Shelby County Fire Department

2020 Annual Report

Alvin D. Benson, Fire Chief

Greetings:

On behalf of our entire Shelby County Fire Department staff, I'd like to thank you for your interest and for taking some time to read about your agency and some of the things we faced as we came through a very unique 2020. It goes without saying that last year was like no other. The obvious challenges began getting our attention during December 2019 and sure enough by March 13th, 2020 we all watched our country close down. Due to our agency's leadership and our committed and dutiful staff, we rapidly learned how to operate a premier fire department through some of the unchartered weeks and months and most difficult times that those of us in this industry have ever seen. The Shelby County Fire Department did not miss one single call during that pandemic.

We also had enormous financial matters that required our most keen attention considering that we were preparing for an unprecedented DE-annexation of more than three thousand two-hundred homes and businesses from the City of Memphis. This action changed our response areas and required the addition of more trained emergency responders and equipment. We placed Engine 60 back into service in the Egypt Central / Austin Peay area. We designed, had built and took delivery of a state-of-the-art pumper for that station. We also introduced the fire squad concept of responding to emergencies aboard smaller pumpers. An initiative that was so successful, in fact, that we have ordered two more of these Fire Squads! A temporary fire station was also created to cover two of the response regions that were returning to our coverages. That tasking was critical because the clock was not going to stop as January 1st, 2021 was swiftly arriving. Every single home was counted, measured and ready for the accurate and correct fire fees to be applied by Halloween. Also, a third Battalion Chief position was also required in what was really a tremendous re-structuring of our department.

By the end of December, and for the first time in our near fifty year history, the Shelby County Fire Department was fielding thirteen full engine companies and ten ambulances. This for an agency that dispatches one thousand emergencies every twenty days and provides protection for almost fifty-thousand structures and one hundred thirty-thousand people!

In closing, we faced never before seen pandemic challenges. During 2020 there were 1,181 calls that triggered our department's stringent COVID-19 response protocols. These are practices that were carefully designed to surround our responders and patients with a measure of safety to reduce and even neutralize the spread of the Coronavirus. When added up, the department was engaged for enough time to basically state that each day was really more than forty-two hours long. I am privileged to lead this fire service organization of such a skilled and committed staff and thank them for the work that they accomplish every single day. As our fiftieth year in service approaches, we cling to our goal to add value to the Shelby County community even beyond our core services. We value stakeholder input and use it to inform decisions and to drive improvement. We too seek a better, stronger Shelby County.

Yours in Service,
Alvin D. Benson, Fire Chief
Shelby County Fire Department

Fire Department Organizational Chart

H.R. Specialist — Myra Stroud

PIO / GIS / Fire Fees — Brent Perkins

FIRE CHIEF — ALVIN D. BENSON

Accountant "A" — Sandra Hughes

Admin. Technician — Sheila Towns

DEPUTY FIRE CHIEF — GLEN F. KNEELAND

Fire Marshal — Jake Haley

- **Fire Inspectors** — Ethan Gladney, Kenneth Woods
- **Logistics** — Artarius Turner
- **Quality Assurance Coordinator** — Brenda Harper

Communications Commander — Roberta Ivory

- **C.A.D. Specialist** — Dennis Lewis
- **Senior Dispatchers** — Kathy James, Keshia Johnson, Samantha Outlaw
- **Dispatchers** — Cicely Banks, Chelsey Allen, Shironda Stepney, LeShae Fox, Sherry Thompson, Michelle Staten, Kevin Lackey, Courtney Jamison, Jennifer Nichols, Dana Davis, Marilyn Mckinney

Administrative Division Chief — Eric B. Jackson, Sr

Emergency Medical Services Division Chief — Donald Fletcher

Emergency Medical Services Battalion Chief — Deverick Clayton

- **Training Lieutenants** — Revoldo Chilis, Ron Royal, Terry Watts
- **Emergency Medical Services Lieutenants** — John Mitchell, Craig Rich, William Mattix

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Battalion 21 — Lawrence Riedel, Jonathan Hanks, Frizell Davis

Fire Station 61
- LIEUTENANTS: Earnest Lubiani, William "Ty" Carpenter, Bobby Dabbs, Darrell Abrams, John Conrey, Larry Jackson
- DRIVERS: Jacob Vandiver, Clay Howard, Kenny Rains, Jason Spry, Rick Bellott, Joseph Palugi
- FIREFIGHTERS: Kevin Hobson, Lee Howell, Jacob Coley, Savon Wigington, David Swindoll, John Hill, Jannicce Garner, Jordan Smith, Undra Gaston, Deon Bates, Wanda Terry, William Alton, Matt Christianson, Denarius Lemock, Andrew Pieraccini, Quintella Malone

Fire Station LS1
- LIEUTENANTS: Adrian Flagg, Brandon Patrick, James Muhammad
- DRIVERS: Ernest "Ty" Larry, Rodney Burgin, Kevin Hill
- FIREFIGHTERS: Josue Medrano, Jeremy Roberts, Quinton Johnson, Joseph Spicer, Evan Montgomery, Carson Penn, Andrew T. Johnson, Daniel Underwood, Jordan Lewis, Damien Wesby, Kyle Bass, Andrew Hunt, Severin Allgood, Cody Harrison, Joseph Banks, Richard Reaves, Darron Smith, Antwyan Pryor, Martin Pritchard, Nicholas Hugo, Stephen Palmoore, Joseph Cox, Anna Muller

Fire Station 69
- LIEUTENANTS: Wilfred Joshua, Tony Harrington, Reginald Tucker
- DRIVERS: Tony Brown, Andrew Morgan, Phillip Fernald
- FIREFIGHTERS: Devin Walker, Ryan Wiggins, Kyle Bourke, Levone Stewart, Chris Jones, Cameron Christian, Kelsey Pope, Josh Mecklin, Wes Carpenter, Jonathan Voss, Greg Benton, James Dowell, Geoff Bryan, Austin Davis, James Harrison, Zackary Bergman, Tarus Lewis, Julianna Beyer, Terrell Johnson, Michael Carter, Jared Ennis, Danielle George, Taylor House

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Battalion 22 — Usarius "Ron" Royal, Joe McNatt, Jason Ervin

Fire Station 60
- LIEUTENANTS: Richard Russell, Brian Jones, Robert Decker
- DRIVERS: Derrick Dennis, James "Chris" Craft, Dustin Flynn
- FIREFIGHTERS: Jordan Owens, Brian Suber, Jamie Allen

Fire Station 64
- LIEUTENANTS: Nick Mansolino, Matt Doyle, Shane Bass
- DRIVERS: Barry Daly, Jordan Kinney, Chris Wright
- FIREFIGHTERS: Patrick Kelly, Robert Gibson, Trevor Rogers, Travis Cooper, Karderius Partee, Cyrus Coleman, Mike Carpenter, Kevin Allen, Jake Burford

Fire Station 66
- LIEUTENANTS: Hunter Hayes, Brandon Cox, Ned Douglas
- DRIVERS: James Lee, Earl Laughlin, Troy Marion
- FIREFIGHTERS: Michael Till, Derrick Woods, James Butler

Fire Station 67
- LIEUTENANTS: Chris Bauer, Milton Clark, Ron Wiseman
- DRIVERS: Tim Williams, Vance Culver, James Renscheid

Fire Station 68
- LIEUTENANTS

Battalion 24 — Jeremy Havlik, Jeff Devisfruto, Larry Robinson

Fire Station 62
- LIEUTENANTS: Ryan Smith, Stuert Lada, Calvin Cleaves
- DRIVERS: Kevin Campbell, Jeremy Shaw, Ashton Johnson

Ladder 62
- LIEUTENANTS: Shane Smithmier, Odie Guy, Liam Cullen
- DRIVERS: Frank IIsley, Jason Furr, David Lester
- FIREFIGHTERS: Patrick McKinney, Andre Powell, Jessica Ringer

Fire Squad 2
- LIEUTENANTS: Danny Young, David Paden, Annette Wright
- DRIVERS: Dustin Boulden, John Barger, Michael Simone
- FIREFIGHTERS: Kenneth Williamson, Justin Luttrell, Travis Moore, "Dontae" Walker, Cedrick Malone, DeAirius Berryhill

Fire Station 63
- LIEUTENANTS: Derry Cook, Don Jenkins, Josh Walker
- DRIVERS: Tyler Wilson, Brian Bennett, David Taylor

Engine 65
- LIEUTENANTS: Scott Coker, Evan Ross, Jordan Dowdy, Patrick Houston
- DRIVERS: Jeremy Bolden
- FIREFIGHTERS: Angel Fagans, Garry DeBose, Cody Buckler

Fire Squad 1
- FIREFIGHTERS: Mark Freeman, Donald Clark, Justin Chandler, John Gites, Joel Gray, Damien Guy, Noah Johnson, Jerry Rayford, Andrew B. Johnson, Evan Mottley, Cordarius Lemock, Gina High, Spencer Brown, Chris Porter, Herbert Korthoff

Fire Station 65
- FIREFIGHTERS: Jessica Burress, Michael Conway, Drew Davenport, Getsen Garcia, Curtis Coburn, Perry Stone, Allen Armstrong, Amanda Hoskins, Jeremy Williams, Michael Hazlerig, Tashalya Davis, Cedrick Malone, "Dontae" Walker, DeAirius Berryhill, Benquavis Poole

Yearly dispatch totals since 2016

The Shelby County Fire Department Communications Division, dispatches emergency calls to a total of five agencies. These are the fire departments Shelby County, Millington, Arlington, the Millington-Memphis Airport and the Shelby County Emergency Management and Homeland Security Agency.

The de-annexation of Cordova South, Rocky Point, Windyke & Southwind have resulted in the expected increase of about 3.25% of all dispatches. We have forecasted that the SCFD will send on the order of at least 17,000 calls to these agencies during 2021. This is an average of 46.5 dispatches each day. Yet the first ninety days of 2021 have already seen a daily average of 50.2 dispatches each day.

All Dispatches for:

2016 - 14,501
2017 - 15,111   (up 4.2%)
2018 - 16,073   (up 6.3%)
2019 - 16,199   (up .7%)
2020 - 16,464   (up 1.6%)
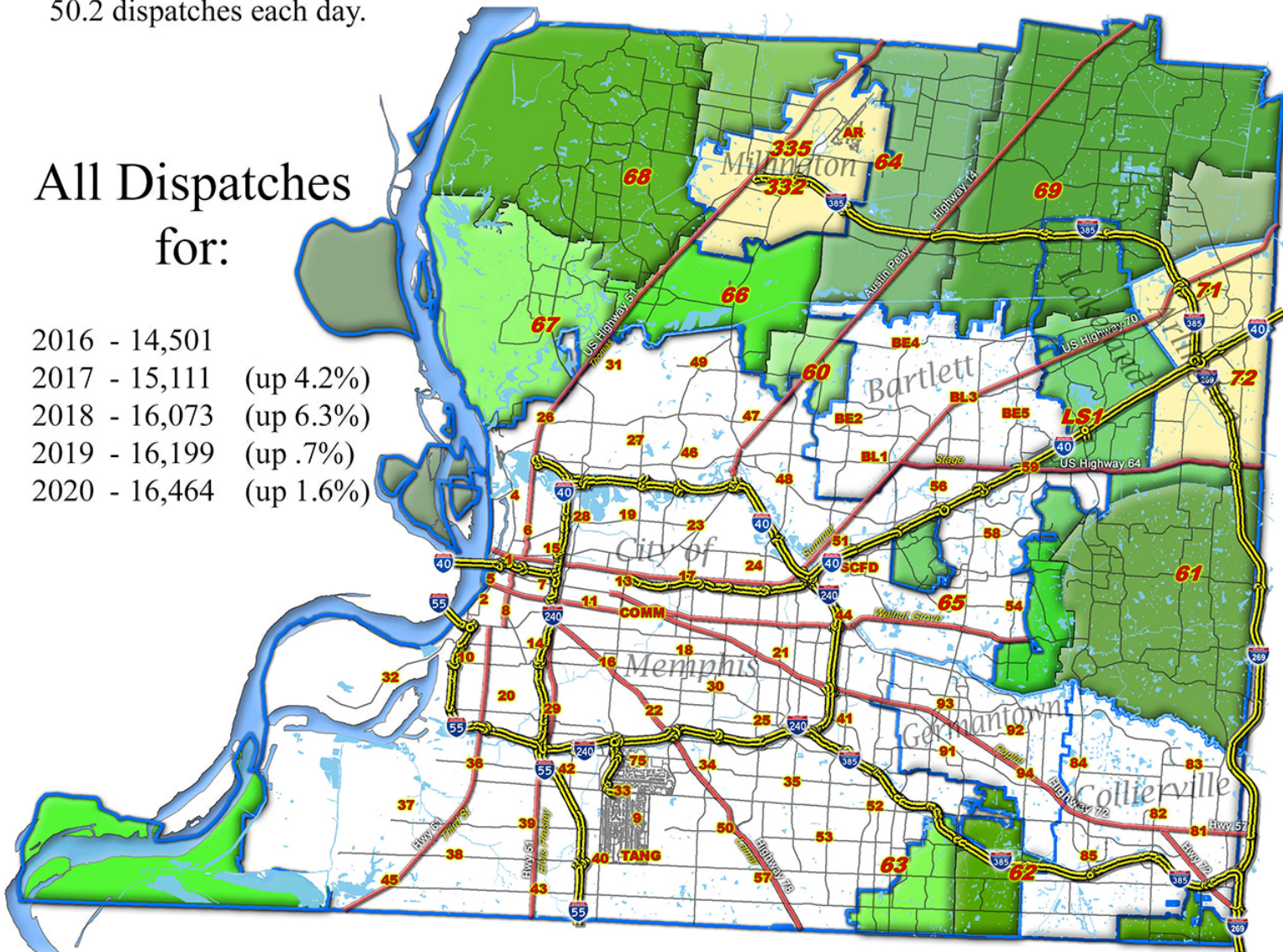
This map displays the January 1, 2021 post de-annexation municipal borders. The areas shaded in green are un-incorporated Shelby County and Lakeland - the "first-in" territories of this fire department. The tan areas reflect Millington and Arlington Fire Departments primary response areas. All of these shaded areas combined is everything that we dispatch to. That's 401.68 of the 785 square miles here in Shelby County - or 51.17% of the county's geography!

What the SCFD dispatches to in a year

2020 SCFD Call Types				
Fallen Party	1,427		Carbon Monoxide Alarm	105
MVC b - 29 Bravo moderate car crash w/injury	1,277		Engine Company assist	105
COVID-19 protocol triggers	1,181		Smoke Detector check / install	99
Alarms	945		Birth issues	93
Breathing Difficulty	864		unresponsive party	92
Chest Pain	798		Confirmed Structure Fires	91
Convulsions / Seizures	468		Immobility issues	79
Fire Calls	463		Choking	78
Strokes	438		Headaches	75
Fainting Party	437		Gun Shot Wounds	67
Bleed	426		EMA notification	64
Assaults (no transport)	404		Airport Alert 2s (many for EMA inbound aircraft with trouble)	63
Alarms disregarded	387		Spills (fuels, chemicals, etc. EMANOT)	60
Man Down (medical alarm)	370		Calls transferred to other agencies	59
Diabetic emergency	351		Outdoor Temperature Emergencies	46
Sick Party (flu - like)	351		Bites (animal)	36
Medical calls (generalized nature)	329		Generator assist	27
Abdominal Pain	302		Hurst tool deployment	27
Full Arrests	265		Accidental Overdose	26
Pain	223		MVAs involving motorcycles	25
Heart Problems	213		unknown medical emergency	21
Trauma Emergencies	205		Burns	19
Overdoses (non-opioid)	200		Stabbings	18
Burn Permits	200		Road Hazards	17
MVC d - 29 Delta major / high mechanism car crash	197		Assist Law Enforcement	16
Psychological emergencies	194		Nine Omega 1 expected end of life	15
Blood Pressure Problems	177		Train crash events (EMA)	15
Weather Advisories	167		Tree Down	14
Generalized Weakness	166		HazMat Calls	13
Altered Consciousness	156		Tree Fires	9
Altered Mental Status	150		Rescues	8
reactions / envenomations	139		Drowning	7
Trash fires	130		Department Vehicle Accident	7
Back Pain	129		Elevator Rescue	5
Informational matters	128		Public Relations	5
Grass Fires	126		Flooded roads	2
Opioid involved ODs	120		Lightning Strikes (structures)	2
Dizzy	114		Hospital Wing	2
Blood Draw (D.U.I.)	112		general transport	2
Vehicle Fires	111		Airport Alert 3 aircraft has crashed	1
Assaults	109			
				16,464

MONTH — Traditionally heaviest activity during summer and around Christmas

2016 - 2020 MONTHLY ACTIVITY

JANUARY	dispatches	or per day		MAY	dispatches	or per day		SEPTEMBER	dispatches	or per day
2016	1,142	36.8		2016	1,246	40.1		2016	1,235	41.1
2017	1,216	39.2		2017	1,307	42.1		2017	1,255	41.8
2018	1,410	45.5		2018	1,453	46.8		2018	1,323	44.1
2019	1,316	42.4		2019	1,387	44.7		2019	1,359	45.3
2020	1,316	42.4		2020	1,251	40.3		2020	1,318	43.9
FEBRUARY	dispatches	or per day		**JUNE**	dispatches	or per day		**OCTOBER**	dispatches	or per day
2016	1,091	37.6		2016	1,237	41.2		2016	1,201	38.7
2017	1,066	38		2017	1,219	40.6		2017	1,318	42.5
2018	1,213	43.3		2018	1,353	45.1		2018	1,392	44.8
2019	1,290	46		2019	1,302	43.4		2019	1,354	43.6
2020	1,355	46.7		2020	1,387	46.2		2020	1,428	46.06
MARCH	dispatches	or per day		**JULY**	dispatches	or per day		**NOVEMBER**	dispatches	or per day
2016	1,232	39.7		2016	1,226	39.5		2016	1,181	39.3
2017	1,224	39.4		2017	1,363	43.9		2017	1,301	43.3
2018	1,283	41.3		2018	1,363	43.9		2018	1,298	43.2
2019	1,316	42.4		2019	1,361	43.9		2019	1,319	43.9
2020	1,321	42.6		2020	1,414	45.6		2020	1,467	48.9
APRIL	dispatches	or per day		**AUGUST**	dispatches	or per day		**DECEMBER**	dispatches	or per day
2016	1,178	39.2		2016	1,238	39.9		2016	1,294	41.7
2017	1,250	41.6		2017	1,307	42.1		2017	1,282	41.3
2018	1,287	42.9		2018	1,351	43.5		2018	1,347	43.4
2019	1,387	44.7		2019	1,436	46.3		2019	1,376	44.3
2020	1,202	40		2020	1,436	46.3		2020	1,569	50.6

DAY

DAILY DISPATCHES	2016	2017	2018	2019	2020
Sunday		2,068	2,130	2,076	2,208
Monday		2,178	2,342	2,425	2,359
Tuesday		2,178	2,264	2,276	2,386
Wednesday		2,122	2,346	2,393	2,437
Thursday		2,147	2,381	2,324	2,413
Friday	2,140	2,334	2,302	2,389	2,393
Saturday		2,084	2,308	2,316	2,268
	14,501	15,111	16,073	16,199	16,464

For these 5 years, the peaks have not been during the weekends

Dispatch Shifts during 2020

Day	6am - 2pm	6,247 dispatches	(37.94%)
Swing	2pm - 10pm	6,851 dispatches	(41.61%)
Night	10pm - 6am	3,366 dispatches	(20.44%)

TIME — Peak times around lunch hours

HOURLY ACTIVITY	2018	2019	2020
06:00 - 06:59	420	445	461
07:00 - 07:59	609	623	587
08:00 - 08:59	759	672	684
09:00 - 09:59	845	843	803
10:00 - 10:59	924	892	908
11:00 - 11:59	911	948	966
12:00 - 12:59	957	906	937
13:00 - 13:59	870	950	901
14:00 - 14:59	929	930	933
15:00 - 15:59	925	893	929
16:00 - 16:59	936	846	916
17:00 - 17:59	914	903	926
18:00 - 18:59	827	862	897
19:00 - 19:59	773	787	811
20:00 - 20:59	725	744	741
21:00 - 21:59	677	663	698
22:00 - 22:59	560	597	621
23:00 - 23:59	491	504	560
00:00 - 00:59	443	472	445
01:00 - 01:59	330	409	386
02:00 - 02:59	318	319	348
03:00 - 03:59	319	355	344
04:00 - 04:59	281	307	319
05:00 - 05:59	330	329	343
	16,073	16,199	16,464

Call Volume By District

Calls by District	Dist 60	Dist 61	Dist 62	Dist 63	Dist 64	Dist 65	Dist 66	Dist 67	Dist 68	Dist 69	Total
Abdominal Pain	16	26	11	52	20	33	15	27	14	9	223
Alarms	26	101	139	195	8	136	14	15	28	24	686
Alarms Disregarded	26	48	20	79	7	94	9	6	16	8	313
Altered Mental Status	0	9	10	25	9	28	3	4	3	4	95
Animal Bite Calls	2	5	2	5	3	8	2	0	0	1	28
Assaults (No Transport)	29	20	29	91	30	51	41	39	6	9	345
Assaults with transport	12	3	29	24	11	16	6	8	0	3	87
Back Pain	7	12	3	22	10	11	5	17	4	6	97
Birth related calls	7	7	3	19	4	7	8	15	3	0	73
Bleeding	27	33	20	73	29	59	12	25	9	16	303
Blood Draw (DUIs)	5	2	4	0	3	21	6	6	1	0	48
Blood Pressure Calls	7	16	7	36	5	25	5	9	4	11	125
Burn Permits	13	45	6	0	20	5	20	11	25	50	195
Burns	0	0	1	6	0	3	1	1	0	2	14
Carbon Monoxide Alarm	3	13	1	26	3	20	5	3	0	4	78
Chest Pains	40	58	33	136	38	104	34	59	34	32	568
Choking	7	1	6	19	2	10	1	3	2	2	53
Confirmed Structure Fires	6	5	3	17	5	12	5	14	4	3	74
Consciousness	8	15	10	23	10	23	6	8	5	5	113
Convulsions/Seizures	29	43	30	112	19	66	15	21	18	9	362
COVID-19 protocol triggers	64	98	73	245	40	166	40	62	51	62	901
Dept Vehicle Accidents	0	0	1	1	0	0	0	0	0	1	3
Detector Checks/Installs	8	6	8	29	2	13	5	8	3	6	88
Diabetic Emergency	21	35	13	66	27	39	17	21	22	9	270
Difficulty Breathing	49	68	55	146	55	114	34	43	36	23	623
Dizzy	5	19	6	23	2	15	5	2	3	3	83
Drowning	0	0	1	0	0	0	0	1	2	1	5
Elevator Rescues	0	0	1	3	0	0	0	0	0	0	4
EMA Notifications	0	4	5	1	2	9	5	2	6	2	36
Fainting	24	28	18	91	24	59	11	23	13	15	306
Fallen Parties	63	114	64	177	95	284	34	69	68	79	1047
Fire Calls (All Types)	54	89	50	126	39	111	40	63	63	43	678
Full Arrest / CPR	17	24	12	48	11	54	8	8	13	16	211
Gun Shot Wound Calls	4	6	3	14	3	7	3	5	3	2	50
Headaches	3	2	3	19	3	12	5	8	6	0	61
Heart Problems	14	16	12	48	6	29	6	10	9	9	159
Hospital Wing	0	0	0	0	0	0	0	0	0	0	0
Hurst Tool deployments	1	5	1	6	2	1	0	1	0	0	17
Man Down (med alarm)	14	25	25	76	10	32	13	32	24	12	263
Medical (non viral)	23	20	20	64	23	46	4	19	10	11	240
Motor Vehicle Crashes	62	156	206	128	53	191	70	23	51	112	1052
Narcan reported- # of events	12	9	4	23	8	23	14	6	5	5	109
Opioid reported	5	11	3	17	6	19	9	2	4	4	80
other	15	11	7	34	4	11	84	5	10	3	184
Overdose (accidental)	0	3	1	1	2	6	0	5	1	1	20
Overdose (non opioid)	18	19	8	29	15	30	11	8	6	9	153
Pain	12	18	11	41	18	21	12	16	6	5	160
Psychiatric Emergencies	15	18	9	33	12	25	5	12	3	6	138
Public Relations	0	0	0	2	0	0	0	0	1	1	4
Reactions / Envenomations	6	8	7	26	7	19	7	12	3	8	103
Rescues	0	0	0	0	0	0	0	0	4	0	4
School Bus Crash	0	0	0	0	0	0	0	0	0	0	0
Sick Party	23	26	11	54	14	31	27	21	11	9	227
Spills (as reported to EMA)	0	1	0	0	1	1	0	0	0	0	3
Stabbing Calls	1	0	1	3	0	2	1	2	2	1	13
Stroke / CVA	22	29	29	95	19	59	17	25	18	23	336
Temp rel med emergency	1	6	1	9	2	4	2	3	1	5	34
Trauma Calls	6	13	12	21	19	32	7	19	9	12	150
Tree Down Calls	0	1	1	1	0	1	0	1	1	3	9
Unresponsive	5	4	4	20	2	18	2	3	0	1	59
weak	8	19	7	26	9	22	5	8	7	6	117
Calls involving a fatality	11	23	12	44	12	57	10	10	16	17	212
DOA	8	16	10	30	9	43	7	7	9	11	150
Total Calls in District	845	1,373	1,035	2,706	771	2,238	716	839	651	706	11,880

This analysis reflects call saturations by geographic region. In other words, what district did these events take place in? Most of these calls were handled by the respective engine and / or ambulance for that district. Sometimes though the equipment may have been unavailable by being on another call at the time. In that case units can be sent from other districts.

ENGINE COMPANIES BY THE NUMBERS

The Shelby County Fire Department saw a very interesting year during 2020. A growth of unprecedented scope was needed for the coming de-annexations of Cordova South, Rocky Point, Windyke and Southwind. In addition, the cessation of mutual aid with Memphis Fire created the need for additional engine companies and equipment. More than 3,200 homes and businesses would be returning to un-incorporated Shelby County and the SCFD would need the strength of no less than thirteen engine companies. The Shelby County Fire Department had operated nine engine companies since 1972.

By July 14th, 2020 "Fire Squad 1" went into service in a temporary fire station located within a business complex at 7740 Trinity Road. The planning phases of two newly constructed fire stations was started and the procurement of land also got underway. The first new fire station is to be built at the intersection of Macon Rd and Dexter Ln near the center of Old Cordova. The second will be located near the intersection of E. Holmes Rd and Hacks Cross.

Together, these new facilities will quickly demonstrate the strengths and capabilities of this comprehensive fire fighting and emergency medical care agency well into the distant future.

ENGINE COMPANY ACTIVITY

The number of dispatches refers to the actual apparatus, not just the district. Sometimes the engine needs to back up a neighboring engine and will leave its district to do so.

"*Assists*" refers to the disposition of the call and describes what the fire fighters did during the event. Other dispositions can be *disregard, out on arrival, unintentional false, remove hazard, investigation only*, etc.

"Fires Extinguished" as it's used here refers to confirmed fires only. Although there are many calls dispatched as "fire danger", the engines are equipped to handle all types of fire related emergencies. Still the bulk of the dispatches are classed as medical emergencies. SCFD engines carry paramedics and emergency medical technicians as well as their supplies to provide the best in pre-hospital medical care.

507 dispatches
315 assists
39 fires extinguished

68
63 fire calls

476 dispatches
285 assists
40 fires extinguished

64
39 fire calls

509 dispatches
303 assists
33 fires extinguished
43 fire calls

69

335
332

490 dispatches
334 assists
39 fires extinguished

67
63 fire calls

66

728 dispatches
353 assists
55 fires extinguished
40 fire calls

60

392 dispatches
236 assists
19 fires extinguished
54 fire calls

953 dispatches
334 assists
49 fires extinguished

71

72

LS1
111 fire calls

852 dispatches
466 assists
44 fires extinguished
89 fire calls

61

465 dispatches
290 assists
10 fires extinguished

65

1,577 dispatches
912 assists
30 fires extinguished

63
126 fire calls

920 dispatches
376 assists
23 fires extinguished

62
50 fire calls

Fire Fees

   Since the creation of the Shelby County Fire Department in 1972 (for almost the last fifty years), this agency has been primarily funded from a fire fee. This fee is charged through the Memphis, Light, Gas and Water Division billing environment to all residential and commercial accounts within un-incorporated Shelby County and Lakeland that receive the services of the Shelby County Fire Department.

   The rate is applied according to the size of the structure and will range between $22.44 (residential) and $96.30 (commercial) per month for all customers outside of an industrial classification.

   MLG&W provides a billing environment for every customer, which is a very effective cost-savings initiative because the SCFD utilizes a reliable database that already exists and applies the appropriate rate to each account without having to endure the cost of additional personnel to operate a stand-alone billing department. The end result is more fire fighters aboard ambulances and engines.

   Although nearly the entire budget of the SCFD is made up from the fire fee, there are additional sources that bolster the revenue stream. These include other departmental dispatching services, burn, industrial, hazardous materials and inspection permit fees - or about 6% of the Shelby County Fire Department's budget.

Rate of growth in un-incorporated Shelby County & Lakeland
based on added active fire fees each year

As of:

31 December 2014 the SCFD covered 43,133 structures			
31 December 2015 the SCFD covered 43,647 structures	- up 514 structures or 1.17%		
31 December 2016 the SCFD covered 44,355 structures	- up 708 structures or 1.59%		
31 December 2017 the SCFD covered 44,798 structures	- up 443 structures or .98%		
31 December 2018 the SCFD covered 45,292 structures	- up 494 structures or 1.09%		
31 December 2019 the SCFD covered 45,954 structures	- up 662 structures or 1.44%		
31 December 2020 the SCFD covered 46,479 structures	- up 525 structures or 1.13%		

Shelby County Fire Dept.
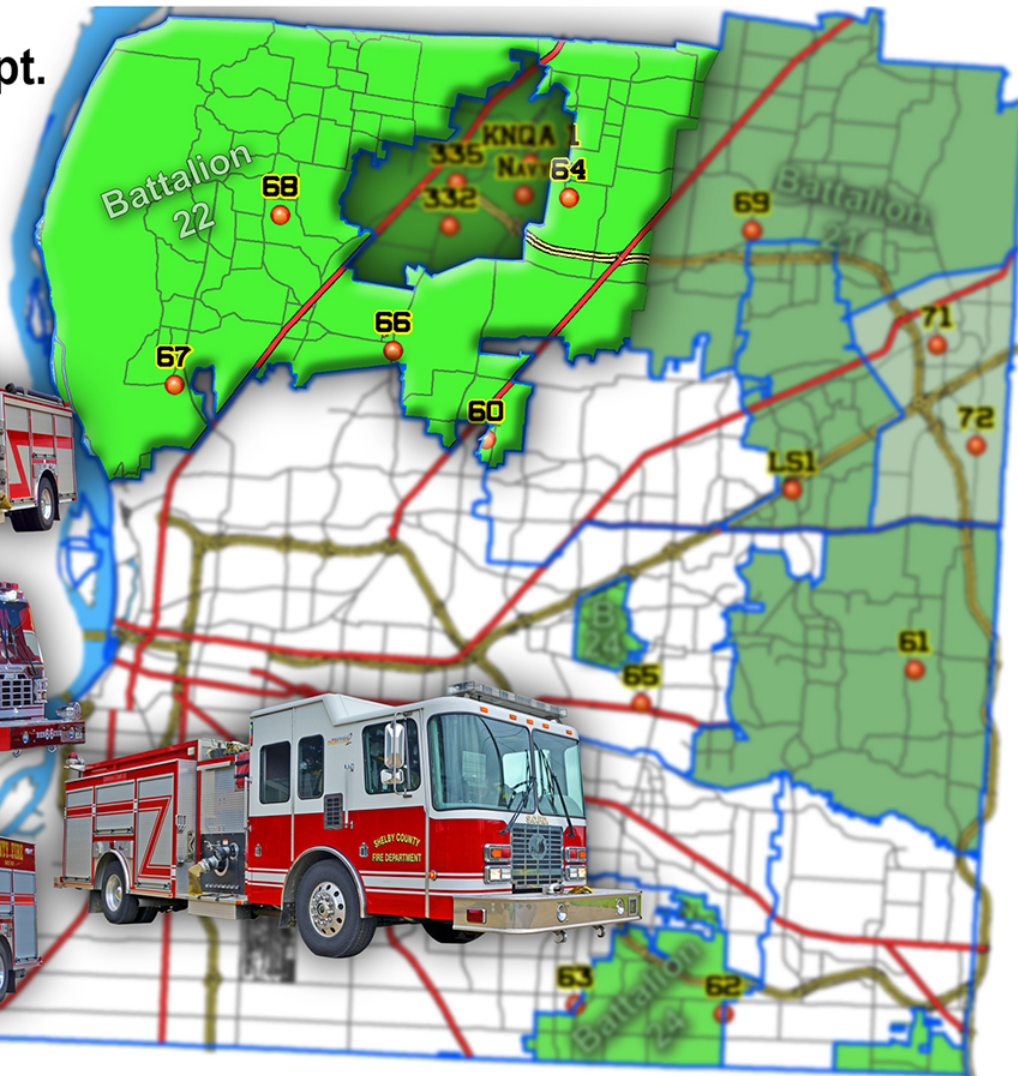## Battalion 21
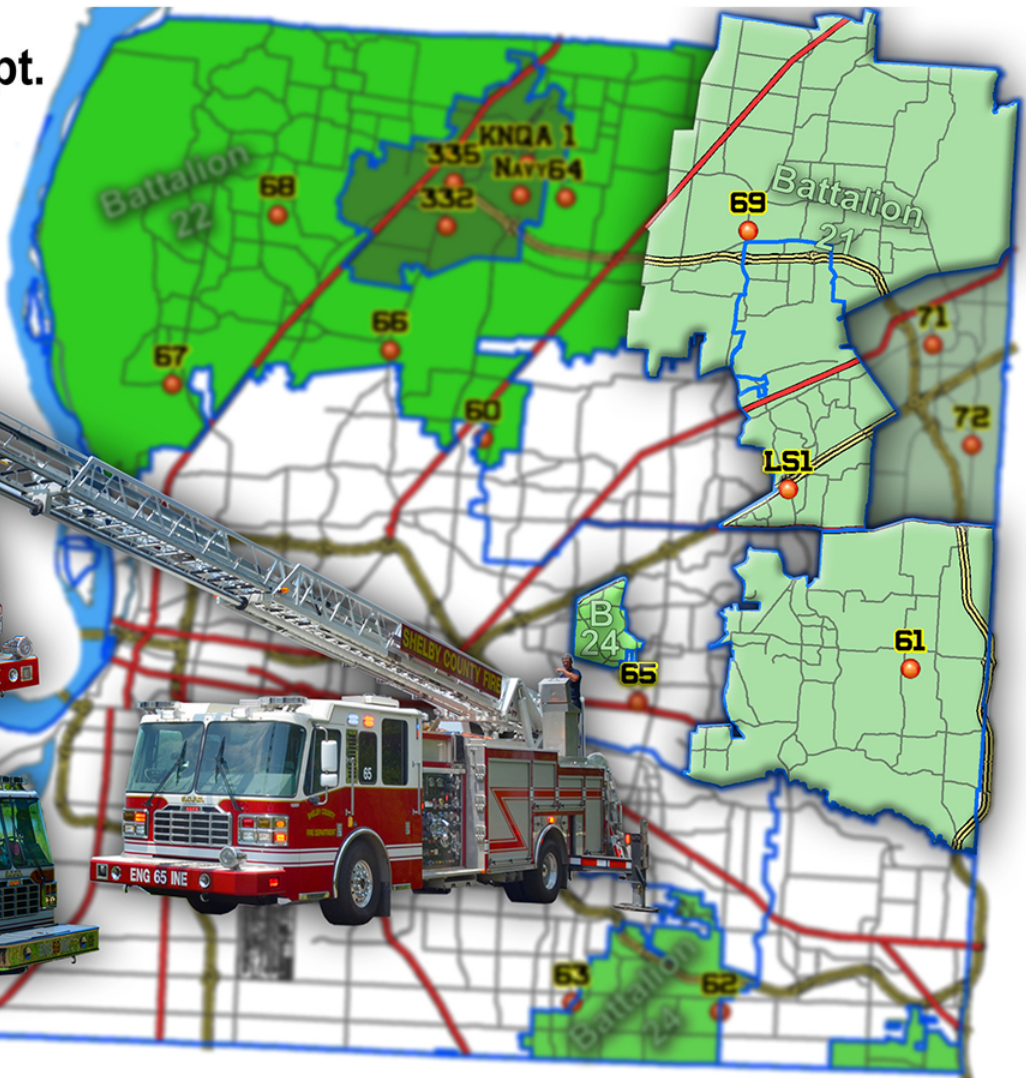
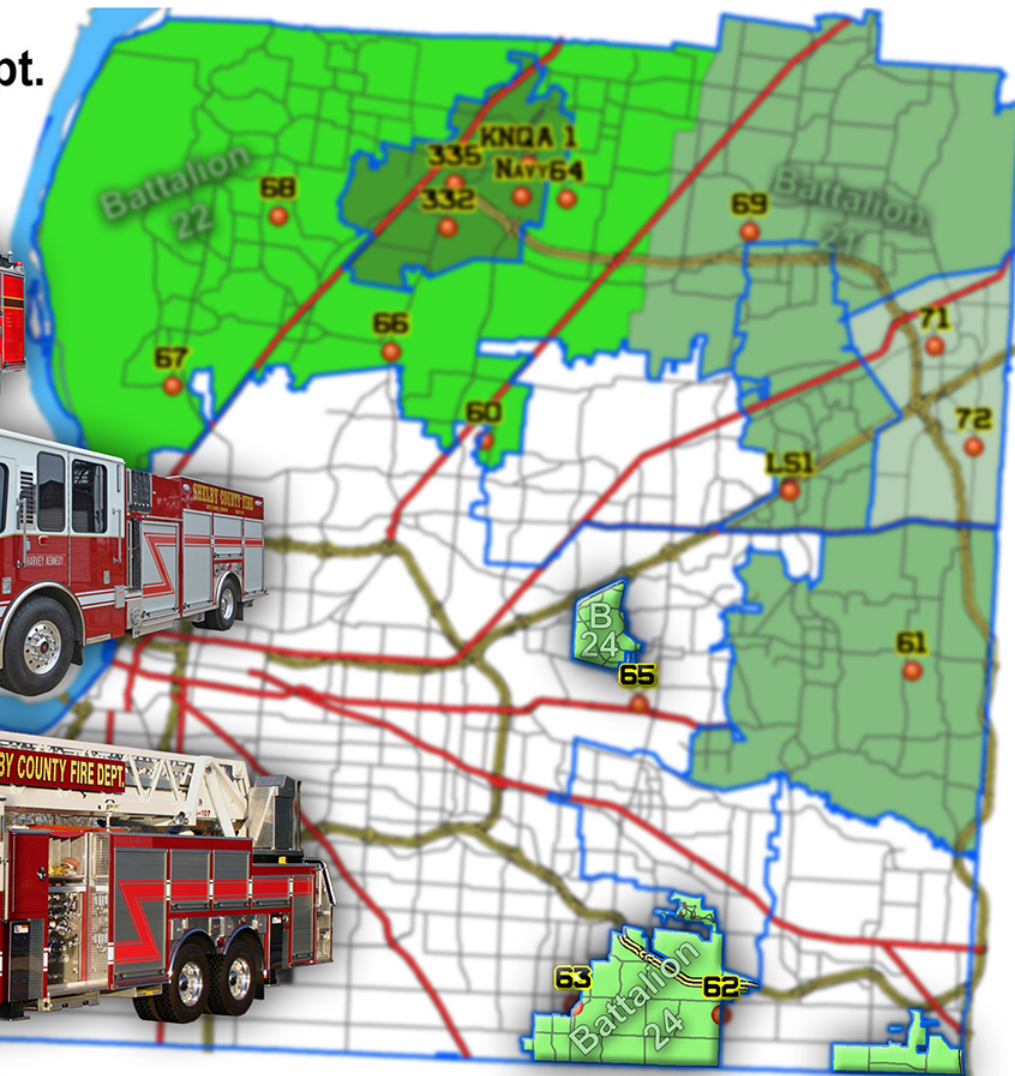# 2020 Fire Fighting Apparatus By The Numbers

APPARATUS

	Dispatches	Assists	Disregards	Extinguished	Investigation Only	No Patient Contact	Out On Arrival	Remove Hazard	Unintentional False
FIRE SQUAD 1 *in service July 14*	465	290	80	10	18	13	7	5	42
ENGINE 61	852	466	145	44	59	26	14	14	78
ENGINE LADDER 65	953	334	283	49	76	21	20	16	95
ENGINE 69	509	303	83	33	34	19	7	5	21

All Dispatches 2,779

    2020 brought the addition of new recruits and equipment for them to train on and work with. It also saw the addition of a third Battalion which allowed for a much better oversight of the growing ranks and engine companies. Geographic area sizes, traffic routing and patterns as well as call saturations were looked at in-depth to determine where these new Battalions would respond. What this led to was much improved times for ranking Battalion Chiefs to arrive on emergency scenes where they can provide command leadership for crews involved in the tasks of mitigation.

Shelby County Fire Dept.
Battalion 22

2020 Fire Fighting Apparatus By The Numbers

APPARATUS

	Dispatches	Assists	Disregards	Extinguished	Investigation Only	No Patient Contact	Out On Arrival	Remove Hazard	Unintentional False
ENGINE 60	392	236	70	19	24	7	9	5	17
ENGINE 64	476	285	99	40	27	6	3	4	11
RESCUE 66	728	353	218	55	52	6	11	10	17
ENGINE 67	490	334	51	39	21	11	3	12	14
ENGINE 68	507	315	85	39	28	7	2	5	22

All Dispatches 2,593

One of the largest challenges faced by the SCFD is the sheer size of the geography of the un-incorporated areas of Shelby County. As is seen on these pages we have grouped the fire apparatus response data according to the Battalion that they are assigned to. Battalions 21 and 22 apparatus face the challenge of large distances to cover while Battalion 24 has areas that are unconnected while its challenge really amounts to very high call volumes. Following pages will display the calls with regard to the ambulances and how they run their areas.

Shelby County Fire Dept.
Battalion 24

2020 Fire Fighting Apparatus By The Numbers

APPARATUS

	Dispatches	Assists	Disregards	Extinguished	Investigation Only	No Patient Contact	Out On Arrival	Remove Hazard	Unintentional False
ENGINE 62	920	376	244	23	79	23	13	16	134
ENGINE 63	1,577	912	242	30	90	62	33	36	166
ENGINE 65	Due to the timing of bringing Engine 65 into Battalion 24, this data was added to Battalion 21								

All Dispatches 2,497

Of note here is the much smaller size of the territory for Battalion 24. Also note that similarity in call volume for the other two Battalions. The population for this territory is very high per square mile. Consequently then so to are the call saturations. Engine 63 remains our busiest engine company by far. Efforts to alleviate their run volumes are being addressed with the addition of "Fire Squad 2" that began service from station 62 during January of 2021.

Fire-Based Emergency Medical Services

SCFD ambulances are staffed with fire-fighting EMT's and Paramedics who are in the employ of the Shelby County Fire Department. Ambulances assigned to Millington, Lakeland and Arlington operate there under agreements with those municipalities.

Due to the changing dynamics of daily call saturations, these units often will temporarily leave their assigned areas to cover for those involved in pre-hospital care or patient transports. It is for this reason that a unit from Eads might be working an emergency south of Germantown or even Lakeland. Maybe one will work a call in Lucy when it is based in Northaven. These are called "move-ups" and they occur in the same fashion that pieces are moved on a chess board.

They are placed where they can do the most good while serving the more than 149,959 residents in our primary areas of responsibility.

Incidently, the almost 17,000 calls dispatched each year can be to any one of the 57,126 homes in these areas.

1,774 Dispatches
92 Disregards
491 No Transports
1,174 Patient Transports

1,230 Dispatches
89 Disregards
364 No Transports
772 Patient Transports

768 Dispatches
101 Disregards
233 No Transports
427 Patient Transports

914 Dispatches
86 Disregards
290 No Transports
527 Patient Transports

1,061 Dispatches
68 Disregards
361 No Transports
619 Patient Transports

954 Dispatches
84 Disregards
308 No Transports
549 Patient Transports

1,144 Dispatches
101 Disregards
293 No Transports
741 Patient Transports

1,265 Dispatches
109 Disregards
408 No Transports
730 Patient Transports

984 Dispatches
105 Disregards
320 No Transports
551 Patient Transports

UNIT 68 (reserve)
131 Dispatches
11 Disregards
35 No Transports
85 Patient Transports

1,726 Dispatches
65 Disregards
563 No Transports
1,084 Patient Transports

1,156 Dispatches
78 Disregards
430 No Transports
637 Patient Transports

As we have written here during the year 2020, the SCFD dispatched 16,464 calls of all types to more that half of the geography of Shelby County, TN. Of those calls there were 13,107 that included the response of an ambulance. That's 79.61% of our dispatches that required the presence of our skilled emergency medical service providers. That is to say our employees and their equipment.

Moreover, the physical size of the SCFD EMS response footprint is in fact, different and larger from the pure "fire only" response areas of this agency. The geographic size of the entire area where we provide ambulance services adds up to 401.68 square miles. That's un-incorporated Shelby County, Millington, Lakeland and Arlington. Our "first-in" fire response regions add up to 355.5 square miles.

To add to the complexities of this fire-based EMS, one should consider the staggering number of different possible emergencies that can present to our staff at any given time - day or night. At any moment, those in this industry can be faced with the most difficult situations imaginable. To properly equip the people in the response teams with the necessary items to properly, effectively and safely mitigate every emergency is one thing. To see to it that they have the highest level of training and skill is another. Staying at the top of these matters takes a daily assessment of how we allocate our assets and abilities. We don't work in an industry where we can tolerate an off day. The Shelby County Fire Department has been a true leader in the Mid-South emergency response package for a half century now. Our medical teams and the comprehensive way that they function are one large reason why we will be around for another half century - and longer.

The Coronavirus Pandemic of 2020

The SCFD started collecting this data when the nation began closing on March 13th, 2020. We needed to see what impacts the department would endure as the virus swept through the Mid-South. There were 1,181 dispatches that initiated the response protocols for the SCFD. Of those 925 possible COVID-19 patients were transported. Not all patients were proven to be COVID positive. It was due to the nature of their call to 9-1-1 that placed their dispatch into a COVID response mode.

The year of the COVID-19 pandemic also saw the SCFD react and rally to the cause when it came to keeping emergency services running while creating methods of responding and keeping our employees safe. New ways of deep cleaning ambulances were created and new practices surrounding patient contact were put into place. All of this while the department prepared for growth in the form of more than 3,000 homes and businesses being de-annexed and returning to the care of the SCFD. Also the addition of new territories, personnel and apparatus that had to be brought in - all doing their best to stifle smooth operations that continued without flaw.

Some Serious Numbers

In amongst the data previously reported regarding the types and amounts of dispatches were some sobering figures.

The year 2020 had 366 days in the calendar year. That's 8,784 hours. During that time the Shelby County Fire Department was engaged in 16,464 calls for help that were dispatched. Nearly one emergency every 30 minutes on average.

There were 27,780 times that our vehicles were placed into response modes during the year.

The SCFD was operationally engaged for 15,089.2 hours during 2020. That's equivalent to 628.7 days of work in that time frame.

We dispatched 1,499 motor vehicle crashes - an average of four each day.

Our First Responders dealt with "end-of-life" calls 281 times of which 191 were deceased on arrival.

Our longest medical call lasted ten hours and fifty-three minutes

There were 120 calls involving Opioid overdoses and Narcan was dispensed more than 150 times.