

MEADOWS
MENTAL HEALTH
POLICY INSTITUTE

Community Health and Equity Committee

June 11

Data Driven Program Design

Data driven policing is the use of data to inform decision making and increase actionable program development and intelligence for all personnel within an agency. When establishing a data driven policing strategy, specificity to the mission is critical to success. For this reason, we consider the following five core goals in data analysis for public safety program design recommendations:

- 1. Increase Efficiency**
Ensure the model is medically informed and medically facing while recognizing public safety needs and risks
- 2. Increase Effectiveness**
Provide immediate and appropriate connections to care to eliminate the emergency cycle
- 3. Identify Real Problems**
Intentionally place programs with appropriate response to ensure all people in need of care have access without regard to acuity levels, to reduce use of force, and to eliminate tragic outcomes
- 4. Connect with the Community**
Programs should have community-based connections to care that are accessible and independent of long-term emergency system involvement
- 5. Gain Internal Insights**
Programs should collect data in real time with frequent monitoring and ability to adjust program to meet identified gaps and trends

FREQUENCY DATA

All MH Calls 2019 through April 2021

54,932 Calls

Hour	Day of Week						
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
0.00	213	193	226	220	262	235	258
1.00	193	188	197	197	223	200	222
2.00	194	142	166	164	179	181	178
3.00	172	150	140	136	144	155	172
4.00	126	137	123	138	128	152	163
5.00	119	120	118	140	111	124	137
6.00	102	151	150	136	138	132	117
7.00	163	203	246	204	236	204	138
8.00	164	282	314	342	316	282	270
9.00	237	345	490	413	410	396	348
10.00	287	442	513	501	494	428	430
11.00	301	501	511	489	509	482	440
12.00	318	450	587	583	522	484	418
13.00	316	498	560	577	520	473	430
14.00	312	511	549	586	535	459	375
15.00	317	420	440	439	483	413	346
16.00	313	429	479	449	421	483	394
17.00	311	472	458	504	427	410	343
18.00	317	448	424	527	443	379	388
19.00	356	453	444	524	445	392	354
20.00	402	434	397	464	382	410	363
21.00	336	390	365	431	411	334	330
22.00	299	322	332	342	333	294	312
23.00	244	285	285	238	291	270	298

The highest rates of mental health calls take place between 10:00 AM and 7:00 PM Monday through Friday with a greater saturation Tuesday through Thursday.

MH Calls by Type 2019 through April 2021

There are two mental health call types which make up the greatest number of mental health emergency calls:

- *Mental Health Disturbance
- *Mental Health Routine

Beginning at 2:00 PM Mental Health Routine calls begin to slow in frequency while Mental Health Disturbance calls continue until 9:00 PM.

Hour	Mental Health Disturbance							Problem / Day of Week Mental Health In Progress ^							Mental Health Routine						
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
0.00	96	89	108	92	120	104	126	34	30	38	39	36	38	33	83	74	80	89	106	93	99
1.00	68	81	97	89	111	101	118	29	37	35	23	42	30	37	96	70	65	85	70	69	67
2.00	91	63	87	76	72	79	84	29	29	22	32	34	29	23	74	50	57	56	73	73	71
3.00	81	66	58	46	67	80	88	18	26	19	31	19	21	22	73	58	63	59	58	54	62
4.00	47	66	52	61	69	76	82	23	16	17	20	20	21	25	56	55	54	57	39	55	56
5.00	46	43	51	57	47	64	62	26	29	18	24	20	19	18	47	48	49	59	44	41	57
6.00	43	72	71	55	66	61	51	19	27	27	23	23	25	20	40	52	52	58	49	46	46
7.00	67	89	118	93	106	81	56	33	30	42	30	34	33	20	63	84	86	81	96	90	62
8.00	73	112	129	143	138	104	97	33	51	55	59	48	39	47	58	139	130	140	130	139	116
9.00	119	120	188	134	166	133	97	52	52	59	56	48	59	47	66	73	243	223	196	204	209
10.00	139	168	198	179	186	153	127	57	74	56	62	61	55	47	87	00	259	260	247	215	258
11.00	121	201	182	187	172	154	136	75	78	75	70	86	94	74	97	22	254	232	251	234	233
12.00	163	179	202	211	207	204	132	83	75	78	88	76	70	77	110	96	307	284	239	210	209
13.00	153	195	194	218	190	177	154	78	81	83	107	99	81	92	102	22	283	252	231	215	184
14.00	163	216	242	211	221	189	134	71	86	74	95	91	89	84	119	09	233	280	223	181	153
15.00	153	198	201	164	187	174	140	64	72	67	84	83	81	69	122	110	172	191	213	158	117
16.00	133	221	212	208	173	197	173	83	69	102	71	93	112	73	123	139	165	170	155	174	148
17.00	153	231	223	207	176	182	138	60	97	94	102	96	92	82	123	144	141	195	155	136	123
18.00	173	222	217	203	188	176	184	83	72	79	111	96	71	75	124	154	128	213	159	132	129
19.00	153	224	220	233	203	171	141	84	94	92	101	88	81	72	116	135	132	190	154	141	141
20.00	180	211	184	213	171	181	167	85	82	79	97	68	84	70	137	141	134	154	143	140	126
21.00	138	195	187	221	180	133	141	84	78	58	74	79	74	63	114	117	120	136	152	127	126
22.00	126	146	131	154	156	132	141	64	59	79	67	75	63	64	109	117	122	121	102	99	107
23.00	93	136	115	107	139	129	128	49	45	53	31	47	40	54	102	104	117	100	105	101	116

	2019	2020	2021	Grand Total
Mental Health Disturbance	8,732	10,300	4,185	23,217
Mental Health In Progress	3,897	4,226	1,631	9,754
Mental Health Routine	8,869	9,648	3,444	21,961
Grand Total	21,498	24,174	9,260	54,932

MH Calls by Day of Week, Hour, and Battalion

Two districts account for the greatest number of mental health emergency calls:

Central and PRUE

Hour	CENTRAL							EAST							NORTH						
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
0.00	37	36	47	39	47	48	55	21	24	36	32	35	29	20	39	29	33	25	52	41	50
1.00	34	37	42	37	41	43	40	22	31	30	21	28	24	34	23	20	32	38	33	36	46
2.00	35	33	32	34	37	43	43	19	20	23	20	20	17	24	40	19	25	25	29	24	28
3.00	35	47	34	28	33	24	32	20	16	13	15	11	20	27	27	13	22	26	19	34	24
4.00	34	32	31	22	19	30	33	12	13	18	21	20	23	21	16	21	18	29	24	22	21
5.00	34	30	24	37	25	25	28	15	14	15	22	14	17	13	12	20	19	23	14	17	22
6.00	24	16	31	18	29	28	23	19	15	20	16	12	14	17	10	21	14	18	26	16	9
7.00	28	46	47	43	48	35	28	21	29	24	42	41	29	16	29	31	44	28	34	35	28
8.00	31	69	72	89	75	69	67	28	38	44	40	47	27	30	25	33	47	57	54	45	42
9.00	46	61	89	88	91	70	80	35	50	62	50	58	50	55	38	60	86	63	61	65	47
10.00	57	83	100	86	120	84	58	27	63	65	77	72	62	58	41	61	93	67	70	70	62
11.00	64	107	106	101	108	110	56	43	73	60	60	70	69	58	33	69	84	66	74	77	77
12.00	60	80	114	117	97	89	69	52	76	89	74	77	63	66	71	76	91	85	72	83	66
13.00	70	74	99	85	82	98	70	45	63	75	76	66	54	65	58	95	82	94	91	59	63
14.00	58	78	105	98	111	93	73	50	65	72	73	71	54	50	65	83	86	92	70	78	71
15.00	54	67	81	84	87	90	82	28	53	48	58	69	54	48	72	70	78	66	87	64	59
16.00	56	64	77	84	85	86	72	35	66	74	57	57	71	47	69	74	91	74	61	87	71
17.00	61	83	81	85	66	62	57	50	60	59	66	47	58	40	50	72	76	80	75	70	67
18.00	66	72	67	85	77	70	73	47	54	60	64	57	48	43	59	80	73	73	74	61	76
19.00	51	74	76	83	78	81	84	44	51	58	51	57	52	48	70	86	79	90	73	75	62
20.00	75	76	67	88	64	81	70	49	69	54	54	48	55	40	60	72	72	87	71	71	60
21.00	64	73	71	72	67	56	67	50	52	40	58	62	47	40	58	63	75	61	68	50	62
22.00	49	70	51	54	56	53	58	36	35	36	45	49	42	45	52	55	54	68	49	41	44
23.00	51	57	61	43	57	54	57	38	32	30	36	25	33	38	34	61	41	39	47	36	46

Hour	PRUE							SOUTH							WEST						
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
0.00	45	27	38	47	51	31	47	35	38	48	31	50	41	42	35	38	24	43	22	42	42
1.00	43	40	35	42	37	37	28	36	33	26	33	43	33	37	34	24	27	25	37	25	34
2.00	39	30	30	25	35	29	25	34	27	29	32	31	39	27	26	13	25	27	25	28	30
3.00	31	32	33	21	30	24	27	29	19	22	19	21	25	30	26	20	13	27	29	22	29
4.00	24	33	20	31	19	28	37	19	18	17	18	24	29	25	20	19	17	17	20	17	22
5.00	21	21	29	24	24	28	31	24	18	15	18	17	24	24	13	15	14	15	15	12	19
6.00	16	30	39	32	24	22	28	19	38	26	23	27	26	23	13	29	20	26	16	24	16
7.00	35	35	42	36	31	33	27	26	33	40	34	43	31	19	24	25	43	21	35	38	20
8.00	34	44	44	51	49	51	47	26	50	51	54	38	40	39	18	44	46	40	37	32	29
9.00	41	49	88	72	61	54	44	42	42	60	53	61	62	39	33	61	66	43	51	60	43
10.00	60	75	76	77	76	76	68	44	70	71	65	67	56	53	51	72	77	72	60	42	52
11.00	54	77	80	91	104	77	81	46	68	70	73	69	60	65	59	78	83	79	60	55	67
12.00	64	75	119	109	92	103	70	57	62	64	86	61	55	50	51	58	73	70	86	67	65
13.00	60	99	99	107	92	101	81	62	75	75	65	71	67	58	40	67	82	110	77	69	59
14.00	55	106	89	108	105	101	67	50	82	77	84	61	58	48	71	63	75	88	85	64	40
15.00	80	92	79	98	87	82	67	56	68	78	60	72	56	36	42	61	59	49	61	55	40
16.00	71	94	87	92	88	86	75	56	66	68	64	63	85	72	48	64	75	64	55	59	47
17.00	76	107	104	99	91	103	70	57	79	58	80	71	62	61	47	68	74	70	63	48	47
18.00	78	96	80	92	93	84	73	59	69	68	73	69	59	54	67	73	74	76	67	54	65
19.00	63	105	85	100	80	76	69	64	59	80	87	78	45	50	61	74	63	64	68	60	37
20.00	87	72	75	78	75	84	72	68	62	67	87	62	57	52	57	75	58	66	58	59	64
21.00	63	81	71	89	87	72	59	44	53	49	71	63	54	63	52	65	53	74	60	48	34
22.00	48	59	81	62	61	58	65	54	53	58	59	55	42	54	58	48	46	51	56	55	40
23.00	42	50	56	45	59	54	62	40	39	45	37	57	60	47	37	43	50	36	46	31	45

FREQUENCY DATA BY LOCALE

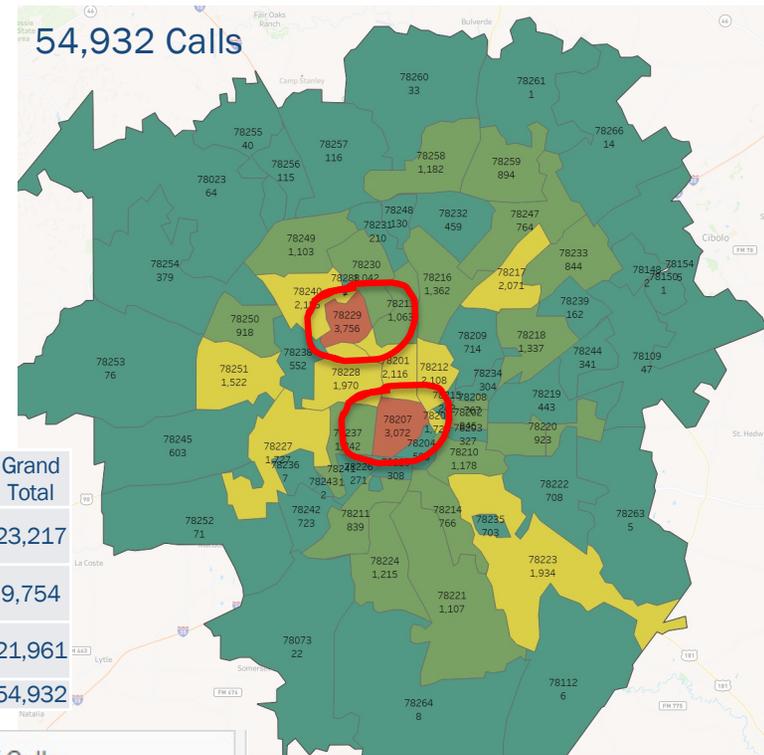
SAPD MH Calls 2019 through April 2021

Taking a closer look, we can narrow the call frequency to specific zip codes.

For all mental health emergency calls two zip codes emerge as the most frequent locale:

***78207**

***78229**



	2019	2020	2021	Grand Total
Mental Health Disturbance	8,732	10,300	4,185	23,217
Mental Health In Progress	3,897	4,226	1,631	9,754
Mental Health Routine	8,869	9,648	3,444	21,961
Grand Total	21,498	24,174	9,260	54,932

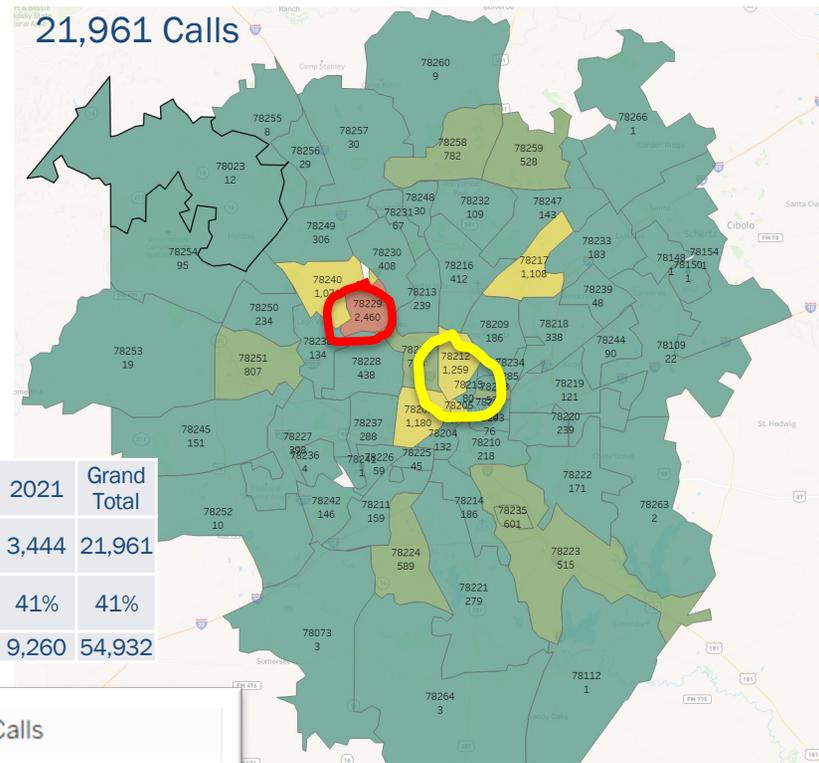


SAPD MH Routine Calls 2019 through April 2021

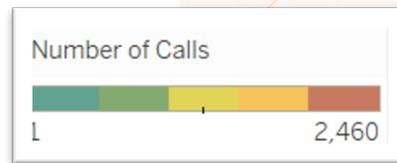
Mental Health Routine (MHR) calls happen with greatest frequency in the 78229 zip code.

There were 2,460 MHR calls for service in this zip code. During the same time period the area with the second highest frequency only had 1,259.

During the data analysis period, 78229 received 1,201 more MHR calls than the second highest count - signifying a specific program need in this area.



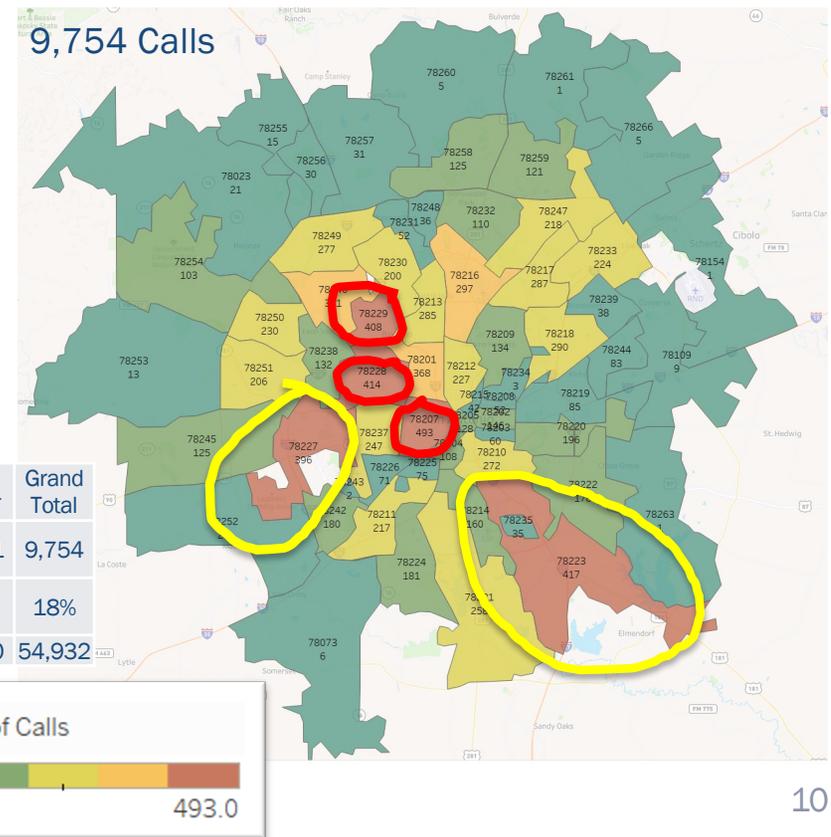
	2019	2020	2021	Grand Total
Mental Health Routine	8,869	9,648	3,444	21,961
% Mental Health Routine	41%	41%	41%	41%
Grand Total	21,498	24,174	9,260	54,932



SAPD MH in Progress Calls 2019 through April 2021

While the MH in Progress calls seem to be more dispersed geographically, we see the same high number of calls in smaller areas as are happening in the larger geographic areas.

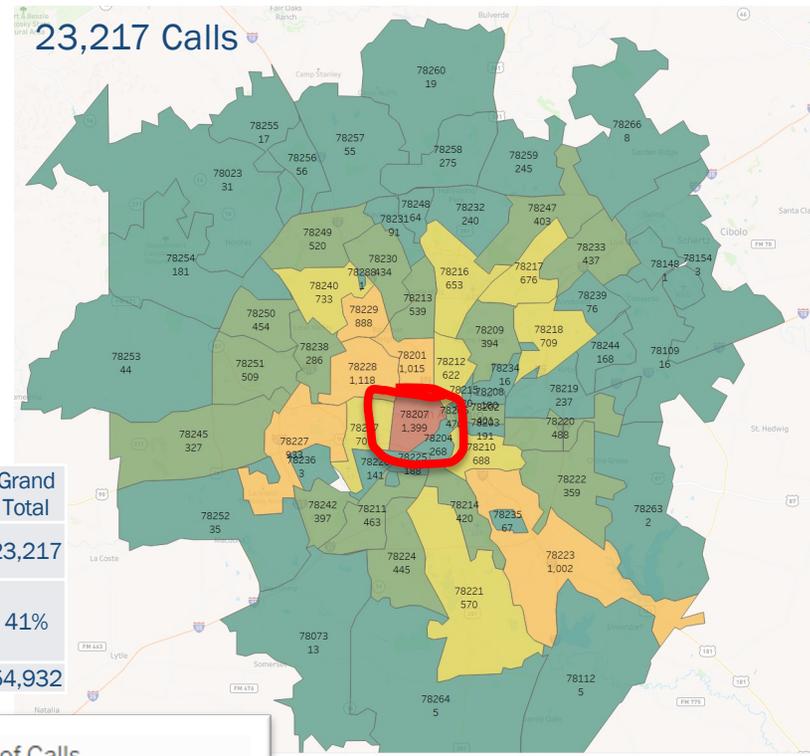
This indicates a high frequency of calls in small locations central to the City.



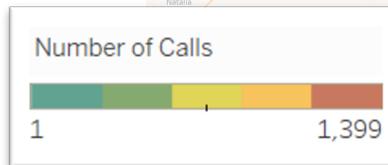
	2019	2020	2021	Grand Total
Mental Health In Progress	3,897	4,226	1,631	9,754
% Mental Health In Progress	18%	18%	18%	18%
Grand Total	21,498	24,174	9,260	54,932

SAPD MH Disturbance Calls 2019 through April 2021

Mental Health Disturbance, the call with the greatest level of intensity and public safety needs, occurs most often in the **78207** zip code.



	2019	2020	2021	Grand Total
Mental Health Disturbance	8,732	10,300	4,185	23,217
% Mental Health Disturbance	41%	41%	41%	41%
Grand Total	21,498	24,174	9,260	54,932

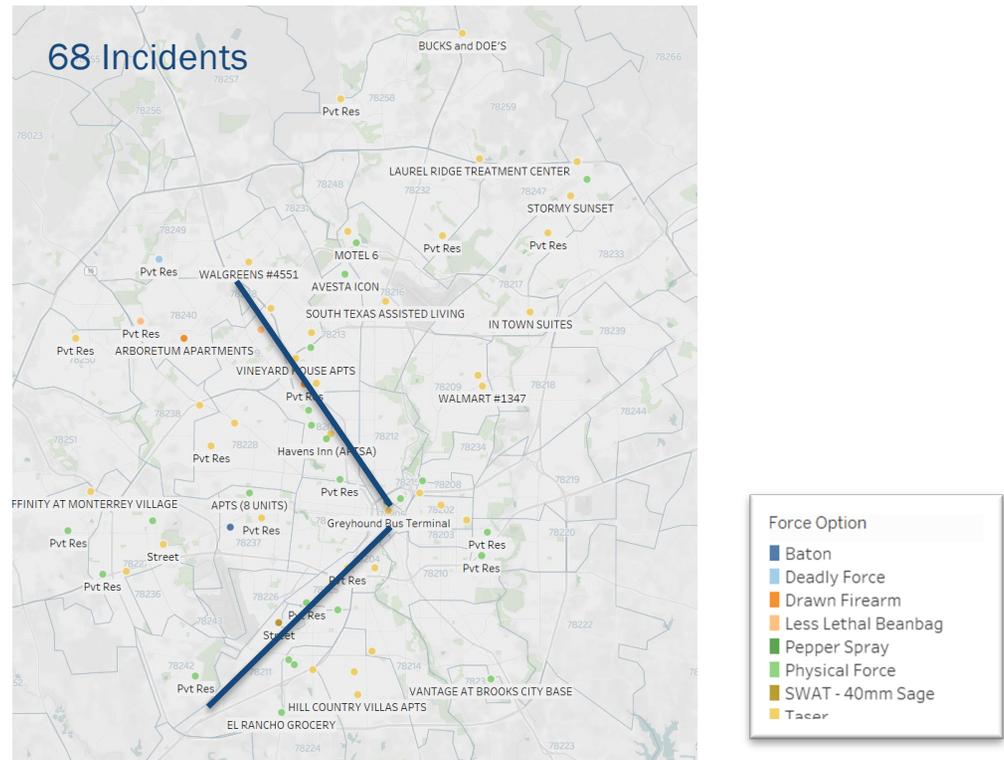


RESPONSE TO RESISTANCE

Map of Response to Resistance Locations by Use of Force Type

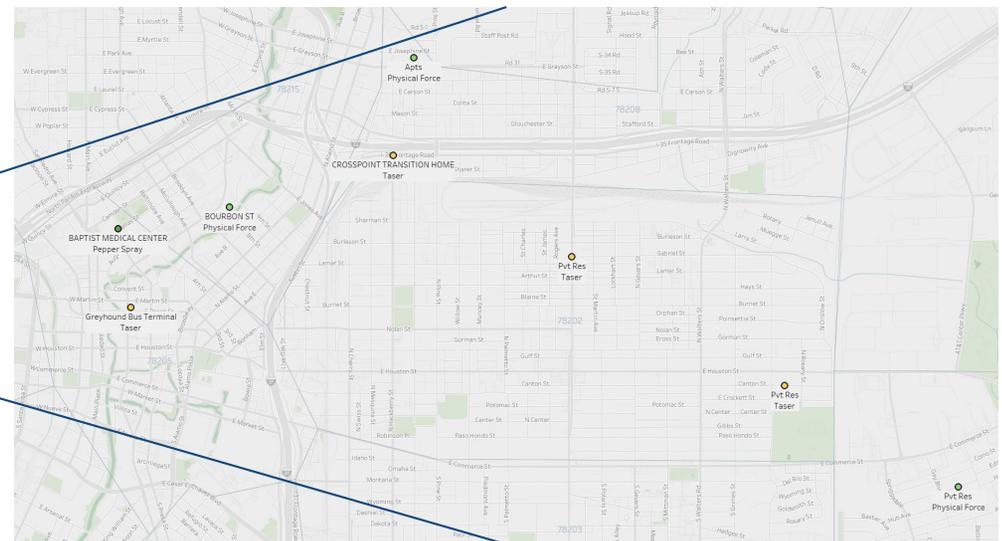
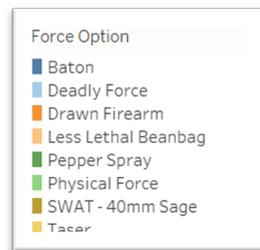
After identifying the areas of the city with the highest number of identified mental health emergencies we want to examine when these calls result in response to resistance (force) as an indicator of call intensity and risk.

We identified the following corridors as the most common geographic region with a force occurrence.



Detail Map of Response to Resistance Locations by Response Type Downtown

The most frequent instances of response to resistance occurred in a concentrated geographic area downtown. Consistent with the area with the highest number of MH Disturbance calls.

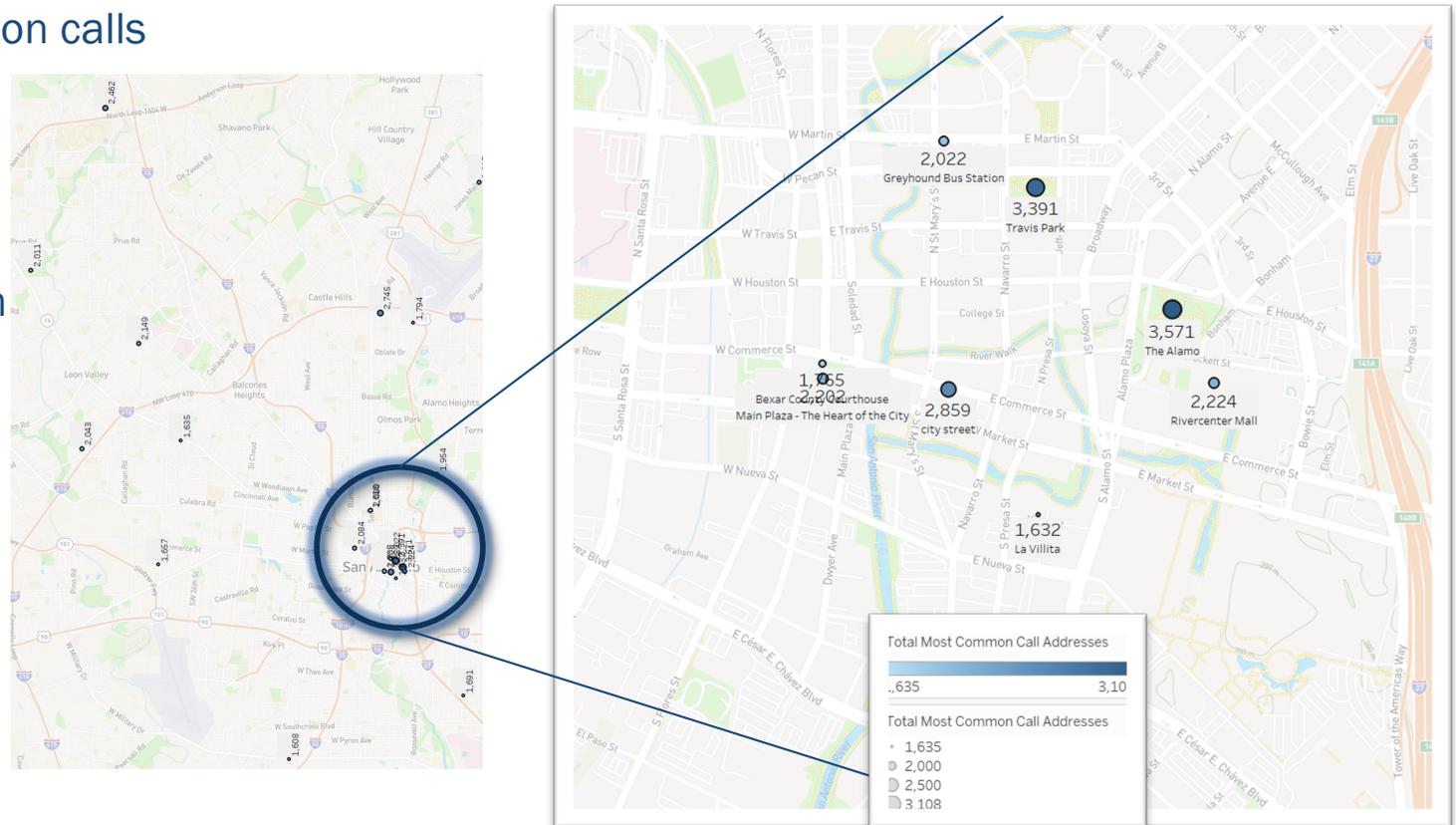


CALL FOR SERVICE OVERLAP

Most Common Location for SAPD Calls: Downton Detail

The final analysis included comparing the most common calls for service for SAPD with mental health emergency calls.

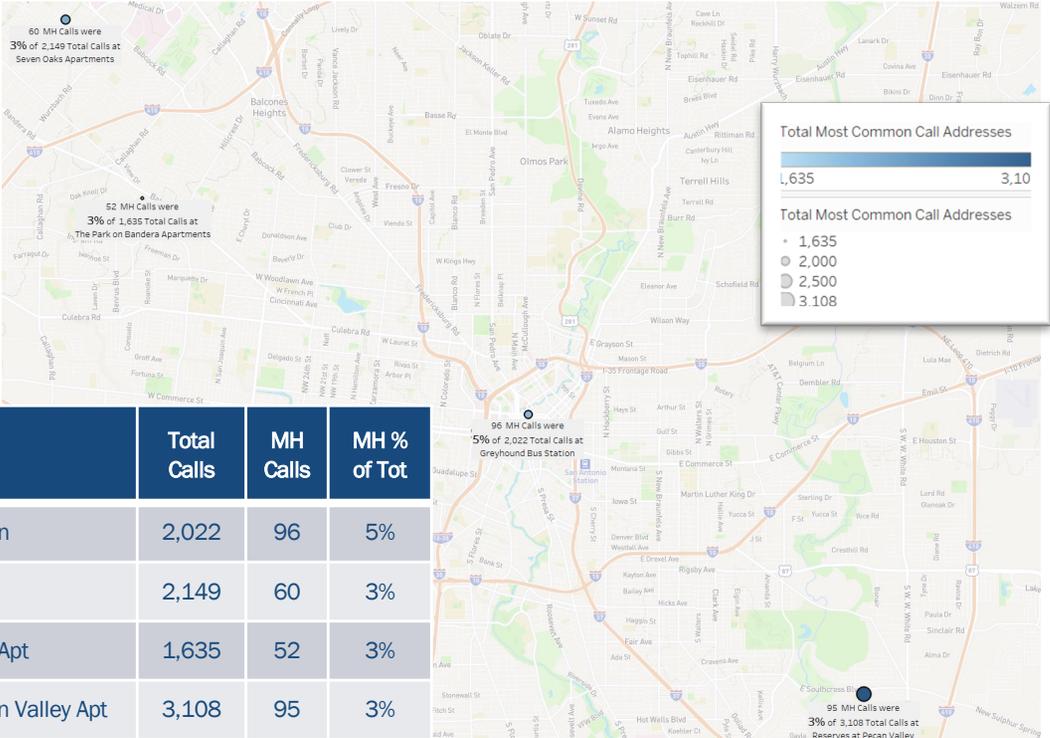
The most common location for calls for service for SAPD is consistent with the most frequent location for mental health disturbance calls.



Places Where Mental Health and Total Calls Overlap

SAPD does not have a method to identify a call as having a mental health element or need outside of the main mental health call codes. Inherently, calls come into a call center as something other than mental health emergency and are not identified as such until the officer arrives. Therefore, we look to see the areas where the highest frequency of all calls overlap with mental health calls.

There are 4 locations where mental health calls for service and SAPD all calls for service overlap.



Places Where Mental Health and Total Calls Overlap

<u>Greyhound Bus Station</u>		
1	Disturbance	837
2	z-On Site Activity	275
3	911 Hang Up	77
4	Welfare Check	74
5	Patrol By	50

<u>Seven Oaks Apartments</u>		
1	Disturbance	472
2	911 Hang Up	145
3	Disturbance Family	135
4	Burglary (In Progress)	83
5	z-On Site Activity	81

<u>Park on Bandera Apartments</u>		
1	Disturbance	297
2	Disturbance Loud Music	135
3	Disturbance Family	87
4	911 Hang Up	87
5	Shot Fired/Heard	72

<u>Reserves at Pecan Valley Apartments</u>		
1	Disturbance	542
2	Disturbance Family	161
3	911 Hang Up	150
4	Shot Fired/Heard	120
5	Miscellaneous	118



DRAFT PROGRAM RECOMMENDATIONS

Draft Considerations

***Final Recommendations will be shared with the Public Safety Committee in the Final August Report**

Adopt Report Management Systems/Computer Automated Dispatch procedures putting into place a disposition code requirement for all calls with a mental health care need without regard for the originating call type or outcome.

Develop clinical triage in the call center including incoming call triage and dispatch consultation for responding officers.

Placement of *multiple* Multidisciplinary Response Teams (MDRT) between the hours of 8 AM and 8 PM in the 78207 zip code with additional *single* teams between those hours in 78208 and 78229.

Develop a systemic approach including MDRT deployment and collaborations with community providers for service access at the areas identified as the top 4 overlap locations to conduct prevention and intervention engagement activities.

MDR Unit

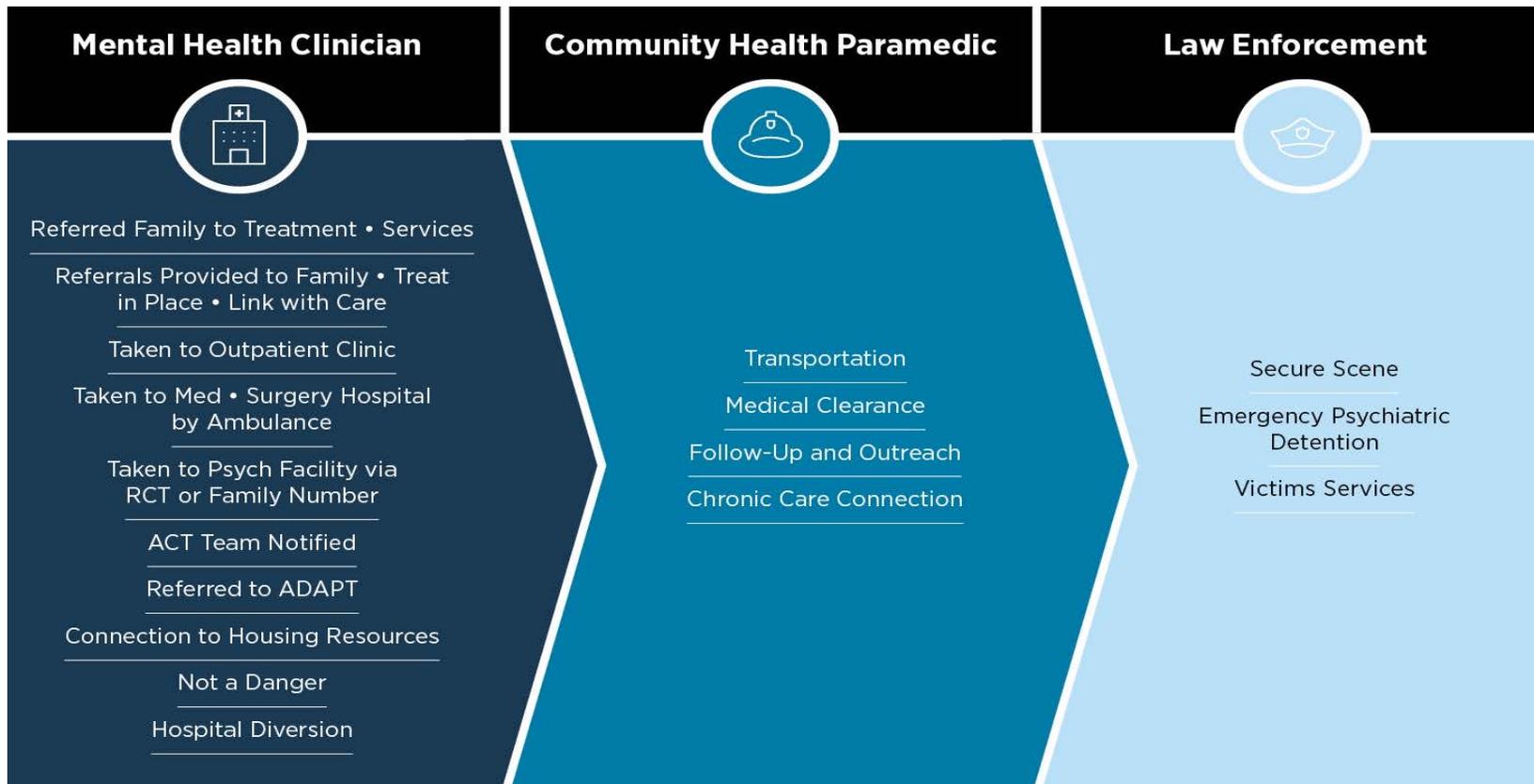
MDR Team



1 MDR Unit

One Team is Necessary to Cover 16-Hour Shifts, Seven Days a Week

Role of MDRT Members



**911 Embedded Mental Health
Clinician**

**Same Day Walk-in Clinic and
Prescriber Services**

**CIT Training for Officers, Clinicians
and Paramedics**

**24/7 Community Hospital
Bed Capacity**

Crisis Medical Care Capacity

Housing Referral Network



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Thank You
