



2020 1st Quarter Report to the  
Lowell, Massachusetts  
Board of Health

Reporting Period: Jan 1- Mar 31 2020

- **INTRODUCTION:**

This is the 1st Qtr. 2020 Report for the Lowell Board of Health.

Any questions or concerns surrounding the contents of this report should be directed to:

Trinity EMS, Inc.

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Thank you,

Management Team

Trinity EMS, Inc

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<b>TIMES:</b>	Trinity BLS Q2 2019	Trinity ALS	LGH ALS	Trinity BLS Q3 2019	Trinity ALS	LGH ALS
Fractile %	<b>94.28%</b>	<b>88.21%</b>	<b>93.32%</b>	<b>93.45%</b>	<b>88.50%</b>	<b>91.57%</b>
Avg out of chute	22 sec	56 sec	48 sec	24 sec	1 min	45 sec
Avg resp time	4 min 7 sec	5 min 47 sec	5 min 5 sec	4 min 11 sec	5 min 30 sec	5 min 12 sec
Avg on scene time	10 min 58 sec	10 min 22 sec	11 min 22 sec	11 min 42 sec	14 min 47 sec	13 min 10 sec
Avg transport time	6 min 41 sec	6 min 45 sec	10 min 34 sec	6 min 54 sec	7 min 38 sec	10 min 32 sec
# of events >7:59 response time	315	25	119	375	23	156
# of events using Non Trinity BLS	0			0		
	Trinity BLS Q4 2019			Trinity BLS Q1 2020		
	<b>91.87%</b>	<b>84.32%</b>	<b>92.12%</b>	<b>91.70%</b>	<b>84.92%</b>	<b>91.65%</b>
Avg out of chute	43 sec	1 min 5 sec	50 sec	58 sec	1 min 11 sec	56 sec
Avg resp time	4 min 48 sec	4 min 53 sec	5 min 56 sec	5 min 25 sec	7 min 8 sec	6 min 13 sec
Avg on scene time	11 min 41 sec	13 min 52 sec	15 min 16 sec	12 min 49 sec	15 min 17 sec	14 min 55 sec
Avg transport time	6 min 42 sec	7 min 9 sec	10 min 44 sec	7 min 4 sec	6 min 3 sec	10 min 25
# of events >7:59 response time	429	37	145	429	30	150
# of events using Non Trinity BLS	1	<-- 8th 911 call in Lowell at that time		0		

	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q 3 2019	Q4 2019	Q1 2020
<b>TEMS BLS</b>	<b>94.04%</b>	<b>94.72%</b>	<b>94.03%</b>	<b>92.75%</b>	<b>94.28%</b>	<b>93.45%</b>	<b>91.87%</b>	<b>91.70%</b>

<b>BLS OUTLIERS:</b>	2018 Total		2019		Last 4 Qs Total		Q2 2019		Q3 2019		Q4 2019		Q1 2020	
1st Emergency	340	24%	386	26%	394	25%	80	25%	85	23%	121	28%	108	25%
2nd Emergency	372	26%	400	27%	402	26%	103	33%	102	27%	96	22%	101	24%
3rd Emergency	259	18%	306	20%	322	21%	49	16%	91	24%	95	22%	87	20%
4th Emergency	189	13%	181	12%	195	13%	30	10%	43	11%	58	14%	64	15%
5th Emergency	146	10%	135	9%	135	9%	24	8%	31	8%	39	9%	41	10%
6th Plus Emergency	115	8%	96	6%	100	6%	29	9%	23	6%	20	5%	28	7%
	1421		1504		1548		315		375		429		429	
<b>BLS REASONS OVER 7:59:</b>	2018 Total		2019		Last 4 Qs Total		Q2 2019		Q3 2019		Q4 2019		Q1 2020	
Total	1421		1504		1548		315		375		429		429	
Couldn't locate house/lost	40	3%	88	6%	94	6%	14	4%	34	9%	26	6%	20	5%
Crew took long route	115	9%	105	7%	86	6%	27	9%	15	4%	29	7%	15	3%
Distance	350	24%	362	24%	378	24%	73	23%	85	23%	127	30%	93	22%
Dispatch delay	40	3%	141	9%	139	9%	26	8%	43	11%	35	8%	35	8%
Highway	9	1%	17	1%	19	1%	1	0%	7	2%	5	1%	6	1%
Out of chute	186	13%	149	10%	146	9%	29	9%	35	9%	39	9%	43	10%
TEMS Dispatch error	127	7%	49	3%	55	4%	12	4%	17	5%	12	3%	14	3%
Weather	47	5%	42	3%	22	1%	0	0%	11	3%	7	2%	4	1%
EMD	227	16%	257	17%	243	16%	60	19%	64	17%	70	16%	49	11%
911 Call volume	235	17%	215	14%	216	14%	50	16%	45	12%	56	13%	65	15%
others/blank	45	3%	79	5%	150	10%	23	7%	19	5%	23	5%	85	20%

<b>BLS OUTLIERS:</b>	2018 Total		2019		Last 4 Qs Total		Q2 2019		Q3 2019		Q4 2019		Q1 2020		
Witin the standard (7:59 >)			20243	93.73%	20056	92.86%	5188	91.69%	5289	93.48%	4838	93.58%	4741	91.70%	
0800-0859			734	3.40%	736	3.41%	158	3.00%	174	3.37%	197	3.81%	207	4.00%	
0900-0959			402	1.86%	405	1.88%	78	1.48%	110	2.13%	110	2.13%	107	2.07%	
1000-1059			201	0.93%	210	0.97%	42	0.80%	54	1.04%	61	1.18%	53	1.03%	
1100-1159			77	0.36%	83	0.38%	19	0.36%	14	0.27%	29	0.56%	21	0.41%	
1200 plus			83	0.38%	108	0.50%	18	0.34%	17	0.33%	32	0.62%	41	0.79%	
							see below		see below		see below		see below		
<b>12 PLUS BREAKOUT</b>	<b>2018 Total</b>		<b>2019</b>		<b>Last 4 Qs Total</b>		<b>Q2 2019</b>		<b>Q3 2019</b>		<b>Q4 2019</b>		<b>Q1 2020</b>		
911 Call volume (5th +)			26	24.07%	30	27.78%	8	25.00%	3	7.32%	10	24.39%	9	21.95%	
Distance				0.00%		0.00%		0.00%	1	2.44%	1	2.44%	3	7.32%	
Crew got lost/couldn't find house			11	10.19%	14	12.96%	3	9.38%	1	2.44%	4	9.76%	6	14.63%	
EMD			13	12.04%	14	12.96%	3	9.38%	3	7.32%	5	12.20%	3	7.32%	
Highway call			6	5.56%	6	5.56%	1	3.13%	1	2.44%	3	7.32%	1	2.44%	
TEMS Dispatch error/delay			13	12.04%	11	10.19%	2	6.25%	4	9.76%	3	7.32%	2	4.88%	
Others			12	11.11%	28	25.93%	1	3.13%	4	9.76%	6	14.63%	17	41.46%	
<b>41 Q1 2020 over 12 minutes</b>															
1	Medical alarm- no tranport	17	Breathing diff, Fire and ALS with patient				33	ABD pain, no trans							
2	Sick person priority 3 transport	18	Psych, no transport				34	Psych, no trans							
3	Chest pain, Fire with patient	19	Chest pain, pt in care of dialysis nurses				35	Sec 12, PD with pt							
4	Psych patient, priority 3 transport	20	Diff breathing, BLS tranport, ALS on site				36	Assault, priority 3							
5	ETOH, priority 3 transport	21	Seisure, no transport				37	Lift assit							
6	Shoulder pain, priority 3 transport	22	MVA, Fire with patient, priority 2 transport				38	Seizure, ALS with pt							
7	Fall, no transport	23	Breathing diff, Fire and ALS with patient				39	Diabetic, no trans							
8	Fall, no transport	24	Overdose, ALS triage				40	Cardiac arrest, FD with							
9	ETOH, priority 3 transport	25	Sec 12 at nursing home				41	Assault, priority 3							
10	Diff uninating, priority 3	26	fall, priority 2 transport												
11	Vomiting, priority 3 transport	27	foot pain, priority 3 transport												
12	Altered mental, no transport	28	Finger stuck in toy, no transport												
13	Locked in bathroom, no transport	29	MVA, Fire with patient, priority 2 transport												
14	OD, Fire and LGH ALS with patient	30	ETOH, priority 3 transport												
15	Nose bleed, priority 3	31	Kids crying, no transport												
16	Check welfare, no transport	32	ETOH, waited for PD												

<b>VOLUME:</b>	2018		2019		Last 4 Qs		Q2 2019		Q3 2019		Q4 2019		Q1 2020	
Total responses (ALS & BLS)	30318		30019		30148		7497		7710		7350		7591	
Total ALS Responses	8511	28%	8276	28%	8194	27%	1994	27%	2050	27%	2082	28%	2068	27%
TEMS ALS Responses	955	11%	871	11%	848	10%	212	11%	200	10%	236	11%	200	10%
LGH ALS Responses	7556	89%	7405	89%	7346	90%	1782	89%	1850	90%	1846	89%	1868	90%
<b>INCIDENTS:</b>	21807		21743		22118		5503		5660		5268		5687	
BLS Incident	12340		13467		13924		3509		3610		3186		3619	
ALS and BLS Incident	8467		8276		8194		1994		2050		2082		2068	
Needle pick ups	728		280		208		77		62		41		28	
Non Emergent Lift assists	784		582		270		116		102		37		15	
<b>TRANSPORTS:</b>	2018		2019		Last 4 Qs		Q2 2019		Q3 2019		Q4 2019		Q1 2020	
Total Transports (ALS & BLS)	16379		16483		16464		4117		4117		4167		4063	
Total BLS Transports	13078	80%	12963	79%	13098	80%	3274	80%	3206	78%	3348	80%	3270	80%
Total ALS Transports	3301	20%	3520	21%	3366	20%	843	20%	911	22%	819	20%	793	20%
TEMS ALS Transports	503	15%	362	10%	359	11%	109	13%	112	12%	118	14%	20	3%
LGH ALS Transports	2798	85%	3058	87%	3007	89%	734	87%	799	88%	701	86%	773	97%
<b>TRIAGE:</b>	2018		2019		Last 4 Qs		Q2 2019		Q3 2019		Q4 2019		Q1 2020	
Total Triage	1178	14%	1072	13%	1076	13%	240	12%	247	12%	294	14%	295	14%
TEMS Triage	57	6%	59	7%	52	6%	16	8%	12	6%	18	8%	6	3%
LGH ALS Triage	1121	15%	1013	14%	1024	14%	224	13%	235	13%	276	15%	289	15%

<b>INTUBATIONS:</b>	2018			2019			Last 4 Qs Total			Q2 2019			Q3 2019			Q4 2019			Q1 2020									
Trinity company total	63	of	69	###	71	of	76	93%	67	of	74	91%	20	of	24	83%	12	of	12	100%	15	of	15	100%	20	of	23	87%
Trinity Lowell only	10	of	10	100%	6	of	7	86%	4	of	5	80%	1	of	2	50%	2	of	2	100%	0	of	0	###	1	of	1	100%
LGH ALS Lowell only	151	of	155	97%	149	of	150	99%	154	of	155	99%	37	of	37	100%	26	of	27	96%	42	of	42	100%	49	of	49	100%
LGH Greater Lowell region													70	of	71	99%	56	of	57	98%	73	of	73	100%	75	of	75	100%
LGH ALS MAI* in Lowell only	62							Last 4 Qs Total			20 (35 system wide)			10 (22 system wide)			17 (30 system wide)											
<b>IO SUCCESS RATE:</b>	2018			2019			Last 4 Qs Total			Q2 2019			Q3 2019			Q4 2019			Q1 2020									
Trinity company total	81	of	81	100%	81	of	81	100%	78	of	78	100%	22	of	22	100%	16	of	16	100%	17	of	17	100%	23	of	23	100%
Trinity Lowell only	12	of	12	100%	8	of	8	100%	6	of	6	100%	2	of	2	100%	2	of	2	100%	1	of	1	100%	1	of	1	100%
LGH ALS Lowell only	83	of	83	100%	89	of	89	100%	86	of	86	100%	20	of	20	100%	18	of	18	100%	23	of	23	100%	25	of	25	100%
<b>Airways:</b>	2018			Last 4 Qs Total			Last 4 Qs Total			Q2 2019			Q3 2019			Q4 2019			Q1 2020									
Trinity company wide- King tube success rate-post ETT failure																												
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Last Name	First Name	Hire Date	Position	MA Certification #	National Registry Certification
Finerty	Andrew	2020-03-09	EMT-B	E0916937	E3507803
Higgins	John	2020-03-09	EMT-B	E0915447	E3463319
Mancuso	Joseph	2020-03-09	EMT-B	E0917243	E3511547
Britko	Courtney	2020-02-03	EMT-B	E0917043	E3512003
Cryer	Scott	2020-02-03	EMT-A	A0900393	A2031641
Gentile	Zackary	2020-02-03	EMT-B	E0917102	E3513420
Oyola	Alberto	2020-02-03	EMT-B	E0915020	E3452331
Piecewicz	Samantha	2020-02-03	EMT-B	E0917055	E3511320
Roderick	Casarra	2020-02-03	EMT-B	E0914457	E3434276
Berberian	Christopher	2020-01-06	EMT-B	E0916752	E3489604
Boucher	Julia	2020-01-06	EMT-B	E0915483	E3466753
Coutu	Samuel	2020-01-06	EMT-B	E0915015	E3452065
Hari	Darshana	2020-01-06	EMT-B	E0916909	E3465106
Kenyon	Erika	2020-01-06	EMT-P	P0903535	M5037055
Norman	Alexei	2020-01-06	EMT-B	E0915856	E3476486
Williams	Steven	2020-01-06	EMT-B	E858329	

# EMD- Direct to Trinity

	2018 Total	2019	Last 4 Qs Total	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Alpha (BLS-P3)	1524	1296	1389	362	296	335	396
Bravo (BLS-P2)	444	453	464	125	90	129	120
Charlie (ALS-P1)	722	719	724	147	220	167	190
Delta (ALS-P1)	634	716	694	139	223	163	169
Echo (ALS-P1)	3	6	5	1	2	1	1
Total EMD by Trinity in Lowell	3327	3190	3276	774	831	795	876

The above data are direct calls to Trinity for patients in Lowell.

Alpha- results in BLS going no lights or sirens to the patient

Bravo- results in BLS going lights and sirens to the patient

Charlie, Delta, Echo- results in ALS and BLS going lights and sirens to the patient

As part of Trinity EMS's EMD accreditation a portion of the above calls are randomly selected for quality assurance review. TEMS reviews 25 EMD'ed calls per week. These 25 calls could come from any city or state.

Potentially none or all 25 calls could be for patients in Lowell.

Trinity EMS an Accredited Center of Excellence through the International Academy of Emergency Dispatch. Trinity is 1 of 2 in Massachusetts and 1 of 184 of these centers in the world



	2018		2019		2019		Q2 2019		Q3 2019		Q4 2019		Q1 2020	
Total ORI in Lowell	811		523		480		137		127		125		91	
Priority 1 ORI in Lowell	455		313		303		83		79		84		57	
Trinity wide ORI	1206		855		840		214		235		209		182	
Trinity wide Priority 1	708		545		557		138		151		144		124	
<b>ORI in Lowell by setting:</b>														
Inside Private home	327	40%	206	40%	193	40%	47	34%	42	33%	68	54%	36	40%
Public location inside	82	10%	76	10%	57	12%	18	13%	14	11%	15	12%	10	11%
Public location outside	386	48%	230	48%	221	46%	69	50%	69	54%	42	34%	41	45%
Other	16	2%	11	2%	9	2%	3	2%	2	2%	0	0%	4	4%
<b>Gender:</b>														
Female	224	28%	151	28%	139	29%	48	35%	33	26%	34	27%	24	27%
Male	588	72%	372	72%	340	71%	89	65%	94	74%	91	73%	66	73%
Females U20	2	1%	3	1%	2	1%	2	4%	0	0%	0	0%	0	0%
Female 20-29	78	35%	32	35%	33	24%	12	25%	5	15%	6	18%	10	42%
Female 30-39	79	35%	53	35%	45	32%	19	40%	7	21%	12	35%	7	29%
Female 40 - 49	36	16%	42	16%	37	27%	9	19%	14	42%	11	32%	3	13%
Female 50- +	29	13%	21	13%	22	16%	6	13%	7	21%	5	15%	4	17%
Male U20	2	0%	1	0%	1	0%	0	0%	0	0%	1	0%	0	1%
Male 20-29	178	30%	91	30%	71	21%	18	21%	19	20%	21	20%	13	23%
Male 30- 39	178	30%	129	30%	121	36%	29	36%	35	33%	34	37%	23	37%
Male 40 - +	124	21%	65	21%	65	19%	19	19%	19	21%	14	20%	13	15%
Male 50- +	106	18%	86	18%	82	24%	23	24%	21	26%	21	22%	17	23%

	2018 Total		2019 Total		Last 4 Qs Total		Q2 2019		Q3 2019		Q4 2019		Q1 2020	
Acre	125	15%	63	15%	58	12%	17	12%	15	12%	13	10%	13	14%
Back Central	107	13%	82	13%	81	17%	26	19%	21	17%	20	16%	14	15%
Belvidere	17	2%	17	2%	21	4%	5	4%	5	4%	6	5%	5	5%
Centralville	109	13%	68	13%	69	14%	20	15%	14	11%	27	22%	8	9%
Downtown	204	25%	138	25%	114	24%	31	23%	34	27%	25	20%	24	26%
Highlands	48	6%	36	6%	30	6%	9	7%	8	6%	6	5%	7	8%
Lower Belvidere	21	3%	11	3%	8	2%	3	2%	2	2%	2	2%	1	1%
Lower Highlands	81	10%	51	10%	47	10%	15	11%	10	8%	16	13%	6	7%
Pawtucketville	48	6%	25	6%	24	5%	4	3%	10	8%	5	4%	5	5%
Sacred Heart	42	5%	21	5%	20	4%	6	4%	5	4%	3	2%	6	7%
South Lowell	9	1%	11	1%	8	2%	1	1%	3	2%	2	2%	2	2%

ALS: Life Support- may refer to vehicles staffed with a least one paramedic or refer to a paramedic level of patient care. Trinity Emergency ALS vehicles are staffed with two paramedics.

A Response: Is defined as dispatching or sending an ambulance to a request for service. In this report , a response is further sorted to include only emergency responses. These numbers do not include routine transfers such as dialysis patients or radiation treatment patients.

A Transport: Is defined as taking a patient in an ambulance to a destination.

BLS: Basic Life Support- may refer to a vehicle staffed with two emergency medical technicians (EMT) or an EMT level of patient care. Trinity BLS ambulances are staffed with two EMT's

EMD: Emergency Medical Dispatch- a nationally recognized system whereby dispatchers are trained and follow a specific protocol to ascertain the nature of illness/injury and provide patient care instructions to the caller until the First Responders or ambulance arrives.

Intubation Attempt: Is defined as insertion of the laryngoscope blade into the oral cavity for the purpose of inserting an endotracheal tube.

MAI: Medication Assisted Intubation is generally regarded as facilitating an intubation with the use of sedatives. In Massachusetts how ever, this term includes the use of Paralytics. The Massachusetts MAI program is not part of the standard scope of practice for Paramedics. It is controlled through the Department of Public Health's Office of Emergency Medical Services Medical Services Committee.

On scene time: The amount of time that has elapsed from the moment the ambulance is on scene to the moment the ambulance begins transport or is released back into service

Out of chute time: The amount of time that elapses from the moment when the ambulance is dispatched to the moment the ambulance begins moving towards the call.

On time performance score: Is the percentage of calls that meet or exceed the response time criteria.

Request for service: When a dispatcher receives request for an ambulance usually via telephone or radio

Response time: The amount of time that has elapsed from the moment the call is completely entered into the dispatch system to the moment the ambulance arrives on scene.

RSI: Rapid Sequence Intubation is the facilitation of intubation using both sedatives and paralytics

Service Zone Plan: M.G.L. Part 1 Title XVI Chpt. 11C Section 1 defines as "a geographic area defined by and comprised of one or more local jurisdictions, in which a local jurisdiction may select and the department shall designate an EMS first response service and an ambulance service to provide EMD first response and primary ambulance response to the public within the defined area, pursuant to section 10." Massachusetts Regulations 105 CMR 170.249.

Transport time: The amount of time that has elapsed from the moment the ambulances leaves the scene with a patient to the moment the ambulance arrives at the receiving facility

Triage down: When a paramedic units arrives at the patients side and based on the patient condition determines that the patient may be treated and transported at the BS level. Note- There is no protocol for this practice, however, OEMS does address it though an administrative advisory: A/R5=620.

- The following document is a detailed outline of the reporting process used by Trinity EMS.
- **Responding lights and sirens**
  - From Lowell 911
    - All calls require a lights and sirens response regardless of the patients condition except
      - Needle pick ups
      - Pt carry down/up without a medical issue
      - Unless requested to response without lights and sirens by the 911 center.
  - Direct to Trinity calls that Trinity EMD's
    - Bravo, Charlie, Delta, and Echo go with lights and sirens
    - Alpha or Omega level calls go without lights and sirens
  - Direct to Trinity that Trinity doesn't EMD
    - Response lights and sirens for any patients. Unless the calling agency EMD'ed the call to a non-urgent level.
    - This set of calls would include call from UMASS PD, or other ambulance services.
- Incident
  - A request for or by someone within the city limits of Lowell that requires an EMS response.
  - Each request is counted as 1 incident
    - A patient that gets a BLS unit for back pain is counted as 1 incident
    - A 10 car MVC with 20 patients requiring 6 BLS, 2 ALS, and 2 helicopters is counted as 1 incident
- Responses
  - Counts the number of occurrences when EMS vehicles response lights and sirens to a call.
    - An ALS and BLS unit response to a patient with chest pain, that counts as 2 responses. (2 vehicles put their lights on)
- Times:
  - All below are from incidents
  - BLS
    - Priority 1, and 2 incident responses
    - Includes 911 and calls direct to Trinity
      - Any call directly to Trinity from another call center that would require an emergent response
        - (IE- Umass Lowell calls Trinity for a chest pain)
        - Any Charlie, Delta, Echo response called and EMD'ed by Trinity
    - Includes call when ALS and BLS responded as well as call when just BLS responded.
    - **Q# year# Performance score**
      - Is the created by
- Dividing the number of incidents BLS units responded to.

- Into the number of those calls that shows a response time over 08:00 or greater
  - Calls excluded
    - Delta level calls EMD'ed by Trinity that had a total response time of greater than 07:59
- **Avg out of chute**
  - Time from Trinity designated and selected ambulance was assigned call to selected crew to the time selected vehicles starts movement towards this call
  - Excluded-
    - Any time showing more than 10 minutes is excluded as likely time stamp missing
- **Avg response time**
  - From Call saved by Trinity dispatch to time ambulance arrived at geocoded location of the call.
    - Within Trinity CAD- The call saved time is called "call taken". This time is created after Trinity dispatch get an address, apartment, complaint, and any other info 911 passed along.
  - Excluded-
    - Charlie, delta, Echo, and Omega calls direct and EMD'ed by Trinity that result in a response time over 07:59
    - Any time showing more than 20 minutes is excluded as likely time stamp missing
- **Avg on scene time**
  - Includes only calls included above
  - Time from crew arrival on site to time vehicle:
    - Clears
    - Occupies to the hospital
  - Excluded
    - Any time showing more than 30 minutes is excluded as likely time stamp missing
- **Avg transport time**
  - Includes only calls included above
  - Time from crew: Clears or arrives to the hospital
  - Excluded
    - Any time showing more than 20 minutes is excluded as likely time stamp missing
- **# of events >7:59 or greater**
  - Includes any call that includes calls included from reasons earlier in the section
  - That's response time is greater than 07:59
  - Excluded
    - Any call where the unit is canceled prior to arrival
- Called that were EMD'ed by Trinity

- No other calls are excluded- weather, 911 call volume as examples are outliers counted and categories in the “BLS reasons over 07:59”
- **# of events using Non Trinity BLS units**
  - Requests for ambulances to Trinity that Trinity was not able to send a BLS unit on within the State mandated 5 minute dispatch time for
    - Any 911 priority 1 or 2 call
    - Any call directly to Trinity from another call center that would require an emergent response
      - (IE- UMass Lowell calls Trinity for a chest pain)
    - Any Charlie, Delta, Echo response called and EMD’ed by Trinity
- ALS
  - The only difference from the BLS is the ALS times start at dispatch, and not call created
- **BLS Outliers:**
  - For any BLS response over 07:59
    - Trinity will make note and report in this section the number of concurrent emergencies in Lowell at the time this call is created.
      - Includes 911 calls and calls direct to Trinity
      - Non-emergency and call in other cities will not be counted
- **BLS Reasons over 07:59**
  - For any BLS response over 07:59
    - Trinity will conduct a route cause analyses as to the reason for the response time
    - Trinity will take note and report in this section. These reasons will be grouping into 1 of the following
      - Couldn’t location house/lost
      - Crew passes the geo-coded location for the address more than once without getting on arrival
    - Crew took long route
      - Crew did not take the fastest route from their dispatch location to the pickup location
    - Distance
      - Usually this is used when a
        - Dispatcher gives the call out within 60 seconds
        - The crew is enroute within 120 seconds
        - Posting is happening
        - The ambulance crew went the most direct route
        - Circumstances include
          - If there is a second call in a sector of the city before reposting. 2<sup>nd</sup> call in downtown, this ambulance to the second call has two reports a much greater distance to the patient.

- Also the extra time could be traffic, school buses, and people not willing to move. I I
      - Gets used if none of the others fit.
    - ALSO
      - If the address is far away from one of the top 4 posting locations
        - Posting location 1 is Chelmsford and Westford
        - Posting location 2 is Bridge & W 6th
        - Posting location 3 is Callery Park
        - Posting location 4 is Mammoth and 4<sup>th</sup>
      - Far away is not defined in miles. More looking at the map and lacking a different issue this is selected.
- Dispatch chute
  - A Trinity EMS dispatch took more than 59 seconds from call saved to dispatch. This could be due to error or workload
- Highway
  - The location of the call is a highway. Accessing highway locations usually takes extra time do to divided 1 way road
- Out of Chute
  - The Trinity EMS crew took at least 120 seconds to get from a dispatched stage to the ambulance physically moving towards the call
- GPS fail
  - If our ambulance tracking program is not running we cannot prove a response time or a root cause.
- TEMS Dispatch error
  - An example of this is TEMS dispatcher entering the wrong house or address.
- Weather
  - Did weather impact posting or travel time. Usually snow/ extreme cold or heat
- 911 Call volume
- Was this call more than the 4<sup>th</sup> emergency in Lowell at this time