



Northville Plymouth Fire Advisory Board Meeting Agenda

Monday, May 1, 2023 4:00 p.m.
Northville City Hall 215 W. Main St.

1. Roll Call: Chair Marques Thomey, Members George Lahanas, Jim Rachwal, Paul Sincock, Brian Turnbull
2. Approval of Meeting Minutes for January 17, 2023
3. Fire Inspection Report
4. Training Report
5. Personnel Staffing Report
6. Run Volume Report
7. Review Response Times
8. Review of CPSM Article – Reducing lights and siren vehicle operation
9. Next Meeting Date
10. Adjournment



Northville Plymouth Fire Advisory Board

Meeting Minutes

Tuesday, January 17, 2023 4:00 p.m.
Plymouth City Hall

1. ROLL CALL

Present: Chair Marques Thomey, Members Jim Rachwal, Paul Sincock, Brian Turnbull, Mark Wollenweber
Also Present: Chief Matt Samhat

2. APPROVAL OF MEETING MINUTES

Turnbull made a motion, seconded by Sincock, to approve the minutes of the October 17, 2022, meeting.

MOTION PASSED 5-0

3. FIRE INSPECTION REPORT

Samhat provided a year-end report outlining the fire inspections. The report shows a total of 631 inspections in 2022, which Samhat noted was more than neighboring communities.

4. TRAINING REPORT

Samhat said department members attended a total of 2804 hours of Thursday night department training, 653 individual training hours, 150 hours of outside training, 202 hours of USAR training and 173 hours of HazMat training in 2022. Thomey asked about the increase of participation in training and Samhat said the numbers are back to pre-Covid levels.

5. PERSONNEL STAFFING REPORT

Samhat reported that there are currently 48 staff members, including 23 at station one and 24 at station two. Thomey asked about personnel participation levels, and Samhat said that staff who didn't meet the response requirements had been relieved of duty.

6. RUN VOLUME REPORT

Samhat reported that in 2022, station one received 673 calls for service in the third quarter, and station two received 1169.

7. REVIEW OF RESPONSE TIMES

The group reviewed the 2022 year-end response times provided by Samhat. The average call-to-arrival response time at Station One was 7:23, with a dispatch-to-arrival time of 6:33. At Station Two, the average call-to-arrival response time was 8:15, and the dispatch-to arrival-time was 7:16 in 2022. Rachwal said the response times are very good when compared to national standards.

9. FINANCIAL REPORT

The group reviewed the year-to-date budget.

11. OTHER BUSINESS

There was a brief discussion on the intergovernmental contract. Resident Kevin Henderson asked about the fire marshal position. Rachwal noted the need for a strategic plan and Wollenweber suggested asking the ICMA Center for Public Safety Management to perform a review of operations.

11. NEXT MEETING DATE

The next meeting will be on Monday, April 17, 2023, at 4:00 p.m. at Northville City Hall.

12. ADJOURNMENT

Turnbull offered a motion, seconded by Sincock, to adjourn the meeting.

MOTION PASSED 5-0



Northville City Fire Department

Serving the cities of Northville and Plymouth

Fire Inspection Report 2023

Inspections Per Inspector

<u>Inspector</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Q 1</u>
Lt Rice	70	39	83	192
O'Donnell	27	1	0	28
Perchman	0	0	6	6
Prieur	27	9	20	56
Total Inspections	124	49	109	282

Inspections By City

<u>City</u>				
Northville	27	1	6	34
Plymouth	97	45	103	245

Inspection Types

New Inspection	69	35	16	120
Re-Inspection	52	8	75	135
Complaint	1	2	1	4
Other	7	4	23	34
Occupancy Measurement	1	0	0	1



Northville City Fire Department

Serving the cities of Northville and Plymouth

Response Times 2023

2022	Jan	Feb	Mar	Q 1	Apr	May	Jun	Q 2
St.1 - Avg Run Times (Metrics)								
Alarm Processing Time	0:01:26	0:01:03	0:01:01	0:01:10				
Turnout Time	0:02:51	0:02:38	0:02:12	0:02:34				
Travel Time	0:03:37	0:02:56	0:03:25	0:03:19				
Call-Arrival Repose Time	0:07:54	0:06:39	0:06:38	0:07:04				
Disp-Arrival Response Time	0:06:27	0:05:36	0:05:36	0:05:53				
Emergent Time (D-A)	0:05:34	0:05:44	0:04:51	0:05:23				
Non-Emergent Time (D-A)	0:09:54	0:05:26	0:06:11	0:07:10				
Avg Personnel Response								
Avg Personnel Response/Call								
00:00 - 07:00	2	2	3	3				
07:00-17:00	5	5	4	5				
17:00-00:00	4	8	7	7				
St.2 - Avg Run Times (Metrics)								
Alarm Processing Time	0:00:55	0:00:51	0:01:27	0:01:04				
Turnout Time	0:03:57	0:02:47	0:02:31	0:03:05				
Travel Time	0:03:09	0:03:17	0:03:34	0:03:20				
Call-Arrival Repose Time	0:08:00	0:06:55	0:07:31	0:07:29				
Disp-Arrival Response Time	0:07:06	0:06:04	0:06:04	0:06:25				
Emergent Time (D-A)	0:06:56	0:05:50	0:05:58	0:06:15				
Non-Emergent Time (D-A)	0:07:36	0:06:21	0:06:10	0:06:42				
Avg Personnel Response								
Avg Personnel Response/Call								
00:00 - 07:00	4	4	5	4				
07:00-17:00	6	6	5	6				
17:00-00:00	7	9	9	8				



Northville City Fire Department

Serving the cities of Northville and Plymouth

Response Times 2023

Yearly Comparison

St.1	2021	% Change	2022	% Change	2023
Alarm Processing Time	0:01:08	-8.4%	0:01:02	12.3%	0:01:10
Turnout Time	0:05:12	-4.1%	0:04:59	-48.6%	0:02:34
Travel Time	0:02:07	23.0%	0:02:36	27.5%	0:03:19
Call-Arrival Repose Time	0:07:29	15.3%	0:08:38	-18.2%	0:07:04
Disp-Arrival Response Time	0:07:21	3.2%	0:07:35	-22.4%	0:05:53
St.2	2021	% Change	2022	% Change	2023
Alarm Processing Time	0:01:06	-10.6%	0:00:59	8.8%	0:01:04
Turnout Time	0:05:40	-16.2%	0:04:45	-35.2%	0:03:05
Travel Time	0:02:26	12.3%	0:02:44	21.8%	0:03:20
Call-Arrival Repose Time	0:09:09	-7.3%	0:08:29	-11.8%	0:07:29
Disp-Arrival Response Time	0:08:02	-6.8%	0:07:29	-14.3%	0:06:25

CPSM is the exclusive provider of police, fire, EMS, Emergency Management and Chief Selection for ICMA – the 105 year old, premier association of public sector managers and administrators with over 13,000 members.

All CPSM subject matter experts have extensive management experience in public safety departments. They are all either currently serving in the service or have recently retired, providing them with recent, real-time experience in this constantly changing environment.



[f](#) [t](#) [in](#) (800) 998-3392 CONTACT US

Culture shift: Reducing lights and siren vehicle operation

on January 18, 2023 in News

Resources to dispel 3 myths about hot response to improve clinician, patient and community safety

By Douglas F. Kupas, MD, EMT-P, FAEMS; and CPSM's Matt Zavadsky, MS-HSA, EMT

In early 2022, 14 international EMS, patient safety, quality and fire associations released a joint position statement encouraging EMS systems to reduce the incidence of lights and siren (L&S) vehicle operations. This represents a significant alignment by these associations on the risks and benefits of L&S EMS vehicle operations.

Most EMS clinicians who have responded to more than a few EMS calls learn that from a clinical need perspective, there are times when a L&S response may be warranted and many times when it is not. L&S response increases the chance of an EMS vehicle crash by 50% and almost triples the chance of crash during patient transport [1]. But how should agencies undertake the effort to change 50 years of culture, both within emergency service agencies and in their communities, to reduce L&S vehicle operations?

There are many myths surrounding L&S vehicle operations that we need to dispel. Perhaps by debunking these common myths, you can embark on processes to help make your agency's personnel, and your community, a little safer.

MYTH #1: THE COMMUNITY EXPECTS A L&S RESPONSE

Invariably, discussions about the appropriateness of lights and siren vehicle operations will include a comment from doubters, like, "the public expects us to respond L&S to their call; if we don't, they will think we're not taking their medical emergency seriously." Are you sure? Have we really asked them that? Do they really care?

CPSM is the exclusive provider of police, fire, EMS, Emergency Management and Chief Selection for ICMA – the 105 year old, premier association of public sector managers and administrators with over 13,000 members.

All CPSM subject matter experts have extensive management experience in public safety departments. They are all either currently serving in the service or have recently retired, providing them with recent, real-time experience in this constantly changing environment.

In 2005, the Anne Arundel County, Maryland, system was planning to increase its responses and transports without using L&S. They surveyed the community and found that 85% of the surveyed public were comfortable with non-L&S response based upon dispatcher screening and with non-L&S transport after EMS provider evaluation [3].

The number of times that callers request “no lights or sirens” from a 911 dispatcher demonstrates many do not want the attention of L&S, even when it is their emergency. If there is a public expectation for L&S response on all calls, it’s likely that we (EMS systems) gave the public that expectation, so we may be responsible for changing that expectation.

Dispel this myth: Start with a community perception survey, including a focused survey for elected and appointed officials, like the one conducted in Connecticut and Maryland. You may be surprised by the outcome. Of course, the survey will be more accurate if you first educate the officials and community about the dangers of EMS vehicle crashes and the actual time saved with a L&S response.

MYTH #2: L&S VEHICLE OPERATION SAVES TIME

One of the first studies to evaluate the effect of L&S operations on transport times was done by Hunt in 1995 [4]. The study found an average reduction of 43.5 seconds when L&S were used.

The 2017 NHTSA report identified 15 studies that compared the time saved during L&S response, transport or both. The average time savings was 2.5 minutes for responses, and 2.4 minutes for transports. Most of the authors of these studies have suggested that only a small subset of patients will benefit by the time saved.

Working with a physician medical director, advanced 911 call centers that do an effective job providing emergency medical dispatch (EMD) can effectively categorize EMS requests into response priorities. A 5-year-old patient choking on a hot dog who appears to have a complete airway obstruction should get a different EMS response than a 21-year-old patient with an ankle injury. The former may be appropriate for a L&S EMS response (as well as a response from the closest police officer and fire/rescue unit, or even public works employee with CPR training), while for the latter, a non-L&S response by an ambulance only is appropriate.

Dispel this myth: Using *your* agency’s data, cross reference the patient’s clinical presentation upon EMS arrival with the EMD response priority. Set your risk tolerance for things like percent of patients with unstable vital signs, critical ALS interventions or the rate need for appropriate L&S transports to the hospital. This would be a sound analysis to identify which EMD determinants are safe for a non-L&S response. You may find this could significantly reduce L&S responses and crash risk.

CPSM is the exclusive provider of police, fire, EMS, Emergency Management and Chief Selection for ICMA – the 105 year old, premier association of public sector managers and administrators with over 13,000 members.

All CPSM subject matter experts have extensive management experience in public safety departments. They are all either currently serving in the service or have recently retired, providing them with recent, real-time experience in this constantly changing environment.

benefit did not outweigh the risk of L&S transport.

If the hospital staff does not perform a life-saving procedure immediately upon our arrival, then the L&S benefit did not outweigh the risk of L&S transport.

Thankfully, many EMS agencies report (and National EMS Information System [NEMSIS] data shows) the incidence of L&S transports are much lower than L&S responses. However, as the 14 associations stated in their joint position, L&S transports are also dangerous, and should require a 100% quality assurance review to determine whether the 2.4 minutes saved by driving L&S to the hospital was worth the clinical benefit of placing the patient, the crew and the public at three times the risk of an ambulance crash.

A note about STEMI patients: There is a great deal of debate in some circles about L&S transports for STEMI patients. One camp feels that the average 2.4 minutes time savings is worth the risk, while others suggesting that a STEMI patient should not be subjected to the L&S environment that increases heart rate, blood pressure and myocardial oxygen demand. This might be a good topic to discuss with the EMS agency medical director.

MYTH #3: EMS PERSONNEL ENJOY L&S VEHICLE OPERATIONS

Let's admit, driving with L&S is *fun*! But crashing and causing injuries is not fun. An ambulance crash also takes two more ambulances (the one involved in the crash and the one now responding to the crash) out of the EMS response system, many of which are already stressed with staffing shortages and increased workloads. This does not help with getting a timely response to the original EMS call.

In preparing for a quality assurance project with the National EMS Quality Alliance (NEMSQA), MedStar pulled 20 weeks of data from our patient care reporting system. The data pull included both data imported from dispatch and crew-entered data fields. We were a little surprised to see that lots of responses were identified in the *dispatch* field as being *dispatched* L&S, but the crew entered that they responded non-L&S.

We thought initially this might have been a data anomaly, until we started asking our field clinicians about it. Many field providers told us that yes, they often respond non-L&S, even when dispatched on L&S cases. When asked why, we were most often told that L&S responses are dangerous and don't save much time, and are often not worth the risk.

Hearing loss has been identified in EMS clinicians from urban environments when exposed to excessive siren noise, and L&S driving is also often accompanied by hard stops and turns that can cause off-balance falls and injuries in unrestrained clinicians in the patient compartment. Anecdotally, some EMS clinicians from agencies that routinely use non-L&S responses on many 911 calls also feel that they arrive at the call with less stress and adrenalin rush and are better able to provide calming patient care.


CPSM is the exclusive provider of police, fire, EMS, Emergency Management and Chief Selection for ICMA – the 105 year old, premier association of public sector managers and administrators with over 13,000 members.

All CPSM subject matter experts have extensive management experience in public safety departments. They are all either currently serving in the service or have recently retired, providing them with recent, real-time experience in this constantly changing environment.

Dr. Atul Gawande's book, "Being mortal," contains the quote, "culture strangles innovation in the crib." Culture shifts are never easy and they take time, education and agency leadership at all levels. But, there are 14 national fire and EMS agencies who are supportive of the change. For additional help, reach out to your professional association, consider getting on the waiting list to join the NEMSQA quality assurance project to reduce L&S vehicle operations, or contact one Matt Zavadsky.

REFERENCES

1. Watanabe BL, Patterson GS, Kempema JM, et al. "Is use of warning lights and sirens associated with increased risk of ambulance crashes? A contemporary analysis using national EMS information system (NEMSIS) data." *Ann Emerg Med.* 2019;74(1):101-109
2. Smackery B, Wilson EM. "Emergency medical services and the public: a research report on consumer attitudes toward EMS in Connecticut." Office of EMS, Connecticut Department of Health Services and Barney School of Business and Public Administration, University of Hartford. Jan 1988."
3. Williams AS. "Identifying issues when responding without lights and siren to selected call types for the Anne Arundel County Fire Department." 2005. Available at: <https://nfa.usfa.fema.gov/pdf/efop/efo38659.pdf>.
4. Hunt RC, Brown LH, Cabinum ES, et al. "Is ambulance transport time with lights and siren faster than that without?" [Erratum appears in *Ann Emerg Med* 1995; 25(6):857] *Ann Emerg Med.* 1995; 25(4):507-11.

 Read this article on EMS1 by LexiPol

Subscribe

Subscribe to our e-mail newsletter to receive updates.



Related Posts:

- Is EMS-on-demand the next big transformation for the profession?
- The EMS workforce: Critical condition!
- Tooele County Council looks at southeast county fire service alternatives
- Data Deep-Dives: Q&A with CPSM's Director of Quantitative Analysis, Dov Chelst
- Law enforcement recruiting difficulties call for new and creative approaches