

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Fire and Emergency Medical Services Department



The State of Emergency Medical Services in the District of Columbia

Testimony of

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Fire and EMS Chief

Before the

Committee on the Judiciary

Council of the District of Columbia

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John A. Wilson Building
1350 Pennsylvania Avenue, NW
Washington, D.C. 20004

3:30 PM



Good afternoon Chairperson McDuffie, other Council members and staff of the Committee. I am Gregory Dean, Chief of the Fire and Emergency Medical Services Department. I am pleased to testify before you today concerning the State of Emergency Medical Services (EMS) in the District of Columbia. For those of you watching, my testimony is also available on the Department's website at fems.dc.gov.

I appreciate this opportunity to share with the Council and the public our plans for reform of the District's Emergency Medical Services (EMS) system. Today I will also share additional details about the first phase of EMS reform, which Mayor Bowser announced to the Council this past Tuesday. We are requesting emergency legislation to authorize the Department to contract with a third party provider or providers to supplement the Department's transport of low priority Basic Life Support patients. We look forward to working cooperatively with the Council, the Department's two labor unions, the District's local and regional hospital community, and community stakeholders, including the Emergency Medical Services Advisory Committee, on this important effort.

As mentioned during my confirmation hearing in June, my goal was to begin a six month process of reviewing and evaluating Department services to better understand how we work and what direction we needed to take for future improvement. As part of this process, it became immediately clear to me that we didn't have sufficient resources to do our jobs, especially in answering EMS calls. Both our people and equipment are overwhelmed on a daily basis. Based on my understanding of previous EMS reforms, the last time we

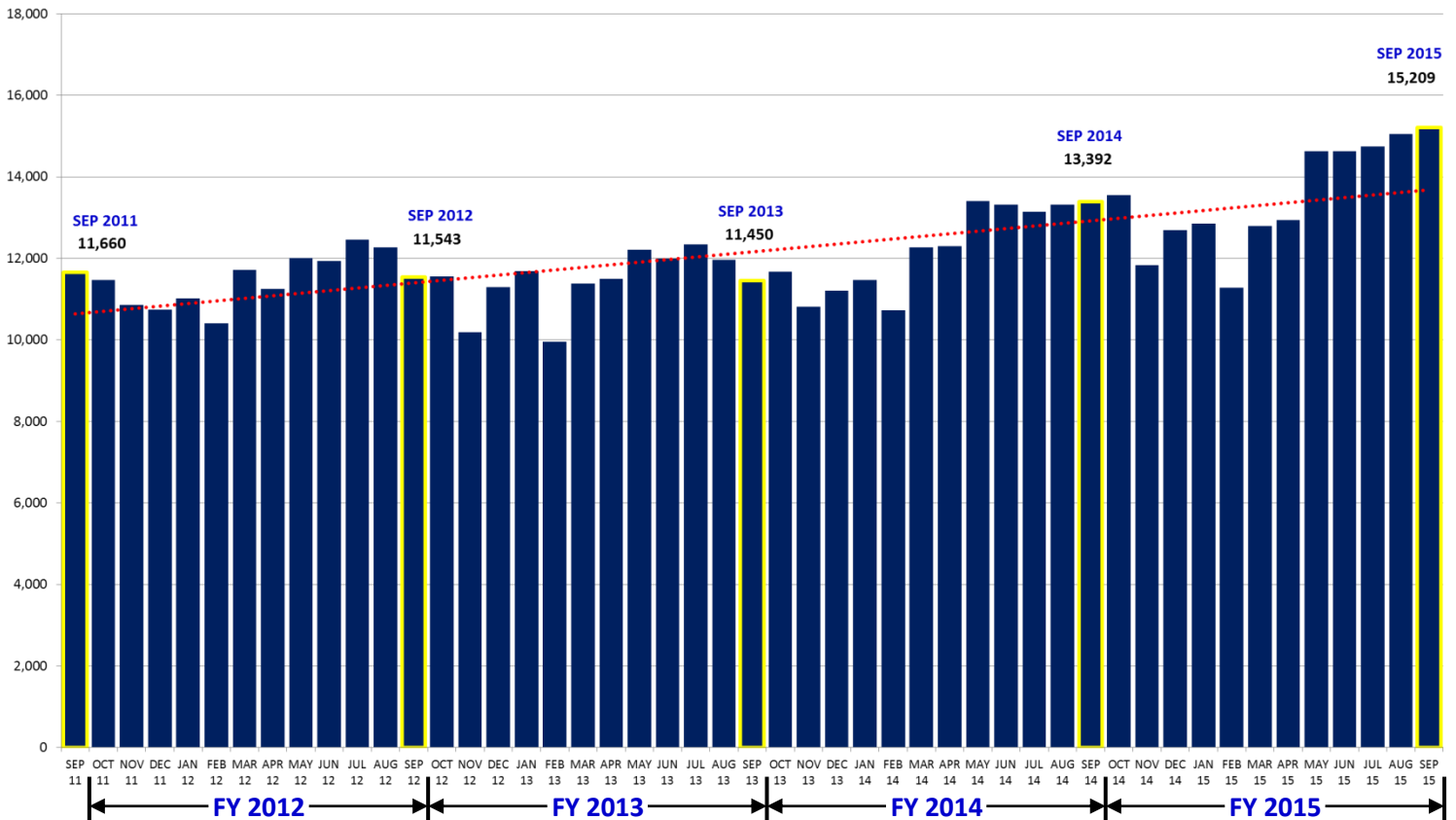


completed an EMS call volume assessment was during 2008, when the number of regularly in-service transport units was increased to the 39 we currently operate. Since that time, and comparing FY 2015 to FY 2008, EMS calls have increased by 35,645 (or 28.2%) while patient transports have increased by 33,299 (or 40.6%).

To help explain why we have announced the third party provider initiative, it would help to understand how increasing EMS call volume has affected our ability to deliver services and, more importantly, how it impacts everything else we do on a daily basis. During 2014, our Department experienced an increase in the number of EMS calls. During 2015, our EMS call volume continued to increase, both on a monthly and daily basis. EMS calls by month since September 2011 are shown in the chart below.

(12,000-15,000 growth)

EMS Calls by Month During the Fiscal Year (FY 2011 to FY 2015)



As of yesterday, our Department responded to 162,168 EMS calls during FY 2015. This was 15,162 (or **10.3%**) more calls compared to FY 2014 and 24,656 (or **17.9%**) more calls compared to FY 2013. Many EMS calls result in patient transports. As of yesterday, our Department transported 115,280 patients to hospitals during FY 2015. This was 6,236 (or **5.7%**) more patient transports compared to FY 2014 and 14,675 (or **14.6%**) more patient transports compared to FY 2013. Our Department has transported more than 10,000 patients to hospitals during each of the last 5 months.

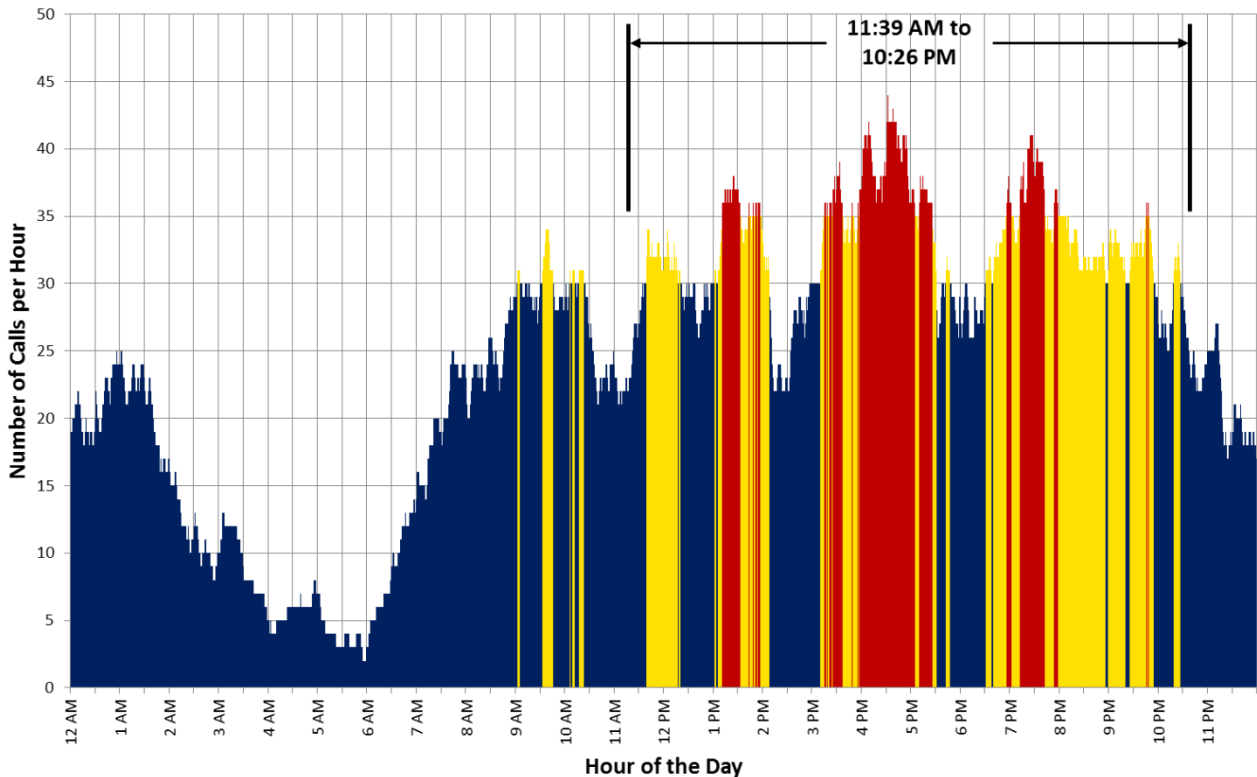
While EMS calls are increasing on a monthly basis, daily totals are increasing as well. This becomes a problem when “surges” occur. An EMS call “surge” is when there is a spike in calls that is maintained for a period of time. This can happen suddenly and is often unpredictable. When a “surge” is sustained for longer periods of time, the capacity of the EMS system to recover quickly, especially transport units being available for responding to calls, declines. EMS call “surges” exceeding a certain level and period of time may result in no available transport units. When this happens, our Department must ask for mutual aid from other jurisdictions or even consider transporting critically ill or injured patients by fire trucks.

EMS calls dispatched by day during the last week of August and the beginning of September, 2015, were especially high, as is illustrated by the following chart. Record EMS call volume dates included September 1st (589 EMS calls) and September 9th (584 EMS calls). The area in the chart in blue represents 30 or fewer EMS calls during the period of any hour. Yellow is 31 to 35 EMS calls per hour. Red is more than 35 EMS



calls per hour. A very lengthy “surge” period occurred from 11:39 AM to 10:26 PM (for a 10 hour and 47 minute duration) during which we responded to 353 EMS calls (or 60.4% of all 584 EMS calls dispatched on this date). More than 30 EMS calls per hour were continuously dispatched for 8 out of 24 hours:

Chart 2: EMS Call "Surge" on Wednesday, 9/9/2015



Everything we plan to do from this point forward concerning EMS reforms cannot be accomplished unless we effectively address the increasing number of EMS calls which continue to outpace available resources. Because of this, I made a recommendation to Mayor Bowser that we immediately engage a private ambulance company to assist our Department in responding to “low priority” EMS calls and transporting “BLS” patients, most of whom require basic treatment by an EMT, including first aid and comfort care. During FY 2014, **38.8%** of patients received the type of service that we expect the third



party provider to deliver. This fiscal year, upward of 35% of transported patients receive this level of service.

Using this approach, a contracted private ambulance company would operate following District Department of Health (DDOH) requirements and other rules, policies or procedures applicable to each EMS Agency operating in the District.¹ During daily operations, OUC EMS dispatch data would be shared with the private ambulance company allowing them to best position their transport units across the District to minimize travel distances and response times. When an EMS call is dispatched, regardless of priority, a Fire and EMS Department first responding fire truck and/or transport unit would still respond to the call. After arriving at a call, a Firefighter, EMT or Paramedic would assess each patient and determine a course of treatment. If assessment reveals the patient only requires basic treatment, the first responding Fire and EMS Department unit would notify the OUC dispatcher to cancel any other responding units and send a private ambulance to the call. Our Department's first responding unit would then remain at the incident scene until the private transport unit arrives, followed by turning the patient over to the private ambulance for transport. Our Firefighters, EMTs and Paramedics would be required to follow a new medical protocol when assessing each patient prior to turnover for private ambulance transport. By contract, the private ambulance company would be required to follow Fire and EMS Department operational medical protocols, complete patient care reports using a system that is the same or similar to the Department's electronic patient care reporting (ePCR)

¹ For a complete description of DDOH EMS agency requirements, please visit the DDOH Emergency Medical Services webpage located at: <http://doh.dc.gov/service/ems-laws-regulations-and-policies> (link confirmed active on 9/30/2015).



system and meet or exceed response time standards when dispatched to “low priority” EMS calls.

We expect that by hiring a third party provider to supplement the Department’s transport of BLS patients, we will spend less time at District hospitals and increase our unit availability, which will allow us to have the appropriate response vehicle available more often as well as to pursue EMS reform. To illustrate the impact that we expect the third party to have, I will review a typical day in EMS.

On a recent day in the District, we responded to 234 “low priority” EMS calls (or 46.5% of the 503 EMS calls dispatched). One snapshot is during a 90 minute span 20 “low priority” calls, 17 resulted in “BLS” patient transports by Fire and EMS Department ambulances, 2 resulted in “no patient contact” and one resulted in a “patient refusal of care.” Of the 17 “BLS” patient ambulance transports, 8 patients (or 47%) could have been turned over to a private ambulance for transport. These included, for example, patients complaining of stomach pain, throat pain, and leg cramps, or patients with a foot injury, or pain from a previous injury. If each of these patients had been turned over to a private ambulance for transport, our Department’s unit availability would have increased. In fact, CAD data analysis indicates that at least 9 Fire and EMS Department transport units would have been available during the EMS call “surge” periods on this date and that upwards of 52 patients could have been turned over to a private ambulance for transport during the same “surge” periods. In all, upwards of 151 patients could have been transported by private ambulance. Possible time savings for Fire and



EMS Department transport units by using private ambulances on this date totaled 154 unit hours, or a potential 32% overall decrease in the amount of time our units actually spent on calls.

The time savings experienced by supplementing our resources in this way will allow our Department to begin to move forward on a number of essential EMS reforms that are critical to improving performance. These reforms will also meet the high level goals and recommendations of the 2007 Task Force on Emergency Medical Services. Our EMS reforms will include organizational investment in our employees, expanding the District's citizen CPR participation, continuing our partnership with the Office of Unified Communications to improve 9-1-1-call taking and dispatch, and better maintenance of our emergency vehicle fleet.

As I turn to this part of my testimony, I want to introduce Dr. Juliette M. Saussy, Mayor Bowser's nominee for Medical Director our Department. Dr. Saussy previously served as the Director of Emergency Medical Services for the City of New Orleans from 2004 to 2010. I am very pleased to welcome Dr. Saussy to the District and have enjoyed serving with her since her appointment during June, earlier this year.

As I have already stated this afternoon, EMS reform will include organizational investment in our employees. Currently, most of our focus on EMS training is continuing education (CE) hours required for certification. However, this certification only takes place every two years. To improve the skills of our members, and to ensure that



everyone understands the importance of EMS services, in early 2016 we will move towards providing EMS training on a monthly basis. Our plan for improvement during FY 2016 involves two key areas. First, in order to improve cardiac arrest survival, the Department will implement revised medical protocols to improve cardiac arrest patient care. This will include “high performance CPR” training for Firefighters, EMTs and Paramedics, better “on scene” patient work flow management and follow-up contact with hospitals concerning patient outcomes for providing feedback to personnel involved with patient treatment. Most of this training will be “hands on” and “skill intensive,” focusing on improving both basic and advanced skills, depending on certification level. Much of this training can be accomplished while personnel are on-duty and at fire stations, following a monthly schedule. According to our Department’s Cardiac Arrest Registry to Enhance Survival (CARES) data from 2014, the number of patients who survived to hospital discharge following a cardiac arrest due to heart disease that was witnessed by a bystander with an initial rhythm of Ventricular Fibrillation was 10 out of 32 cases (or 31%). This measure is directly comparable to the cardiac arrest survival rate experienced by King County (Washington) of 113 out of 209 cases (or 54%).²

Next, as part of a Department initiative involving EMS continuous quality improvement (CQI) to improve compliance with medical treatment protocols for patients presenting with time-sensitive illnesses, the Department will provide informative and supportive feedback to personnel who provided patient treatment for each of these time sensitive

² For a complete description of King County (Washington) cardiac arrest statistics, please view page 45 of the Division of Emergency Medical Services 2015 Annual Report to the King County Council located at: <http://www.kingcounty.gov/healthservices/health/~media/health/publichealth/documents/ems/2015-Annual-Report.ashx> (link confirmed active on 9/30/2015).



cases, along with follow-up training focusing on improvement of both basic and advanced knowledge, depending on certification level. As part of this effort, the Department will begin to publish public website data measuring quality outcomes to time sensitive illnesses and injuries.

Expanding the District's "citizen CPR" participation and public automatic external defibrillator (AED) use during sudden cardiac arrest events will be another important part of the District's EMS reform. Our plan for improvement during FY 2016 involves two key areas. First, as part of our initiative to improve cardiac arrest survival, the Department will provide CPR training to District residents, employees and work day commuters. This includes "hands only" CPR training AED familiarization during scheduled events by Department personnel. Expanded "citizen CPR" participation during cardiac arrests is a "link" in the American Heart Association's "chain of survival" and improves cardiac arrest survivability. According to our Department's CARES data from 2014, the number of bystanders who initiated CPR before the arrival of Fire and EMS Department personnel was 139 out of 526 cases (or 26%). This measure is directly comparable to the bystander CPR participation rate experienced by King County (Washington) of 789 out of 1,103 cases (or 72%).³

Second, our Department, working closely with the OUC, will improve public access to AEDs by removing obstacles to the purchase and use of AEDs by building owners and

³ For a complete description of King County (Washington) cardiac arrest statistics, please view page 45 of the Division of Emergency Medical Services 2015 Annual Report to the King County Council located at: <http://www.kingcounty.gov/healthservices/health/~media/health/publichealth/documents/ems/2015-Annual-Report.ashx> (link confirmed active on 9/30/2015).



tenants. Described by the “Citizen Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) Amendment Act of 2015,” submitted to Council by Mayor Bowser, the proposed legislation would eliminate AED registration fees, simplify and update training requirements and require AED owners to notify both our Department and the OUC when an AED is placed in or removed from service. Public AED use during cardiac arrests is a “link” in the American Heart Association’s “chain of survival” and improves cardiac arrest survivability. According to our Department’s CARES data from 2014, the number of bystanders who used a public access AED before the arrival of Fire and EMS Department personnel was 7 out of 526 cases (or 1.3%).

We will also continue to strengthen our partnership with OUC to improve 9-1-1 call taking, call management and dispatching procedures to assist with getting the right resources to the right patients in the right amount of time. Even as I speak, experts from Priority Dispatch Corporation, the company that provides emergency dispatch call taking software to support OUC operations, are visiting the District to assist with improving our 9-1-1 system. These efforts include examining the response packages for the District and working with OUC to make several procedural changes dealing with mutual aid requests, the Alpha Hold Policy, and joint training courses. In addition to these procedural changes, FEMS and OUC have been working together to finalize a standard operating procedure and clarify the roles and responsibilities of representatives on the OUC operation floor including dispatchers and supervisors, the FEMS Fire Liaison Officer, and the Emergency Liaison Officers.



Finally, successful EMS reform will depend on our continuing to invest in a fully functioning fleet of operational and reserve apparatus. In an effort to keep pace with the increasing number of EMS calls, our Department operates 39 transport units 24 hours per day and attempts to operate 10 “power shift” units 12 hours per day (on weekdays) for a total of 49 transport units during the busiest times. As of yesterday, September 30th, we had 57 transport units available to use for EMS operations. This number varies daily because of the high operating hours and mileage requirements placed on our vehicles. Although we expect delivery of 42 new, refurbished or leased transport units by the end of fiscal year 2016, our planned replacement schedule will only allow us to create a sufficient reserve fleet and to maintain the status quo in terms of units that are operationally available. This is because most of our transport units are in continuous operation, with very little remaining time for vehicle maintenance and repairs.

Additionally, if EMS calls during FY 2016 keep pace with FY 2015 numbers or increase again, each new vehicle will simply be used more often, resulting in a greater need for maintenance and repair. In a high performing EMS system, reliable and well equipped emergency vehicles are an important asset, not only for daily operations but also for the many special events the District hosts and for unexpected significant events, like natural disasters or terrorist attacks.

The challenges facing our Department did not occur overnight and cannot be resolved quickly. Our efforts and the EMS reforms I discussed today serve as a starting point for moving forward to become part of a premier emergency response system. As we formulate the Department’s FY 2017 proposed operating budget, I look forward to



working closely with Mayor Bowser's Office, the Council, our labor organizations, the community and our personnel, to better determine and prioritize the resources we need to operate and improve performance.

In closing, I would like to thank the men and women of our Department, who are very committed to delivering outstanding emergency medical services for residents and visitors in the District of Columbia. Their input is very valuable to me, which is why today we are releasing a confidential survey to all Department employees in order to get feedback from them on our service delivery, their working conditions, development and training, and other issues. Using this type of survey was recommended by the Task Force on EMS in 2007, and it is a recommendation that I fully embrace.

I thank you for the opportunity to testify and I would be happy to answer any questions that you or the Committee may have.

