

Significantly Improving a Fire Service-Based EMS Deployment and Response System...an Innovative Model

By: Assistant Fire Chief Todd Harms

The Phoenix Fire Department has been delivering paramedic level EMS service since the early 1970's. Over the years we have deployed a number of delivery models, including taking over ambulance service delivery for the city in 1985. In 2006, under the direction of Fire Chief Bob Khan, then Local 493 President Billy Shields, and current Local 493 President Pete Gorraiz, the Phoenix Fire Department began the process of developing a long-term strategic plan. This plan laid the ground work for reviewing the entire department, from our long standing mission statement to all levels of service delivery. A key initiative of the strategic plan was our goal to improve service delivery by reducing response times, reducing out of service time, and keeping companies available in their first due response area.

To meet one of the initiatives, a plan was developed that would convert the last 14 Basic Life Support (BLS) engine companies to Advanced Life Support (ALS) providers (two paramedics and two EMT's), and convert all ambulances to 1-1's (one EMT and one Paramedic). In the previous system, it was not uncommon to dispatch two engines and one ambulance on EMS calls where transportation was necessary. This would include the closest BLS engine, the closest ALS engine, and a BLS ambulance for transport. The paramedic on the ALS engine would then "ride in" with the patient when required. With the recently updated system, the closest ALS engine responds and then transfers care to the ambulance for transportation, allowing the ALS engine to return to service in their first due area. The labor/management committee working on this new deployment model felt strongly these changes would significantly impact the department's ability to meet our strategic and operational goals.

While the initial meetings were highly emotionally charged, the department continued the process of moving forward. A key issue that was agreed upon was that no department member would be displaced from their permanent position.

Members in Phoenix bid on individual positions and are assigned by seniority. With this agreement, as positions became available they would be advertised as long term temporary positions until the individual engines or ambulances were ready for conversion (in Phoenix any position on a engine company can be a paramedic position: Captain, Engineer, or Firefighter). A priority list of the 14 BLS engine companies was also developed to prioritize the conversions as multiple companies would later become available. The priority list was based upon the work load of the individual companies, the make-up of surrounding engine companies, and out service times. The ambulance priority list was based on travel distance to a primary and secondary hospital, as well as the nearest trauma center.

The Phoenix Fire Department's EMS division is responsible for the initial certification and ongoing training for the department's paramedics. Members apply and compete for 24 positions per class in a process similar to other promotional exams. They complete a written exam, a practical "hand's-on" evaluation, and an interview process. One challenge that arose for the EMS division was that in the past, the department had traditionally completed only one paramedic training program per year. For the conversion process to be successful and timely, EMS would need to run multiple overlapping paramedic classes. This would require an enormous commitment from the instructors and staff support.

Following the development of the Strategic plan, the United Phoenix Firefighters Union was successful in the passage of a special Public Safety tax initiative (Proposition 1) for fire and police services. The successful passing of Prop 1 allowed the department to hire 100 new firefighters, purchase the equipment needed for the ALS conversions, and provide the additional EMS staff and equipment to complete the paramedic training requirements. The assigned staff at EMS was tripled to accommodate the additional medic training programs and the additional work load on maintaining paramedic certifications.

Through the department's deployment committee, which is co-chaired by the Operations Division Assistant Fire Chief and the Vice President of Local 493,

we began the process of facilitating the conversions. The Deployment committees meetings are open meetings to all department members and are always very well attended. For the department, during this time, a number of retirements and internal changes caused a significant amount of individual firefighter movement to occur. The engine companies became available for conversion faster than we could train paramedics. Two months before a paramedic class would graduate; the deployment committee would hold a department wide meeting to discuss the next round of conversions. We would consider the number of medics retiring, the conversion availability, and the paramedic needs to maintain staffing for leave occurrences (vacation and sick leave, hour reduction days...). Companies were identified, positions advertised for filling, and on the assigned conversion day, staffed and equipped with paramedics with ALS gear.

On June 2nd 2010 the department converted the last two BLS engines to ALS and the last full time ambulances to 1-1's. The conversions have had a dramatic impact on the department's daily operations. We have met our goal of reducing response times by 10% during the third year of the conversions. Our engine company's availability has increased and out of service times have decreased. Overall, the conversions have had very positive service delivery outcomes in the Phoenix Fire Department and have positively affected the public served in Phoenix.

About the Author:

Assistant Fire Chief Todd Harms has been a member of the Phoenix Fire Department for 23 years. He currently manages the North Operations Division. Chief Harms has been an instructor at many national fire service conferences and continues to participate in the local, state, and national fire service.