VENICE FIRE DEPARTMENT
ALS Takeover Business Plan

Presented by

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CITY OF VENICE
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Mission Statement

Venice Fire Rescue is to promote, preserve and protect the safety of all members in the community utilizing effective fire prevention with community outreach programs while providing quality fire, rescue and emergency medical services (EMS) with a commitment to excellence. Our top priority is to provide the best fire service to our great city while maintaining a high ISO rating.

Vision Statement

Venice Fire Rescue to be known as one of the premier fire service organizations and work toward an ISO rating of 1. We will continue to strive to be a dynamic fire department known for our professionalism, and abilities to adapt to the needs of the community in which we serve.

The Members of the Venice Fire Rescue:

- Strive to be role models in the community, and leaders in our profession.
- Will be accountable to those we serve, each other and any fire service organization we interact with.
- Are committed to providing the best public service through innovative training, education and equipment.
- Will take the Fire Department into the future through productive teamwork, open and honest communications, and participatory management throughout the organization.

Background

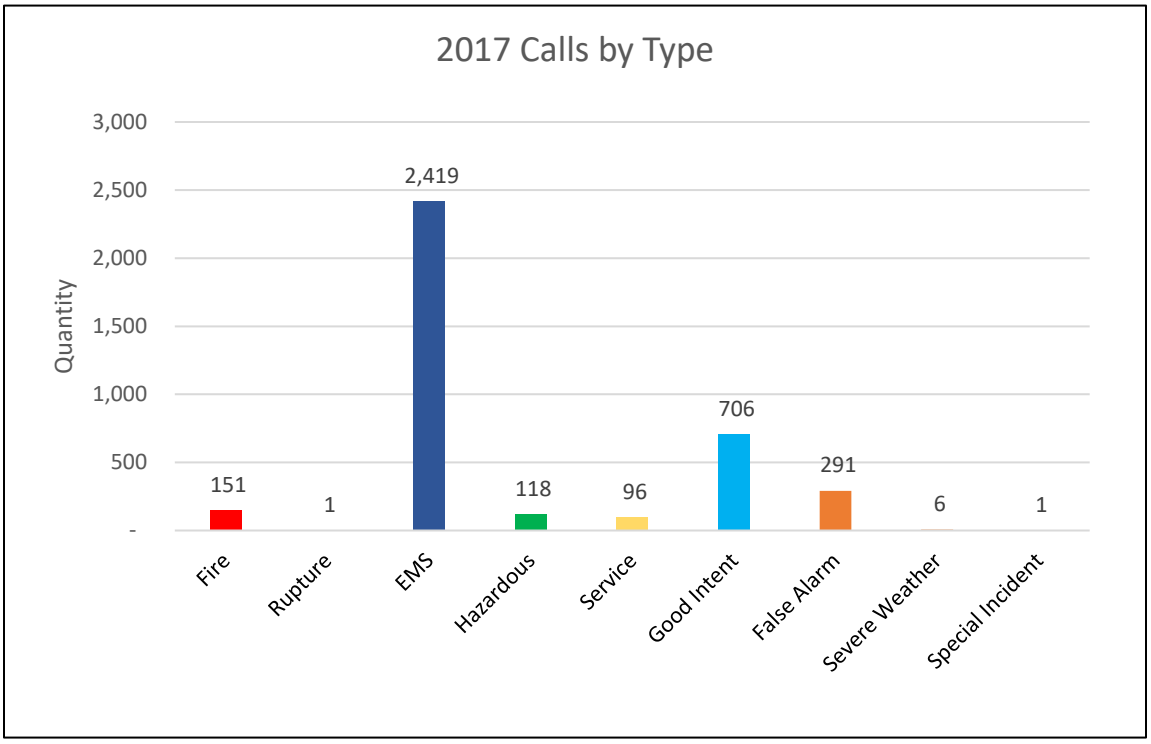
The City of Venice Fire Rescue was established in 1926. Venice Fire Rescue provides fire suppression, first responder medical response, water rescue response, public education and fire prevention/code enforcement.

Venice Fire Rescue is funded through ad valorem tax, various fees and impact fees. We employ 46 full time employees (FTE's) that work out of 3 stations. Out of the 46 FTE's, 42 are dual certified as Firefighter/EMT. Our operations division is 100% dual certified.

There are 67 counties in the State of Florida, in which all utilize Advanced Life Support (ALS) Non-Transport Engines to assist on ALS calls or begin early ALS before the arrival of the ambulance. All Counties in Florida do utilize ALS to augment emergency medical services to their citizens.

Need Statement

In 2017, Venice Fire Rescue responded to 3,790 incidents. On average, 62-68% of our response is for EMS related incidents. For all EMS related calls in the City, the Venice Fire engine arrived on scene ahead of the rescue 66% of the time. The average response time for our units to those calls are four minutes and fifteen seconds. Our units were on scene first and administering patient care approximately three minutes and seven seconds prior to the ambulance arriving on scene.



With Station 2 housing one of the busiest ALS units in the entire County, our units are often responding with an out of area ALS unit. This delay in implementing ALS procedures may result in a negative outcome of the patient.

Stated Benefits

Response time is crucial in our line of business and there are years of research and data on how response times affect outcomes on both fire and medical incidents. A patient's heart stops beating and the patient stops breathing, the cells of the brain begin to die within 4 to 6 minutes without oxygen, after 6 minutes brain cells are severely damaged and cannot be replaced or regenerated.

The "Golden Hour" for trauma patients, starts at the time of the accident and in some cases, this time is not easily identified. In many cases, the patient arrives at the Trauma Center past the "Golden Hour". Going beyond the "Golden Hour" results in a much higher mortality rate.

Patients with blockages within their coronary or cerebral arteries, experiencing myocardial infarction or stroke are highly impacted by the "Golden Hour". The quicker we can arrive on scene, assess the patient for cardiac/stroke alert criteria, call the alert and start ALS treatment, dramatically shortens the on-scene time. This allows for a more rapid transport to the appropriate hospital. The sooner a hospital can administer clot-busting medications and/or place stents, the greater the chance of immediate reversal of possible permanent effects from myocardial infarctions or strokes. The keys to successful treatments of these patients in the field are rapid response, rapid determination of "alert" and immediate ALS.

There are three (3) types of cardiac arrest:

1. Asystole
2. Pulseless Electrical Activity (PEA)
3. Ventricular Fibrillation (V-fib)

The most treatable of these lethal rhythms, while still in the field, is ventricular fibrillation. Pre-hospital cardiac arrest from ventricular fibrillation has a higher chance of resuscitation, compared to the other types of cardiac arrest; if 9-1-1 is immediately called, and immediate bystander CPR with rapid defibrillation has been administered. Decades of research has proven that delaying defibrillation on a patient, who is in ventricular fibrillation, reduces the chances of resuscitation (converting V-fib to a rhythm with pulses) by 10% every minute. At 10 minutes the chances of resuscitation drops to 0%.

Severe anaphylactic shock from an allergic reaction can close the patient's airway within a matter of a few minutes. Severe facial trauma with massive swelling of the upper/lower airway will occur rapidly after the injury and result in respiratory arrest and eventually death. Placement of endotracheal tube and the administration of certain medications within the first few minutes after arriving on scene can mean the difference between life and death.

Hypovolemic, cardiogenic and the other types of shock results in inadequate tissue perfusion at the cellular level, which leads to irreversible shock and death of the patient. The quicker intravenous lines are established to begin volume replacement, the better chance of preventing a patient from going into irreversible shock and dying.

Years of data show that our Venice engines arrive on scene first on average of three (3) minutes before the arrival of the ambulance. In that time period, a lot of advanced life support interventions (endotracheal intubation, IV, medications) can be initiated that could have an immediate positive impact on the patient's outcome and reduce the scene time which would allow for a quicker transport time to the closest hospital.

Current County staffing configuration of an ambulance is a single paramedic with a single emergency medical technician (EMT). EMTs are restricted in the medical procedures they are allowed to perform. This significantly increases the burden on the paramedic, as multiple ALS interventions frequently need to be accomplished simultaneously just to stabilize a patient for transport. Many ALS calls are highly time sensitive and the inability to achieve required interventions further increase stress and possibly delay treatment.

There has been a lot of research conducted over the staffing configuration of an ALS call and the ideal number of personnel is four (4), two (2) EMTs and two (2) paramedics. Having a second paramedic allows multiple ALS interventions to be achieved simultaneously as well as allowing the second paramedic the opportunity to start an ALS intervention that the first paramedic may not achieve, i.e. endotracheal intubation, intravenous access, etc. Rapid ALS interventions and reduced scene time results in getting the patient to the hospital quicker, which results in a higher positive outcome. These same efficiencies may be obtained initially here in Venice by staffing Fire Department paramedics on the fire engines and allowing us to transition to take over all ALS services and transports.

Providing all ALS services in the City of Venice will have a positive impact to the citizens and our visitors as well as providing more depth in ALS resources here in Sarasota County especially during a natural or manmade disaster.

Another benefit, by offering full ALS services, we become eligible to participate in grant offerings that we previously were excluded from. There are many types of grants (Federal, State, private) available for agencies providing ALS.

By expanding our services model, we can explore all of these possible sources of funding. These grants can come in the form of 100% funded, partially funded or matching and can be used for programs that range from training, equipment, vehicles and research. With our successful history of grant awards, we believe the City could realize significant benefit in the funding/maintenance of the ALS program.

Recommended Action

Initially, create two (2) ALS non-transport engines and one (1) ALS rescue (a/k/a ambulance) within the City of Venice. Since the actual call data reveals that Venice units are on scene on average 3 minutes and 7 seconds 66% of the time, the City would benefit initiating this plan without delay.

After the implementation of the transitional ALS response, we recommend to take over the full ALS transport service from the County. This will allow us to have total operational control of the units that reside in Venice City limits. By taking over the ambulance service it would enhance the level of service by having Venice paramedics who train and work in Venice at all times vs the frequent floater personnel model that is currently deployed. We believe by maintaining a consistent staff will correlate to improved level of service and will allow for an improvement in response times.

Stages of Implementation

We have completed and been approved for our COPCN (Certificate of Public Convenience and Necessity). This application has gone before County Commissioners for approval. **See Appendix 1.**

If you were to approve this Business Plan today, one could anticipate having the first phase operational during first quarter of FY20. This would provide for two ALS non-transport engines with a single rescue in place and three years to take over the full ALS service.

The main reason for this implementation delay is staffing paramedics. Currently, Venice Fire Rescue does not have any paramedics on staff. The transition would begin with hiring an EMS Battalion Chief, followed by hiring 12 paramedic/firefighters. The following two years would add six more paramedic/firefighters each year. Total number of new on-line seats would be 24 to operate a full ALS transport service. A chart of the progression for the staffing and front line units is in **Appendix 2.**

The transition would begin with operating a single ALS Rescue (ambulance) and converting two of the three current fire engines to ALS engines (non-transport). Then over three years progress into having three front line ALS rescues and three (3) ALS engines. As with the engines, a backup rescue unit will be needed.

The consideration of an "Early out Incentive" for fourteen (14) of the senior firefighters in the Chapter 175 plan would reduce the payroll over the next five years. This Early out Incentive would start in 2020 and conclude in 2022. The reason for this incentive is to reduce the number of employees in the 175 plan leaving a total to seven (7) in the plan. As the firefighters retire out during this incentive phase, it will allow the Department to replace them with firefighter/paramedics. Details are in **Appendix 3.**

Listed below are the stages leading to full implementation, some can be completed simultaneously and while others will need to occur in order listed.

STAGE 1 (FY 19)

Medical Director - Execute a contract in accordance to F.S. 401 and 64J of the F.A.C for a Medical Director. In order to obtain our ALS non-transport license from the State of Florida we will be required to have a Medical Director for ALS. Currently, we have Dr. Mark Johnson of Global EMS as our Medical Director for first responder level (EMT) needs. The Medical Director issues all treatment protocols, EMS policies and procedures, quality and assurance reviews. Most importantly for ALS units, the law provides for the Medical Director to develop protocol for the types and amounts of medications, IV fluids and other ALS supplies that will be on ALS units.

Additionally, the Medical Director assesses and approves new paramedics to paramedic-in-charge status. The Medical Director is also responsible for the approval of the Department's continuing educational program for EMTs and paramedics. This is to ensure that the minimum

State of Florida criteria for each level of certification is achieved and maintained. The projected costs would be approximately $30,000 per year for full ALS service Medical Director.

ALS Staffing – Hire an EMS Battalion Chief as a designated operational leadership position due to the complexity of the ALS program. This person will also be critical to the development of the program working, with the Medical Director, and with fire operations staff. Prepare for the FY 20 new hires.

Equipment – Prepare to initiate FY20 ALS operations. Obtain ALS rescue for front line status and a second for backup. The front line unit will be assigned to Fire Station 2 as it historically has the highest number of ALS calls. Initially, leasing the ALS units will be considered to allow possible lower start-up expenses. The correlating additional medical equipment and supplies required are detailed in **Appendix 4**.

Operational Units – Same as FY 18.

ALS Program Policies & Procedures – Under the guidance of the Medical Director and in accordance with all Florida Laws, EMS/ALS policies and procedures will be developed. These will include accountability of narcotics, from ordering, receiving, storing, use and proper disposal. The same will also be addressed for the equipment used to administer the medications.

Other documents that will need to be either revised or created will be ALS Protocols, Trauma Transport Protocols, STEMI & Stroke Alert Protocols, and policies over HIPPA. There will also be the development of a Quality Assurance Program to ensure compliance to protocols, skills and the review of run reports and data sharing with hospitals and other providers. The vast majority of these policies exists now, our name will need to be added as the ALS provider. Training will be accomplished to ensure current and future employees are familiar with the new/revised policies.

An additional administrative (in-house) Quality Assurance program will be developed. It is different than the Medical Director requires. Our in-house program is to provide standards for reviews of incidents, meaning they come up with as an example, we will review 100% of all Chest Pain calls, 25% of all ill patients, and 100% of all endotracheal intubations etc., they will be involved in research projects, measuring patient outcomes to determine effectiveness of protocols. Review and make recommendation over training programs and medical equipment. This will require an additional administrative support position to assist the EMS Battalion for full oversite of the program.

Licenses

Narcotics DEA License - Prior to operating ALS, narcotic licensing must be obtained from the Drug Enforcement Administration (DEA). These policies will need to be completed prior to submitting our license application, as they are part of the application process. We can then apply for the licenses once the Medical Director has approved the policies. The cost of a DEA license is $150.00 and it is valid for five (5) years. Obtaining our DEA license allows us to purchase, store and administer narcotics.

Advanced Life Support License - State of Florida application for ALS Non-Transport has a fee of $1,375.00. Each ALS Non Transport Engine will require a State of Florida ALS Permit Sticker and the cost for this ALS Permit is $25.00 each. Both the State of Florida ALS license and ALS Vehicle Permits are renewed every two (2) years at the same fees. Interesting to note, these fees have been the same for the past 14 years. When the State of Florida receives the application and fees it usually takes no more than 30 days to receive your license and permit stickers.

Medical Malpractice Liability Insurance
In order to operate fire service response, we are required to carry liability insurance. The State of Florida requires proof of liability insurance with the application for either BLS or ALS license including ALS Non-transport license.

The City's liability insurance is through The Florida League of Cities. It was originally obtained as part of the process initiating BLS many years ago. The policy provides coverage/protection to the Medical Director, EMTs and paramedics for medical care during an emergency call, including HIPAA coverage. See **Appendix 5** for more information regarding the cost and coverage.

STAGE 2 (FY 20)

ALS Staffing – Hire 12 new positions as paramedic/firefighters. No personnel eligible for the early out incentive.

Equipment – Obtain and outfit a second front line ALS Rescue unit (operational FY21). The engines at the remaining fire stations will equipped ALS non-transport units.

Operational Units – Single ALS rescue (Sta 2), two non-transport ALS engines (Sta 1 & 3), single fire engine (Sta 2), single aerial platform, brush truck and rescue boat.

STAGE 3 (FY 21)

ALS Staffing – Hire six new positions paramedic/firefighters. Hire one administrative support person. Six (6) current personnel will be eligible for the early out incentive.

Equipment – Obtain and outfit third front line ALS Rescue unit (operational FY22).

Operational Units – Two ALS rescue (Sta 1 & 2), two non-transport ALS engines (Sta 1 & 3), single fire engine (Sta 2), single aerial platform, brush truck and rescue boat.

STAGE 4 (FY 22)

ALS Staffing – Hire six (6) new positions paramedic/firefighters. Three (3) current personnel will be eligible for the early out incentive.

Equipment – The final single fire engine will also be outfitted and begin operation as a non-transport ALS unit.

Operational Units – Three (3) ALS rescue, two (2) non-transport ALS engines, aerial platform, brush truck and rescue boat.

Stage 5 (FY23)

ALS Staffing – Five (5) current personnel will be eligible for the early out incentive.

Equipment – No new equipment anticipated.

Operational Units – Same as FY 22. Three (3) ALS rescue, three (3) non-transport ALS engines, single aerial platform, brush truck and rescue boat.

Funding

If approved to initiate ALS operation effective for FY20, the current budget needs to be amended so that the initial startup costs can be funded. As noted earlier there are several factors that must be in place prior to the ALS wheels rolling. We will work with the Finance Department to coordinate what funding opportunities and accounts will be utilized to best operate this program.

Typically, the funding for EMS is through the ad valorem. In 2002 due to a law suit on the east coast of Florida over the funding of EMS through non-ad valorem assessment the Florida Supreme Court ruled that non-ad valorem assessment is to provide benefit for the fee paid, which fire prevention and suppression services provides benefit to structure. EMS, on the other hand, does not provide a benefit to a structure, EMS provides benefit to people, and ruled that EMS is to be funded through ad valorem tax.

After this Supreme Court Ruling was rendered, all agencies in Florida that previously funded EMS through a non-ad valorem assessment had to begin funding EMS through ad valorem. Budgets had to be split so it was clear which revenue stream funded which service.

Annually, there is an MSTU the City Council approves that allows Sarasota County to assess Venice taxpayer's .66mils on the ad valorem tax. This is currently producing approximately $2,500,000 with today's property rates. As the property values effect the annual ad valorem so does growth which the City of Venice is currently experiencing.

The expectation is that if Venice Fire takes over full ALS transport services then that .66mil will be added to the Venice tax assessment which would then be allocated for the EMS service.

The other main fee collected is transport fees. These are collected with each patient transport and the amount billed is based on the level of care provided. Different incidents may require more ALS care in which it is billed accordingly. We would recommend utilizing a billing company to handle this duty as it requires dealing with private insurance companies, Medicare and Medicaid. Utilizing a billing company is a common practice by ALS agencies. Venice is known to have a high collection rate due to Medicare and Medicaid being the primary insurance

companies for our residence. This guarantees that our department will be reimbursed for services rendered at a standard rate for the area.

Additionally, by taking over the ALS transport service, the City may adopt an EMS impact fee to assist in covering cost with future growth. This is a fee that can be used for expansion of services and would be a one-time fee assessed to new homes and businesses in the City. In 2017, City Council elected for the first time to collect fire and police impact fees.

As noted earlier, there are several opportunities to apply for additional EMS grants if we were approved to offer ALS services to offset some of the cost we may occur.

Rumor vs. Fact

Rumor - Sarasota County Emergency Services would control Venice Fire Rescue ALS units and move it out of the City jurisdiction and into another area of Sarasota County for coverage or dispatch it to another Agency's area to handle a call.

Fact - This is an absolute rumor, Venice Fire is in control of our own units. Sarasota County will not control the movements or placement of our ALS assets. That responsibility lies solely under the control of each individual governing agency. Another fact that exist today, when EMS gets busy, the Fire Department gets busier by running as a first responder. As a Fire Department gets busy with one (1) or more working fires, the other fire agencies either assist on the working fire or they move in to provide coverage (mutual and automatic aid) until our units become available.

Rumor - Fire Department's firefighter/paramedics on an ALS engine will not be able to practice their skills as much as certified paramedic on an ambulance on EMS calls.

Fact - The placement of an ALS engine with paramedic is to enhance delivery of advanced life support in areas known to have delays or an overabundance of EMS calls. Venice Fire Rescue arrives on scene first 66 percent of the time and are on scene for over three (3) minutes before an ALS unit arrives. This will allow ALS support care from the inception of arriving on scene. Just imagine trying to hold your breath for three minutes.

Rumor - Operating ALS non-transport engines will cause an increase in our call volume, causing the Fire Department to respond to all EMS calls in our area.

Fact - The Fire Department respond to medical calls within their jurisdiction now as part of current dispatch protocols. As an example, calls for cardiac, shortness of breath, unconscious patients, altered mental status, stroke, car accidents, long falls, shootings and stabbings. We also respond as first responders when there is a delay in the response of the ambulance. Furthermore, the Fire Department responds to 100% of medical calls within their respective jurisdiction, which are ill persons, minor injury, check of wellbeing of a patient until ambulances become available. This practice has been in place since 1998 when Venice started running EMS assistance within the City.

Rumor - When a Firefighter/Paramedic calls in sick, the ALS Engine will be placed out of service until we hire back a replacement or we will need to take the ALS equipment off the engine or swap over to a rescue engine because of not having a Paramedic on the apparatus

Fact – Florida law clearly covers this topic. There is a provision allowing an ALS non-transport vehicle to remain in service along with its ALS equipment and without a paramedic onboard as long as we operate with an EMT and use the BLS equipment. All of our Firefighters are currently EMT certified and all of the apparatus carry BLS equipment. See the Appendix 6 for statute details.