

ITEMS REQUIRING BOCC APPROVAL  
 1 ITEM

1. AMBULANCES -- EMERGENCY MEDICAL SERVICE/FLEET MANAGEMENT  
FUNDING -- FLEET MANAGEMENT

(Request sent to 18 vendors)

RFP #17-0055 Contract

	Emergency Services Supply (Osage Ambulance)	American Response Vehicles & American Emergency Vehicles (AEV)
2017 Ford E450 Super-Duty, RV cutaway chassis 158" wheelbase with an "Ambulance 47A Prep Package"	\$235,785.00 ea.	\$214,970.00 ea.
Days to Delivery	165 days from purchase agreement (TBD upon chassis availability)	120 to 150 days after receipt of confirmed shop order
No Bids	Danko Emergency Equipment Co.	

On the recommendation of Joe Thomas, on behalf of EMS and Fleet Management, Jennifer Dombaugh moved to **accept the best proposal from American Response Vehicles & American Emergency Vehicles and establish contract pricing for one (1) year with two (2) one-year options to renew.** Linda Kizzire seconded the motion. The motion passed unanimously.

A review committee comprised of Adrienne Byrne - Health Department, Paul Gibson, David Poland, Brandon Ellis, Ryan Kilby, Timothy Popp and Tim Vandeberghe - EMS, Mark Kemper and Andrew Shepherd - Fleet Management, and Joe Thomas - Purchasing evaluated and rated both proposals based on meeting requirements, specifications, experience, references, cost and overall approach. The committee unanimously recommends that American Response Vehicles & American Emergency Vehicles (AEV) provides the best solution.

Ambulances are made-to-order products with various layouts and requirements. The county requires standardization of ambulances and this is critical in order to facilitate timely response and care of patients. This standardization also provides a safer working environment for responders when working on-scene with patients. The county currently has 28 ambulances in the fleet all built to the same specifications.

AEV provided a thorough proposal which only required a few clarifications, which were answered promptly and completely. AEV has onsite mechanical and electrical engineers that are employed by them. This gives them the ability to design and construct a safe, customized ambulance built to the customer's specific needs. AEV has a number of quality control procedures in place. This gives them the ability to locate issues within the assembly process that will assist in efficient production, safety and meeting of deadlines.

The ambulance modules used by AEV are constructed by Mickey Truck Bodies in High Point, NC. In 2012, delegates from Sedgwick County visited Mickey Truck Bodies and were impressed with their manufacturing processes. Mickey Truck Bodies is a national company that has been in business since 1904 and AEV has been working with them since 1991.

Once the ambulance modules are delivered, the boxes are etched and painted. From there, the chassis and bodies are started down a very well organized line that consists of six (6) cells. Each ambulance is in a cell for up to eight (8) hours and then moves to the next cell. The employees assigned to each cell are given a checklist of items that have been installed and after their review, a quality control supervisor also confirms verification of completion before moving to the next cell.

In 2012, Sedgwick County made the decision to accept the proposal from AEV to produce ambulances. In the past five (5) years, EMS has received 12 newly constructed ambulances and 16 remounted ambulances from this vendor. The county has an excellent working relationship with AEV with both the new and remounted ambulances. New ambulances are received within 130 days and remounted ambulances within 90 days. The quality and workmanship have exceeded expectations and ambulances are received from the factory and placed directly into service without any delays. Both the new and remounted ambulances have been constructed exactly to or have exceeded our specifications. AEV's engineering staff works closely with EMS and Fleet Management to resolve any changes or issues that may arise during construction, all without any delays.

AEV has performed extensive crash testing on their ambulances and complies with the Federal Motor Vehicle Safety Standard and also with SAE-J3026 to the design and testing of occupant seating and restraint systems for personnel being transported in the patient compartment.

AEV has made Fleet Management an authorized warranty repair center and will extend the full warranty of the ambulance box if it is to be remounted by Fleet or another authorized remounting agency. AEV has been recognized as a "Carolina Star Worksite" by the North Carolina Department of Labor for total commitment to creating and maintaining a safe and healthy workplace.

Emergency Services Supply's (Osage Ambulance) response was incomplete and some of their supporting qualification documentation had expired. Osage Ambulance listed seven (7) exceptions to specifications in their proposal, one of which was a broad exception to the General Body Construction (see in Notes section). However, upon closer review, it was discovered that there were actually 80 separate exceptions that were not listed in their proposal. The exceptions that were not listed pertained to the overall construction and safety of the ambulance module that Osage is providing as well as several items that were specified in the EMS/Fleet specifications.

Interior and exterior compartments were not designed or engineered to the requested specifications. Of the seven (7) exterior compartments, all seven (7) did not meet the minimum requirements and of the twelve (12) interior compartments, five (5) did not meet the minimum requirements.

The overall design of their module is an Osage standard ambulance. There are no allowances made for any customization of the module as requested due to Osage not having an onsite engineering staff. Osage does not have the capability to custom design exterior and interior storage compartments, or change design for safety and medical equipment accommodations.

After reviewing the Osage Ambulance proposal, it was discovered that many of the items that EMS/Fleet had specified to be included in proposers' responses were omitted from Osage's response or worded that these items would be "provided by Sedgwick County."

**(Notes: Major exceptions made by Osage Ambulances)**

The construction exceptions of the module not listed pertained to the structural integrity of the exterior corner extrusions, side impact safety beams, the lack of wall gussets with minimal floor gussets and the aluminum surface skin. The corner extrusions specified by EMS are to have two (2) lateral center webs to ensure the load bearing capabilities and structural durability of the ambulance body in the event of impact. Osage Ambulances do not use ribs but rather a hollow corner extrusion. No continuous side safety impact beams were going to be installed on the driver and passenger sides of the module. The aluminum skin used for the exterior walls, roof and doors are made of a more brittle alloy with less structural integrity and corrosive resistance. EMS specified a 28,000 to 33,000 psi strength alloy, Osage provides a 22,000 psi.

EMS specified a minimum for HVAC of a 35,000 BTU unit with 690 cfm output. Osage specified a 32,000 btu with a 630 cfm output. The exhaust system was specified as a 240 cfm exhaust, Osage specified a 138 cfm.

All ambulances are required under the Federal KKK-A-1842F to be compliant with all minimum Federal Safety standards. The manufacturers are required to hire an independent testing laboratory to complete testing. Osage uses Environmental Testing Laboratory from Dallas, TX. Environmental Testing Laboratories accreditation through the Laboratory Accreditation Bureau expired on September 2, 2015. Also, the certification for compliance for the AMD 008 Grab Rail Static Load testing expired on May 14, 2017.

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*Questions and Answers*

Linda Kizzire: I know that we're in the process of implementing a Fleet policy on vehicles and life expectancies of those and so Scott if you could elaborate on where the replacement ambulance falls into this possible proposal.

Scott Hadley EMS Director: Before you today for consideration is who the vendor will be and when the decision is made to replace a vehicle, is going to be presented by Director Poland with Fleet Management, who will be recommending new policy changes to the vehicle replacement.

We will be presenting that to Commissioners next week at a staff meeting to get their input on that change in policy. Right now, due to that change, we don't know how many ambulances we will be replacing but today is for who will build it, when the decision is made to replace an ambulance.

We've had two proposals. The committee has thoroughly reviewed those. We think the best proposal is from AEV. I know Penny can elaborate more on the new system that she's recommending to the Commissioners that will take into consideration several criteria before we replace a vehicle including vehicle age, mileage, preventive maintenance cost, and overall condition of the vehicle. Several variables will be in the calculation to say when it reaches a certain point, we will replace that vehicle.

Today, basically the sole point of replacement in our current policy is odometer mileage. We know there are many other things that influence a vehicle, whether it be a dump truck, a mower, an ambulance, a Sheriff's patrol vehicle. We want to understand that better and to get to a point where we replace that vehicle based on a point system including all those variables and not just mileage. We're going to do the same thing for an ambulance. Today I can't tell you how many we would be looking at replacing but we don't have a contract in place right now, so if some emergency had occurred, if we wrecked an ambulance and totaled it, we don't have a vendor to go to replace that. It's critical that we get a new contract in place and we believe AEV has submitted the best, most complete, and thorough proposal that meet our specifications.

Linda Kizzire: So this is a replacement ambulance or is it a new one for the fleet? Are you going to retire one?

Scott Hadley: When we go to replace that - again that's based on, let's say, it gets to a certain point, we say "We need to replace it." and then we would use this company to manufacture a brand new ambulance.

Thomas Stolz: This is not a request today to buy an ambulance?

Scott Hadley: Correct.

Thomas Stolz: This is just to get a vendor.

Talaya Schwartz: Do you have any idea how soon that might be? This is just for one year with only two one-year options to renew so if you don't have to do it for a whole year then we may want to consider offering more options to renew.

Joe Thomas: Yes, but we are not sure how many vehicles will be ordered based on this new 15 point system.

Scott Hadley: Correct.

Talaya Schwartz: Because I know that this is a very well written proposal and I know there's a lot of work that went into it so sometimes only getting it for three years...

Scott Hadley: Yes, and I don't know if that is something we need to look at in the future but that has been standard on previous contracts – for a year with two one year options to renew.

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Thomas Stolz: Scott, the county requires standardization of ambulances. Can you expound upon that for just a little bit?

Scott Hadley: In our world, in the Emergency Medical Services world it's important that we have standardized ambulances. This means compartments in the vehicles configured identically throughout the Fleet. The compartment size - so it fits the particular equipment that we have in there so when the paramedics are working in the vehicle they know where everything is at.

The equipment's in the exact same spot on every single vehicle and that's important when you're out there dealing with multiple patients that if you have to go out to get a piece of equipment, it's in the same location and you're not searching around thinking "Well, this is built a little bit different, which vehicle is this, where is that equipment at?" First Responders - a lot of times will work hand-in-hand with the Wichita Fire Department, Sedgwick County Fire Department. We will send them out to get a piece of equipment and it is important for them to know where that equipment is. If we had four different manufacturers and they are all configured differently, they may get confused and that may delay us providing care to a patient. It's extremely critical for us to have things standardized, identical and whatever manufacturer is doing that, it is important that they can configure those compartments, to hold the equipment and medications and supplies that we have in the exact same location. When it's time to get a piece of equipment, it's instinctive where you go to get that piece of equipment. They don't have to think and "I got to stop. This is a different manufacturer so is it in this compartment versus that compartment."

Joe Thomas: One of the things we talked about in evaluation committee was that part of the standardization was an important safety factor that a lot of the equipment be located on the curb side of the ambulance which makes it safer that EMS personnel.

Scott Hadley: That is intentional. Again so when you are at an accident scene, close to go to the curb side, protection, not out in traffic trying to get equipment out of the ambulance.

Thomas Stolz: And so the situation we have today, we have 28 ambulances out there and you're trying to put a piece of a puzzle in with these other 28. Let's talk about the compartments for just a bit. The other vendor, the Emergency Services Supply, the Osage Ambulance could not do that. They could not build compartments to the level that would be consistent between your existing fleet and what they are proposing.

Scott Hadley: Correct, it wasn't customizable. They couldn't customize it to the exact height, width and depth that we need for that particular compartment, especially the exterior. As you saw on the interior they could only modify five of the 12 compartments to some degree and that's again extremely important that we set these up and that we have them customizable. Previous vendors before AEV were able to do that as well. They were able to customize. We've had a variety of vendors over the years. All of them have been able to customize it to our specifications and that's what we're still looking for today. I don't think we're asking for anything unreasonable. This is something that has been standard practice for decades, that they build it to those specifications.

Joe Thomas: I know on previous RFPs where Osage has responded we made it very clear that we wanted it customize. They never ever came back and said they could. We figured part of the reason is they don't have an on-site mechanical engineer and engineering staff which limits their ability to customize.

Scott Hadley: It's a standard cookie cutter model. That's what they provide.

Tom Stolz: And when we say that they have on-site mechanical and electrical engineers, that is onsite in the shop, in North Carolina that is not onsite here in Wichita?

Scott Hadley: That is correct. The benefit of that is that the fleet mechanic, Mark Kemper, can hook up the ambulance electronically and be on the phone and online with that mechanical engineer should something happen here and have that type of service available to us whenever he needs it and the other proposer did not have that availability for that to occur either after we take delivery of the vehicle.

Linda Kizzire: Scott you also mentioned the previous vendor did not respond?

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Scott Hadley: They are no longer in business. A previous one that we had, Medtech, is no longer in business building ambulances. So that is who we had prior to the AEV.

Linda Kizzire: OK

Tom Stoltz: You and I walked the halls on this 6 or 7 months ago with that old vendor. I think the price was around \$185,000. This is a pretty significant price jump, is it not?

Scott Hadley: It is. It is an increase from the old contract and I think the last purchase price I will get the exact number but it is right in the neighborhood of \$190,000.00 the last vehicle that we did purchase and then we went out with the new specifications and this is what the proposals came back at. Part of that is the reconfiguration on the inside for safety features. Right now we have one side on the curb side with a squad bench. It is a long bench we use to lay down a patient on there or have the capability of laying a patient on there. Safety studies in the design of an ambulance and the way the industry is going is to make a single attendant seat that is on a track where the attendant can stay seated throughout transport. Because right now, they have to get up and move around and the attendant is always standing back there. If you have a hard stop or an accident, you could injure somebody. So the design now is to take that squad bench out, reconfigure to a single seat where all the equipment is secured and within reach of that attendant. So they do not have to get up throughout transport. That way if we do have a hard stop or something, they are seated and restrained along with the patient in the back of the ambulance. That added a little bit to the cost versus what we had in the previous design at \$190,000.00.

Tom Stoltz: So there are some differences in the compartment of this ambulance. This will be a little bit different than your other 28, correct?

Scott Hadley: Correct, on the squad bench side. Everything else is the design of the compartments is identically the same. Where the equipment will be placed is identically the same. It is just the configuration back there instead of having a lay down squad bench, it will be a single seat in there and I know Paul can provide more information on that if you need that.

Joe Thomas: Also I think in the evaluation committee, in order to minimize cost we removed the Striker Cot Power Load System. Is that correct, that we took out of this contract?

Scott Hadley: Correct

Paul Gibson: To help lower because it was a big difference.

Scott Hadley: I think that system was about \$22,000.00 in addition to what you are seeing here today but we removed that.

Tom Stoltz: How does the Sedgwick County standards of EMS requirement compare to Johnson County, Wyandotte, other?

Scott Hadley: We in the ambulance industry and the majority of folks that specify ambulances in the ambulance industry use what they called the Triple K Specification. That is the standard that has been around for decades and some states are actually statutorily adopted that standard for ambulance manufacturing. There are certain minimum specification requirements by Triple K that the ambulance industry adheres to and we follow the triple K specification here and have for many years. That is the minimum standard that we try to adhere to and AEV is able to either meet them or exceed that particular standard so most folks in the English world use Triple K. There are some others evolving out there now through NFPA, the National Fire Academy and through CAAS, the Commission on Accreditation of Ambulance Services have a ground vehicle standard now that they are proposing to use but currently we are using the Triple K specification and those get periodically updated year after year after year. So when the update is made, when we write the new specifications, we try to adhere to those new standards that are out there in the industry.

Tom Stoltz: Do other large urban counties use Triple K?

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Scott Hadley: Yes. I think Paul can elaborate. I do not know how many states. I do not have that number but a lot of states have adopted that in legislation that they will use Triple K standards for Ambulance Manufacturing.

Tom Stoltz: I am a little bit confused. On the top of the second page in the first paragraph it talks about we made a decision for a proposal of AEV. For the last five years they have met or exceeded expectations. Who did you say the old contract was with?

Scott Hadley: Before AEV was Medtech.

Thomas Stolz: So this is the same vendor we had that last five years.

Scott Hadley: Yes.

Thomas Stolz: We're seeing this price jump basically because we're making some safety modifications.

Scott Hadley: Correct. And to the suspension of the ambulance – instead of the standard leaf spring suspension it's a liquid spring suspension which gives more stability, durability, reliability, patient comfort in the ride in that particular vehicle and it's worked out very well and I know Penny can you probably elaborate on that as well if you need that.

Thomas Stolz: What is the warranty on these when we buy? Two components here; you have the car part of it, the Ford which is an E450.

Scott Hadley: Paul can address that because there's an electrical system warranty. There are different warranties on those.

Joe Thomas: Paul, correct me if I'm not reading the right thing but the welded body warranty is 20 years. The conversion warranty which is the electric system, paint, and graphics is seven years or 70,000 miles.

Paul Gibson EMS Logistics Manager: That's correct. That's what the warranty is. The liquid spring warranty which Scott had mentioned, I believe has a five year warranty. We have one truck with it now. The company's been very dependable. They back up their product and we get a turnaround time that is very quick on any components that might fail or break down during their only use of the truck. It's a big advantage for patient care. It stabilizes the ride for the patient. It makes it a much smoother and comfortable ride. I can attest to it. I rode in the back of the truck with patients. I rode in the back of one of our trucks with my father-in-law this past year and it makes a big difference.

Thomas Stolz: That suspension system has a five year warranty. The other part of the vehicle, the frame part, I'm hearing you say 20 on some of the...

Joe Thomas: 20 years on the box.

Paul Gibson: The box has a 20 year warranty for any defects, anything that fails on the box, structural integrity of it, stress fractures, things like that. That is warranted by the manufacturer. That warranty carries over if we remount the truck. We remount each one of our ambulances one time as a cost-savings effort. Essentially a remount truck is where we take the module portion off the back of a chassis, refurbish the module, place it on a new chassis, and run it for another life span.

Thomas Stolz: What's a refurb cost?

Paul Gibson: Our last ones cost \$110,000.00.

Thomas Stolz: About half.

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Paul Gibson: Yes. Given the price on this, with the new truck, you're looking at \$325,000.00 over an 8 to 10 year span for the ambulance.

Linda Kizzire: Are there plans in the future to modify the other ambulances to have that single-seat, Scott or Paul, where the worker would be safer in the back?

Paul Gibson: We will only do the modifications on new construction trucks. On our remount trucks we won't do it. It would become too cost prohibitive at that point. It involves quite a bit of extensive work. Anything you modify or adjust on the inside of the box affects stuff on the outside the box. If you modify a compartment on the inside of the ambulance it actually affects a compartment on the outside of the truck as well. It's a very tightly configured truck. There's not really much room for leeway or play. It's not like we can just take something out and replace it with something else without affecting something else within the truck.

Thomas Stolz: So back to Linda's first question; if the commission adopts the new fleet policy, Penny, you would do the mathematics on the vehicle part, not the box part of this? On the vehicle part; mileage, hours, shape, maintenance cost? You would calculate that piece and then determine whether that vehicle needs to be replaced but the box would move with the next vehicle if it's still under warranty, correct?

Penny Poland, Director of Fleet Management: That is correct.