



OFFICE OF COUNTY MAYOR GLENN JACOBS

Procurement Division, 1000 N. Central Street, Suite 100, Knoxville, TN 37917

**Knox County Procurement Division
Addendum I to Invitation to Bid #2893
Fourteen (14) Passenger Vans**

Addendum Date: September 20, 2019

Buyer: Christina Davin

Opening Date: October 2, 2019 at 2:00 pm

Total Page(s): Seventeen (17)

The following is to be added:

Add : 4.2.31 Maroon vinyl will be included on exterior of Bus: CAC, Knox County CAC Transit in 2 (two) locations, the phone number in 3 (three) locations, and the wrap around roadway path that has cut out dashed lines. Please see Appendix C.

The following is to be amended:

Delete 1: 4.2.21 Exterior colors used on bus including tire rims to be Ford white with maroon stripes. See Appendix 'B'.

Add 1: 4.2.21 Exterior colors used on bus including tire rims to be Ford white with maroon stripes. See Appendix 'C'.

Delete 2: Section VI Specification Checklist Attachment A

Add 2: Section VI Updated Specification Checklist Attachment A

Delete 3: Appendix A

Add 3: Updated Appendix A

The following is for Clarification:

Question 1: we reviewed the seating plan drawing on page 48, Diagram Appendix A. This drawing shows a flip seat behind the curbside wheelchair position not referenced in the specifications. This seat would be add a 15th passenger, making it a CDL required bus. Page 33, fifth box does specify this one [1] additional single fold-up bench seat. Is this single flip seat required, or not, and if so is a 3 point seatbelt or a lap belt required? Please clarify.

Answer 1: We only want 7 of the 3PT seats that fold up for the capacity of 14. No single seat. Drawing should show 7 seats. Please see the attached Updated Appendix A.

Question 2: Please note regarding length of seatbelt [90" specified], we are offering the standard length 3PT seatbelt that comes with the Freedman GO-ES seat, since this is all that is available that meets FMVSS requirements. Please approve.

Answer 2: We want the longest available and have requested seatbelt extensions.

Question 3: Page 1, Section 1.6 [and elsewhere]: Is a hard copy bid required, and if so, in addition to the original how many copies are required. Or; may bidders mail either a hard copy or submit on-line as referenced in Section 1.14 on page 2 in the bid document.

Answer 3: Correct, Bidder may choose how they submit.



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- Question 4:** Page 18, Section 4.2.20: Specification requires that track run “full length” from front to rear. This makes sense for the three [3] street side wheelchair positions, but does Knoxville CAC require that the track run “full length” from front to rear since there is only one wheelchair position on the curbside. Please clarify, length of track on curbside that runs front to rear, it could be 48”, 50”, 52”, full length of passenger compartment, etc.?
- Answer 4:** They need to run full length for the street side and long enough for the one wheelchair to be secured on the single station.
- Question 5:** Page 18, Section 4.2.21: Paint & Graphics:
We assume that the reference to Appendix B in this section should be Appendix C, since Appendix B depicts camera locations. It is not clear to us on Appendix C or B where the maroon stripes should be. We suspect that the maroon color is a vinyl and is the curved belt line around the bus with white dashes? Please clarify. Photos would be helpful, if you can please provide in your response.
- Answer 5:** Please see above Added and Amended 1, the Appendix has been amended to Appendix C.
- Question 6:** Also, it appears in Appendix C that there may be a black painted band around the side passenger windows. Is a painted black band around the windows required? Please clarify.
- Answer 6:** Black band not required.
- Question 7:** Page 21, Section 4.11.2 Radio: Please clarify; third bullet point requires two [2] front radio speakers wired to dash and the seventh bullet point requires four [4] speakers in passenger compartment for AM/FM radio. Are a total of six [6] speakers required, or just four [4], and if six [6] are all six [6] to be wired to the AM/FM radio? Please clarify.
- Answer 7:** Six speakers total with wired for radio..
- Question 8:** Page 24, Section 4.23.3: There are a variety of Ford authorized extended service ESP plus warranty protection plans available. Please clarify which plan is required.?
- Answer 8:** Just give options as to what you have available and the pricing.
- Question 9:** Please clarify if you are looking for separate pricing for each component of the build. These prices/percentages are captured during the Post Award Buy America audit only.
- Answer 9:** Bidder must list components and the domestic content as required by Buy America. These requirements are a national requirement.
- Question 10:** 3.46 – Please accept that the firm price will only apply for as long as 2019 chassis are available with 6.8L V10 engine rather than 12 months. Please make provision for chassis price increase after Ford terminates production of the 6.8L V10. Ford has not yet released the new engine specifications or pricing.
- Answer 10:** Knox County will not accept price increases due to a new chassis and the testing as that process could take months. At that time, the County would rebid.
- Question 11:** 3.55 – 2 year contract will be subject to 2019 Chassis availability. Please make provision for chassis price increase after Ford terminates production of the 6.8L V10. Ford has not yet released the new engine specifications or pricing.
- Answer 11:** Per Section 3.46 Pricing must stand firm for a year. At renewal time, the vendor may request a price increase

End of Addendum #1.

Addendum must be acknowledged in your submittal.

Christina Davin, Senior Buyer, Knox County Procurement

VENDOR _____

Bidders must complete the Specifications Checklist and return with their bid. If submitting electronically, bidders must attach the Specifications Checklist with their response. Bidders are to indicate if the Fourteen (14) Passenger Vans bid meet the minimum specifications by marking the “Yes” or “No” box. If the minimum specification is not met, bidder must explain in the “Comment” section. Bidders may include additional sheets if needed.

6.1 TECHNICAL SPECIFICATIONS

Specification	Yes	No	Comments
<u>General Dimensions</u>			
Length: 24 ft. 6 inches maximum			
Interior Width: maximum 93"			
Interior Height: minimum 75" at center after raised floor			
Wheelbase: 176" maximum			
Top of first step height from ground: 12" maximum			
GVWR: minimum 14,500 lbs.; provide GVWR in 'Comments'			
<u>Engine</u>			
10 cylinder gasoline engine			
400 cubic inches minimum			
Engine compartment insulated from passenger compartment with fiberglass material or equivalent			
Interior noise will not exceed 80 dba under 45 mph			
Interior noise will never exceed 83 dba			
Engine furnished with a large capacity, full flow oil filter and engine oil cooler			
<u>Cooling System</u>			
Radiator: heavy-duty (4-core) with greatest available capacity recommended by manufacturer			
Coolant recovery system present to return expelled coolant to the system			
Largest radiator fan complying with manufacturer's standards provided			
Permanent ethylene glycol antifreeze providing protection for ambient temperatures from -20°F to +100°F while vehicles are used for prolonged transit purposes			
<u>Electrical System – 12-Volt</u>			
Alternator: minimum 225 amps SAE rating			
Minimum amperage: cold rated; delivers 165 amps to 200°F			
Alternator/regulator protected from wheel wash			
Dual, heavy-duty 12-volt horn provided, protected from wheel wash			
<u>Electrical System – 12-Volt</u>			
Dual OEM batteries with cold crank of no less than 1,050 amps			
Dual OEM batteries are to be lead acid premium construction, maintenance free. Both batteries are to be mounted on a slide-out tray with dual battery door/tray locked closure system			
Third battery (8D) used to power the wheelchair lift mounted in a separate compartment with a slide-out tray on the side of the vehicle			
RV type isolator to separate the 8D battery from the dual batteries			

VENDOR _____

Electrical System – 12-Volt	Yes	No	Comment
Wiring to be color-coded and function-coded			
Wiring diagram provided explaining coloring, function and components of the system			
No butt or "T" connectors used			
All wiring of sufficient size to carry required currents without excessive voltage drops			
All wiring protected from heat, water, solvents, road splash, stones, grease, oil, fuel, abrasion, and chafing by proper insulation, conduit, or flexible tubing			
Disconnect switch easily reachable from the driver's seat provided capable of disconnecting all circuits			
Switch heavy-duty; can carry any load it encounters; to be 70-2281-1 Flexible Corp. part number or equal			
Wiring devices, switches etc. except circuit breakers, are to be rated to carry at least 125% of the maximum ampere load for which the circuit is protected			
Master electrical component panel located inside the bus			
Master electrical component: in compartment, power distribution is accomplished through a non-printed-circuit board (PBC) distribution center utilizing Packard 280 and 800 series (or equal) connection pins			
Bussmann-Cooper (or approved equal) power distribution center utilizing automotive mini and micro relays and fuses provide circuit protection			
Fuel System			
Fuel Tank Capacity: minimum 55 gallon capacity			
OEM fuel filter with replacement elements			
No dual tanks are to be used			
Designed to keep fumes from entering passenger compartment			
All federal safety standards are to be met			
Steering			
Heavy-duty power steering system that is self-centering with little driver effort			
Steering mechanism constructed to make the wheel free from road shock and vibration			
Metal steering wheel, covered with plastic or synthetic resin and the vehicle has tilt steering			
Transmission			
Transmission: heavy-duty, fully automatic power shift, 4-speed, hydraulic-drive type, overdrive is 5 th gear			
Transmission shift level: interlocked with the starting motor to prevent engagement of starter in any gear position other than 'neutral' or 'park'			
Audible warning system outside of vehicles activated when the transmission is in 'reverse'			
Auxiliary transmission oil cooler provided			
Brakes			
Dual hydraulic/hydroboost brake booster, power, self-adjusting brakes with front disc/rear disc with 4-wheel ABS			
Brakes: heaviest available with a minimum rotor diameter of 12.5", Brakes are to be self-adjusting			

VENDOR _____

<u>Brakes</u>	Yes	No	Comment
Parking Brake: either a transmission drum type or rear axle mounted type (state which in 'Comments') and shall activate the rear wheel brakes			
Handle or pedal that activates the parking brake is easily accessible to driver but does not hinder driver's movement to or from the driver's seat			
<u>Tires and Wheels</u>			
Heaviest duty available, ventilated, pressed steel, 16" x 6.00" minimum, designed to equal/exceed the G.V.W.R., and are interchangeable			
1 spare wheel and tire shipped loose in each vehicle. Vehicles have dual rear wheels and single front wheels			
Tires: LT 225/75 R 16 load range E, balanced, jack and its handle to be shipped loose in each vehicle			
<u>Suspension</u>			
Front Axle Capacity: 5,000 lbs. minimum			
Rear Axle Capacity: 9,450 lbs. minimum			
Front Springs (combined rating at ground): 5,000 lbs. minimum			
Rear Springs (combined rating at ground): 9,450 lbs. minimum			
1-3/8" gas-filled front and rear heavy, double acting, shock absorbers used on front and rear of the vehicles			
Front stabilizer bar with 1" diameter / rear stabilizer bar with a 1.25" diameter installed			
<u>Rear Axle Ratio</u>			
4:56 required ratio to maintain highway speeds at normal engine RPMs			
Ratio to be such that vehicle capable of maintaining 55 to 60 mph for prolonged periods at normal RPMs			
<u>Instruments, Controls, Base Equipment</u>			
Ammeter or voltmeter to have numerical calibration or graduated charge and discharge			
Vehicle(s) to include speedometer, odometer, oil pressure gauge, turn signal level on column, turn signal and flasher indicator lights, fuel gauge and headlight high beam indicator (mark any of the abovementioned not included in 'Comments')			
Sun visor 6" x 30" that can be positioned at windshield or to the left of the driver			
Two-speed minimum windshield wipers			
2 radio speakers (2 front) wired to dash			
Clearance (marker) lights controlled by headlight control switch			
Switches and temperature controls for passenger compartment heater, heater fan			
Passenger compartment courtesy lights/stepwell lights			
AM/FM clock radio; 4 speakers in passenger compartment			
Back-up camera; 7" inch display located on center console			
Locked storage compartment in front of bus, passenger side above windshield			
Tilt steering wheel			
Chrome grill			

VENDOR _____

<u>Instruments, Controls, Base Equipment</u>	Yes	No	Comment
Reverse alarm			
Standard driver's seat (to be reclining)			
Front and rear mud flaps			
Automatic fast idle in driver's area			
Mounted console with cup holders (sized for legal size clipboard to right of driver's seat)			
All gauges clearly visible to driver from seated position and all switches within reach of seated driver/allow driver to continue safe operation of vehicle while engaging or disengaging switches			
<u>Exhaust System</u>			
Manufacturer's heaviest duty system available for engine. System is corrosion resistant and securely fastened/routed to protect components from hazards			
Exhaust will exit street side of vehicles. Exhaust system minimum 3.5" diameter			
<u>Body and Accessories</u>			
Body structure built as integral unit reinforced at joints and corners where stress concentration may occur to adequately carry required loads and stand road shock			
Body structure full steel "cage" type construction; walls/sides welded together, no mechanical fasteners, bolts, or clips used to hold steel cage together			
Structural support members minimum 1 1/2" x 1 1/2", 16 gauge steel tubing (list is included) if using an item not included on list, note in 'Comments'			
Body bolted through sub-floor structure to chassis frame as recommended. Welding body understructures to chassis frame will not be permitted			
Exterior panels (walls and roof) to be metal/fiberglass composite. Side walls are the equivalent of .040 aluminum or .060 FRP, laminated to non-wood, moisture and mold resistant substrata backer material, or approved equal. Wood substrate (i.e. Luan) is not acceptable			
Exterior panels are to be riveted, welded, or bonded to body framing (pop rivets and sheet metal screws not acceptable). Panels installed to shed water. Side panels below the floor line easily removable for service/repair			
Stepwells to be one-piece construction, adequately reinforced to prevent deflection			
3 steps provided, minimum tread depth of 8.5" inches. Bottom step height no higher than 12" inches			
Steps and risers in accordance with federal regulations governing elderly and handicapped transport vehicles.			
Stepwells to be lighted and continuous for the full width of the door opening			
Undercoating applied to metal parts subject to rust/corrosion by elements. Polyolueim, Ziebart, Quaker State Soundoff, Ashland Tectyl 165G or equivalent used. Automotive undercoating not satisfactory			
Fasteners (nuts bolts, clips, washers, clamps, etc.) are a type that prevent corrosion (zinc, cadmium plated or phosphate coated). No sheet metal screws			
Nuts/bolts to be Grade 8 type, sourced in USA			

VENDOR _____

<u>Body and Accessories</u>	Yes	No	Comment
Major components (transmission, engine, radiator, battery, alternator, A/C compressor) accessible by access doors			
Have standard front and rear bumpers			
At least 2 tow hooks provided/securely attached to vehicles' understructure. Tow hooks mounted at rear and located so no damage occurs to vehicle under tow			
Floor: Plywood material applied over steel floor structure and securely fastened thereto			
Plywood a minimum 5/8" five-ply, resin, waterproof bond, laminated fir, A-C Exterior Grade or better, manufactured in conformance with U.S. Product Standard PS 1-74 for Construction and Industrial Plywood or approved equal			
Floor raised to level of wheel wells to provide flat surface, with minimum 75" headroom at center			
Step to access raised floor incorporated in stepwell whereas passenger to be at level of raised floor at top of the entrance stepwell. An additional step in the passenger compartment (or upon entering passenger compartment) is not acceptable.			
Floor Covering: Floor covering to be Altro floor covering or approved equal. The minimum thickness must be at least 2.2 millimeters. The flooring material shall meet minimum required thickness. The flooring shall be a blend of PVC and quartz aggregate. Any "matting" glass fiber web," or "backing" shall not be included as part of the required thickness. Industry standard warranty of 10 years for 2.2 millimeter thickness flooring is required.			
Under Seat Area: The area under the seating area covered with ALTRO floor covering or an approved equal			
Aisle: Aisles black non-skid, wear-resistant ALTRO floor covering or equal			
Bonding: Floor covering bonded to the floor with waterproof sealer. Covering must not crack when subjected to sudden temperature changes. All seams to be heat sealed			
Step Tread: Step tread edges, including floor level, covered with rally molded nosing. Step edges to have a 2" inch wide white diagonal striped band running the full width of the step			
Passenger Entrance Door: Front doorway provided on right side of each vehicle. The door will be two-leaf outward opening. Clear opening width minimum 29" inches/minimum clear opening height to be 80" inches			
Passenger entrance door manually operated. Assist handles mounted on both sides of stairwell. Doors and door wells constructed to prevent drafts and water entry. Door and door openings to comply with federal regulations. The door shall be equipped with the largest steel available to ensure durability for extended use of the door			
Driver's Door: Driver's door at left side of the driver's seat. Minimum of 2 steps (plus a running board) aid driver entering or exiting			
Emergency Exits: Emergency exits comply with F.M.V.S.S.517.217-76. Required that clearly marked push-out windows be located at the rear and each side. Red indicator light will be placed above emergency exits and remain illuminated when bus is in service			

VENDOR _____

<u>Body and Accessories</u>	Yes	No	Comment
Wheelchair Lift Door: Mounted behind rear axle, complies with ADA regulations			
Windows - Passenger, Side: 3/16" thick side windows of single density; tempered safety glass with 44% maximum to 28% minimum light transmission gray glaze. Windows have aluminum frames, ventilating type with T-slides at top sill. 1 window on each side of body to be push-out type and clearly marked for emergency exit. Windows/frames meet/exceed federal and state of Tennessee Standards including F.M.V.S.S. 217			
Driver's side window: Gray glazed with ¼" inch tempered glass; easily adjustable with one-hand operation			
Rear window: Minimum 1,000 square inches, push-out type. Van-guard (rear window lens) should be installed in rear window			
Windshield: ¼" inch laminated safety glass with single density tint.			
Entrance Door Windows: Single fixed type, single density safety glass; allows maximum visibility			
Windshield Wipers & Washers: 2 heavy-duty electric, self-parking, two-speed windshield wipers furnished. Windshield washers with ample reservoir located for easy inspection, maintenance, filling and removal			
Heating/Defrosting Systems: Consist of at least 2 units, one front unit located in driver's area, and one unit located to uniformly heat bus. Rear to have shut off valve			
Front unit to have one large heater core and heavy-duty blower to provide heated air for defrosting windshield and bus's heat. Blower motor controlled by a minimum three-position switch on the driver's control panel			
Additional outlet provided near driver allowing heated air to driver's area. Lever/knob to control distribution of heated air between defroster plenum chamber and bus's heating outlet. Control located conveniently for driver			
Intensity and temperature of heated air regulated by driver at driver's control panel			
Bus's rear heating unit located to provide 65°F inside temperature (evenly distributed) at 0°F ambient. Inside temperature measurement with empty bus. Circulation blower controlled by three-position switch on driver control panel. Combustion type heaters not permitted			
Add required amount for permanent all-weather coolant after heaters have been connected to protect cooling system to -20°F tested at normal engine temperature			
Minimal heater output for the passenger area 35,000 BTU; minimal driver heater output 20,000 BTU			
Air Conditioning and Ventilation: Complete factory air conditioning system capable of providing cooling/dehumidifying capacity for passenger comfort. System capable of maintaining a 72°F interior temperature with full load of passengers, with an ambient temperature of 98°F and 70% relative humidity. Warranted 36 months/75,000 miles			

VENDOR _____

Specification	Yes	No	Comment
Passenger air conditioner unit shall be Thermo King SA-800 (or approved equal) dual compressor system. Minimal air conditioner output for the passenger area is to be 67,000 BTU. Minimal driver air conditioner output will be 12,000 BTU.			
Multiple cool air outlets evenly distribute cool air for passengers/operator. Bottom vents in rear evaporator required			
Furnish full details of AC system proposed for vehicles. Product information showing evaporator/condenser models included			
One dash unit for driver area and one large heavy-duty internally mounted roof unit (with appropriate drainage to prevent leaking) for passenger compartment. Condenser skirt mounted. No exterior roof mounted equipment			
Ventilator providing direct ventilation for the brake/acceleration pedal furnished. Driver can control air to be outside (vent), heated (heater) or cooled (AC)			
Interior and Exterior Lighting: Automatic access light(s) at passenger entrance to light outside approach to entrance and the stepwell. Light(s) situated to avoid damage by bus's washer, tree limbs, etc.			
Automatic access light(s) installed to light wheelchair lift and entrance to lift. Wheelchair lift light comes on when lift door is open. Light meets ADA lighting requirements, and activates by a door jamb plunger switch			
Lights illuminate the aisles, passenger compartment, and seating positions			
Driver's overhead light that enables driver to read/write at night while in driver's seat			
Instrument panel lighted enabling driver to see gauges from upright seated position while driving			
Exterior light(s) comply with federal/state requirements			
Exterior Lighting: LED lights (except for OEM cab) and will include sealed beam headlights with high and low beam switch (turn signal activated)			
Front, rear and side directional signals, operated by lever on left side of steering column; self-cancelling type			
2 white/clear backup lights in rear of vehicles, engage when transmission in reverse			
Rear mounted, red, combination stop/signal tail lights; tail light below both in one unit			
Single, white rear license plate light			
Front and rear clearance lights			
Minimum 6 reflectors; 2 red on rear, 1 on each side; rear area, 1 on each side; front area, amber			
Front/rear identification markers, amber front and red rear			
Switch provided to operate directional signals simultaneously as an emergency warning signal; on steering column			
Seating Arrangement/Floor Plan: Seating arrangement/floor plan to accommodate four (4) forward facing wheelchairs and six (6) forward facing passengers or fourteen (14) ambulatory passengers with no wheel chairs in place			

VENDOR _____

Specification	Yes	No	Comment
Body and Accessories			
Passenger seats will be seven (7) 34" Freedman 3PT Foldaway Seat or approved equals. Back height should be 21-1/2" from top of seat cushion.			
Vinyl seat covering required (provide sample). Aisle seat has padded armrest (aisle side); flips up for easy access			
Aisle seats have top padded grab rails			
Seating capacity shall be (14) seated passengers (see diagram Appendix A), or four (4) Wheelchairs and (6) ambulatory. Three (3) wheel chair positions shall be placed on street side behind driver and One (1) wheel chair position shall be placed curbside directly beside lift. All seating shall comply with F.M.V.S.S. 207 and 302.			
1 additional single fold-up bench seat installed along rear wall behind street-side wheelchair position; allows 1 additional passenger; seatbelt installed for additional seat			
Retractor wheelchair securement/occupant restraint systems forward facing and is Sure-Lok System AL812S-4C series or equal			
Retractor wheelchair securement system complies with ANSI/RESNA WC-18 Wheelchair Tiedown and Occupant Restraint Systems for use in Motor Vehicles (30MPH/20G impact test criteria), 49 CFR Part 38 Americans with Disabilities Act (ADA), CSA Z605 Mobility Aid Securement and Occupant Restraint Systems for Motor Vehicles (30MPH/20G impact test criteria), and ISO 10542 (proposed) Wheelchair tiedown and occupant Restraint Systems for use in Motor Vehicles (30 MPH.20G impact test criteria) requirements			
Retractors heavy duty with heat-treated, plated components/minimum 48 ratchet teeth in metal housing			
Retractor kit has at least 4 retractors to secure wheelchair			
Retractors equipped with 2 manual positive-locking tension knobs for tightening webbing for front/rear positions. Retractor has positive-locking release button for releasing webbing			
Wheelchair securement & occupant restraint systems have label on each assembly; identifies type of belt, date of manufacture, and manufacturer name/part number			
Combination pelvic/upper torso seat belt required. Passengers provided with pelvic seat belt 90" in length. Seat belts are standard buckle type and seat belts/ anchorages meet requirements of F.M.V.S.S. 209 and 210. Seat belts must compatible with infant/child restraint equipment. 8 seatbelt extensions must be provided			
Driver's seat is to be Freedman Shield Driver's Seat with Adnik Powered Base or equal. Driver's seat will have side armrests. Color of seat will match passenger seats. A quick release-type retractable combination pelvic/upper torso seat belt is to be installed for driver			
Wheelchair Tie-downs: Floor anchorages for tie-downs to be OMNI L-Track or equal, flush mounted to the floor surface, with no protrusion with track running the full-length of the bus			
Heavy duty seat belt cutter, Sure-lok Part #8705 or equal to be included			

VENDOR _____

Specification	Yes	No	Comment
Body and Accessories			
Heavy duty storage pouches, Sure-Lok Part #FE201145 or equal provided to hang tie-downs to prevent tangling/soiling of belts/straps. Location of pouches to be approved by agency			
Heavy duty seat belt cutter, Sure-lok Part #8705 or equal to be included			
Exterior colors used on bus including tire rims to be Ford White with maroon stripes. See Appendix 'B'			
Interior paneling, walls and ceiling are fiberglass or otherwise covered with an easily maintained material. Basic interior color to be gray. Dash and instrument panel finished to harmonize with overall interior tones. Interior paneling minimum thickness 0.150" including substrata			
Handrails, Stanchions & Modesty Panels: Passenger assists are full-grip, vertical stanchions or handholds provided for safety of standees and of ingress and egress. Handhold/stanchions made of 1 1/4" stainless steel tubes. Handholds/stanchions properly supported and held securely in place with fully-welded, stainless steel corrosion resistant, fittings. Vertical stanchion provided at rear of passenger door at aisle. Horizontal handhold to extend from this stanchion to wall. Door operation will not create hazard. Vertical stanchion provided as part of driver's barrier. Left and right roof grab rails installed so it's possible to move the full-length of coach without losing support. Modesty panels extend from 4" - 12" above floor to bottom of window. Finish to match interior seat colors. Parallel grab rails of 1 1/4" stainless steel installed with adequate knuckle clearance at front door to aid boarding/exiting passengers. Installed 1 each side, they are not to infringe on clear opening. Rails start at bottom step, follow steps to top of step well			
Mirrors: Rosco (or approved equal) fully-adjustable, outside right and left hand rear view mirrors shall be 6" by 9". Mirror head to be ABS Frame and bracket anodized aluminum or power coated steel/aluminum and retractable, break-away-type to prevent damage by bus's wash equipment. Right front mirror mounted to prevent contact with pedestrian or boarding passengers			
Low mount convex mirror furnished below outside mirrors for localized vision			
Adequate rear view mirror installed for driver's view of interior and rear of vehicles. Overhead two-way adjustable mirror (minimum 15" x 6") located in front of and over the driver's seat above windshield			
Mirror mountings sufficiently rigid to prevent distortion from vibration			
Emergency Equipment consists of one 5-pound fire extinguisher, one 21-unit first aid kit, blood borne pathogen kit, and 3 safety triangle reflectors. Emergency equipment locked in area easily accessible by driver and will not interfere with passengers when not in use			
Vehicle equipped with SEON (or approved equal) 5 Camera System including the cameras, DVR, software, cabling, wiring, installation of the camera, warranty.			

VENDOR _____

Specification	Yes	No	Comment
<u>Body and Accessories</u>			
Cameras to be installed on vehicles and be operational prior to delivery (See Appendix 'C' for Camera Placement).			
One (1) exterior SEON HD3W03EI20 (or approved equal) wedge camera with high resolution for sharp images day and night.			
Two (2) interior SEON HD3Q03A20 (or approved equal) dome cameras with high resolution for sharp images day and night.			
One (1) interior SEON HWQ03A50 (or approved equal) dome camera with high resolution for sharp images day and night.			
One (1) interior SEON CHW702E20 HD (or approved equal) camera with high resolution for sharp images day and night.			
One (1) SRL GA07NP Smart-Reach Lite Wireless Bridge, 2.4 GHZ, standard antenna with NMO mount, with six (6) feet cable and PoE Adapter.			
One (1) Explorer TH6-6-channel DVR WITH 1TH Hard Drive (or approved equal) that supports one high-definition video channel for detailed surveillance applications such as license plates or facial recognition.			
One (1) VMC5V (or approved equal) Commander vehicle licensing.			
One (1) vMax View (or approved equal) easy to use software for viewing, archiving, and retrieval of video, and allows for easy searching by video clip, alarm, date and time, or even GPS location.			
Vehicle equipped with heavy duty backup sensor			
Vehicle equipped with Supra Elante Key Box or equal			
Vehicle equipped with Donation Box Model Number DM1			
Mobility rebates issued to CAC			
<u>Lift Specifications</u>			
Lift platform and mechanism to be Braun NCL1000-2 Century Series (or approved equal). Platform is power-up, gravity-down system which is fully-automatic including required safety stop at outer edge of platform. Follow specifications/operational facts that apply to lift			
Height, lift frame: 66.25"			
Usable platform width: 34"			
Usable platform length: 54"			
Floor to ground travel: 48"			
Entry width: 35"			
Wheelchair lift finished with baked-on power coating which will meet a salt spray test of 1,000 hours. Frame and platform design tested to a static load of 3,000 pounds, and 1,000 pounds of continuous lifting capacity			
Lift fully-automatic in operation. Platform folded, unfolded, raised and lowered by means of 2 single-acting cylinders only. No additional hydraulic/electric actuators necessary for operational cycle of lift. Lift equipped with safety feature to prevent inadvertent folding when lift is occupied			

VENDOR _____

Specification	Yes	No	Comment
<u>Lift Specifications</u>			
Lift incorporates a safety barrier on inboard edge of platform assembly. Barrier forms transition bridge plate between the vehicle floor and platform whenever lift is at vehicle entry level. Barrier automatically moves to raised position when platform leaves vehicle floor level			
Power lifting system 12-volt electro-hydraulic, operating system that is circuit breaker protected, operating 2 single-acting hydraulic cylinders. Lift has no chains, cables, ball-screw actuators, sprockets or pulleys. Hydraulic system is gravity-down design, requiring no limit switches/bypass valves to stop downward travel of platform. Operation of unit provides smooth, jerk-free ride in up and down directions. Hydraulic cylinders utilize pull-type design to reduce hydraulic pressure requirements and minimize potential hydraulic leaks/resulting damage to vehicle interior. Gravity-down system regulated by pressure-compensating flow control valves installed in pump. Externally mounted pressure compensating flow control valves not permitted. Platform welded steel construction and surface is see-through grating, allowing for improved visibility and safe use in icy weather. Platform has usable width of 34" and minimum length of 54". Sides of platform protected by fixed vertical barriers minimum 2-1/2" high			
Roll stop barrier on outboard edge of platform is mechanically activated to the up position to reduce possibility of human error in closing outboard roll stop barrier. Minimum upward travel shall be needed to engage safety barrier to its up position			
Lift provides complete manual operation of functions by a single manual release valve and hand pump. No disassembly of actuators necessary to operate the lift manually. Complete manual operation of lift to be accomplished from single location at lift			
Lift incorporates dual handrail and platform "occupant-restraint" belt system for safety. The "occupant-restraint" belt system connects between the 2 handrails. Dual handrails will not reduce the usable width of the platform			
Lift controls mounted in lightweight weather-resistant box with momentary contact switches. Lift controls durable material and will be designed for 1-handed operation. Control box attached to a cut resistant cord allowing operation within 7-foot radius of lift. Switches labeled with operating instructions. Switches backlit. Lift system protected by manual reset circuit breaker. Lift will comply with all current ADA and FMV403 requirements			
Lift door 2-panel door with "L" handle and has 3-point latch with key lock. 2 non-ventilating windows that have the same percentage of light transmission as other side windows. Heavy duty latch for each door that will hold open under any condition			
Size of body opening will in no way limit full operation of lift nor impede its proper maintenance			
An Intermotive (or approved equal) brake interlock system provided to ensure that vehicle cannot be moved while lift door is open			

VENDOR _____

Specification	Yes	No	Comment
Miscellaneous Standards			
The following is to be supplied to CAC at time of delivery or prior to delivery: Engine Gasoline Manuals/CDs (2 copies), Transmission Co Manuals/CDs (2 copies), Service Manuals/CDs (2 copies), Parts Manuals/CDs (1 copy), Wheelchair Lift Manuals/CDs (2 copies), Wiring Schematic Diagram (2 copies), Operators Manuals/CDs (1 per vehicle & 1 for file)			
Any other manuals (wheelchair tie-downs, air conditioning chassis, body, seats, etc.) not included in main parts and service manuals will be delivered			
Legal documents delivered with vehicles and address owners as "Knoxville-Knox County Community Action Committee." Proper documentation to acquire license and registration is required at time of delivery			
After sale, service continued while vehicles are in-service. This includes, but is not limited to, service and parts manual updates, parts sales, guidance in solving mechanical, electrical, or other problems with vehicles. When needed, CAC maintenance supervisors to be permitted to call manufacturer at expense of CAC for assistance. When serious problems persist that habitually interrupt service, manufacturer will send a representative to CAC at the expense of the manufacturer			
Photographs of the vehicles may be provided to CAC with the manufacturer's bid			
Workmanship			
Workmanship throughout vehicles is to conform to highest standards of commercially accepted practice for class of work, and result in neat/finished appearance. Design of body/equipment which manufacturer proposes to furnish is to be such as to provide vehicles of substantial and durable construction in all respects			
Welding procedures, welding materials, and qualifications of operators, will be in accordance with standards of American Society of Testing Materials and the American Welding Society. Welds visible to public to be ground smooth after welding to present a smooth, workmanlike appearance. Where metal is welded to metal, the contact surface will be free of scale, grease, and paint			
Exposed surfaces/edges to be smooth, free from burrs and other projections, and neatly finished			
Parts are new; no reconditioned obsolete parts accepted			
Manufacturer to submit with bid, a detailed description and specifications of frame structure, roof structure, and body with particular reference to materials used			
Motor Vehicle Standards			
Manufacturer to certify that vans comply with all U.S. Department of Transportation safety standards for bus applicable as of the date of manufacture, and complies with all Interstate Commerce Commission requirements for motor vans operated in interstate commerce.			
Vans in complete compliance with all requirements of the laws of the State of Tennessee for lighting equipment and warning/safety devices			

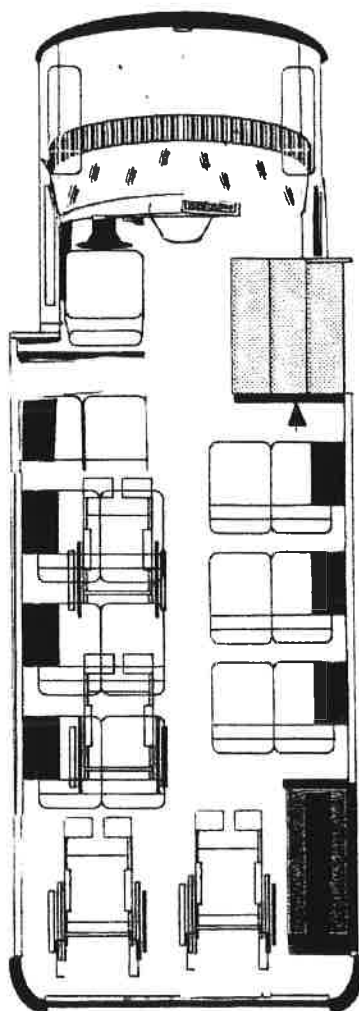
VENDOR _____

Specification	Yes	No	Comment
<u>Motor Vehicle Standards</u>			
Manufacturer certifies that vans conform to air pollution control standards set by Federal Transit Administration for motor vehicles to be used on projects by FTA			
Vehicles comply with Americans with Disabilities Act requirements effective January 26, 1992 and the FTA transit accessibility program. Vehicles being purchased will be part of larger fleet of vehicles in demand responsive system, when viewed in its entirety ensures to individuals with disabilities a level of service equal to that provided to general public. Therefore, it is allowable to have removable seating over the wheelchair restraint stations. This approach is designed for maximum flexibility and allow most efficient dispatching of vehicles.			
<u>Tests & Testing</u>			
Each complete vehicle/all working and moving parts and operating devices tested/put in operating condition by manufacturer			
Roofs, windows, windshields and compartment doors of vehicles are water tested in approved manner and any leaks found are repaired in a workmanlike manner			
Manufacturer will not attach any dealer identification, advertising or similar material to vehicles. Prior to acceptance of vehicles by CAC, manufacturer will service and adjust vehicles for operation to include, as a minimum, the following: focusing of lights, vehicle alignment after conversion, adjustment of accessories, checking of electrical braking and suspension systems, charging of battery, inflation of tires, balancing of all wheels, complete lubrication of engine, chassis and operating mechanisms with recommended grades of lubricants for the ambient temperature at the point of delivery, servicing of cooling system with permanent type antifreeze and summer coolant for -20oF and servicing windshield washer with water and proper additives			
Additional to Certification for the Interim Bus Testing Program (49 CFR Part 665) a copy of Test Report on Bus Model to be provided by Bus Testing Facility in Altoona			
<u>Delivery</u>			
Based on reasonable production time and with due consideration to unforeseen circumstances, CAC expects that delivery of the units will be made within 90 days of receipt of Purchase Order. If time of delivery cannot be met, indicate as an exception on submitted bids with projected time of delivery. If delivery time is less than 90 days, state the delivery schedule. Delivery time will factor in choosing successful bidder who will be awarded contract. Vehicles delivered FOB to L.T.Ross Building, 2247 Western Ave., Knoxville, Tennessee, 37921			

VENDOR _____

Specification	Yes	No	Comment
<u>Certification</u>			
Certification of compliance with all applicable Federal Motor Vehicle Safety Standards, including Numbers 101, 102, 103, 104, 105, 106, 107, 108, 111, 112, 113, 116, 119, 120, 124, 127, 205, 207, 208, 209, 210, 212, 213, 217, 219, 220, 301 and 302 is required			
Certification that vans offered have been designed, manufactured, assembled and tested for passenger service, and are suitable for extended service in heavy, stop-and-go traffic is required			
<u>Warranty</u>			
Manufacturer is to state all terms, conditions, and limitations of warranty. Terms, conditions, prices, limitations of any optional, extended warranties to be stated, including local agents responsible for service			
Minimum warranty for mechanical components of 36 months/36,000 miles, no deductible. Warranty will fully pay for defective workmanship and materials/labor costs			
CAC to have option to purchase extended service (ESP) plus warranty protection plan			
<u>Option</u>			
CAC requests option of purchasing up to 12 additional vehicles that fulfill these specifications for 360 days after bid opening			

SEATING CHART



7-Flip Seats for a Total of 14 Passengers

4-Wheelchair Stations