

ITB-TVT-2009-02
Attachment D.9
MINIMUM SPECIFICATIONS TYPE IX VEHICLE
14 PASSENGER MODIFIED VAN

Required Response Procedure: This attachment must be submitted with any bid for Type **IX** vehicles. In every required place in this section the authorized representative of the manufacturer, dealer-vendor or offeror/bidder must:

- Indicate that their equipment and/or materials are compliant with specifications by initialing the line captioned “Compliant with Specifications”; OR
- Provide an initial on the line provided for “Compliant with Approved Exceptions” where applicable.

Bidders must comply with all minimum specifications. Compliance with approved exceptions is allowable only where applicable to a particular minimum specification. Compliance with an approved exception does not relieve the bidder of compliance with all other specifications not related to the particular exception.

Any non-compliant equipment, materials, installation or service not approved through the exceptions/equals process described in Section 1.4 of this ITB and published as an Amendment to this Invitation to Bid cannot be offered by a Manufacturer, Dealer-Vendor, and/or Offeror/Bidder. Bids without 100% compliance will be disqualified.

MINIMUM TECHNICAL SPECIFICATIONS - MODIFIED VEHICLE CONFIGURATION

D.9.1 VEHICLE CONFIGURATION	Compliant with Specifications	Compliant with Approved Exceptions
D.9.1.1 This invitation for bid contains split-bench modified vans.		
D.9.1.2 Center aisle seating configuration with high-back seats, and passenger assist handle on first bench seat.		
D.9.1.3 AISLE WIDTH Aisle width will be not less than 12-inches between arms.		
D.9.1.4 Vehicle conversions must meet all applicable state and federal regulations, including but not limited to the following: Federal Motor Vehicle Safety Standards (FMVSS) 207, 208, 209, 210 and 302.		
D.9.1.5 Vans to include the following customized features: a) Overhead rear air conditioning with multiple duct positions. b) Individual reading lights for each seat position (thirteen (13) total).		
D.9.1.6 A suggested Vendor Floor Plan reflecting the written specifications for the floor and seating configurations presented in this document should be submitted for approval during the Equals/Exceptions/Clarification period in order that the Vendor Submitted Bid incorporates all costs.		
D.9.1.7: The transit agency requires that the vehicle for their application should be a normal Ford E350 body or equal with the upgraded interior described in the specifications.		
D.9.1.8: A pop-top van is not acceptable under this application for the transit agency.		

D.9.2 SEATING	Compliant with Specifications	Compliant with Approved Exceptions
D.9.2.1 DRIVER AND FRONT PASSENGER SEATS to be supplied by the chassis manufacturer.		
D.9.2.2 SINGLE-BENCH SEATS —Shall be Two (2) single-passenger high back seats		
D.9.2.3 SPLIT-BENCH SEATS —Shall be Two (2) 2-passenger high-back split-bench seats		
D.9.2.4 THREE-PERSON SPLIT BENCH SEAT —Shall be Two (2) 3-passenger high-back split-bench seats. One (1) bench located behind the driver and front passenger seats, with the right one-third of the back capable of tilting forward a minimum of 45 degrees. Release to be located on right side of bench for easy manipulation from van side doors. Back must lock in full upright position and meet all FMVSS certifications. Padded metal passenger assist handle affixed to the seat closest to entry doorway. One (1) bench shall be located at rear of van.		
D.9.2.5 ARMRESTS All interior seats to have 2" aisle up armrests.		
D.9.2.6 FIXED LUMBAR SUPPORT All seats to have fixed lumbar support. Seat back angle to be 17-19 degrees.		
D.9.2.7 SEAT BELTS AND SHOULDER HARNESSSES Lap belts shall be attached to seat frame. a) Lap belts to be placed between seat and back cushion. b) Female portion of lap belt restraint to be on aisle side and the shorter of the two pieces. c) A rigid lap belt sheath is to be installed on all aisle seat positions and the seat at door opening to prevent belts from falling to the floor. d) Seat belts must be compatible with readily available seat belt extenders from manufacturer. e) Shoulder harnesses must be installed per factory-recommended specifications and conform to all requirements of FMVSS 208 for all outboard-designated seating positions. f) Both lap belts and shoulder harnesses must conform to all FMVSS requirements.		
D.9.2.8 SEAT DIMENSIONS Actual seat dimensions may vary slightly depending upon vehicle manufacturer. All seats must conform to the requirements of the Federal Motor Vehicle Safety Standards.		

D.9.3 FABRIC AND SEWING	Compliant with Specifications	Compliant with Approved Exceptions
D.9.3.1 Fabric: Cloth fabric used on rear seats must be supplied by the same manufacturer that supplies the fabric for the chassis manufacturer's front bucket seats, or identical to it in appearance, quality and content from another manufacturer.		
D.9.3.2 Sewing: The seat upholstery shall be sewn using high quality UVR (ultraviolet ray resistant) thread.		

D.9.4 ELECTRICAL WORK:	Compliant with Specifications	Compliant with Approved Exceptions
D.9.4.1 All wiring shall be in accordance with SAE standards and meet UL and National Fire Protection Association (NFPA 70), National Electrical Code 2002 requirements.		
D.9.4.2 OVERHEAD READING LIGHTS The individual overhead lights shall be on the aircraft type, swivel, and directional reading lights and must not protrude more than <u>1/2-inch below the surface of the headliner</u> . The bulb shall be the automotive bayonet-type base and must be replaceable from the interior of the vehicle without removing the fixture from the headliner. Each light shall be individually controlled and wired to the "accessory" or "on" position of the ignition key through a fused relay assembly. Light placement shall be at the front edge of the seat cushion and shall not interfere with passenger headroom, entrance or egress. All reading lights shall have molded connectors for attaching to the main wiring harness. Splices, butt, bell or Scott Lok connectors will be allowed.		
D.9.4.3 FUSED RELAY ASSEMBLY A fused relay block assembly will be installed under the dash and securely mounted to the inside of the firewall. The fuse block will be battery fed and the relay activated by the ignition switch to allow power to the interior lights and A/C system with the ignition in the "on" or "accessory" position only. A spade-type fuse block and Bosch relay or equivalent shall be used. All connections shall be machine crimped with the wires color-coded per the electrical schematic.		
D.9.4.4 WIRE HARNESSSES separate wire harness for the overhead reading lights and A/C system will be marked and color-coded per the approved schematic. Both harnesses will be manufactured using molded plugs for each reading light and the A/C unit for ease of replacement and/or service. Wiring harnesses will be securely fastened to the chassis structure to prevent chafing and insulated to prevent damage and/or "rattling" above the headliner. All wiring under the chassis will be protected with autoloom, and securely mounted to the chassis. The under-chassis wiring will also be protected from corrosion and damage caused by water, salt, ice, dissimilar metals and/or road debris. Star washers will be used between all ground wire terminals and chassis structure. An electrical conductive coating will be applied to all chassis grounding connections.		
D.9.4.5 WIRING DIAGRAM Each bidder must submit a wiring diagram that clearly demonstrates compliance with the electrical requirements as stated in paragraphs D.9.4.2 – D.9.4.4 above, with the bid submittal.		
D.9.5 GENERAL - VEHICLE	Compliant with Specifications	Compliant with Approved Exceptions
<p><i>Whenever Heavy-duty is noted - the vendor must provide the heaviest duty option available for factory-installed equipment. Additionally, the vendor must note applicable codes for Heavy-duty options.</i></p> <p>Include all factory standard equipment, factory-installed unless specified differently as follows:</p>		
D.9.5.1 5.4 L., 8-cyl. Minimum (or an engine with equivalent h.p.		

and torque is acceptable)		
D.9.5.2 Roll Stability Control		
D.9.5.3 Transmission, automatic overdrive		
D.9.5.4 Breaker-less electronic ignition		
D.9.5.5 Power steering		
D.9.5.6 Power Brakes ; 4-wheel anti-lock system		
D.9.5.7 Heavy-duty battery ; 78/75 amp-hr		
D.9.5.8 Heavy-duty Alternator, 155 amp minimum		
D.9.5.9 Heavy-duty radiator transimission cooler		
D.9.5.10 Heavy-duty Air Conditioning system, front and back		
D.9.5.11 Heavy-duty heating system		
D.9.5.12 Heavy-duty suspension		
D.9.5.13 Heavy-duty shocks; rear		
D.9.5.14 Heavy-duty front shocks, computer-selected for weight. Minimum rear axle ratio 3.5		
D.9.5.15 Front stabilizer bar		
D.9.5.16 Single fuel tank; 35.0 gallon minimum		
D.9.5.17 Tire Pressure Monitoring System		
D.9.5.18 Tires : Minimum LT245/75x16E belted radial, Bridgestone, or equal, AT Revo OWL E Siped; front and rear tires must operate at a minimum of 80% of the maximum psi pressure. Spare tire to be installed by vehicle manufacturer or converter under the vehicle or bolted to the chassis floor and mounted under rear seat and be assessible from the rear door. Side panel should be designed accordingly. Spare Tire to include TPMS Sensor.		
D.9.5.19 Wheel rims to match van color, argent, or black		
D.9.5.20 Wheel covers		

D.9.6 EXTERIOR EQUIPMENT - VEHICLE	Compliant with Specifications	Compliant with Approved Exceptions
<p><i>Whenever Heavy-duty is noted - the vendor must provide the heaviest duty option available for factory-installed equipment. Additionally, the vendor must note applicable codes for Heavy-duty options.</i></p> <p>Include all factory standard equipment, factory-installed unless specified differently as follows:</p>		
D.9.6.1 Color: Factory paint, standard colors. Must submit color charts for both interior and exterior standard colors with bids. Silver, black or white are preferred. Red or maroon are additional choices.		

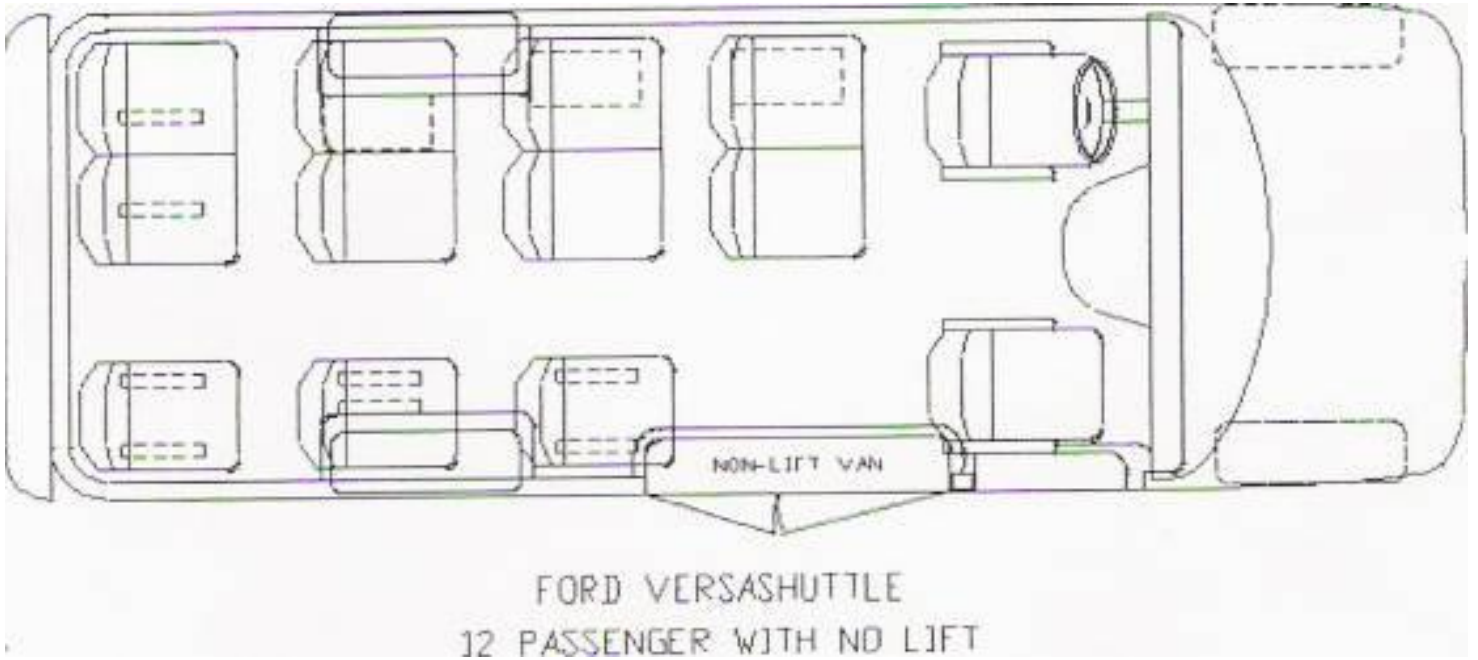
D.9.6.2 Doors; side, double		
D.9.6.3 Doors; rear, double full entry opening with inside handle		
D.9.6.4 Complete body glass; Privacy glass for all glass beyond driver passenger position. Side doors, rear doors and rear quarter panel glass to be vented.		
D.9.6.5 Window latch pull pin windows (emergency exits) side and rear		
D.9.6.6 Side Mirrors: Power, low-mount, oversized chrome, black or to match van color; wide angle mirror for front right side approximately 6x9; LED directional signals in the Side mirrors.		
D.9.6.7 Undercoating: undercoating should be a non-asbestos, traditional, heavy, tar-like petroleum-based product; the intent is to reduce operational noise. Full under-body undercoating to include wheel wells.		
D.9.6.8 Heavy-duty under-body structure		
D.9.6.9 Heavy-duty signal flashers.		
D.9.6.10 Heavy-duty bumpers, especially rear, if available.		
D.9.6.11 Stainless Steel Running Boards. Running board shall run full length on passenger side of the vehicle; and a quarter-length running board on the driver's side. Include heavy-duty rubber matting on the surface so passengers do not slip.		
D.9.6.12 2-inch Receiver Hitch to accommodate a bike rack with a maximum capacity of two (2) bikes.		
D.9.6.13 Provide a two-position bike rack on the rear.		

D.9.7 INTERIOR AND SAFETY EQUIPMENT - VEHICLE:	Compliant with Specifications	Compliant with Approved Exceptions
<p><i>Whenever Heavy-duty is noted - the vendor must provide the heaviest duty option available for factory-installed equipment. Additionally, the vendor must note applicable codes for Heavy-duty options.</i></p> <p>Include all factory standard equipment, factory-installed unless specified differently as follows:</p>		
D.9.7.1 Factory-installed or equal, cloth driver and front passenger high-back seats. Arms on right side of driver and left side of passenger seats. Must include 3-point restraint system.		
D.9.7.2 Headliner, full		
D.9.7.3 Insulation: Interior full package including headliner, side panels and floor as supplied by factory		
D.9.7.4 Cloth upholstery		
D.9.7.5 Carpeting, full interior		
D.9.7.6 Driver side and front passenger carpeted floor mats		
D.9.7.7 Power door locks		

D.9.7.8 Power windows		
D.9.7.9 Power driver's seat		
D.9.7.10 Instruments (temp, oil, amp). Trip odometer		
D.9.7.11 Cruise control		
D.9.7.12 Clock; AM/FM stereo/single-CD player with digital clock; front and rear speakers		
D.9.7.13 Tilt steering wheel		
D.9.7.14 Heavy-duty air conditioning front and rear; rear to have overhead air with multiple duct positions		
D.9.7.15 Heavy-duty heater; front and rear. Rear heat to have floor or adjacent sidewall ducting.		
D.9.7.16 Interior day/night mirror		
D.9.7.17 Intermittent wipers		
D.9.7.18 Air bag Supplemental Restraint System (SRS)		
D.9.7.19 Rear Back-up Camera System		

D.9.8 MISCELLANEOUS	Compliant with Specifications	Compliant with Approved Exceptions
D.9.8.1 SPARE TIRE The spare tire shall be installed by the vehicle manufacturer or converter under the vehicle or bolted to the chassis floor and be mounted under the center of the rear seat to not interfere with passenger leg placement. The rear quarter panel should be finished accordingly. A steel tire restraint will be bolted through the chassis floor to prevent the tire from moving forward in the event of an accident. All tire tools will be securely mounted to the chassis structure.		
D.9.8.2 Eight (8) sets of keys per vehicle, individually labeled and tagged, must accompany vehicle delivery.		
D.9.8.3 One additional vehicle owner's manual for each of six vehicles purchased.		
D.9.8.4 WARRANTY Minimum 2-year warranty, to cover parts and labor for any work done by converter. Warranty shall be accomplished within the Boise area within four (4) working days of notice.		
D.9.8.5 OEM standard warranty for all non-converted elements of the Vans with 100,000 miles power-train.		

Approved floor plan for Vehicle Type IX



MISCELLANEOUS TECHNICAL SPECIFICATIONS FOR ALL VEHICLES

General Description: These are Miscellaneous Requirements that have not been covered in other areas of the document and/or which may require greater detail or reinforcement of quality requirements.

1. All metal shall be thoroughly cleaned, paint lock processed, or acid etched and primed. All exterior visible metal shall be painted in addition to priming. All welded joints shall be cleaned and primed.
2. All nuts, bolts, dips, and other fasteners shall be zinc, cadmium plated, or phosphate coated. All exterior panels shall be riveted or welded in place. Sheet metal screws and "pop" rivets will be permitted only on fender skirts and two section type entrance doors. No other sheet metal screws or "pop" rivets will be permitted, unless approved by the procuring agency.
3. There shall be no sharp corners on the unit that will cause injury to passengers. All corners that could cause injury to passengers shall be slightly rounded and filed smooth.
4. All welders shall be certified per the American Welding Society rules for the work that they are performing. All welds shall be relatively free of slag inclusions and undercut. Fillet weld sizes shall be equal to the thickness of the least of the joined plates. All welds shall be made in a workmanlike manner, properly fused, of ample penetration, and, where practicable, be smoothly finished on all exposed surfaces. Intermittent or spot welds shall be spaced and proportioned as to provide ample strength for the purpose.
5. All material installed shall be new and free of rust.
6. No wires shall be visible on the exterior or interior of the unit.
7. Weather stripping shall have no coating of any type.
8. Access doors shall be provided where necessary to service the engine, electrical, transmission, radiator, and batteries.
9. All switches shall be labeled. "Dymo"-type labels are not acceptable
10. All doors must be adjusted to fit their openings.
11. All windows shall be free of any defects due to welding slag, assembly, damage, or scratches.
12. All units shall be thoroughly cleaned and weather sealed before inspection.
13. All signs shall comply with the CCR, Title 13, and Section 1284.
14. All interior signs may be painted or vinyl decals. All exterior signs shall be painted.
15. Burn marks, cuts, or scuff marks will not be allowed on the interior or exterior of the unit.
16. All hoses supplied in assembling the units described in these specifications shall have temperature and psi ratings more than maximum operating temperatures and pressure.
17. All vehicles shall be completely roads tested before approval.
18. All holes, not used by manufacturer to install OEM equipment will be covered with a cover or plug matching adjacent colors.