



STATE OF GEORGIA

(Department of Administrative Services, State Purchasing Division)

2022 TECHNICAL AND PERFORMANCE SPECIFICATIONS

FOR

Ford Mobility Van

NOTICE: This specification is NOT intended to restrict competition. Manufacturers/Dealer may bid their bus(es) in accordance with their standard manufacturing process. In the case where that process varies for this specification, Deviations must be submitted on the provided Request for Specification Deviation Document Form and Specification Deviation Certification and Compliance Form. Any deviation documented shall be “brand name, equivalent, or equal in performance” and must meet or exceed all FTA requirements (for FTA compliant vehicles), and all Federal, State, and Local requirements. The state may, at any time during the evaluation and/or contract period, require the bidders to provide proof that the deviation meets the “brand name, equivalent or equal” in performance.

2023 U4X Transit Specs

1.0 Chassis Shall be the current model Ford Chassis

1.1 General

1.1.1 Vehicle Chassis shall be the current Ford Chassis and meet all applicable SAE and FMVSS requirements

1.1.2 Manufacturer/Vehicle Alterer shall attest that they are certified by Chassis Manufacturer's QVM Program when they are supplying a response.

1.1.3 Manufacturer/Vehicle Alterer shall attest that they are certified by the Federal Transit Administration's TVM Program at the time they are supplying a response.

1.2 Dimensions

1.2.1 Wheelbase- 148"

1.2.2 Overall height- 107.7"

1.2.3 Overall length- 263.9"

1.2.4 Inside height- 77"

1.3 Gross Vehicle Weight Rating (GVWR)

1.7.1 GVWR of 10,000 min

1.3 Electrical

1.3.1 Wiring shall be TXL insulated. All wiring shall be color coded for identification. All wiring should run inside the body in a protected area. Any wiring exposed to the elements shall be in a nonmetallic loom and securely clipped for maximum protection. Clips shall be rubber or plastic coated to prevent their cutting through the wire insulation.

1.3.2. All accessories and electrical equipment, except the head, parking lights, emergency flashers, and wheelchair lift, shall be wired through the vehicle ignition switch to be operative only with the switch in ON or ACCESSORY position.

1.3.3. OEM backup alarm shall be provided.

1.3.4. Power wire to lift shall be securely clamped and protected in-line circuit breaker with manual reset provided for the lift.

2.0 Body

2.1 General

2.1.1 Unibody raised roof van shall meet all stated specifications. The vehicle shall meet the structural integrity of the stated van that shall not be degraded.

2.1.2 Vehicles shall meet all applicable requirements of the Americans with Disabilities Act (ADA) as outlined in 49 CFR 37 and 38, issued 9/6/91; and 49 CFR 571, FMVSS 403 and 404, issued 12/27/02 for the body structure.

2.2 Raised Roof

2.2.1 The raised roof shall be part of a unitized body-constructed OEM vehicle.

2.2.2 Minimum of 77" center aisle height.

2.2.3 The raised roof shall be the Ford High roof option.

2.3 Passenger Entrance Door

2.3 The Passenger door sliding door shall be replaced with a bifold transit door.

2.4 All airbags must be retained except the rear passenger side ejection mitigation bag.

2.5 The bus door should be interlocked so that the door can not be opened if the vehicle is not in park

2.6 The bus door should be a 36" x 82" opening and a minimum of 84" at the second step.

2.7 The bus doorsteps shall be no larger than 9" x9."

2.8 The actuator shall be mounted above the transit door and shall be hidden behind the OEM headliner

2.9 The transit-style door shall be able to be opened by a rocker switch mounted within reach of a driver or the use of a key fob. In the event of an emergency, there shall be an emergency lever to release the door.

2.4 Lift Door

2.4.1 The lift door shall be curbside of the vehicle rear of the rear axle.

2.4.2 The lift doors shall be dual manual swing outdoors with a clear opening of 44" x74". The lift doors shall have shocks installed to help hold the doors open as well as help assist with opening the doors.

2.4.3 Pistol grip dual handles and locking from the outside.

2.7 Windows

2.7.1 Standard OEM power standard windows in the front doors shall be retained. The windshield shall be OEM safety tinted type.

2.7.2 An OEM wagon Van Chassis with Full OEM Windows shall be provided.

2.10 Bumpers

2.10.1 OEM front and rear bumpers shall be provided.

2.8. Exterior Lighting

2.11.1 Exterior lighting shall meet all state and federal regulations.

2.11.2 Lighting requirements for the passenger entry and lift door areas must meet ADA requirements.

2.9. Exterior Mirrors

2.12.1 OEM dual power and black matte finish.

2.12.2 OEM mirrors with manual convex shall be provided.

2.10.Finishing Procedures

2.10.1 All bolts shall be treated to prevent corrosion.

2.10.2 All screws shall be fastened securely into panels or the vehicle so as not to jar loose.

2.10.3 All bare metal components shall be prepped with acrylic enamel paint to match the vehicle.

3.0 Interior

3.1.1 Interior finish shall be completed to industry standard. Interior color shall be OEM with coordinating colors for any additions.

3.1.2 All sharp edges, sharp corners, and protrusions shall be eliminated for safety reasons.

3.1.3 Vehicles shall meet all applicable requirements of the ADA as outlined in 49 CFR 37 and 38, issued 9/16/91; and 49 CFR 571; all applicable FMVSS requirements, including but not limited to 208, 302, 403, and 404 concerning the vehicle.

3.1.4 The chassis shall be an OEM wagon chassis with an OEM interior.

3.2. Flooring

$\frac{3}{4}$ " plywood subfloor with vinyl nonslip covering.

3.3. Seating

3.3.1 Driver's seat shall be OEM deluxe high back, fully padded, contoured bucket type, heavy-duty construction with armrest. The driver's seat shall be easily adjusted forward and backward without using tools. OEM unbelt restraint system is required. Vinyl upholstery shall complement the vehicle's exterior and coordinate with the passenger seats.

3.3.2 Freedman Go-ES or equivalent seating shall be provided for the vehicles. All seating must comply with the new requirements of FMVSS 208 and all other applicable FMVSS requirements. Bench seating shall be provided in single or double-passenger sizes depending on seating configurations shown in the attached drawings. Forward-facing foldaway seats (single or double) shall be provided over wheelchair stations.

3.3.3 All seats shall be heavy-duty construction with 1" 16 gauge reinforced tubular steel frames. All metal surfaces shall be chemically cleaned, iron phosphate, painted, and baked to provide rugged, long-lasting, rust-resistant surfaces.

3.3.4 All seat backs should be a minimum of 16 gauge 1" x16" steel straps welded to the seat frame. All seat bottoms shall use a flex plate suspension system for even support.

3.3.5 Upholstery material shall be Freedman Level 1, transit vinyl Seats, or equivalent, and shall be color-keyed to the vehicle's interior panels and exterior color. Foam padding shall be high-density (4.5 pcf), non-deformable foam. Load-bearing values shall be more than 45ILD.

3.3.8 All seating shall meet or exceed all applicable FMVSS requirements, including, but not limited to, FMVSS 302, 207, and 208

3.4. Passenger Restraint System All seating comes complete with integrated 3-point seatbelts to be compliant with FMVSS 208 and all other applicable FMVSS regulations.

3.5 Interior Lighting

3.5.1 The interior of the vehicle shall be adequately illuminated. Overhead lighting fixtures and courtesy lights shall be arranged in such a manner as to provide lighting intensity at a reading level.

3.5.2 Adequate light shall be provided for the instrument panel, with intensity controlled by an instrument panel switch.

3.5.3 All door lights and the passenger entry door shall automatically illuminate when doors are open.

3.6. Instrument Panel, Dash, and other controls

3.6.1 Dash shall coordinate with the interior trim color. Glove box with light and lock to be provided (OEM)

3.6.2 Instrument panel and dash shall be equipped with the following OEM instruments, gauges, and controls. All controls and switches shall be within easy reach of the driver. No overhead switches or controls are permitted. Lights in place of gauges are not acceptable except as noted.

Speedometer with odometer and trip odometer
Oil pressure gauge
Voltmeter
Engine coolant temperature gauge
Fuel gauge
Upper beam headlamp indicator
Dual-note horn
Directional signals (**light**)
Parking brake on (**light**)
Headlight switch
Inside hood release
Controls for heater, defroster, and air conditioning
Standard OEM AM/FM radio w/digital clock & speakers
Windshield wiper and washer
Emergency flashers

3.6.3 OEM driver's sun visor to be provided.

3.6.4 OEM driver's side airbag to be provided in the steering wheel.

3.6.5 OEM front passenger airbag to be provided.

3.6.6 All vehicles shall provide a total of 4 sets of keys for the vehicles
(Ford, Bus door key fob, lift door key)

3.7. Section Deleted

3.8 Heating and Cooling

3.8.1 Front heater and defroster shall be OEM with the maximum BTU rating available.

3.8.2 Rear aftermarket heat and AC

3.9 Emergency and Safety Equipment

3.9.4 Tire Changing Tools- Jack (OEM) shall be mounted at the back corner of the van. The wheel wrench and appropriate tools shall be located inside the front passenger step well compartment.

3.10 Front Airbags and Side Ejection Mitigation System

3.10.1 Standard OEM Driver and Front Passenger Airbags shall be retained.

3.10.2 The Standard OEM Passenger Van Sidewall Ejection Mitigation System shall be retained.

3.10.3 All vehicles shall provide an oxygen tank holder. The oxygen hold must hold at least one (1) tank and mount into an "L" track for securement.

4.0 Wheelchair/mobility Aid Lift System

4.1 General

4.1.1 Vehicles shall meet all applicable requirements of the Americans with Disabilities Act (ADA) as outlined in 49 CFR 37 and 38, issued 9/6/91; and 49 CFR 571, FMVSS 403 and 404, issued 12/27/02 concerning mobility aid accessibility. The contractor (vendor) is solely responsible for any additions, deletions, omissions, or interpretations of ADA, as it relates to the construction of the vehicles.

4.2 Wheelchair/Mobility Aid Stations

4.2.1 Wheelchair/mobility aid stations(s) are the space inside the vehicle for transporting persons in wheelchair/mobility aid devices and are to be provided on vehicles having wheelchair/mobility aid lifts. Each wheelchair/mobility aid device station shall consist of a usable floor area where a passenger in a wheelchair/mobility aid device may be positioned and where a wheelchair/mobility aid system shall be installed.

4.2.2 All wheelchair/mobility aid stations shall be designed to secure wheelchair/mobility aid devices in a forward-facing position.

4.2.3 The stations shall not be any less than the minimum length of 48" required per the ADA

4.2.4 No wheelchair/mobility aid station(s) obstructions shall hinder a wheelchair/mobility aid device from being rolled into place.

4.3 Wheelchair/Mobility Aid Securement System

4.3.1 The four-point track/belt tie-down shall be provided at each wheelchair/mobility aid device position. Securement systems and their attachments to the vehicles shall withstand a force in a forward longitudinal direction of 2,500 lbs. per securement leg and a minimum of 5,000 pounds for each aid device. Movement of an occupied wheelchair/mobility aid device shall be no more than 2".

4.3.2 this system shall be composed of the following components: four(4) separate belts and four(4) lengths of a track with all necessary buckles, hardware fittings, and other parts to make it a complete wheelchair/mobility aid device securement system. Q-Straint QRT-DLX tie down system or equivalent.

4.3.3 Each wheelchair/mobility aid station shall have a separate securement for each set of tie downs. They are not to share the same track.

4.3.4 The floor tracks for the wheelchair/mobility aid stations shall sit on top of the floor to ensure that no debris obstructs the securement for the wheelchair/mobility aid station

4.3.5 During installation of the wheelchair/mobility aid securement system care shall be taken to avoid damage to any of the vehicle's components. Particular attention should be taken to avoid damage to the fuel tank during and after installation of the L-Track. It should be noted that the method of installing the track is the solely responsibility of the vendor and he may use whatever method will obtain the required results. By submitting and signing this bid the vendor hereby certifies that the wheelchair/mobility aid device securement system has met all applicable Federal motor Vehicle Safety Standards and has been mounted in accordance with the manufacturer's specifications.

4.3.6 Each set of retractors shall have their own tiedown bags mounted in an approved location prior to building the vehicles.

4.5 Wheelchair/Mobility Aid Device Lift

4.5.1 The wheelchair/mobility aid lift system shall be a system which permits persons confined to wheelchair/mobility aid device to enter and leave the vehicle while in a wheelchair/mobility aid device without difficulty by means of a vertical lifting platform and which also provides for the safe transportation of persons in a wheelchair/mobility aid device inside the vehicle. Braun Century II or approved equal.

4.5.2 The lift operation and installation must meet ADA, FMVSS 403 and 404 requirements.

4.5.3 Lift shall require no independent power source. The lift shall operate on the vehicle's existing heavy duty electrical system.

4.5.4 Placement of the lift or the method of attaching shall not significantly diminish the structural integrity of the vehicle or cause a hazardous unbalancing of the vehicle either by its weight when the vehicle is moving or by its weight and load when the vehicle is stopped, subject to the vehicle manufacture's recommendations.

4.5.5 All protrusions or moving parts of the lift mechanism which could snag clothing shall have a guard or shield to protect passengers and/or operator.

4.5.7 An operational manual shall be provided.

4.6 Lift Platform

4.6.1 The platform to be provided shall be the widest available for the manufacturer with a minimum clear usable width of 34" and a minimum clear usable length of 51".

4.6.2 The lift platform shall also be in compliance with ADA and FMVSS 403 and 404 requirements.

4.6.3 The maximum weight that lifted by the lift shall be posted on the lift (800lbs.).

4.6.4 Platforms shall be capable of being raised and lowered with no sudden acceleration, deceleration, or jerking motion.

4.6.5 A handrail restraint, a belt between the two handrails, shall be provided in order to offer extra security for passengers in wheelchair/mobility aid devices as they are lifted on the platform.

4.7 Lift Controls, Interlock, and Backup Systems

4.7.1 Operating controls shall be of heavy-duty commercial type and shall be designed for hand-held operation with a long cord extension to allow operation of the lift by the operator standing outside the vehicle at a position behind or at the side of the lift platform. A method for storing and securing the controls when not in use shall be provided.

4.7.2 The lift operation and interlock shall be in compliance with ADA and FMVSS 403 and 404 requirements.

4.7.3 The controls shall be designed to be used safely without adverse effects to the operator or to the controls in all weather conditions.

4.7.4 Lift controls shall allow for instant direction reversal at any point in the cycle.

4.7.5 The vehicle shall have an interlock system that will not allow the vehicle to be shifted out of park if the lift door is open. As an added feature, it also will not allow the vehicle to be shifted out of park anytime the parking (emergency) brake is applied.

4.7.6 The interlock system shall make the lift controls inoperative unless the vehicle's emergency brake is active.

4.7.7 The interlock system shall only allow the lift to be operational when the vehicle is in "Park", the "parking (emergency) brake is engaged, the "ignition" is on, and the "lift door" is open.

4.7.8 In addition to the normal operating power, a manual backup system for unloading wheelchair/mobility aid passengers and returning the lift to the stowed position shall be provided in the event of electrical failure. The backup system shall be mounted on the interior of the vehicle, close to the lift, and in a location that will not interfere with passenger loading and unloading.