

Northeast DuPage Special Recreation Association (NEDSRA)

SPECIFICATIONS FOR: PARATRANSIT SHUTTLE BUS

GENERAL: The purpose of these specifications is to describe one paratransit shuttle bus.

Scope:

It is the intention of this specification to describe a vehicle of substantial and durable construction in all respects. Particular attention is given to features which provide the safest possible vehicle for transporting people.

Purpose:

The purpose of these specifications is to describe a mid-sized transit bus which will be used to transport passengers in both rural and urban areas. The bus will be of a "Steel Cage" type construction, with laminated sidewalls, rear walls, and roof. The bus body is to be mounted on a 2023 or newer Ford RV Cutaway chassis, E-450 series, with the Shuttle Bus Prep Package included. All vehicle suppliers must conform to this technical specification.

General

Unit described shall be new and of the latest design and production, complete, serviced, ready for work upon delivery, and include all standard equipment. This vehicle must meet the National Highway Safety Transportation Board and Federal Motor Vehicle Safety Standards (FMVSS). This unit must meet or exceed all of the specifications listed below and not require a CDL to operate. Any exceptions to these specifications must be detailed in the attachment to this proposal. Such exceptions must meet or exceed the specifications called for in this bid document. The determination of NEDSRA regarding any such request, as far as accepting or denying said request, will be final. **Please note two alternate bids are included (page 10).**

Capacity:

Vehicle must be able to accommodate the following loads.

1. With no wheelchairs on board, 14 seated passengers plus driver.
2. With 1 wheelchair on board, 13 seated passengers plus driver.
3. With 2 wheelchairs on board, 12 seated passengers plus driver.
4. With 3 wheelchairs on board, 10 seated passengers plus driver.
5. With 4 wheelchairs on board, 8 seated passengers plus driver.

NOTE: Unit must **not** require a CDL license to operate.

It is the intent of the Northeast DuPage Special Recreation Association, hereby referred to as NEDSRA, to purchase one unit that meets the following specifications and requirements.

All bids, at a minimum, must meet the following specifications.

DIMENSIONS:

Overall exterior length	285" minimum
Overall Exterior width (ex. mirrors)	96" maximum
Overall height	115" maximum
Interior headroom	77" minimum
Interior width (seat level)	90" minimum
Aisle width	17" minimum
Ground to first step	11.5" maximum
Seat hip-to-knee spacing	30" minimum

CHASSIS EQUIPMENT AS FOLLOWS:

Model year/make:	2023 or newer Ford E450 Super Duty cutaway
Wheelbase:	158" minimum
G.V.W.R.:	14,500# minimum
Engine:	7.3L VA Gas Engine
Transmission:	6-speed automatic w/overdrive
Exhaust:	Rear of vehicle, street side
Rear axle ratio:	4.56:1
Axle ratings:	Front 5,000# min, Rear 9,600# min
Steering:	Power
Brakes:	Power disc, antilock
Shocks:	Heavy duty, front, and rear
Batteries:	Dual
Alternator:	225 amps
Bumper Front:	Chrome
Bumper Rear:	Steel painted rear w/wrap around corners
Horns:	Dual
Tires:	Steel belted, black sidewall, all-season radial
Fuel capacity:	55 gallons minimum
Radiator:	Heavy duty, largest capacity available
Gages:	Oil pressure, fuel, Amp meter, temperature
Drive shaft guards:	Two (2)
Wipers:	Intermittent
Airbag:	Drivers side
Steering features:	Tilt wheel w/cruise control

VEHICLE BODY

Body, General Construction:

The body structure shall be built as an integral unit. All joints and corners where stress concentration may occur shall be adequately reinforced to carry required loads and withstand road shock. The bus body shall be certified by an independent testing agency to meet the requirements of Federal Motor Vehicle Safety Standard Number 220 and FMVSS 221. Certification of compliance with these tests shall be provided with the submission of this bid. Failure to submit this data will render your bid unresponsive.

Body Structural Framing:

- A. The vehicle body structure must incorporate an integral, fixture-welded steel body framing for floor, front, rear, sidewalls, and roof. The purchaser will be the final judge as to the acceptability of the proposed construction.
- B. The vehicle body structure must incorporate steel body framing for floor, front, rear, sidewalls, and roof body construction. The body shall incorporate a steel structure as the primary load-bearing mechanism.
- C. The body shall incorporate a steel structure as the primary load/stress-bearing mechanism.
- D. Sidewall Construction:
 - Wheelchair Options - Add another layer of metal. Depending on track locations, another structure of steel is welded in place between each vertical member for attaching a shoulder belt mount. Also, additional structure is added to accommodate wheelchair door frames.
- E. The bus body will be essentially a steel cage after components are welded together. The mounting track for the passenger seats will be welded to both the side-wall steel frame and to the steel sub-floor. Any other method of attaching the seat track to the bus body is not acceptable.
- F. Insulation: in sidewalls, rear wall, and roof.
- G. The structural steel shall be treated with anti-corrosion material after the entire framing structure is welded together.
- H. A front cap constructed of fiberglass shall close in the front end of the body.
- I. The exterior sidewall of the bus shall be smooth. There shall be no exposed fasteners on the exterior of the bus.
- J. All nuts, bolts, clips, washers, clamps, and like fasteners shall be coated to prevent corrosion.
- K. Wheel housings shall be of one-piece steel construction. Wheel wells are to be constructed and adequately reinforced to prevent deflection. Ample clearance shall be provided for tires in their maximum jounce position, according to the chassis manufacturer.
- L. Access doors shall be provided where necessary to service transmission, engine, radiator, battery, and air conditioning components.
- M. The entire body frame under structure shall be fully undercoated according to the chassis manufacturer guidelines. The joints of the floor and walls or any voids shall be sealed with non-flammable resin-type material after manufacturing of the body and interior items are installed in the bus.
- N. Any bright metal exterior trim shall be stainless steel, polished aluminum, or chrome plated.
- O. Water channeling rain gutters shall be installed over all door and window openings.

BODY PANELS:

Body panels (side walls) shall consist of a matrix of fiberglass reinforced plastic (FRP). Exterior surfaces will be treated to prevent moisture penetration and corrosion.

INTERIOR:

Walls, headliner, and cab liner are to be covered with padded vinyl material. All interior trim pads are to be vinyl. Colors selected after bid approval.

MIRRORS:

Shall consist of two (2) Euro style high impact plastic housings with approximately 6.5" x 9" upper flat glass mirrors with lower convex mirrors of approximately 6.5" x 4" convex mirrors and shall be remote and heated.

Interior passenger view mirror 6" x 16"

PASSENGER ENTRANCE DOOR:

- A. The entry door shall be fully encompassed by an integrally welded steel door surround. The complete door surround and header shall be galvanized steel, incorporate the step well, and be installed in the body as a single unit. The door shall have a full clear opening, as tall and wide as possible, extending lower than the bottom step to prevent water from entering the vehicle.
- B. The entry door shall be a two-leaf, outward opening type, electric operated, and controlled from the driver's seat.
- C. Full-length glass shall be provided on the entry door for full visibility.
- D. At the meeting edges of each door leaf, a rubber seal shall be installed so that the edges form a tight overlapping seal when closed.
- E. A 1-1/4" stainless steel grab bar (stanchion) shall be securely fastened to both sides of the interior of the doorway parallel to the steps to assist passengers in entering or exiting the vehicle.
- F. An exterior key switch shall be mounted to the front side of the entrance door to allow entrance without having to go through the driver's door or have the vehicle running.
- G. There shall be one 14"W x 86"H window in each panel of the entry door

FLOOR STRUCTURE:

The interior of the bus shall have a flat floor. The floor covering shall be smooth rubber or vinyl in gray. Steps shall be covered with a 2" white safety nosing on each step edge. Step tread shall be of one-piece rubber flooring. The floor covering shall be butt jointed and securely cemented to the marine-grade plywood floor with a waterproof adhesive. The floor sub-structure shall be covered with a marine grade plywood with sealed edges.

WINDOWS:

- A. The windshield is to be a one-piece design. Windshield shall be laminated tinted safety glass.
- B. The driver's window shall be capable of opening. This window shall be tempered or laminated safety glass.
- C. The side passenger windows shall be transit type, as opposed to the school bus type. It is desired to maintain a transit type appearance, and school bus type windows will not be accepted. The passenger windows shall be certified by an independent testing agency to be in compliance with FMVSS 217. Passenger windows must be capable of opening to ensure ventilation. Windows shall be an upper T-sliding design.
- D. Hinged emergency escape windows must be provided on each side of the bus. In addition, a rear hinged emergency escape window must be provided. Emergency windows must be clearly labeled, and operating instructions must be clearly visible.
- E. All egress windows shall be identified with a red light that is illuminated during vehicle operation. All passenger windows must be safety glass with an AS-3 marking. Windows are to be dark tinted. All passenger windows shall be installed in black powder coated or anodized aluminum frames or an equivalent. Each side window shall be a minimum of 36" tall by 36" wide, except where the floor plan desired requires the use of one smaller (filler) window on each side.

LIGHTING:

INTERIOR: Shall consist of one (1) step well light to illuminate entrance area adequately when door is opened and one (1) driver's courtesy light that activates when driver's door is opened or with head light switch. Passenger cabin area lights that offer sufficient interior light levels to allow for safe passenger movement. These lights shall activate when the entrance door is open or with a separate interior switch located by the driver. An exterior light that meets ADA requirements shall be mounted in the body skirt by the front entrance door. This too shall activate when door is opened. All interior lights shall be LED.

EXTERIOR: Shall consist of OEM chassis standard front cab light configuration. In addition, body shall have five (5) amber clearance lamps on the front and five (5) red on the rear in ICC configuration. On the upper rear left and right corners of the body, there shall be one (1) red light that matches the clearance lamps.

Rear of bus shall have a license plate lamp, two (2) 4" round tail/stop lamps, two (2) 4" round white backup lamps, and two (2) 4" round amber turn signals. Tail/stop, backup, and turn signal lamps shall be the types that are totally sealed and throw-a-way type. Lamps shall be installed in a manner that is aesthetically pleasing and in combination form. School bus type lamps are not acceptable.

Vehicle shall have high mount center LED stop lamp.

All exterior lights shall be LED.

DRIVERS CONSOLE:

A separate driver's console shall be included for the purpose of accommodating all switches that are installed by body manufacturer. These shall include but are not limited to electric door switch, heater switch, air conditioning controls, interior passenger lights switch, and lift power switch. This console is to be located in a manner to allow for easy use by driver.

All switches installed by body manufacturer shall be rocker style. Only exception is regarding rear air conditioning switches, which shall be those supplied by the air conditioning manufacturer.

There shall be at least two cup holders in the console.

WIRING:

All wiring shall follow a uniform code of color and be function coded to allow with ease the identity of individual wires throughout the vehicle.

There shall be two (2) fuse/relay boxes. One shall be chassis OEM installed and shall not be altered in any way. The other shall be for body and components as installed by body manufacturer. This junction box shall be installed on the interior of vehicle.

There shall be indicator lights, chimes, and gauges that include: service engine soon indicator light, check fuel cap indicator light, brake system warning indicator light, anti-lock brake system indicator light, airbag readiness indicator light, safety belt indicator light, charging system indicator light, low fuel indicator light, check gauge indicator light, turn signal indicator light, high beams indicator light, transmission control indicator light, key – in – ignition warning chime, headlamps on warning chime, parking brake on warning chime, speedometer gauge, engine coolant temperature gauge, odometer gauge, trip odometer, tachometer gauge, battery voltage gauge, engine oil pressure gauge, fuel gauge.

An electrical wiring diagram shall be supplied with the vehicle for all body components.

AIR CONDITIONING:

Shall consist of chassis OEM dash air conditioning and body manufacturer installed rear air conditioning. Capacity of rear unit shall be a minimum of 67,000 BTU's with dual engine driven compressor. System shall incorporate 3 fan skirt mounted condensers. Evaporator shall be installed in the rear of vehicle. Front and rear systems shall work independently of each other. Bidder shall submit information on make and type of air conditioning proposed along with wiring/plumbing diagrams with bid.

HEATING:

Shall consist of chassis OEM dash heater/defroster and one rear floor or wall/corner mounted heater with a minimum of 60,000 BTU's.

STANCHIONS, HAND RAILS, AND MODESTY PANELS:

Bus shall have a vertical and horizontal stanchion mounted behind the entrance door. There shall also be a right and left entrance hand rail at step area. These hand rails shall be mounted in a manner that allows passengers to grasp throughout the ascent or descent of the vehicle, following the incline of the steps. A modesty panel shall also be installed to the rear side of the step well in front of the first row of seats as well as a stanchion and modesty panel behind the driver.

SEATS:

DRIVER: Shall be high back reclining bucket seat with right arm rest and covered with Level 4 material. Color to be determined at award of bid.

PASSENGERS: Bus shall be able to accommodate 14 passengers with no wheelchairs on board. The seats shall double, high back, with flip-up armrests. All seats should be fixed in place, except those covering wheelchair tie-downs. **(See Page 10 for Alternate #1).** Driver side should be four double seat rows, and curb side should be three double seat rows.

All seats shall be covered with Level 4 material. Colors to be determined at award of bid. All seat positions shall have retractable seat belts that meet all FMVSS requirements.

REVERSE ALARM:

Vehicle is to be equipped with a reverse alarm that activates when the transmission is put in reverse operation.

BACKUP SYSTEM:

Vehicle is to be equipped with backup camera display in the driver rear view mirror, as well as an obstacle detection system.

PARATRANSIT EQUIPMENT:

LIFT: Bus shall have a Braun lift that meets all ADA and FMVSS requirements. Lift shall be mounted to steel with plates in the curbside rear corner of bus. Include warranty information with bid.

INTERLOCK/FAST IDLE SYSTEM: Bus shall be equipped with an ADA compliant lift interlock system with integrated fast idle system. An Intermotive model is required.

LIFT DOORS: Shall be of double panel construction. Panels shall have a door handle with at least one of these handles to have a key lock cylinder for the purpose of locking and securing the bus. Panels shall have a window that is the same height as the side passengers' windows and shall be installed at the same height as the passenger windows.

Panels shall have heavy-duty gas-filled shocks or over-center springs to hold doors open.

Lift doors shall meet the minimum requirements of ADA regarding clear opening height and width as it applies to buses in excess of 22 feet.

LIFT LIGHTS: An interior LED light shall be mounted above the lift door as well as one (1) exterior LED lights, which shall be mounted in the skirt of the bus and centered below the lift doors. Illumination requirements of these lights shall meet ADA requirements. These lights shall activate when the lift doors are opened and shall be independent of vehicle driving lamps.

MOBILITY AID/PASSENGER RESTRAINT BELT SYSTEMS: Shall be manufactured by Q-Straint, model "QRT auto retracting type, and be the Slide & Click style and consist of four (4) straps that secure wheelchairs in place and a combination lap/shoulder harness for wheelchair passenger. These securement systems must meet all ADA requirements. Bus shall be able to accommodate four (4) wheelchairs.

PRIORITY DECALS: Decals indicating that wheelchair positions are reserved for those with mobility aid devices as well as one set of forward facing seats that are reserved for passengers with disabilities, shall be installed. These decals are to meet all ADA requirements.

BELT STORAGE COMPARTMENT: A storage compartment located in the nose cone of the bus above the front windshield shall be supplied. This compartment shall have adequate space to store wheelchair belts when not in use and incorporate at least half the width of the front nose cone area. This will also be able to be opened and latched shut without the use of a key. **(See Page 10 for Alternate #2).**

WHEEL INSERTS:

Stainless steel wheel inserts of high quality shall be installed on each wheel. Shall include valve stem extensions on rear wheels.

RADIO:

An AM/FM/Clock/Bluetooth/USB enabled radio w/4 speakers or equivalent shall be supplied. Radio shall be mounted in OEM chassis location in dash.

MISCELLANEOUS:

Mud flaps at front and rear wheels.
Driver's side running board

Vehicle shall be delivered with the following safety equipment:

1. 5# Fire extinguisher
2. First aid kit
3. Reflector triangles
4. Catalytic Converter Protection/Anti-theft shield.

All equipment shall be mounted in vehicle.

Vehicle shall be delivered with current State of Illinois safety inspection sticker.
Vehicle color shall be bright white.

Lettering of vehicle is also to be included in the price as quoted by the bidder. Attached is a rendering of the current design currently used by NEDSRA. Bidder will be expected to match the colors using the 4-color process, or CMYK.

Vehicle shall meet or exceed all State and federal regulations in effect at time of manufacturing, including ADA (Americans With Disabilities Act) requirements as they pertain to the type of vehicle being requested.

INFORMATION TO BE INCLUDED WITH THE BID PROPOSAL:

Bidder/manufacturer shall certify that vehicle being bid does not exceed the maximum GVWR when loaded per the requirements of the chassis manufacturer.

Bidder shall submit proposed floor plan with bid.

Bidder shall submit product catalogs on the vehicle being proposed as well as on the lift, air conditioning system, and other pertinent equipment.

Bidder shall certify that the vehicle being bid is built within the guidelines of the chassis manufacturer and that bus manufacturer does have a certificate from Ford Motor Company stating that the bus manufacturer has a "Fully Meets" status pertaining to the minimum requirements of the "Transit Bus Quality Program". A copy of this certificate must be submitted with the bid.

Bidder must be a fully licensed and bonded vehicle dealer in the State of Illinois. A copy of dealer license must be submitted with the bid.

Prices and Payments:

All bid prices shall be complete and include warranty and delivery of the completed vehicle to this agency.

All bid prices shall be guaranteed a minimum of sixty (60) days after bid opening.

Payment shall be made in accordance with these specifications and the Bid Proposal submitted by the Bidder. Payment will be made upon acceptance of the vehicle(s) and equipment specified under these specifications.

Full payment will be made as unit is received, inspected, and found to comply with procurement specifications, free of damage, and properly invoiced.

Delivery:

Vehicles purchased under this contract shall be delivered to NEDSRA as soon as possible and no later than April 2024.

The unit must be setup, serviced, registered municipal plates applied and ready for operation.

Warranty:

A description of all applicable warranties as well as copies of said warranties, shall be submitted with the bid. Please indicate if a third party vendor will be utilized for warranty work and provide a list of third party vendors used by the bidder in region.

Trade-In:

NEDSRA will be trading in one vehicle as part of the bid process. Vendors are encouraged to assess the value of the vehicle and make an offer. An accepted purchase price for the trade-in will be the amount deducted from the winning bid. The vehicle is a 2012 Ford Elkhart El Dorado, which seats 14 passengers and does NOT have a lift. As of April 2023, the odometer reads 73,500 miles. The vehicle is available to view by appointment. Contact Jerry Barton at jbarton@nedstra.org.

Alternate # 1 – Passenger Seats

All passenger seats fold away against the wall.

Alternate #2 – Overhead Parcel Rack with Netting

Opposite of the driver’s side of the bus, parcel rack, with netting, shall be installed for the intent of storing small articles. The rack shall match the interior and securely fastened to the roof and wall steel post.





1770 W. Centennial Place, Addison, IL 60101-1076
Phone 630.620.4500 Fax 630.620.4598 www.nedsra.org

Northeast DuPage Special Recreation Association

BID SUBMITTAL FORM FOR PARATRANSIT SHUTTLE BUS

1. Bidder acknowledges receipt of the following bid addenda, if any:

2. Bidder acknowledges that it has reviewed the specifications and drawings related to this bid and agrees that if NEDSRA awards the bid to this Bidder, Bidder agrees to furnish and deliver the specified vehicle in accordance with the specifications and drawings, and all other terms and conditions contained therein.

3. Bidder hereby submits the total price to furnish and deliver the Paratransit bus specified in the specifications and drawings:

Main Bid \$ _____

Alternate #1 \$ _____

Alternate #2 \$ _____

4. If awarded the bid, Bidder agrees to deduct the amount of \$ _____ from the purchase price in exchange for NEDSRA's trade-in of a 2012 Ford Elkhart El Dorado.

5. Bidder acknowledges that this bid is firm and irrevocable for a period of sixty (60) days after the date of bid opening.

6. Bidder will provide any safety/construction rationale that deviates from the written vehicle specifications.

Bid Company: _____

Submitted By: _____

Address: _____

Phone: _____ **Email:** _____

State Of: _____ **County Of:** _____

Subscribed and signed before me on (date): _____

Signature of Notary Public: _____

Seal of Notary Public:

Addendum #1

Project: 2023 or Newer 14 Passenger "Paratransit Shuttle Bus" Bid
Prepared by: Jerry Barton, Northeast DuPage Special Recreation Association
Date Prepared: 5/15/2023
Copies to: Emailed Bidders

The following items are clarifications or modifications to the bid documents.

Bidders shall sign the addendum sheet as part of the bid documents showing that they have received and read this addendum.

Item #1 – Revisions and clarifications to the specification of Seat/Passengers on page 7.

Instead of 4 double row seats on the driver's side, floor plan should include:

- Driver side to include 3 double foldaway high back seats
- Passenger side to include 3 double rigid high back seats
- Rear wall to include 2 flip seats

The third-row double bench seat on each side should fold away to accommodate wheelchair positions. Jump seats should fold up to accommodate wheelchair positions.

Mission to serve as an integral partner with our member park districts and villages to positively impact individuals with disabilities through diverse recreation opportunities and community services.

Member Partner Communities: Addison ♦ Bensenville ♦ Butterfield ♦ Glendale Heights ♦ Itasca ♦ Lombard ♦ Medinah ♦ Oakbrook Terrace ♦ Schiller Park ♦ Villa Park ♦ Wood Dale

