

REQUEST FOR TRANSIT VEHICLE PRICE QUOTE (RFQ)

This is (check appropriate):

Initial Request for Quote (from Requesting Agency to Vendors)

Due Date: 09/07/2023

Response to RFQ (from Responding Vendor back to Requesting Agency)

Grant Funded Purchase STIF Funds

VENDOR (Business Name): Schetky NW Sales, Inc.

Vendor Contact Person: Kevin Mansfield

Phone: (480) 818-0708

Email Address: kevinm@schetkynw.com

Alt Phone: (623) 478-1920

Meets Buy America Standards (49 USC § 5323(j); 49 CFR part 661)

REQUESTING AGENCY INFORMATION

Agency: City of Sandy

Date: September 7, 2023

Contact Person: Andi Howell

Phone: 503-235-6780

Email Address: ahowell@ci.sandy.or.us Fax: NA

Agency Address: 16610 Champion Way Sandy, OR 97055

The above Agency, through its Public Transit program or public transit affiliate, is requesting price quotes from Oregon State Price Agreement Contract Vendors for the purchase of the following vehicle(s):

From (circle): Oregon State Price Agreement / **Other** No. of Vehicles Required: 2

PTD Vehicle Category (Check): (Please see *PTD Vehicle Descriptions and Useful Life Standards*)

Cat A Cat B Cat C Cat D Cat E ____ (select from 1 to 3)

Length: 20-25 Regular Seats: 10 - 14

ADA Stations/Tiedowns: 1 or 2

Fuel Type: Gasoline Diesel Bio-fuel Hybrid CNG Propane

High Floor Low Floor Other Comment: see below

The general specification for vehicle is as follows:

| | | |
|---|---|--|
| A. VENDOR'S VEHICLE BASE PRICE INFORMATION | | VEHICLE BASE PRICE |
| <i>This Section to be completed by Vendor</i> | | <i>Enter base price from State Price Agreement below</i> |
| Vehicle Make/Model: EIDorado Advantage | | |
| Length: Approximately 24' | | |
| Fuel Type: Gasoline | | |
| Floor: <input checked="" type="checkbox"/> High Floor <input type="checkbox"/> Low Floor Other: | | |
| No. of Regular Passenger Seats: Fourteen (14) | | |
| No. of ADA Stations w/Tiedowns Desired: Two (2) | | |
| Other Special Note: Additional tie downs available | | |
| B. VEHICLE REQUIRED SPECIFICATIONS | | |
| <i>Requesting Agency completes Description column</i> <i>Vendor completes "Vendor Response" columns</i> | VENDOR RESPONSE | |
| <i>Requesting Agency's Required Specifications Description</i> | <i>Vendor Suggestions (related to vehicle specs)</i> | |
| Seeking available units that are on site or scheduled to be on site by end of year (2023); new models only. Must have at least 1 ADA Securement station. Category D. | Yes | |
| As many standard specs per State Price Agreement as possible - please include a list of vendors provided standard specs with RFQ response. | See Attached | |
| <u>APPROVED EQUAL</u> | | |
| Items bid other than specified must be determined by the Buyer as an approved equal. Include in final bid detailed specifications, cut sheets, and modifications necessary that would make the proposed item equal to the desired specifications. Determination of approved equal will be made by the Buyer, and the decision is final. | Yes | |
| Altoona Test Executive Summary | See Attached | |

| Requesting Agency's Required Specifications Description (Continued) | VENDOR RESPONSE |
|--|--|
| | <i>Vendor Suggestions (related to vehicle specs)</i> |
| External color standard white | Yes |
| The vehicle should be approximately 20-25 feet in length | Yes |
| 6.8-liter gasoline engine or equivalent | 7.3 liter is the current engine offered |
| Triangle Reflector Kit-secured to the floor behind driver seat | Yes |
| One (1) or Two (2) ADA securement stations | Yes |
| Braun Century Wheelchair Lift with 1,000-pound lifting capacity and 34" by 54" platform, or equivalent with seatbelt on lift | Yes |
| Fast idle, part of wheelchair lift package | Yes |
| A wheelchair securement system | Yes, 2 are included. |
| Heated, remotely operated exterior mirrors with integrated turn signals (controls must be in reach of driver which allow adjustments while in a normal sitting position) | Yes |
| LED ADA light package, includes all exterior ADA lights (door activated) | Yes |
| Daytime running lights (LED) 7" | Yes |
| LED amber flashing lights, front and rear 7" or larger triggered with front door, lift and rear door to flash | Switch activated only |
| LED light package for all standard/required rear stop, tail, and backup lights | Yes |
| LED step well lights | Yes |
| Fuel sender access cover | Yes |
| Wheelchair door ajar light | Yes |
| Rear emergency door w/ 2 windows w/ door ajar light and buzzer | Yes |
| Electric passenger entrance Option to open electric front door from outside vehicle (key) | Yes |
| Wide angle lens, rear door window | Yes |
| Dual windows One (1) on each side of rear emergency door | Yes |
| Grab handles LH and RH of entry way, angled to match entry steps and yellow powder coated. | Yes |
| Power base for driver seat, install vinyl base on power base | Yes |
| Driver's seat have equivalent features to Seats Inc. Legacy LO w driver seat cover level 4 | No. Freedman Shield covered in level 4 vinyl. Agency could replace seat if needed. |
| 17" mid-back standard seats (Freedman or equivalent) | No. All seats are Freedman – Mid-High Notch Back Double AM Foldaway seats |
| Seat belt extension for driver (longest available up to 12") | Yes |
| Altro non-skid floor coved to seat rail or equivalent | Yes |
| FAK, Fire Ext, and BBP Kit mounted | Yes |
| Full view curb window | Yes |

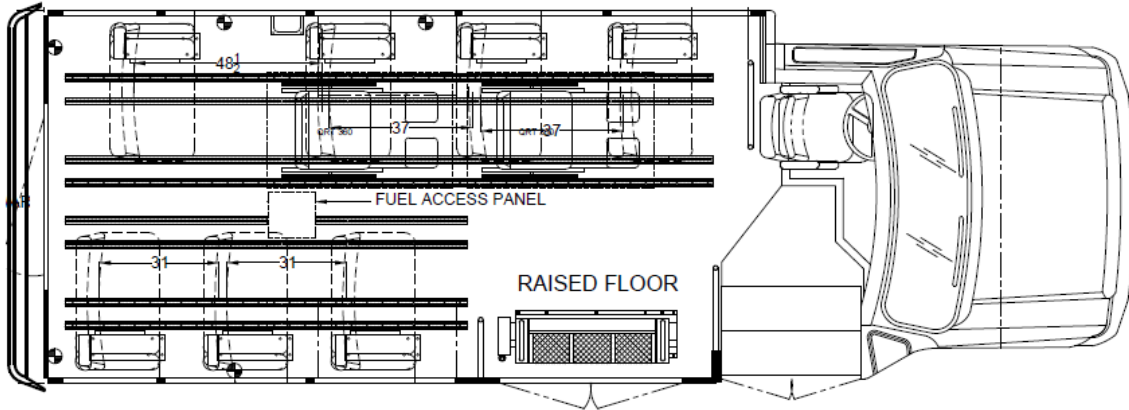
| Requesting Agency's Required Specifications Description (Continued) | VENDOR RESPONSE |
|--|--|
| | <i>Vendor Suggestions (related to vehicle specs)</i> |
| Rear LED brake lights under rear body windows | Yes |
| Door actuated LED interior ceiling lights | Yes |
| Add stanchion for farebox, 12V pre-wire | Yes |
| Pull cord stop request system w/transition stop request sign & buzzer - auditory & visual | Yes |
| Bike rack for 3 bikes | Yes |
| Front license plate bracket | Yes |
| Single Switch Intermittent Wipers | Yes |
| FRP Ceiling and Walls | Yes |
| Seat Belt Cutter, Flashlight, mounted within reach of driver | Yes |
| Four (4) scooter tie-down loops | Yes |
| Matrix listing all warranties, component, company, contact information and duration. | See Attached |
| Inner dual tires air valve extender kit | Yes |
| Interior passenger view mirror above the driver (adjustable) | Yes |
| AM/FM/CD with color backup camera, Bluetooth and hands-free technology. Exterior mounted camera 4 Speakers | Yes |
| LED exterior light package | Yes |
| Skirt mounted rear LED docking lights | Yes |
| LED exterior entry door light, door activated | Yes |
| LED side marker/turn signals | Yes |
| Aisle side seats to have armrests and grab handles | Yes |
| All except driver's seat to be vinyl / level 4 upholstery or higher | Yes |
| Seat back grab handles on aisle and window seats | Aisle seats only |
| Four (4) 12-inch seatbelt extensions | Yes |
| Yellow standee line and sign, yellow step nosing | Yes |
| Front and side destination sign windows, overhead access door and 12V prewire power and ground | Yes |
| Drip moldings over all passenger windows (stainless steel or equivalent) | Yes |
| Passenger side overhead railing (with straps) | Street side overhead railing |
| Subtotal Cost of Required Options: | \$ 69,516.81 |
| Total Vehicle Cost With All Required Options and TAX: | \$ 172,214.81 |
| | |

| C. VEHICLE PREFERRED OPTIONS | | | |
|---|---|---|--|
| Requesting Agency's Preferred Options Description | Included in Base Price? YES / NO | \$Additional Cost for Option\$ (or Note Not Available) | Vendor Suggestions (related to vehicle specs) |
| Interior 4 Camera CCTV system (Seon or equivalent) with minimum 250gb HD | Yes | | 5 camera system is included with price |
| As built wiring diagrams and parts manual | Yes | | |
| Exterior height clearance decal (above driver) | Yes | | |
| 4 Sets of keys, or fobs (split into sets) lift door and rear door, keyed alike | No | \$295.00 | 2 sets are included in cost is for 2 more sets |
| LED yield signs with driver activation switch on dash (match TriMet yield sign ORS 811.167) | Yes | | |
| Install TDSS systems under fold-away seats. | No | \$834.00 | |
| | | | |
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| | | | |
| | | | |
| | | | |
| Subtotal Cost of Preferred Options: | | \$1.129.00 | |

Vendor's Signature: Karen Mangold Date Sent: 9/22/2023

Vendor's Response Back to RFQ – Please sign and date your response here.

Sample Floor plan (Attach or cut-and-paste new plan here, or attach on back)



VENDOR INFORMATION

Vendors are strongly encouraged to submit price quotes using the format provided. Vendors should specifically note if and how they meet the above specifications and note any differences in what has been called out above, in their price quotes. This may be done on the form, or on an attached sheet. The vehicle(s) will be purchased with funding from the Oregon Department of Transportation, Public Transit Division and the Requesting Agency, and will follow applicable Federal and State procurement guidelines.

Price Quote shall be submitted to the Requesting Agency contact person named on the first page on this form.

Price Quotes may be sent by U.S. Mail, emailed, or faxed to the addresses for Requesting Agency noted on page 1 of this form.

Vendors are required to submit the following certification attachments with each Quote response:

Attachment 1 – Certificate of Compliance with Bus Testing Requirement

Attachment 2 – Pre-Award FMVSS and Buy America Certification

Attachment 3 – Transit Vehicle Manufacturer (TVM) Certification (DBE)

VEHICLE SELECTION INFORMATION

Selection of the vehicle and successful price quote will be based on:

Lowest Cost with Required Specifications (*Lifecycle costs may be considered in price determination and may affect lowest bid determination*)

Best Value Determination (ODOT PTD pre-approval required.)

The Best Value Determination criteria are as follows:

Attachment 1

BUS TESTING CERTIFICATION

The undersigned bidder [Contractor/Manufacturer] certifies that the vehicle model or vehicle models offered in this bid submission complies with 49 CFR Part 665.

A copy of the test report (for each bid ITEM) prepared by the Federal Transit Administration's (FTA) Altoona, Pennsylvania Bus Testing Center is attached to this certification and is a true and correct copy of the test report as prepared by the facility.

The undersigned understands that misrepresenting the testing status of a vehicle acquired with Federal financial assistance may subject the undersigned to civil penalties as outlined in the U.S. Department of Transportation's regulation on Program Fraud Civil Remedies, 49 CFR Part 31. In addition, the undersigned understands that FTA may suspend or debar a manufacturer under the procedures in 49 CFR Part 29.

Schetky Northwest, Inc.

Name of Bidder/Company Name

Kevin Mansfield

Type or print name

Kevin Mansfield

Signature of authorized representative

Cora L Crittle

Signature of notary and SEAL



Date of Signature

11 14 2020

Attachment 2

PRE-AWARD CERTIFICATION FOR PROCUREMENT OF ROLLING STOCK (VENDOR)

PRE-AWARD AUDIT REQUIREMENTS

A recipient purchasing revenue service rolling stock with FTA funds must ensure that a pre-award audit under this part is complete before the recipient enters into a formal contract for the purchase of such rolling stock.

DESCRIPTION OF PRE-AWARD AUDIT

A pre-award audit under this part includes— (a) A Buy America certification; (b) A purchaser's requirements certification; and (c) Where appropriate, a manufacturer's Federal Motor Vehicle Safety certification information.

PRE-AWARD BUY AMERICA CERTIFICATION

For purposes of this part, a pre-award Buy America certification is a certification that the recipient keeps on file that:

- a. There is a letter from FTA which grants a waiver to the rolling stock to be purchased from the Buy America requirements under section 165(b) (1), (b)(2), or (b)(4) of the Surface Transportation Assistance Act of 1982, as amended; or
- b. The recipient is satisfied that the rolling stock to be purchased meets the requirements of section 165(a) or (b)(3) of the Surface Transportation Assistance Act of 1982, as amended, after having reviewed itself or through an audit prepared by someone other than the manufacturer or its agent documentation provided by the manufacturer which lists:
 1. The Component and subcomponent parts of the rolling stock that are produced in the United States is more than 60% for FY2016 and 2017, more than 65% for FY2018 and 2019, more than 70% for FY2020 of the cost of all components and subcomponents of the vehicle identified by the manufacturer; and
 2. The location of the final assembly must take place in the United States (49 CFR 661.11), including a description of the activities that will take place at the final assembly point and the cost of final assembly.

PRE-AWARD PURCHASERS REQUIREMENTS CERTIFICATION

For purposes of this part, a pre-award purchaser's requirements certification is a certification a recipient keeps on file that:

- a. The rolling stock the recipient is contracting for is the same product described in the purchaser's solicitation specification; and
- b. The proposed manufacturer is a responsible manufacturer with the capability to produce a vehicle that meets the recipient's specification set forth in the recipient's solicitation.

If buses or other rolling stock (including train control, communication, and traction power equipment) are being procured, the appropriate certificate as set forth below shall be completed and submitted by each bidder in accordance with the requirements in 49 CFR 661.13(b).

PRE-AWARD FMVSS COMPLIANCE CERTIFICATION

As required by Title 49 of the CFR, Part 663 – Subpart D, the recipient certifies that it received, at the pre-award stage, a copy of the manufacturers self-certification information stating that the buses will comply with the relevant Federal Motor Vehicle Safety Standards issued by the National Highway Traffic Safety Administration in Title 49 of the Code of Federal Regulations, Part 571.

Bidder or offeror Certificate of:

COMPLIANCE with Buy America and FMVSS Rolling Stock Requirements

As required by 49 CFR Part 663, the bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j), and the applicable regulations of 49 CFR 661.11.

Company Schetky Northwest, Inc.

Name Kevin Mansfield Title Sales Manager

Signature  Date 11/14/2022

Bidder or offeror Certificate of:

NON-COMPLIANCE with Buy America and FMVSS Rolling Stock Requirements

As required by 49 CFR Part 663, the bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j), but may qualify for an exception to the requirement consistent with 49 U.S.C. 5323(j)(2), as amended, and the applicable regulations in 49 CFR 661.7.

Company _____

Name _____ Title _____

Signature _____ Date _____

Attachment 3

TRANSIT VEHICLE MANUFACTURER (TVM) CERTIFICATION

Pursuant to the provisions of Section 105(f) of the Surface Transportation Assistance Act of 1982, each bidder for this contract must certify that it has complied with the requirements of 49 CFR Part 26.49, regarding the participation of Disadvantaged Business Enterprises (DBE) in FTA assisted procurements of transit vehicles. Absent this certification, properly completed and signed, a bid shall be deemed non-responsive.

Certification:

I hereby certify, for the bidder named below, that it has complied with the provisions of 49 CFR Part 26.49 and that I am duly authorized by said bidder to make this certification.

Name of Bidder/Company Schetky Northwest, Inc.

Name Type or print Kevin Mansfield

Signature of Authorized Representative

Kevin Mansfield

Date 11/14/2022

Signature of notary and SEAL

Cora L Crittle



STATE STANDARDS PER DASPS 2234-19

STANDARD & BASE VEHICLE EQUIPMENT (INCLUDED UNLESS REQUESTED OTHERWISE)

CAT D, ElDorado Advantage

STANDARD CHASSIS FEATURES

7.3L V8 PREMIUM GASOLINE ENGINE
14,500 GVWR
240 AMP ALTERNATOR
HILL START ASSIST
TRACTION CONTROL
ELECTRONIC STABILITY CONTROL
FLEET TELEMATICS MODEM
12V POWER POINT
HEAVY DUTY 240 AMP ALTERNATOR
ELECTRONIC 6-SPEED AUTOMATIC TRANSMISSION
55 GALLON FUEL TANK
DRIVER'S MIRROR, DAY/NIGHT INTERIOR REVIEW MIRROR
TIRES, LT225/75R16E BSW ALL SEASON HANKOOK DYNAPRO HT
DUAL REAR WHEEL
CRUISE CONTROL
DASH HEAT, WITH ADDITIONAL CONTROLS FOR REAR HEAT
FRONT AIR-CONDITIONING
DAYTIME RUNNING LAMP
OXFORD WHITE STANDARD CAB PAINT
AUXILIARY FUEL PORT
FRONT CHROME BUMPER
CHROME GRILLE
ENGINE BLOCK HEATER
FRONT LICENSE PLATE BRACKET
FRONT VINYL FLOOR COVERING IN DRIVER'S COMPARTMENT
50 STATE EMISSIONS

STANDARD VEHICLE EQUIPMENT

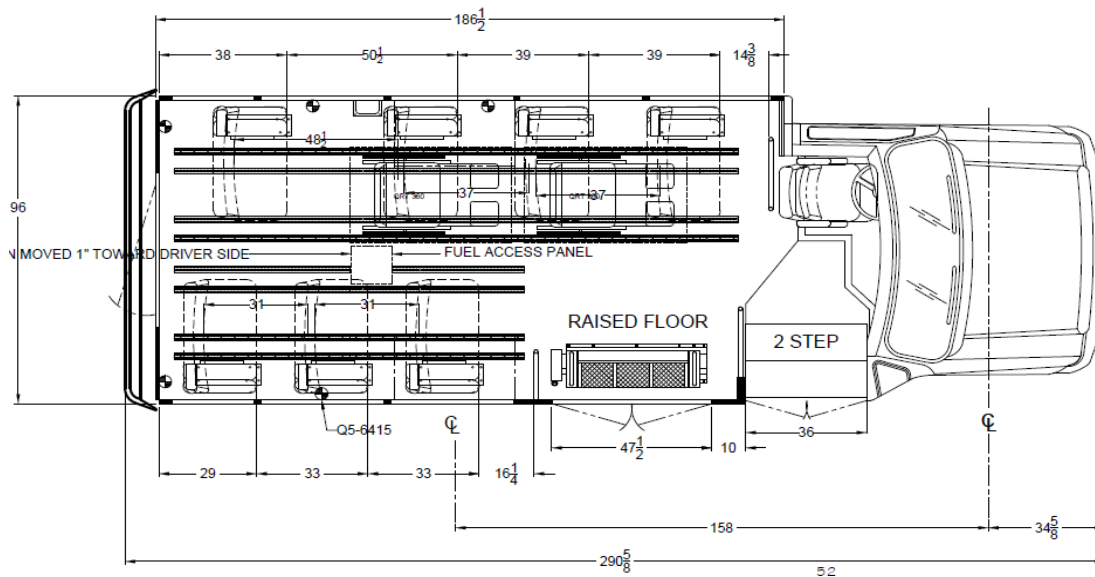
CURBSIDE ROUTED EXHAUST REAR EXIT
REAR BUMPER WHITE STEEL 'WRAP'
REAR WINDOW STD
BASE ELECTRICAL SYSTEM AND ELECTRICAL PANEL
ROSCO REAR VIEW CAMERA WITH 7" COLOR MONITOR LOCATED IN REAR VIEW MIRROR
MUDFLAPS ON REAR ONLY ARE STANDARD
LEFT HAND ENTRY STANCHION WITH MODESTY PANEL AND LEFT ENTRY ASSIST RAIL, STAINLESS
UNDERCOATING, AND SIDES OF WOOD FLOOR EDGES SEALED BEFORE ASSEMBLY
RUSTPROOFING STEEL FLOORING & OUTRIGGERS - 1000 HOUR SALT SPRAY TESTED
CABLINER VERTICAL PORTIONS OVER DRIVER WILL BE COVERED WITH VERONA COAL STD
PASSENGER CABIN SIDEWALLS - WILL PULL IN WHITE VINYL THATCH STANDARD
PASSENGER CABIN HEADLINER WILL PULL IN WHITE VINYL THATCH STANDARD

BASE VEHICLE EQUIPMENT (AS SPECIFIED BY STATE)

MANUAL, CUSTOM BUILT PARTS, USB
CUSTOM OVERALL ELEC WIRING SCHEMATIC, JUMP DRIVE EP4
CHASSIS OEM AM/FM/CD RADIO E-FORD
SPRING SPACER, LIFT SIDE E450
FRONT END TIRE ALIGNMENT
TIRE VALVE EXTENSIONS, 6"
SUSPENSION, MOR-RYDE E-450
EXHAUST, STREETSIDE CORNER 45 FORD SD W/MORRYDE
FUEL SENDER ACCESS DIAM PLT CHEVY / FORD 2009-
FAST IDLE, W/INTERLOCK FORD IM V2
RISER, RSD FLR YELLOW 40
FLOOR STEEL, RAISED SC240
DOOR, ENTRY 40 ELEC STAINLESS
EXTERIOR ENTRY DOOR KEY LOCK KUBOTA
WINDOW PACKAGE, T-TOP SLIDERS
A/C, ACT 50S 70KBTU TIE-IN E-FORD AT/AL
HEATER, 65K BTU LOW PROFILE 5/8"
HEATER, BOOSTER PUMP
BATTERY TRAY, M/R SEALTITE PS SC SS
BATTERY DISCONNECT, COLE HERSEE STEPWELL
PD & BATTERY (2) G27 IN SLIDE TRAY
MANUAL RESET CIRCUIT BREAKERS (FUSES)
CABLINER, W/STORAGE SC
DRIVER SEAT, USSC G2E AT/AL/SC ONLY, WITH RH ARMREST
SEATBELT EXTENSION, 12" FREEDMAN USR (QTY 2)
SEATBELT, FREEDMAN USR FEATHER (QTY 8)
SEAT, MID-BACK DOUBLE FREEDMAN (QTY 6)
SEAT COVER, LEVEL 3 (QTY 12)
SEAT ARMREST, U.S.ARM (QTY 6)
SEATBELT, 74" STANDARD (QTY 4, REAR ROW ONLY)
SEAT, AV GRAB HANDLE- PADDED (QTY 6)
FLOOR, 3/4" MARINE PLYWOOD
HANDRAIL, RH ENTRY ASSIST
HANDRAIL, OVERHEAD (QTY 2)
REVERSE ALARM (102 DB)
MIRROR, VELVAC HEAT-REM FORD E-FORD
MIRROR, 6 X 16 REAR VIEW INTERIOR SC
FIRST AID KIT, 24 UNIT
FIRE EXT & REFLECTOR KIT, 5#
LIGHTS, LED EXTERIOR PKG, W/REAR TURN, CMBL, SIDE MARKER
LIGHT GUARD ONLY, SUPER 60 SIDE TURN
LIGHTS, LED DOME SUPER BRIGHT (QTY 6)
LIGHT, UNDERHOOD LED
LIGHT, LED EXTERIOR ENTRY DOOR
SPEAKERS, (QTY 4)
PREWIRE, IGN-BATT-GND FRT STORAGE HD
PREWIRE, IGN-BATT-GND PASS DASH HD
REAR VIEW CAMERA, ROSCO 7" IN-MIRROR LCD-STD
FLOOR RUBBER, RCA GRAY (190-250)
COVE MOLDING, RUBBER TO SEAT RAIL SC
STEP NOSING, YELLOW GERFLOR/RCA 40"

STANDEE LINE, RCA YELLOW 2 X 30
INTERIOR SKIN, FRP WALL & CEILING SC 240
CAB UNDERCOAT OPTION
SPARE TIRE, HANKOOK LT225/75R16 E-FORD
MODESTY PANEL, DRIVER, STARBOARD SC
RUNNING BOARD, DR SIDE DIAMOND PLT - FD
WHEELCHAIR DOOR, SC RSD FRT CHALLENGER 48X72
LIFT, BRAUN CENTURY NCL1000FIB34X51-2 1000LB FRT PUMP
SEATBELT EXTENSION, 12" FORD OEM
DECALS, ADA SPEC
RESTRAINT, QRT360L Q-10007 (QTY 2)
L-TRACK, FULL LENGTH SPLICED PER PLACEMENT, 30" X 52" WC POSITION (QTY 2)
RESTRAINT, Q-STRNT BELT CUTTER
LIGHT LED, SKIRT MOUNT OVAL BELOW LIFT
LIGHT, LED LIFT INT CEILING MOUNT
DECALS, CUSTOM INTERIOR, "VIDEO CAMERA IN USE" DECALS #0038514 ENGLISH & #0039744 SPANISH
SPO - VERTICAL STANCHION WITH FLOOR-TO-CEILING MOD PANEL BEHIND WC LIFT
TRIANGLE YIELD SIGN
FIVE (5) CAMERA SEON SYSTEM
HELM SERVICE MANUAL, FORD

TRANSIT AGENCY FLEXBUS™ STOCK UNIT



VEHICLE CONFIGURATION

15 TOTAL PASSENGERS

- PROPOSAL INCLUDES TWO WHEELCHAIR SECUREMENTS, WITH POSSIBILITY OF FIVE WHEELCHAIR POSITIONS. FRONT LIFT, WITH TRANSIT AGENCY PREFERED SPECIFICATIONS
- HIGHEST SAFETY CONTENT, IMPROVED WHEELCHAIR ACCESSIBILITY
- HIGH CAPACITY AIR-CONDITIONING AND HEAT FOR ALL CLIMATES
- BACK-UP CAMERAS AND AUDIBLE BACK-UP SENSORS FOR INCREASED ACCIDENT PREVENTION

STANDARD CHASSIS FEATURES

| 2024 FORD E-450 CHASSIS |
|--|
| 7.3L V8 PREMIUM GASOLINE ENGINE |
| 14,500 GVWR |
| 240 AMP ALTERNATOR |
| HILL START ASSIST |
| TRACTION CONTROL |
| ELECTRONIC STABILITY CONTROL |
| FLEET TELEMATICS MODEM |
| 12V POWER POINT |
| HEAVY DUTY 240 AMP ALTERNATOR |
| ELECTRONIC 6-SPEED AUTOMATIC TRANSMISSION |
| 55 GALLON FUEL TANK |
| DRIVER'S MIRROR, DAY/NIGHT INTERIOR REVIEW MIRROR |
| TIRES, LT225/75Rx16E BSW ALL SEASON HANKOOK DYNAPRO HT |
| DUAL REAR WHEEL |
| CRUISE CONTROL |
| DASH HEAT, WITH ADDITIONAL CONTROLS FOR REAR HEAT |
| FRONT AIR-CONDITIONING |

| |
|--|
| DAYTIME RUNNING LAMP |
| OXFORD WHITE STANDARD CAB PAINT |
| AUXILIARY FUEL PORT |
| FRONT CHROME BUMPER |
| CHROME GRILLE |
| ENGINE BLOCK HEATER |
| FRONT LICENSE PLATE BRACKET |
| FRONT VINYL FLOOR COVERING IN DRIVER'S COMPARTMENT |
| 50 STATE EMISSIONS |

STANDARD BODY FEATURES

| EXTERIOR STANDARDS |
|--|
| LED EXTERIOR LIGHTS |
| <ul style="list-style-type: none"> • THINLINE RECTANGULAR FRONT & REAR CLEARANCE AND MARKER LIGHTS • LED RED STOP/TAIL & TURN SIGNAL • LED BACK UP LIGHTS • LED LICENSE PLATE LIGHT • ADA COMPLIANT SURFACE MOUNTED EXTERIOR ENTRY DOOR LIGHT |
| EXTERIOR ROSCO BRAND SIDE MIRROR |
| <ul style="list-style-type: none"> • FLAT UPPER MIRROR, CONVEX LOWER MIRROR |
| FIBERGLASS FRONT CAP WITH RECESSED MOUNTING FOR MARKER/CLEARANCE LIGHTS |
| CURBVIEW WINDOW, TO ALLOW DRIVER TO BETTER SEE CURBSIDE PICKUP AREA |
| FIBERGLASS REAR CAP, WITH RECESSED MOUNTING FOR LIGHTS, AND LARGE AREA FOR GRAPHICS |
| FIBERGLASS SINGLE-PIECE ROOF, TO BEST PROTECT AGAINST POTENTIAL LEAKS |
| UPPER AND LOWER EXTERIOR SIDEWALLS, SEALED ALUMINUM, RUST RESISTANT |
| HEAVY-DUTY REAR BUMPER, STEEL, WITH STAINLESS STEEL BOLTS |
| INTERIOR STANDARDS |
| GREY PADDED VINYL IN DRIVER'S AREA |
| SOUND-ABATEMENT AUTOCLOTH ON PASSENGER-AREA CEILING AND REAR WALL, GRAY |
| VANDAL-RESISTANT, DISINFECTANT-APPROVED FRP ON PASSENGER-AREA SIDEWALLS |
| LED DOME LIGHTS, PASSENGER AND DRIVER-AREA |
| GERFLOR BRAND FLOORING, PROVIDING SUPERIOR SLIP RESISTANCE TO STANDARD FLOORING |
| WELDED FLOORING SEAMS TO CREATE FLAT/UNIFORM FLOORING SURFACE WITHOUT TRIP HAZARDS |
| WHITE STEP NOSINGS, TO EASILY RECOGNIZE ENTRY STEP EDGES |
| STAINLESS STEEL GRAB RAIL, STANCHION, AND MODESTY PANEL AT ENTRY DOOR STEPWELL |
| SIDE AND REAR EGRESS WINDOWS |
| ELECTRIC ENTRY DOOR, WITH DRIVER'S SWITCH AND EMERGENCY RELEASE |
| BUS TO UNDERGO THOROUGH WATER TESTING PRIOR TO DELIVERY |
| BODY MOUNTED ON RUBBER SHOCK ISOLATORS, DRASTICALLY REDUCING ROAD VIBRATION |
| SEATS TO BE MOUNTED IN SEAT-TRACKING |
| SAFETY STANDARDS |
| MEETS AND EXCEEDS ALL FMVSS (FEDERAL MOTOR VEHICLE SAFETY STANDARDS) REQUIREMENTS |
| MEETS FTA BUY AMERICA REQUIREMENTS |
| MEETS FEDERAL ADA REQUIREMENTS (IF EQUIPPED WITH WHEELCHAIR LIFT) |
| CERTIFIED FORD QVM (QUALITY VEHICLE MANUFACTURER) |
| CERTIFIED ISO 9001:2008 (QUALITY MANAGEMENT SYSTEMS) COMPANY |
| MEETS AND EXCEEDS ROLLOVER AND SIDE IMPACT TESTING |

AS-BUILT VEHICLE FEATURES

| MODEL |
|---|
| ELDORADO ADVANTAGE 24 MODEL BUS BODY |
| FORD E-450 158" WHEELBASE, 7.3L PREMIUM GAS ENGINE CHASSIS |
| ELDORADO 5 YEAR / 100,000 MILE LIMITED STRUCTURAL WARRANTY |
| ELDORADO 3 YEAR / 36,000 MILE LIMITED BODY WARRANTY |
| FORD 5 YEAR / 60,000 LIMITED POWERTRAIN WARRANTY |
| SPECIAL INSTRUCTIONS OR NOTES |
| INCLUDE WEIGHT SLIP WITH VEHICLE |
| 15-MINUTE WATER TEST WITH DOCUMENTATION, SHIP WITH VEHICLE |
| 27" MINIMUM HIP-TO-KNEE SPACING |
| SPECIAL BUILD OPTIONS |
| AS-BUILT PARTS MANUAL ON USB FLASH DRIVE |
| ELECTRICAL SYSTEM |
| INTERMOTIVE FLEX TECH ELECTRICAL SYSTEM |
| SIDEWALL / REARWALL / CEILING |
| SIDEWALL: FRP |
| CEILING: FRP |
| REAR WALL: FRP |
| COVE COLORED FLOORING ON SIDEWALL TO SEAT TRACK |
| FLOORING - WHITE NOSING IS STANDARD |
| GERFLOR SIRIUS NT #6727 ANTHRACITE (GREY) I.L.O. GRAPHITE |
| YELLOW STEP NOSING - PER STEP |
| 5/8" MARINETECH PLYWOOD FLOOR |
| RAISED FLOOR W/EXTRA STEP UP BEHIND DRIVER |
| FUEL TANK ACCESS PLATE IN FLOOR |
| EDGE SEAL & UNDERCOAT PLYWOOD BEFORE INSTALLATION |
| CHASSIS |
| FRONT AND REAR MUDFLAPS |
| HEAVY DUTY ANTI-SLIP ALUMINUM RUNNING BOARD ON DRIVER'S SIDE (LARGE) |
| MOR-RYDE RS SUSPENSION |
| EXTERIOR MIRROR SET, REMOTE/HEATED FORD |
| STAINLESS STEEL WHEEL INSERTS, SET OF 4 |
| VALVE STEM EXTENDER INNER DUAL REAR WHEEL, PAIR |
| FRONT END ALIGNMENT W/ CAMBER & CASTER - SEND DOCUMENTATION IN BUS |
| WHITE STAINLESS STEEL REAR BUMPER |
| AIR-CONDITIONING |
| ACC (VALEO) CLIMATE CONTROL, A/C SYSTEMS, 90K, SKIRT MOUNT, IN-WALL EVAP |
| HEATER |
| ADDED HEAT TO ACC EVAPORATOR, INCLUDES BOOSTER PUMP & ELECTRONIC WATER VALVES |
| MISCELLANEOUS HEATER |
| INSULATED HEATER HOSES |
| ELECTRICAL |
| LOCATE SWITCH PANEL ON ENGINE COVER - NOT OVERHEAD |
| DOOR AJAR WARNING ON ENTRY DOOR - BUZZER AND LIGHT IN DRIVER AREA |
| DOOR AJAR WARNING ON WHEELCHAIR DOOR - BUZZER AND LIGHT IN DRIVER AREA |
| DOOR AJAR WARNING ON REAR DOOR - BUZZER AND LIGHT IN DRIVER AREA |
| WINDOW AJAR ALARM BUZZER ON ALL EGRESS WINDOWS & LIGHT IN DRIVER AREA |
| STAINLESS STEEL BATTERY BOX & TRAY, 304 REQUIRED |
| LOCATE (2) BATTERIES TO TRAY |

| |
|---|
| ROTARY DISCONNECT SWITCH |
| CIRCUIT BREAKERS IN LIEU OF FUSES |
| LIGHT IN ENGINE AREA |
| LAMINATED WIRING SCHEMATIC ***AS BUILT*** ON ELECTRICAL PANEL DOOR |
| WIRING DIAGRAM "AS BUILT" ON USB FLASH DRIVE |
| 12V PREWIRE, IGN HOT & GROUND TO RIGHT SIDE OF DASH AREA |
| DESTINATION SIGNS/I.D. SIGN/FRONT VIEW WINDOW |
| INSTALL FRONT DESTINATION SIGN WINDOW AND OVERHEAD ACCESS DOOR FOR CUSTOMER INSTALLED SIGN |
| INSTALL SIDE DESTINATION SIGN WINDOW W/STRUCTURE FOR CUSTOMER INSTALLED SIGN |
| 12V PREWIRE POWER & GROUND - IGNITION HOT FOR FRONT AND SIDE DESTINATION SIGNS |
| FAREBOXES |
| ADD STANCHION FOR FAREBOX - SHIPPED LOOSE |
| 12V PREWIRE- POWER & GROUND- IGNITION HOT FOR FAREBOX |
| EXTERIOR LIGHTS |
| SURFACE MOUNT LED ENTRY DOOR EXTERIOR LIGHT |
| 2 LED 7" LTS-REAR FLASH, AMBER, SWITCH IN PANEL |
| 2 LED AMBER 7" LIGHTS ON FRONT FLASH WHEN |
| LED REAR CENTER MOUNT BRAKE LIGHT, RECTANGULAR |
| LED MID-SHIP TURN / MARKER LIGHTS |
| INDEPENDENT RED BRAKE & AMBER TURN SIGNAL LIGHTS |
| INDEPENDENT BRAKES: (2) ADDITIONAL 4" ROUND LED BRAKE LIGHTS INSTALLED ABOVE OTHER STOP/ TAIL, TURN, & BACK-UP LIGHTS ON REAR CAP |
| INTERIOR LIGHTS |
| ADDITIONAL INTERIOR LED DOME LAMP, QTY 2 |
| DOOR ACTIVATED INTERIOR LIGHTS |
| LED STRIP LIGHT ON STEP BEHIND DRIVER, RASIED FLOOR INDICATOR |
| AUDIO / VISUAL |
| FORD E-SERIES OEM AM/FM/BT RADIO ORDERED ON CHASSIS |
| 4 SPEAKERS WITH WIRE TO CHASSIS OEM RADIO |
| GROUND PLANE FOR 2-WAY RADIO, PULL CHORD, CONDUIT TERMINATES B PILLAR FLOOR |
| DOORS / HATCH / WINDOWS |
| PASSENGER DOOR, ELECTRIC |
| PASSENGER DOOR, 36" ROUGH OPENING (STANDARD) |
| EXTERIOR PASSENGER ENTRANCE DOOR KEY |
| REAR DOOR, (1) WINDOW - STANDARD LEFT HAND HINGE |
| ADDITIONAL WINDOW FOR REAR DOOR |
| TWIN WINDOWS EITHER SIDE OF REAR DOOR |
| PARATRANSIT OPTIONS |
| DOUBLE W/C DOORS W/ WINDOWS, LED INTERIOR LIGHT, LEAF SPRING, LED EXTERIOR LIGHTING, FRONT LIFT |
| BRAUN WHEELCHAIR LIFT |
| BRAUN CENTURY NCL 1000 3454HB-2 1000# (34"X54") |
| SEAT BELT ON BRAUN LIFT - INSTALLED |
| LIFT FAST IDLE WITH 403 INTERLOCK |
| INTERMOTIVE GATEWAY 508-F FORD E OR 517-F TRANSIT FAST IDLE WITH LIFT INTERLOCK |
| Q STRAINT W.C. SECUREMENT KITS, ACCESSORIES |
| Q10032 - 4 QRT 360 RETRACTOR TIE DOWN L TRACK & Q5-6415-RET-L L-TRACK MOUNTED RETRACTABLE SHOULDER BELT W/ Q8-6325 LAP BELT |
| WHEELCHAIR RESTRAINTS MEET WC18 & WC19 FEDERAL RECOMMENDATIONS |
| Q STRAINT BELT STORAGE POUCH, QTY 2 |

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|---|
| Q STRAIT BELT CUTTER (SHIP LOOSE) |
| Q STRAIT Q8-6324 24" LAP BELT EXTENSION |
| MISCELLANEOUS WHEELCHAIR ACCESSORIES |
| L-TRACK FOR WHEELCHAIR TIEDOWNS, INSTALLED FRONT-TO-BACK, TO ACCOMMODATE LARGER PRIORITY SEATING SIGN **REQUIRED FOR ADA COMPLIANCE** |
| WHEELCHAIR DECAL (INTERNATIONAL SYMBOL OF ACCESSIBILITY), EACH |
| FULL LENGTH L-TRACK ON FLOOR IN WC AREA. SEE FLOOR PLAN |
| FULL LENGTH L-TRACK ON SIDEWALL (AS NEEDED) |
| WC AREA 30" X 52". SEE FLOOR PLAN |
| ONLY 2 QRT 360 TIE DOWN SETS ORDERED, CUSTOMER TO PROVIDE ADDITIONAL IF REQUIRED |
| SAFETY OPTIONS |
| 5 LB FIRE EXTINGUISHER |
| 25 UNIT FIRST AID KIT |
| EMERGENCY TRIANGLE KIT |
| BACK-UP ALARM, SAE TYPE C 97 DB(A) |
| BACK-UP CAMERA SYSTEM, ROSCO BRAND, W/ 7" REARVIEW MONITOR / MIRROR COMBO |
| ROSCO AUDIBLE BACKUP WARNING SYSTEM, FLUSH MOUNT IN STEEL BUMPER |
| INTERIOR CONVEX MIRROR 6"X9" |
| RED LIGHT OVER EMERGENCY EXIT, EGRESS WINDOWS, AND REAR DOOR, QTY 3 |
| YELLOW "STANDEE" LINE |
| DECAL - PLEASE STAND BEHIND WHITE/YELLOW LINE WHEN VEHICLE IS IN MOTION |
| DECAL VEHICLE HEIGHT STICKER |
| GRAB RAIL / STANCHION / PANELS |
| CEILING GRAB RAIL - INSTALL ON STREET SIDE |
| FORMED ENDS ON CEILING GRAB RAILS |
| YELLOW POWDER COAT CEILING GRAB RAIL |
| LEFT HAND ENTRY VERTICAL GRAB RAIL - 1 1/4" |
| RIGHT HAND ENTRY VERTICAL GRAB RAIL - 1 1/4" |
| 1 1/4" DUAL ENTRY GRAB RAILS PARALLEL TO ENTRANCE STEPS (BOTH SIDES) |
| YELLOW POWDER COAT ENTRY GRAB RAILS, QTY 3 |
| STANCHION AND MODESTY PANEL AT ENTRY DOOR |
| STANCHION AND MODESTY PANEL BEHIND DRIVER |
| YELLOW POWDER COAT STANCHION/PANEL ASSEMBLIES |
| ADDL STANCHION AND MODESTY PANEL BEHIND LIFT |
| ADD TINTED PLEXIGLASS UPPER PANEL AT DRIVER |
| PLEXIGLASS MUST BE WITHIN 6" OF THE CEILING |
| SEATING - DRIVER |
| FREEDMAN SHIELD, WITH RECLINER, RIGHT HAND ARMREST, FOUR (4) POSITION LUMBAR, MESH POCKET |
| ADNIK 6 WAY DRIVER SEAT POWER BASE |
| INSTALL VINYL SKIRT ON POWER SEAT BASE |
| FREEDMAN SHIELD DRIVER SEAT FABRICS |
| DRIVER SEAT COVER - LEVEL 4, #004 WAVE FREESTYLE BLUE |
| SEATING - PASSENGER |
| FOLDAWAY SEAT - MID-HIGH NOTCH BACK DOUBLE AM, QTY 7 |
| PASSENGER SEAT FABRICS |
| SEAT COVER - LEVEL 4, #004 WAVE FREESTYLE BLUE, QTY 14 |
| SEAT OPTIONS |
| ANTI-VANDAL GRAB HANDLE, YELLOW, ON AISLE, QTY 7 |
| BLACK US ARMREST, ON AISLE, QTY 7 |
| SEAT BELTS |
| SEAT BELT, FREEDMAN USR RETRACTABLE, QTY 14 |
| SEAT BELT EXTENSION, 12" (P/N 56410) FOR USR SEATBELTS |

| MISCELLANEOUS |
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| THE ITEMS BELOW WILL BE ADDED POST PRODUCTION AT SCHETKY'S PORTLAND SHOP |
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|---------------------------|
| TRIANGLE YIELD SIGN-AMBER |
|---------------------------|

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| 5-CAMERA SEON SYSTEM |
|----------------------|

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| HELM SERVICE MANUAL - FORD |
|----------------------------|

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|---------------------------------|
| OEM DRIVER'S SEAT BELT EXTENDER |
|---------------------------------|

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|-----------------|
| WIDE ANGLE LENS |
|-----------------|

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|---|
| PULL CORD STOP REQUEST SYSTEM W/TRANSITION STOP REQUEST SIGN & BUZZER-AUDITORY & VISUAL |
|---|

| |
|-------------|
| 3 BIKE RACK |
|-------------|

| |
|------------|
| FLASHLIGHT |
|------------|

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|-------------------|
| 4 - SCOOTER LOOPS |
|-------------------|

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|------------------------------|
| SKIRT MOUNTED DOCKING LIGHTS |
|------------------------------|

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| 2 - USR SEAT BELT EXTENDERS |
|-----------------------------|

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|--------------------|
| 6 - RAILING STRAPS |
|--------------------|



U.S. Department
of Transportation
**Federal Transit
Administration**

1200 New Jersey Avenue SE
Washington, D.C. 20590

May 25, 2022

Larry Hall
Director of Engineering
Forest River Bus
2367 Century Drive
Goshen IN 46528

Dear: Mr. Hall:

This is in response to your letter dated July 20, 2021, in which you requested assistance from the Federal Transit Administration (FTA) concerning the applicability of the Bus Testing Regulation (49 CFR Part 665) to the Eldorado Advantage and Starcraft Allstar bus models manufactured by Forrest River. Your letter states that:

- Forest River Bus has acquired Eldorado out of Salina, Kansas and has consolidated it with Starcraft Bus. Forrest River Bus is asking that FTA recognize the “Family Group” to minimize the testing related to its product line.
- Both bus models are built on mass produced chassis, the bus bodies are mounted to the chassis using the same process and materials. Both brands are built with the same gage of steel.
- The key differences between these bus models are:
 - a. The front and rear fiberglass caps body lines differences are only cosmetic.
 - b. Both Eldorado and Starcraft are spray primed steel cage.
 - c. Both Eldorado and the Starcraft bus have hand hugged exterior skin.
- Forest River provided detailed frame prints to illustrate the similarities in the construction of the frame, as well as a model comparison chart.
- Forest River referenced Bus Testing Report number PTI-BT-R0518 as the applicable baseline.

You have asked FTA for a determination of the Bus Testing requirements for the Eldorado Advantage bus model using the full test of the Starcraft Allstar (LTI-BT-R0518) as a baseline. You included drawings to illustrate the similarities/differences in the construction of the frames and a model comparison chart to support your request.

FTA has reviewed your request and accompanying documentation and has determined that **no additional testing will be required for the Eldorado Advantage bus model because FTA expects the full test of the Starcraft Allstar (LTI-BT-R0518) to provide substantially similar data.** This determination is based on the following conclusions drawn from information submitted by Forest River or contained in our files:

- The Starcraft Allstar has completed testing in the 7-year, 200,000-mile service life category at Altoona (LTI-BT-R0518). Consequently, variants of the Allstar, such as the Eldorado Advantage,

are eligible for Partial Testing procedures; only those tests in which we would expect to obtain significantly different data would need to be repeated.

- The Eldorado Advantage model features the same epoxy spray coating process in its construction as the epoxy spray coating on the Starcraft Allstar model. Corrosion is not directly tested during FTA Bus Testing, nor would we expect it to be a factor in the overall durability of a bus model during the relatively short testing duration at LTI. Therefore, significantly different test data would not be expected in the Structural Integrity and Reliability tests.
- The Starcraft Allstar and Eldorado Advantage have fiberglass endcaps with minor cosmetic differences in the fiberglass end cap designs. FTA has typically treated cosmetic shape changes to fiberglass end caps as minor changes and significantly different data would not be expected in the Structural Integrity and Reliability tests.
- The exterior skin panels lamination process of the Eldorado Advantage and Starcraft Allstar bus models are both “hand hugged.” We would not expect to obtain significantly different results in the Structural Integrity and Reliability tests.
- The Eldorado Advantage and Starcraft Allstar have similar structures. The Starcraft Allstar has a slightly different tube extrusion profile in the wall structure and 3-inch less interior width compared with the Eldorado Advantage. The different profile and width is not considered a major change to the structure and would not be expected to produce significantly different results in the Structural Integrity and Reliability tests.
- The Advantage and Allstar bus models are both built on the Ford E-350 and E-450 cutaway chassis. They are all similar or identical in size shape and weight and as such would not be expected to produce significantly different results in the Maintainability, Safety, Performance, Fuel Economy, Noise, and Emissions tests.

This determination is based on the changes detailed in your letter or mentioned above. If Forest River makes any other changes to the Eldorado Advantage and Starcraft Allstar, additional testing may be required. If you require any further assistance with this or other matters concerning Bus Testing, I encourage you to consult the resources provided at www.transit.dot.gov/research-innovation/bus-testing. If you still have questions after checking this website, please contact me.

Sincerely,



Marcel Belanger
Bus Testing Program Manager
Office of Infrastructure, Safety, and
Asset Innovation, TRI-20
marcel.belanger@dot.gov
202-366-0725

Cc: Mohammed Yousuf, Director, FTA Office of Infrastructure, Safety and Asset Innovation

Attachments: July 20, 2021 letter from Larry Hall with structural drawings

O:\TRI\BUSTEST\Forest River\Forest River 073021 - Allstar-Advantage brand comparison.docx



July 20, 2021

Marcel **Belanger**
Bus Testing Program Manager
Federal Transit Administration
Office of Mobility Innovation, TRI-12
Room E43-471
1200 New Jersey Ave. SE
East Building, 4th Floor
Washington, DC 20590

Re: Brand Comparison of Forest River Commercial Bus Group: Allstar / Advantage

Dear Mr. Belanger:

Forest River Bus has acquired Eldorado out of Salina, Kansas and has consolidated it with Starcraft Bus. We are asking that FTA recognize the "Family Group" to minimize the testing load of our product line "Altoona Testing".

Both build on mass produced chassis, the bus body is mounted to the chassis using the same process and materials. Both brands are built with the same gage of steel.

The difference between models:

- a- Front and rear fiberglass caps body lines only cosmetic.
- b- Both Eldorado and Starcraft are spray primed steel cage.
- c- Both Eldorado and Starcraft are hand hugged exterior skin.

Attached to this e-mail are detailed frame prints to illustrate the similarities in the construction of the frame, as well as a model comparison chart. Please refer to Test number PTI-BT-R0518.

If FTA decides that additional testing is required, please indicate which test is needed.

Sincerely,



Larry Hall
Director of Engineering
Starcraft Bus
A Division of Forest River, Inc.

STURAA TEST

7 YEAR

200,000 MILE BUS

from

**STARCRAFT BUS,
A DIVISION of FOREST RIVER INC.**

MODEL ALLSTAR -25

FEBRUARY 2006

PTI-BT-R0518

PENNSTATE



The Pennsylvania Transportation Institute

201 Research Office Building (814) 865-1891
The Pennsylvania State University
University Park, PA 16802

Bus Testing and Research Center

2237 Old Route 220 N. (814) 695-3404
Duncansville, PA 16635

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EXECUTIVE SUMMARY

Starcraft Bus, a Division of Forest River Inc. submitted a model Allstar-25, gasoline-powered 17 seat (including the driver) 25-foot bus, for a 7 yr/200,000 mile STURAA test. The odometer reading at the time of delivery was 529.0 miles. Testing started on December 6, 2005 and was completed on February 14, 2006. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of the test program is the Structural Durability Test, which also provides the information for the Maintainability and Reliability results. The Structural Durability Test was started on December 14, 2005 and was completed on February 1, 2006.

The interior of the bus is configured with seating for 17 passengers including the driver + 1 wheelchair position. Free floor space will accommodate 10 standing passengers resulting in a potential capacity of 27 persons + 1 wheelchair position. At 150 lbs per person 600 lbs per wheelchair position, this load results in a measured gross vehicle weight of 13,950 lbs. The first segment of the Structural Durability Test was performed with the bus loaded to a GVW of 13,950 lbs. The middle segment was performed at a seated load weight of 12,500 lbs and the final segment was performed at a curb weight of 9,510 lbs. Durability driving resulted in no unscheduled maintenance and failures.

Accessibility, in general, was adequate, components covered in Section 1.3 (Repair and/or Replacement of Selected Subsystems) along with all other components encountered during testing, were found to be readily accessible and no restrictions were noted.

The Reliability section compiles failures that occurred during Structural Durability Testing. Breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. The problems are also listed by class as defined in Section 2. The test bus encountered no failures during the Structural Durability Test.

The Safety Test, (a double-lane change, obstacle avoidance test) was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph. The performance of the bus is illustrated by a speed vs. time plot. Acceleration and gradeability test data are provided in Section 4, Performance. The average time to obtain 50 mph was 13.75 seconds.

The Shakedown Test produced a maximum final loaded deflection of 0.224 inches with a permanent set ranging between -0.003 to 0.005 inches under a distributed static load of 10,725 lbs. The Distortion Test was completed with all subsystems, doors and escape mechanisms operating properly. Water leakage observed during the test at the top of the rear door between the door and the door frame.

The test bus was not equipped with any type of tow eyes or tow hooks, therefore, the Static Towing Test was not performed. The Dynamic Towing Test was performed by means of a front-lift tow. The towing interface was accomplished using a hydraulic under-lift wrecker. The bus was towed without incident and no damage resulted from the test. The manufacturer does not recommend towing the bus from the rear; therefore, a rear test was not performed. The Jacking and Hoisting Tests were also performed without incident. The bus was found to be stable on the jack stands, and the minimum jacking clearance observed with a tire deflated was 8.8 inches.

A Fuel Economy Test was run on simulated central business district, arterial, and commuter courses. The results were 6.39 mpg, 6.90 mpg, and 10.17 mpg respectively; with an overall average of 7.32 mpg.

A series of Interior and Exterior Noise Tests was performed. These data are listed in Section 7.1 and 7.2 respectively.

STANDARD WARRANTIES

The following information must be filled out and provided for each Make/Model/Mfg offered under this Price Agreement.

| | |
|------------------------------------|--|
| Bus Vendor | <u>Schetky Northwest Bus Sales, Inc.</u> |
| Bus Manufacturer | <u>EIDorado National</u> |
| Bus Model | <u>Advantage 240 - E450</u> |
| Useful Life Category / Subcategory | <u>Category D/High Floor</u> |

| Warranty | Miles | Years | Source |
|---|----------------------------------|---|----------------------|
| Body Structure | 36,000 | 3 | OEM |
| Chassis | 36,000 | 3 | OEM (FORD) |
| Engine | 60,000 | 5 | OEM (FORD) |
| Transmission | 60,000 | 5 | OEM (FORD) |
| Air conditioner | UNLIMITED | 3 | OEM (Valeo) |
| Lift/Ramp | 3,000 CYCLES or 10,000 CYCLES | 1 (STANDARD) OR 3 YEARS IF REGISTERED WITHIN 20 DAYS | OEM (BRAUN) |
| Seating | UNLIMITED | METAL COMPONENTS- 5 PLASTIC COMPONENTS - 3 MOVING COMPONENTS - 3 GAS SHOCK COMPONENTS - 1 FOAM UPHOLSTERED COMPONENTS - 2 | OEM (FREEDMAN) |
| Passenger Heater | UNLIMITED | 2 | OEM |
| Tires | 40,000 | 6 | OEM (HANKOOK) |
| Starter | 36,000 | 3 | OEM (FORD) |
| Door Systems - Passenger and Emergency | UNLIMITED | 1 | OEM (A&M) |
| Alternator | 36,000 | 3 | OEM (FORD) |
| Seon Surveillance System | N/A | 3 | SEON |
| Yield Sign | UNLIMITED | 3 | DataLED Technologies |

** ALL WARRANTIES PROVIDED ARE SUBJECT TO MANUFACTURERS' TERMS AND CONDITIONS.