



COMMONWEALTH of VIRGINIA

Jennifer B. DeBruhl
Director

DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION
600 EAST MAIN STREET, SUITE 2102
RICHMOND, VA 23219-2416

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FAX (804) 225-3752
Virginia Relay Center
800-828-1120 (TDD)

PRE -AWARD PURCHASER'S REQUIREMENTS CERTIFICATION

As required by Title 49 of the CFR. Part 663 - Subpart B, Department of Rail and Public Transportation (the recipient) certifies that the buses to be purchased, 12-Year Heavy Duty Low-Floor Transit Bus (description of buses) from Motor Coach Industries (New Flyer). (the manufacturer), are the same product described in the recipient's solicitation specification and that the proposed manufacturer is a responsible manufacturer with the capability to produce a bus that meets the specifications.

Date: 10/16/2022

Signature:

A handwritten signature in blue ink, appearing to read "Avery Daugherty".

Avery Daugherty, Statewide Program Manager

MCI



**Virginia Department of Rail and Public
Transportation**

IFB 6447

IFB

Motor Coach Industries

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Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 1, Letter of Transmittal

Solicitation Requirements:

N/A

MCI Response:

Please see attached New Flyer's [Letter of Transmittal](#) to Virginia Department of Rail and Public Transportation.

Please indicate your acceptance by providing a Purchase Order to New Flyer, attention:

Adrian Graca, Business Segment Director, Urban Transit Fleets

204.470.5521

Adrian_Graca@newflyer.com





October 11, 2022

Pamela Copeland
Commonwealth of Virginia
1111 East Broad Street
Richmond Virginia 23219

Subject: IFB # 6447 Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty, 12 Year (29 ft. – 60 ft sizes)

Dear Pamela,

MCI is honored to have the opportunity to submit our response to the Commonwealth of Virginia for proposal IFB #6447. This proposal is for the manufacture and delivery of Commuter Coach Buses in various models.

We would like to highlight key elements of our proposal:

Warranty: MCI exceeds the industry standard warranties in many areas such as our 5 year / 300,000 miles axle warranty (standard warranty is 2 years) and our 3 years / 150,000 miles multiplex warranty (standard competitor warranty is 1 year / 50,000 miles). Please see our Warranty Proposal for more information. Please note that warranty is included in the coach price.

Training: MCI Training is an organization within the MCI Customer Services group, a division of New Flyer Industries. As a part of the leading manufacturer of heavy-duty coaches in the United States and Canada, we have access to top design, engineering, propulsion technology, and electrical systems professionals. This allows us to offer the service and expertise to maximize the lifetime value of your fleet. Please see our Training Proposal for more information. Please note that optional training is not included in the coach price.

Publications: The MCI Publications team combines extensive, hands-on technical experience with exceptional writing, illustrating, and publishing skills to create the industry's benchmark in maintenance manuals. They supply accurate information in a timely manner, assisting the customer in the performance of proper bus maintenance, which adds to the overall reliability and lifetime value of each MCI coach on the road. Please see our Publications Proposal for more information. Please note that publications are included in the coach price.

Tooling and Diagnostics: Please see our Tools and Diagnostics Proposal for more information. Please note that tooling and diagnostics are not included in the coach price.

This project allows MCI the important opportunity to continue our relationship with the Commonwealth of Virginia. It also gives us the opportunity again to delivery some of the most advanced vehicles available in North America. We thank you for your continued interest in MCI products and look forward to working with you again in the near future.

Thank you for the opportunity to submit this proposal. We would be pleased to have the opportunity to meet and present our proposal to your organization to describe the value we offer and how we can address and support the Commonwealth of Virginia's goals and objectives.

Sincerely,

MOTOR COACH INDUSTRIES

A handwritten signature in black ink that reads "Barry Karlenzig". The signature is written in a cursive style and is positioned above the printed name and title.

Barry Karlenzig

Technical Sales Manager

204.590.8394

Barry_Karlenzig@newflyer.com

CC: Louis Quaglia – Regional Sales Manager
Adrian Graca – Business Segment Director – Urban Transit Fleets
Stephanie Laubenstein – Director, Sales & Business Development

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Tab 2, MCI Qualifications

Solicitation Requirements:

N/A

MCI Response:

Please see attached MCI's [Price Summary](#) for the following models:

- D45CRT
- D45CRT Le
- D4520
- D45CRT CHARGE
- D45CRT Le CHARGE

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
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2A – NFI Corporate Overview

Solicitation Requirements:

N/A

MCI Response:

Passengers around the world are seeking modern transportation options they can feel good about as traffic congestion, costs and air quality continue to saddle today's growing cities. That is why New Flyer is engineering progressive mobility solutions through buses, technology, and infrastructure that serves our communities and makes our cities smarter, while safeguarding precious resources. In doing so, we are creating jobs, fortifying North America's infrastructure, and modernizing the industry and the world around us.

North America's Transit Bus Leader

New Flyer is North America's heavy-duty transit bus leader and offers the most advanced product line under the Xcelsior® and Xcelsior CHARGE® brands. It also offers infrastructure development through NFI Infrastructure Solutions™, a service dedicated to providing safe, sustainable, and reliable charging and mobility solutions. New Flyer actively supports over 35,000 heavy-duty transit buses (New Flyer, NABI, and Orion) currently in service, of which 8,600 are powered by electric motors and battery propulsion and 1,900 are zero-emission. Since 2000, New Flyer has consistently maintained its leading market share, and its customers include all 25 of the 25 largest transit agencies in the United States and Canada, and approximately 500 agencies operate our buses.

Further information is available at www.newflyer.com.

Our Products

New Flyer has over 50 years of experience in manufacturing zero-emission buses (ZEBs), with more electric buses on the road in North America than any other manufacturer. We are also the only North American manufacturer offering all three types of zero-emission transit bus (battery-electric, fuel cell-electric, and trolley-electric). New Flyer is committed to developing smart mobility solutions and working with public and private stakeholders in transportation to support building Smart Cities and communities across North America. New Flyer was the first bus manufacturer in the world to sign on to the Shared Mobility Principles for Livable Cities, and we are engineering progressive transit technology to serve your communities and make your cities smarter, while safeguarding your precious resources.

History of Innovation

New Flyer was founded in 1930 and is now the largest transit bus manufacturer in North America, with fabrication, manufacturing, and service centers in the United States and Canada. We continue building on our 90+ year legacy of innovation to deliver innovative mobility solutions and technology that meets the demands of communities today, and into the future. Historic highlights of New Flyer's transit leadership and technology advancement are below.

- 1930: Founded in Winnipeg, Manitoba
- 1968: First electric trolley
- 1988: First diesel-hybrid bus
- 1990: First low-floor bus in North America
- 2008: First LED headlights in the industry
- 2010: Introduced industry-leading Xcelsior® bus platform
- 2012: Introduced first battery-electric bus

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- 2017: Introduced next-generation, battery-electric bus (Xcelsior CHARGE™)
- 2017: Opened the Vehicle Innovation Center in Anniston, Alabama
- 2018: Delivered 10,000th Xcelsior®
- 2019: Launched Connect 360™, New Flyer Infrastructure Solutions™ (now NFI Infrastructure Solutions™) and New Flyer's AV program
- 2020: Launched National Community Benefit Framework and Anniston Workforce Development Program
- 2020: Announced first automated heavy-duty transit bus deployment in North America (with Connecticut Department of Transportation)
- 2021: Unveiled the Xcelsior AV™, North America's first automated transit bus
- 2021: Unveiled the Xcelsior CHARGE NG™, New Flyer's next-generation, zero-emission, battery-electric bus

Locations

New Flyer is driven by a team over 3,300 people strong across more than ten facilities in North America. New Flyer's manufacturing is supported by four major manufacturing facilities located in Anniston, AL; Crookston, MN; St. Cloud, MN; and Winnipeg, MB. In 2018, New Flyer announced that all four facilities became capable of manufacturing zero-emission, battery-electric buses. Its facility in Anniston, Alabama, is also home to NFI's Vehicle Innovation Center (VIC), opened late 2017 and dedicated to the exploration and advancement of bus and coach technology connecting people to places. It remains the first and only innovation lab of its kind in North America.

Quality Assurance and Operational Excellence

New Flyer initiated Operational Excellence in its manufacturing processes in 2008, with the vision to provide and maintain a safe, clean, and efficient working environment for all employees while delivering exceptional first-time quality and defined processes. New Flyer utilizes lean manufacturing and 5S techniques to ensure its team has the best tools and stations to successfully complete the job, and strongly believes in quality at the source. New Flyer is proud to have been the first bus manufacturer to achieve all three certifications for its manufacturing processes: ISO 9001 (quality management), ISO 14001 (environmental management), and OHSAS 18001 (occupational health and safety management).

Built to Rely On®

New Flyer continues building on its nearly 90-year legacy of innovation to deliver advanced transit solutions that meet the complex demands of communities today and into the future. In pursuit of building efficient, sustainable, and connected multi-modal solutions across North America, it is our mission to keep advancing. Whether it's our people, our facilities, or our products, we strive to evolve ourselves to be your partner for life and support you for the life of your vehicles. Further details are available at newflyer.com.

NFI Group

New Flyer operates as New Flyer of America Inc. and New Flyer Industries Canada ULC, subsidiaries of NFI Group Inc. ("NFI"). With 7,500 team members in ten countries, NFI is a leading global bus manufacturer of mass mobility solutions under the brands New Flyer® (heavy-duty transit buses), MCI® (motor coaches), Alexander Dennis Limited (single and double-deck buses), Plaxton (motor coaches), ARBOC® (low-floor cutaway and medium-duty buses), and NFI Parts®. NFI currently offers the widest range of sustainable drive systems available, including zero-emission electric (trolley, battery, and fuel cell), natural gas, electric hybrid, and clean diesel. In total, NFI supports its installed base of over 105,000 buses and coaches around the world. NFI common shares are traded on the Toronto Stock Exchange under the symbol NFI.

News and information is available at www.nfigroup.com, www.newflyer.com, www.mcicoach.com, www.arbocsv.com, www.alexander-dennis.com, and www.nfi.parts.



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2B – Financial Statements

Solicitation Requirements:

Contractor shall provide electronic reports in Microsoft Excel format on a quarterly basis showing total invoiced sales data, which means all invoices issued within the reporting period. Reports shall be provided no later the 15th of the next month following the end of the calendar quarter, reporting total invoiced sales and return transactions that took place in the immediately preceding quarter. Reports shall be sent to the DPS Contracting Officer.

MCI Response:

Motor Coach Industries, Inc. is a wholly owned subsidiary of NFI Group Inc. (NFI), a leading independent global bus manufacturer of mass mobility solutions.

With over 9,000 team members operating from more than 50 facilities across ten countries, NFI is a leading independent global bus manufacturer providing a comprehensive suite of mass transportation solutions under brands: New Flyer® (heavy-duty transit buses), Alexander Dennis Limited (single and double deck buses), Plaxton (motor coaches), MCI® (motor coaches), ARBOC® (low-floor cutaway and medium-duty buses), and NFI Parts™. NFI buses and motor coaches incorporate the widest range of drive systems available including clean diesel, natural gas, diesel-electric hybrid, and zero-emission electric (trolley, battery, and fuel cell). In total, NFI now supports over 105,000 buses and coaches currently in service around the world.

NFI Group is a publicly traded corporation, with common shares traded on the Toronto Stock Exchange under the symbol NFI.

For the fiscal year ended December 27, 2020, NFI Group generated revenue and Adjusted EBITDA of approximately \$2.4 billion USD and \$158 million USD, respectively. In addition, our backlog remains solid at USD \$4.5 billion of firm and option orders.

Consolidated Audited Financial Statements for the past four (4) years may be accessed at:

<https://www.nfigroup.com/financial-information/quarterly-annual-results>



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2C – Vendor Data Sheet

Solicitation Requirements:

Attachment C: Vendor Data Sheet

MCI Response:


Please find [Attachment C, Vendor Data Sheet](#), enclosed for your evaluation.

VENDOR DATA SHEET

The following information is required as part of the Bidder's response to this solicitation. Failure to complete and provide this sheet may result in bid being declared nonresponsive. (In the case of a Combined Two-Step IFB, it may cause the Technical Proposal to be determined to be not acceptable.)

1. Qualification: The Bidder must have the capability and capacity in all respects to satisfy fully all of the contractual requirements.
2. Bidder's Primary Contact:
Name: Stephanie Laubenstein Phone: 204.391.1788 Email: Stephanie_Laubenstein@newflyer.com
3. Years in Business: Indicate the length of time Bidder has been in business providing this type of good or service:
81 Years 8 Months
4. eVA Vendor ID or DUNS Number: DUNS Number 005943873
5. Indicate below a listing of at least four (4) current or recent accounts, either commercial or governmental, that the Bidder is servicing, has serviced, or has provided similar goods/services. Include the length of service and the name, address, and telephone number of the point of contact.
 - A. Company: Potomac and Rappahannock Transportation Commission Contact: Perrin Palistrant (Director of Maintenance)
Phone: (703) 580-6162 Email: _____
ppalistrant@omniride.com
Dates of Service: January 2021 \$ Value: -
 - B. Company: Georgia Regional Transportation Authority Contact: Darryl Howell (Transit Program Manager)
Phone: (404) 893-3024 Email: DHowell@ATLtransit.ga.gov
Dates of Service: August 2022 \$ Value: -
 - C. Company: Antelope Valley Transit Authority Contact: Martin Tompkins (CEO)
Phone: (661) 755-9629 Email: mtompkins@avta.com
Dates of Service: January 2022 \$ Value: -
 - D. Company: Nashville Metropolitan Transit Authority Contact: Carl Rokus (Director of Maintenance)
Phone: (615) 880-3272 Email: carl.rokus@nashville.gov
Dates of Service: January 2022 \$ Value: -

I certify the accuracy of this information.

Signed:  Title: Director, Sales and Business Development Date: 10 Oct 22

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2D – Small Business Subcontracting Plan

Solicitation Requirements:

Attachment D

A. Complete the subcontractor plan as specified in the electronic response; or

B. Download the “paper response” form, complete the subcontractor plan section, and submit as an attachment with the bid response.

MCI Response:

Not applicable to MCI.

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2E – State Corporation Commission Form

Solicitation Requirements:

Attachment E: State Corporation Commission Form

MCI Response:

Please find **Attachment E, State Corporation Commission Form**, enclosed for your evaluation.

STATE CORPORATION COMMISSION FORM

The following information is required as part of the Bidder's response to this solicitation. Failure to complete and provide this form may result in bid being declared nonresponsive. (In the case of a Combined Two-Step IFB, it may cause the Technical Proposal to be determined to be not acceptable.)

Virginia State Corporation Commission ("SCC") registration information: The Bidder:

is a corporation or other business entity with the following SCC identification number:

-OR-

is not a corporation, limited liability company, limited partnership, registered limited liability partnership, or business trust

-OR-

is an out-of-state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting any employees or agents in Virginia who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the Bidder in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contracts by which such goods were sold and shipped into Virginia from Bidder's out-of-state location)

-OR-

is an out-of-state business entity that is including with this bid an opinion of legal counsel which accurately and completely discloses the undersigned Bidder's current contacts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of § 13.1-757 or other similar provisions in Titles 13.1 or 50 of the Code of Virginia.

****NOTE**** >> Check the following box if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact business in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number after the due date for bids (the Commonwealth reserves the right to determine in its sole discretion whether to allow such waiver):

Signature: Stephanie Laubenstein Date: 10 Oct 22

Name: Stephanie Laubenstein

Print

Title: Director, Sales and Business Development

Name of Firm: Motor Coach Industries, Inc.

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2F – NDAA 2020 Section 7613 Compliance Form

Solicitation Requirements:

Attachment F: NDAA 2020 Section 7613 Compliance Form

MCI Response:

Please find [Attachment F, NDAA 2020 Section 7613 Compliance Form](#), enclosed for your evaluation.

NDA 2020 Section 7613 Compliance Form

Regarding compliance with Section 7613 of the National Defense Authorization Act for Fiscal Year 2020 (NDA 2020), subsection 49 U.S.C. § 5323 (u), the undersigned Bidder:

IS COMPLIANT with the provisions of this subsection and certifies the manufacturer is not “owned or controlled by, is a subsidiary of, or is otherwise related legally or financially to a corporation based in” certain foreign countries covered by the restrictions outlined.

IS NOT COMPLIANT with the provisions of this subsection and certifies the manufacturer is “owned or controlled by, is a subsidiary of, or is otherwise related legally or financially to a corporation based in” certain foreign countries covered by the restrictions outlined.

For more information regarding the restriction criteria and the provisions of subsection 49 U.S.C. § 5323 (u), visit the FTA Frequently-Asked-Questions for Section 7613 at the following link: <https://www.transit.dot.gov/funding/procurement/frequently-asked-questions-regarding-section-7613-national-defense>

PLEASE NOTE: Failure to provide this information, may result in your bid being declared non-responsive

Signature:  Date: 10 Oct 22

Name: Stephanie Laubenstein
Print

Title: Director, Sales and Business Development

Name of Firm: Motor Coach Industries, Inc.

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2G – Federal Certifications

Solicitation Requirements:

Attachment J: Federal Certifications

- *Certification and Restrictions on Lobbying*
- *Government-Wide Debarment and Suspension*
- *Bus Testing Certification*
- *Transit Vehicle Manufacturer (TVM) Certification*

MCI Response:

Please find the following forms enclosed for your evaluation.

- **Certification and Restrictions on Lobbying**
- **Government-Wide Debarment and Suspension**
- **Bus Testing Certification**
- **Transit Vehicle Manufacturer (TVM) Certification**

Altoona test reports have not been attached but may be viewed directly here:

<https://www.altoonabustest.psu.edu/bus-list.aspx>

Please refer to the corresponding Bus Number (Report):

Model	Bus Number
D45 CRT	1713
D45 CRT LE	1713
D45 CRT LE CHARGE	1713 / 2020-10
D45 CRT CHARGE	1713 / 2020-10
D4520	1713

Not Applicable (Motor Coach Industries, Inc. is not a lower tier participant, in addition, MCI does not have any lower tier participants as part of this proposal)

Attachment J
IFB6447

**GOVERNMENT-WIDE DEBARMENT AND SUSPENSION
(NONPROCUREMENT)**

Instructions for Certification By signing and submitting this bid or proposal, the prospective lower tier participant is providing the signed certification set out below.

(1) It will comply and facilitate compliance with U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 CFR part 1200, which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 CFR part 180,

(2) To the best of its knowledge and belief, that its Principals and Subrecipients at the first tier:

a. Are eligible to participate in covered transactions of any Federal department or agency and are not presently:

1. Debarred,
2. Suspended,
3. Proposed for debarment,
4. Declared ineligible,
5. Voluntarily excluded, or
6. Disqualified,

b. Its management has not within a three-year period preceding its latest application or proposal been convicted of or had a civil judgment rendered against any of them for:

1. Commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction, or contract under a public transaction,
2. Violation of any Federal or State antitrust statute, or,
3. Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making any false statement, or receiving stolen property,

c. It is not presently indicted for, or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses listed in the preceding subsection 2.b of this Certification,

d. It has not had one or more public transactions (Federal, State, or local) terminated for cause or default within a three-year period preceding this Certification,

e. If, at a later time, it receives any information that contradicts the statements of subsections 2.a —2.d above, it will promptly provide that information to FTA,

f. It will treat each lower tier contract or lower tier subcontract under its Project as a covered lower tier contract for purposes of 2 CFR part 1200 and 2 CFR part 180 if it:

1. Equals or exceeds \$25,000,,
2. Is for audit services, or,
3. Requires the consent of a Federal official, and

g. It will require that each covered lower tier contractor and subcontractor:

1. Comply and facilitate compliance with the Federal requirements of 2 CFR parts 180 and 1200, and

2. Assure that each lower tier participant in its Project is not presently declared by any Federal department or agency to be:

- a. Debarred from participation in its federally funded Project,
- b. Suspended from participation in its federally funded Project,
- c. Proposed for debarment from participation in its federally funded Project,
- d. Declared ineligible to participate in its federally funded Project,
- e. Voluntarily excluded from participation in its federally funded Project, or
- f. Disqualified from participation in its federally funded Project, and

3. It will provide a written explanation as indicated on a page attached in FTA's TrAMS platform or the Signature Page if it or any of its principals, including any of its first tier Subrecipients or its Third-Party Participants at a lower tier, is unable to certify compliance with the preceding statements in this Certification Group.

(3) It will provide a written explanation as indicated on a page attached in FTA's TrAMS platform or the Signature Page if it or any of its principals, including any of its first tier Subrecipients or its Third-Party Participants at a lower tier, is unable to certify compliance with the preceding statements in this Certification Group.

Certification

Contractor: _____

Signature of Authorized Official: _____ Date ____ / ____ / ____

Name and Title of Contractor's Authorized Official: _____

Federal Certifications

CERTIFICATION AND RESTRICTIONS ON LOBBYING

I, Stephanie Laubenstein hereby certify
(Name and title of official)

On behalf of Motor Coach Industries, Inc. that:
(Name of Bidder/Company Name)

- No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- If any funds other than federal appropriated funds have been paid or will be paid to any person influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form — LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification and understands that the provisions of 31 U.S.C. Section 3801, et seq., are applicable thereto.

Name of Bidder/Company Name: Motor Coach Industries, Inc.

Type or print name: Stephanie Laubenstein

Signature of authorized representative: [Signature] Date 10 / Oct / 22

Signature of notary and SEAL: [Signature]



Christy L. Davidson
A Notary Public for the Province of Manitoba.
My Commission Expires: May 19, 2023
711 Karnaghan Avenue
Winnipeg, Manitoba R2C 3T4

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.

Name of Bidder/Company Name: Motor Coach Industries, Inc.

Type or print name: Stephanie Laubenstein

Signature of authorized representative: 

Signature of notary and SEAL: 

Date of Signature: 10 / Oct / 2022 **Christy L. Davidson**

**A Notary Public for the Province of Manitoba.
My Commission Expires: May 19, 2023
711 Kernaghan Avenue
Winnipeg, Manitoba R2C 3T4**



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.

BIDDER/COMPANY

Name of Bidder/Company Motor Coach Industries, Inc.

Signature of Representative *Stephanie Laubenstein*

Type or Print Name Stephanie Laubenstein

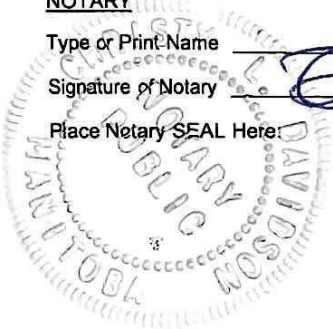
Title Director, Sales and Business Development Date 10 / Oct / 22

NOTARY

Type or Print Name _____

Signature of Notary *Christy L. Davidson*

Place Notary SEAL Here:



Christy L. Davidson
A Notary Public for the Province of Manitoba.
My Commission Expires: May 19, 2023
711 Kernaghan Avenue
Winnipeg, Manitoba R2C 3T4

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Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

2H – FMVSS Compliance

Solicitation Requirements:

The bidder shall submit with bid, documentation certifying that the offered vehicle meets all applicable Federal Motor Vehicle Safety Standard (FMVSS) Regulations. Vehicle must comply with all applicable FMVSS for Low Floor Transit Buses, Commuter Coach Buses, and Trolleys.

MCI Response:

Please find the [FFMVSS Certificate](#) enclosed for your evaluation.



CER 8.8 Federal Motor Vehicle Safety Standards

The Proposer and (if selected) Contractor shall submit (1) manufacturer’s FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or (2) manufacturer’s certified statement that the contracted buses will not be subject to FMVSS regulations.

Company name: Motor Coach Industries, Inc.

Name of signer: Stephanie Laubenstein

Title: Director, Sales and Business Development



10 Oct 22

Authorized signature

Date

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 3, Pricing Schedule

Solicitation Requirements:

Attachment H, Pricing Schedule

MCI Response:

Please find [Attachment H, Pricing Schedule](#), enclosed for your evaluation.

**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:

Motor Coach Industries, Inc. // Model D45CRT CHARGE

This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in **Attachment A**. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)					
Discount for volume level:	Order Volume / Quantity	Volume Discount	1 to 5 / each	6 to 10 / each	11 + / each
Base Price			\$1,324,990.00	\$1,323,490.00	\$1,321,990.00
Less Discount from List Price			0.00%	0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV. Specification, Section C. Requirements, #11)			\$1,324,990.00	\$1,323,490.00	\$1,321,990.00
Delivery Price (flat fee)			\$24,042.50	\$24,042.50	\$24,042.50
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only			\$1,349,032.50	\$1,347,532.50	\$1,346,032.50

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year ____ 2023	Y
GVWR	State Vehicle GVWR: ____ 54,000 Lbs.	Y
Wheelbase	State Vehicle Wheelbase: ____ 315"	Y
Battery Access Door/Disconnect Switch		Y
Battery	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: ____ 45.83 Ft	Y
Overall Exterior Width	State Vehicle Width: ____ 102"	Y

Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): _____ 138.6" _____	Y	
Axle/Springs/Frame	As required for vehicle GVWR	Y	
Ground to Step Threshold	Maximum 14.0" +/- .5"	N	16.5" Un-kneeled, 15.5 Kneeled
Interior width at Seat Level	Minimum 91"	Y	
Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	Y	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/Yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 315/80R X 22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.	Y	
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	Y	
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	N	Sun Visor will be electrically controlled, with the exception of the driver's side visor which shall be manual
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	Y	
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.	Y	
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 Interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross-bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y		MCI Service center
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	Y		
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y		
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand held web cutter.	Y		
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y		
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y		
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N		
Rear Heater	Minimum of 40,000 BTU / hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	Y		
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y		
Steering	Power steering with tilt steering wheel	Y		
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	N		Six wheel anti-lock brakes
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to the recipient via electronic customer specific data portal.	Y		
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y		
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y		
Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier laminated to lower surface and moisture sealed edges.	Y		
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.	Y		
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.	Y		
Air Condition	State AC System: _____ MMC _____	Y		
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper	Y		

<p>Body Manufacturer's Electronic Customer-Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) • Bus body electrical schematics • List of items shipped with bus 	<p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category <u>Proof of completed test to accompany bid</u>. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p> <p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:

Motor Coach Industries, Inc. // Model D45CRT Le CHARGE

This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in **Attachment A**. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Discount for volume level:			
Base Price		\$1,322,990.00	\$1,321,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV. Specification, Section C. Requirements, #11)		\$1,322,990.00	\$1,321,490.00
Delivery Price (flat fee)		\$24,043.75	\$24,043.75
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,347,033.75	\$1,345,533.75
			11 + / each
			\$1,319,990.00
			0.00%
			\$1,319,990.00
			\$24,043.75
			\$1,344,033.75

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!

Feature	Description	Meets Specs? Y/N	Comments
Year Model 2022 or current production model year	Model Year ____ 2023	Y	
GVWR	State Vehicle GVWR: ____ 54,000 Lbs.	Y	
Wheelbase	State Vehicle Wheelbase: ____ 315"	Y	
Battery Access Door/Disconnect Switch		Y	
Battery	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y	NMC Lithium ION Ultra High Energy
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: ____ 45.83 Ft	Y	
Overall Exterior Width	State Vehicle Width: ____ 102"	Y	

Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): 138.6"	Y	
Axle/Springs/Frame	As required for vehicle GVWR	Y	
Ground to Step Threshold	Maximum 14.0" +/- .5"	N	16.5" Un-kneeled, 15.5 Kneeled
Interior width at Seat Level	Minimum 91"	Y	
Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	Y	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/Yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: 315/80R X 22.5 Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.	Y	
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	Y	
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	N	Sun Visor will be electrically controlled, with the exception of the driver's side visor which shall be manual
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs; (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	Y	
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.	Y	
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 Interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross-bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y		MCI Service center
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	Y		
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y		
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand held web cutter.	Y		
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y		
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y		
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N		
Rear Heater	Minimum of 40,000 BTU / hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	Y		
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y		
Steering	Power steering with tilt steering wheel	Y		
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	N		Six wheel anti-lock brakes
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to the recipient via electronic customer specific data portal.	Y		
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y		
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y		
Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier laminated to lower surface and moisture sealed edges.	Y		
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.	Y		
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.	Y		
Air Condition	State AC System: _____ MMC _____	Y		
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper	Y		

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) • Bus body electrical schematics • List of items shipped with bus 	<p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category <u>Proof of completed test to accompany bid</u>. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p> <p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: Motor Coach Industries, Inc. // Model D45CRT Le

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid noting the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity	1 to 5 / each	6 to 10 / each
Base Price		\$765,990.00	\$764,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$765,990.00	\$764,490.00
Delivery Price (flat fee)		\$4,456.25	\$4,456.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$770,446.25	\$768,946.25
			\$767,446.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!			Meets Specs? Y/N	Comments
Feature	Description			
Year Model 2022 or current production model year	Model Year: 2023			
GVWR	State Vehicle GVWR: 54,000 Lbs		Y	
Wheelbase	State Vehicle Wheelbase: 315"		Y	
Engine	State Engine (Minimum 6.7 liters): 12 Litre		Y	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 45'10"		Y	
Exterior Height	State Vehicle Width: 102"		Y	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 138.6"		Y	
Ground to Step Threshold	As required for vehicle GVWR		Y	
Interior width at Seat Level	Maximum 14.0" +/- 5"		N	16.5 Un-kneeled, 15.5 Kneeled
Interior Height	Minimum 91"		Y	
Shock Absorbers	Minimum 75" at center aisle		Y	
Suspension	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available		Y	
Drive Shaft	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.		Y	
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.		Y	

Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler.			Y	
Fuel Sending Unit	Included as standard feature			Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.			Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting			Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.			Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.			Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.			Y	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.			Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment			Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.			Y	
Tires and Wheels	State Tire Size: _____ 315/80r x 22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. Whittle paint rims standard.			Y	
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard			Y	
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions			Y	
Instrumentation	Factory installed gauges and dome light.			Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.			N	Sun Visors are electrically controlled, except for the driver's side window which is manual
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets			Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			Y	
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.			Y	
Seat Covering	Please include pricing options.			Y	
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.			Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	Will be supplied by MCI service center
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	700 Lb capacity Lift
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	Y	
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	Y	
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	N	Six wheel antilock
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	Y	
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: Motor Coach Industries, Inc. // Model D45CRT

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$679,990.00	\$678,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$679,990.00	\$678,490.00
Delivery Price (flat fee)		\$4,456.25	\$4,456.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$684,446.25	\$682,946.25
			\$681,446.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year: 2023	
GVWR	State Vehicle GVWR: 54,000 Lbs	Y
Wheelbase	State Vehicle Wheelbase: 315"	Y
Engine	State Engine (Minimum 6.7 liters): 12 Litre	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 45'10"	Y
Exterior Height	State Vehicle Width: 102"	Y
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 138.6"	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- 5"	N
Interior Height	Minimum 91"	Y
Shock Absorbers	Minimum 75" at center aisle	Y
Suspension	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Drive Shaft	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	16.5 Un-kneeled, 15.5 Kneeled	

Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler			Y	
Fuel Sending Unit	Included as standard feature			Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.			Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting			Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.			Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.			Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.			Y	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.			Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment			Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.			Y	
Tires and Wheels	State Tire Size: _____ 315/80r x 22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. Whittle paint rims standard.			Y	
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard			Y	
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions			Y	
Instrumentation	Factory installed gauges and dome light.			Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.			N	Sun Visors are electrically controlled, except for the driver's side window which is manual
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets			Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			Y	
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.			Y	
Seat Covering	Please include pricing options.			Y	
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.			Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	Will be supplied by MCI service center
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	700 Lb capacity Lift
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	Y	
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	Y	
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	N	Six wheel antilock
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	Y	
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier. laminated to lower surface and moisture sealed edges.		Y		
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.		Y		
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.		Y		
Air Condition	State AC System: _____ MMC _____		Y		
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper		Y		
OPTIONAL EQUIPMENT	Model Number/Order Code	Description	MSRP BASE PRICE		Contract Base Price
Please list all optional equipment, additional safety options, paint schemes, graphics/wraps, and accessories below that your firm can provide beyond the factory options. Please refer to optional items list attached.					
			\$	-	\$
			\$	-	\$
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			\$	-	\$
			\$	-	\$
			\$	-	\$
			\$	-	\$
	% Off MSRP/Catalog/List				
For unlisted options (not listed above), please provide a percentage off MSRP/Catalog price					
	%				
Extended Warranty and Price (include coverage description, number of years, and price)	Coverage			MSRP/LIST PRICE	Contract Price
Engine (Cummins Diesel X12)	Years 3.4.5 (Total 5 Years) (coverage will be as per supplier's warranty document)			\$7,357.50	\$7,357.50
Transmission (Allison B500 GEN V)	Years 3.4.5 (Total 5 Years) (coverage will be as per supplier's warranty document)			\$2,492.10	\$2,492.10
				\$	\$
				\$	\$
				\$	\$
				\$	\$
Post-Warranty Maintenance	Contract Amount			\$	\$
Labor (hourly rate)	\$ / per hour			\$350.00	
Parts (Discount Percentage)	% discount off of list/MSRP			0%	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: Motor Coach Industries, Inc. // Model D4520

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid noting the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$697,990.00	\$696,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$697,990.00	\$696,490.00
Delivery Price (flat fee)		\$4,456.25	\$4,456.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$702,446.25	\$700,946.25
			\$699,446.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year: 2023	
GVWR	State Vehicle GVWR: 54,000 Lbs	Y
Wheelbase	State Vehicle Wheelbase: 315"	Y
Engine	State Engine (Minimum 6.7 liters): 12 Litre	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 45'10"	Y
Exterior Height	State Vehicle Width: 102"	Y
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 138.6"	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- 5"	N
Interior Height	Minimum 91"	Y
Shock Absorbers	Minimum 75" at center aisle	Y
Suspension	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Drive Shaft	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	16.5 Un-kneeled, 15.5 Kneeled	

Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler.			Y	
Fuel Sending Unit	Included as standard feature			Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.			Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting			Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.			Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.			Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.			Y	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.			Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment			Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.			Y	
Tires and Wheels	State Tire Size: _____ 315/80r x 22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. Whittle paint rims standard.			Y	
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard			Y	
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions			Y	
Instrumentation	Factory installed gauges and dome light.			Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.			N	Sun Visors are electrically controlled, except for the driver's side window which is manual
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets			Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			Y	
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.			Y	
Seat Covering	Please include pricing options.			Y	
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.			Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	Will be supplied by MCI service center
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	700 Lb capacity Lift
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	Y	
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	Y	
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	N	Six wheel antilock
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	Y	
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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Battery Charging Infrastructure (Equipment Only - No infrastructure/installation prices)	Model Number/Order Code	Please provide options. (Equipment only - no installation)	MSRP/LIST PRICE	CONTRACT PRICE
Plug-In Chargers				
Equipment - ABB HVC-C150kW Depot Charger with 1 Dispenser	ABB HVC-C150kW Depot Charger with 1 Dispenser	ABB HVC-C150kW Depot Charger with 1 Dispenser/Charge Box with single 7m CCS1 cable; Sequential Charging; Power cabinet metal frame; Depot Charge box pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 131,342
Equipment - ABB HVC-C150kW Depot Charger with 2 Dispensers	ABB HVC-C150kW Depot Charger with 2 Dispensers	ABB HVC-C150kW Depot Charger with 2 Dispenser/Charge Box with single 7m CCS1 cable each; Sequential Charging; Power cabinet metal frame; Depot Charge box pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 154,415
Equipment - ABB HVC-C150kW Depot Charger with 3 Dispensers	ABB HVC-C150kW Depot Charger with 3 Dispensers	ABB HVC-C150kW Depot Charger with 3 Dispenser/Charge Box with single 7m CCS1 cable each; Sequential Charging; Power cabinet metal frame; Depot Charge box pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 172,934
Equipment - Heliox Flex DC 180kW Depot Charger with 1 Dispenser	Heliox Flex DC 180kW Depot Charger with 1 Dispenser	Heliox Flex DC 180kW Depot Charger with 1 dispenser (Column) with single 7m CCS1 cable; Dynamic Charging; column pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$ 127,430
Equipment - Heliox Flex DC 180kW Depot Charger with 2 Dispensers	Heliox Flex DC 180kW Depot Charger with 2 Dispensers	Heliox Flex DC 180kW Depot Charger with 2 dispensers (Column) with single 7m CCS1 cable each; Dynamic Charging; column pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$ 150,858
Equipment - Heliox Flex DC 180kW Depot Charger with 3 Dispensers	Heliox Flex DC 180kW Depot Charger with 3 Dispensers	Heliox Flex DC 180kW Depot Charger with 3 dispensers (Column) with single 7m CCS1 cable each; Dynamic Charging; column pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$ 172,444
Overhead/Opportunity Chargers				
Equipment - ABB HVC-PD 300kW Overhead Charger - Mast Pantograph	ABB HVC-PD 300kW Overhead Charger - Mast Pantograph	ABB HVC-PD 300kW Overhead Charger with Mast and Pantograph; Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 367,227
Equipment - ABB HVC-PD 300kW Overhead Charger - Ceiling Mounted Pantograph	ABB HVC-PD 300kW Overhead Charger - Ceiling Mounted Pantograph	ABB HVC-PD 300kW Overhead Charger with Pantograph for Ceiling Mount (No Mast); Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 403,090
Equipment - ABB HVC-PD 450kW Overhead Charger - Mast Pantograph	ABB HVC-PD 450kW Overhead Charger - Mast Pantograph	ABB HVC-PD 450kW Overhead Charger with Mast and Pantograph; Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 456,119

Equipment - ABB HVC-PD 450kW Overhead Charger - Ceiling Mounted pantograph	ABB HVC-PD 450kW Overhead Charger - Ceiling Mounted Pantograph	ABB HVC-PD 450kW Overhead Charger with Pantograph for Ceiling Mount (No Mast); Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$	491,981
Equipment - Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:1	Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:1	Heliox Flex DC 180kW Depot Charger with Pantograph (250A) for Ceiling Mount; Dynamic Charging; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	150,608
Equipment - Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:2	Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:2	Heliox Flex DC 180kW Depot Charger with 2 Pantographs (250A) for Ceiling Mount; Dynamic Charging; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	190,929
Equipment - Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:3	Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:3	Heliox Flex DC 180kW Depot Charger with 3 Pantographs (250A) for Ceiling Mount; Dynamic Charging; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	234,599
Equipment - Heliox Ultra Fast 360kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 360kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 360kW Depot Charger with Pantograph (600A) for Ceiling Mount; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	257,033
Equipment - Heliox Ultra Fast 450kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 450kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 450kW Depot Charger with Pantograph (600A) for Ceiling Mount; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	374,159
Equipment- Heliox Ultra Fast 360kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 360kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 360kW Depot Charger with Mast and Pantograph (600A); Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	369,997
Equipment- Heliox Ultra Fast 450kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 450kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 450kW Depot Charger with Mast and Pantograph (600A); Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	487,124
Mobile Charger					
Equipment - Heliox Fast DC 50 kW Mobile Charger	Heliox Fast DC 50 kW Mobile Charger	Heliox Fast DC 50 kW Mobile Charger with single 3m CCS1 cable; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Freight	NA	\$	55,235

Motor Coach Industries
Options Price Sheet

Category	Item #	Description	Diesel CRTLE	Diesel CRT	Electric CRTLE	Electric CRT	Price
BODY - PASSENGER SEATS							
BODY - PASSENGER SEATS	1	44 Passenger Seating Configuration	NA	NA	NA	NA	NA
BODY - PASSENGER SEATS	2	51 Passenger Seat Configuration	NA	NA	NA	NA	NA
BODY - PASSENGER SEATS	3	ADD additional double flip seat in lieu of fixed seat	Option	Option	Option	Option	\$ 1,125.62
BODY - PASSENGER SEATS	4	Remove one set of fixed seats	Option	Option	Option	Option	\$ (813.00)
BODY - PASSENGER SEATS	5	remove individual seat	Option	Option	Option	Option	\$ (390.00)
Fuel							
Fuel	6	EMCO - Posi/Lock Blue Urea Dispensing System	Option	NA	NA	NA	\$ 908.77
Fuel	7	Standard Gravity Fill	Option	NA	NA	NA	\$ (10.00)
Fuel Filter							
Fuel Filter	4	Davco Fuel Pro 384, Heated	Option	NA	NA	NA	\$ 511.95
Fuel Filter	8	Davco Fuel Pro 384, Heated	NA	Option	NA	NA	\$ 511.95
Passenger Seat Options							
Passenger Seat Options	28	110 v outlets with USB charging throughout seating layout	Option	Option	Option	Option	\$ 8,368.97
Passenger Seat Options	29	Dual USB charging station throughout seating layout	Option	Option	Option	Option	\$ 5,745.49
Passenger Seat Options	30	Cup holders for each seat	Option	Option	Option	Option	\$ 20.12
Passenger Seat Options	31	Self-storing footrests for each seat	Option	Option	Option	Option	\$ 30.18
Passenger Seat Options	32	Expanding mesh magazine holder on seat back	Option	Option	Option	Option	\$ 32.42
Passenger Seat Options	34	Freedman Amaya A-220 Buy America	Option	Option	Option	Option	\$ 10,081.44

All options listed below are the same for each bus length worksheet.

Category	Item #	Description	Designation	Propulsion (if applicable)	Price
Body- Bike Rack					
Body - Bike Rack	1	Sportworks Apex 3 - 3 Position Bike, Stainless Steel	Option		\$ 4,329.24
Body - Bike Rack	2	Sportworks - 2 Position Bike, Black Powder Coated	Option		\$ 4,300.18
Body - Bike Rack	3	Sportworks - 2 Position Bike, Stainless Steel	Option		\$ 4,188.40
Body - Bike Rack	4	Sportworks - 3 Position Bike, Black Powder Coated	Option		\$ 4,441.02
Body - Bike Rack	7	Bike Rack Deployed Lamp on Dash	Option		\$ 121.84
Body - Bike Rack	8	Bike Rack 5" Spot Mirror	Option		\$ 55.89
Body - Bike Rack	9	Bike Rack Mounted Advertising Frame, 14"X 44"	Option		\$ 3,050.48
Body - Bike Rack	10	Mounting Brackets only	Option		\$ 1,376.01
Body - Bike Rack	12	Sportworks 2 Bike slideout bike rack (Baggage Compartment)	Option		\$ 6,349.10
Body - Driver's Barrier					
Body - Driver's Barrier	7	Arowguard Global Driver's Barrier Shield	Option		\$ 7,265.70
Body - Driver Seat					
Body - Driver Seat	4	USSC 9100 ALX - 3 w/Fabric Seat and Back w/Gray Fabric Boxing	Option		\$ (330.00)
Body - Driver Seat	8	Add 3 -Point, Horizontally Adjustable D - Loop	Option		\$ 98.37
Body - Driver Seat	9	Driver's Seat Vacancy Alarm	Option		\$ 111.78
Body - Driver Seat	10	Safety Orange Shoulder Belt (US SC ALX)	Option		\$ 111.78
Body - Driver Seat	11	Silicon Foam AT Lower Seat Cushion (USSC)	Option		\$ 1,122.27
Body - Driver Seat	12	Holdsworth Fabric	Option		\$ 83.84
Body - Driver Seat	13	FR Treated Foam (Recano)	Option		\$ 382.29
Body - Floor Covering					
Body - Floor Covering	3	Altro wood safety (vinyl simulated woodgrain)	Option		\$ 561.14
Body - Floor Covering	4	Gerflor Tarabus Gaya Wood (vinyl simulated woodgrain)	Option		\$ 342.05
Body - Floor Covering	8	Pressure-preservative treated plywood	Option		\$ 279.45
Body - Floor Covering	9	Gerflor Tarabus Sirius 6801	Option		\$ 658.38
Body - Mirror, Exterior					
Body - Mirror, Exterior	4	Safe Fleet 9" x 11" 2 Piece, Heated, Remote Both Sides	Option		\$ 681.86
Body - Mirror, Exterior	5	Safe Fleet 9" x 13" Class "A" 2 Piece, Heated, Remote Both Sides	Option		\$ 715.39
Body - Mirror, Exterior	7	Safe Fleet 10" x 11" 1 Piece, Heated, Remote Both Sides	Option		\$ (37.00)

Body – Mirror, Exterior	12	ADD: LED Turn Signal to Side Mirror - Side Mount	Option	\$ 243.68
Body – Mirror, Exterior	13	ADD: LED Turn Signal to Side Mirror - Within Glass	Option	\$ 163.20
Body - Mirror, Interior				
Body – Mirror, Interior	2	Mirror - 4.75" X 15"	Option	\$ (28.00)
Body – Mirror, Interior	3	Mirror - Front Door 6" Round on Header Door	Option	\$ 70.42
Body – Mirror, Interior	5	Mirror - 8 1/2" X 1" center	Option	\$ 50.30
Body – Mirror, Interior	6	Mirror - 5" flat	Option	\$ 33.53
Body - Paint & Decal				
Body – Paint & Decal	2	(2) Colors, with and without Black Mask At Windows	Option	\$ 5,030.10
Body – Paint & Decal	3	(3) Colors, with and without Black Mask At Windows	Option	\$ 8,942.40
Body – Paint & Decal	4	Basic Decal Package (Up to Three Strips and Equivalent Design)	Option	\$ 2,459.16
Body – Paint & Decal	5	Custom Paint/Decal Design (Per Purchasers' Spec)	Option	\$ 13,413.60
Body – Paint & Decal	6	Clear Coat Complete Bus	Option	\$ 3,060.54
Body - Passenger Signal				
Body – Passenger Signal	1	Pullcords - Above Windows (Neutral Or Yellow) w/Touch Pad At W/C Positions	Option	\$ 1,213.93
Body – Passenger Signal	2	Touch Tape (At Window Mullions)	Option	\$ 558.90
Body – Passenger Signal	4	Additional Amber Stop Request Lamp Mounted on Driver's Dash	Option	\$ 80.48
Body - Roof Hatch				
Body – Roof Hatch	3	Electric Hatch with Driver Control (per Position)	Option	\$ 507.48
Body - Schedule Rack				
Body – Schedule Rack	2	Innocom Schedule Racks 3.75" x 7" x 1.5"	Option	\$ 3.35
Body – Schedule Rack	3	Innocom Schedule Racks 8.62" x 1.1" x 1"	Option	\$ 23.47
Body – Schedule Rack	4	22" x 21" Black, RH Load Open Back	Option	\$ 363.29
Body – Schedule Rack	5	Transit Information Products - 19" x 21" OBIC19/214PLTRMC	Option	\$ 344.28
Body – Schedule Rack	6	Transit Information Products - 19" x 21" OBIC110P2LTRMC	Option	\$ 465.00
Body - Stanchions/Grab Rails				
Body – Stanchions/Grab Rails	2	Powder Coated Vertical Stanchions, Grab Rails and Modesty Panel Tubes	Option	\$ 79.36
Body – Stanchions/Grab Rails	4	Farebox Guard Rail	Option	\$ 383.41
Cooling System				
Cooling System	11	Double Breeze Constant Tension Clamps	Option	\$ 7.82
Cooling System	14	Webasto Model Thermo 300 (104,000 btu) Coolant Heater	Option	\$ 4,655.64
Cooling System	16	Proheat Model X120 (120,000 btu) Coolant Heater	Option	\$ 5,253.66
Cooling System	19	Proheat Model X45 (45,000 btu)Coolant Heater	Option	\$ 4,186.16
Electrical				
Electrical	2	24 Volt to 13.6 Volt DC - DC Converter, 30 Ampere Output, Model 1645 - 24 - 12 -30, Manufactured By Wilmore Electronics Co., Inc. or Equivalent	Option	\$ 1,197.16
Electrical	5	Electronic compartment - plastic construction	Option	\$ 646.09
Electrical - Automatic Passenger Counter				
Electrical – Automatic Passenger Counter	2	UTA Automatic Passenger Counter System with GPS, WLAN Capabilities	Option	\$ 7,264.58
Electrical – Automatic Passenger Counter	3	UTA APC Sensors, Cabling, CPU only	Option	\$ 6,845.41
Electrical – Automatic Passenger Counter	4	Wiring provisions IAW APC manufacture	Option	\$ 1,762.77
Electrical – Automatic Passenger Counter	5	Strategic Mapping APC system (Per Site)	Option	\$ 65,999.38

Electrical - Auxiliary Lights					
Electrical - Auxiliary Lights	6	Exterior Curb Lamps, Front & Rear - Diallight	Option	\$	171.02
Electrical - Auxiliary Lights	7	Triangle Amber LED Yield Sign - Diallight	Option	\$	272.74
Electrical - Auxiliary Lights	10	Overhead Farebox LED - Light W/Night - Day Switch (on Drivers Side Panel) - Light Illuminates W/Frt. Door Open and Switch in the Night Position	Option	\$	57.01
Electrical - Auxiliary Lights	12	LED Beacon Light	Option	\$	167.67
Electrical - Auxiliary Lights	13	LED Decal Lights (2) - Non - Flashing only (Per NHTSA)	Option	\$	543.25
Electrical - Battery & Battery Chargers					
Electrical - Battery & Battery Chargers	1	Polyethylene battery tray and enclosure	Option	\$	(326.00)
Electrical - Battery & Battery Chargers	2	(2) DEKA 8D Side and Top Post Connections (Standard for Diesel Bus)	Option	\$	127.43
Electrical - Battery & Battery Chargers	3	(4) DEKA Group 32 Top Post	Option	\$	1,564.92
Electrical - Battery & Battery Chargers	4	DEKA AGM Type 8D/Group 32	Option	\$	2,794.50
Electrical - Battery & Battery Chargers	5	(4) Odyssey Group 32	Option	\$	1,541.45
Electrical - Battery & Battery Chargers	7	Ultra Capacitors - KBI/KAPower	Option	\$	5,100.52
Electrical - Battery & Battery Chargers	9	Remove Anderson 350 Jump Start	Option	\$	(146.00)
Electrical - Battery & Battery Chargers	36	150 kW Charger and Dispenser	Option	(electric only)	\$ 168,981.18
Electrical - Communication/Radi o					
Electrical - Communication/Radio	1	Pre - Wire:12V/40A Direct Battery & 12V/10A Ignition (Route to RH Dash & Ele. Equip. Box) and Install Roof Mount RF/GPS/Cellular Antenna	Option	\$	779.11
Electrical - Communication/Radio	4	Motorola APX4500	Option	\$	9,978.60
Electrical - Communication/Radio	5	Motorola CM200 and CM300, 45W, 439 - 470- MHZ	Option	\$	2,958.82
Electrical - Communication/Radio	8	DC Power Filter for Radio Wiring	Option	\$	102.84
Electrical - Communication/Radio	9	Hand - Held Microphone	Option	\$	(1,312.00)
Electrical - Communication/Radio	10	Public Address System with Boom Mic	Option	\$	(1,112.00)
Electrical - Communication/Radio	12	ASP930T Radio Antenna with RG58 Coax Cable and TNC Connector	Option	\$	105.07
Electrical - Communication/Radio	13	Antenna Specialist ASP - 572	Option	\$	279.45
Electrical - Destination Sign					
Electrical - Destination Sign	1	Twin Vision Silver Series Sign (16 X160) Front & Side	Option	\$	1,612.99
Electrical - Destination Sign	5	Twin Vision 100% Amber LED, Front, Curb Side, Rear	Option	\$	465.00
Electrical - Destination Sign	6	Twin Vision 100% Amber LED, Rear	Option	\$	163.20

Electrical – Destination Sign	8	Twin Vision Chroma IV 100% Color LED	Option	\$	2,829.15
Electrical – Destination Sign	11	AXION with Wi Fi and Time and Date Time Stamp	Option	\$	6,933.71
Electrical – Destination Sign	12	Luminator Spectrum 100% Amber LED Front, Curbside, Rear	Option	\$	9,331.39
Electrical – Destination Sign	13	Luminator White LED Front, Curb-side and Rear	Option	\$	1,177.04
Electrical – Destination Sign	14	Add Twin Vision Smart Series II w/ rear camera, Rear Sign	Option	\$	649.44
Electrical – Destination Sign	15	Add Street Side Sign (Twin Vision Amber LED)	Option	\$	1,599.57
Electrical – Destination Sign	16	Add Street Side Sign (Twin Silver Series LED)	Option	\$	2,681.60
Electrical – Destination Sign	17	Remove Rear Sign (DEDUCT)	Option	\$	(600.00)
Electrical – Destination Sign	18	Program Software (Twin Vision)	Option	\$	492.95
Electrical – Destination Sign	19	Luminator Programming Software USB Wireless	Option	\$	1,301.12
Electrical – Destination Sign	22	Transign, (4) Character, Metal Housing	Option	\$	758.99
Electrical – Destination Sign	25	Twin Vision Electronic Front Dash Sign	Option	\$	974.72
Electrical – Destination Sign	26	Hanover Display LED Amber Destination Signs (model# OL028, OL054 & OL64J)	Option	\$	8,114.11
Electrical – Destination Sign	27	Luminator Electronic Front Dash Sign	Option	\$	974.72
Electrical - Destination Sign Programming					
Electrical – Destination Sign Programming	1	Luminator USB & Integrated Programming Software	Option	\$	557.78
Electrical – Destination Sign Programming	2	Twin Vision Elyse 2 USB	Option	\$	64.83
Electrical – Destination Sign Programming	3	Twin Vision Software Package	Option	\$	492.95
Electrical - Diagnostics					
Electrical – Diagnostics	1	Set of Multiplexing Diagnostics (Includes the 7 Following Items)	Option	\$	4,723.36
Electrical - Equipment Storage Box					
Electrical – Equipment Storage Box	2	UTA APC Sensors, Cabling, CPU only	Option	\$	6,845.41
Electrical – Equipment Storage Box	6	Strategic Mapping sensors, cabling, CPU only	Option (Per Site)	\$	65,999.38
Electrical - Lights, Exterior					
Electrical – Lights, Exterior	2	Headlight LED Dialight - Low Beam	Option	\$	325.28
Electrical – Lights, Exterior	3	Headlight LED Dialight - High Beam	Option	\$	325.28
Electrical - Intelligent Vehicle Network					
Electrical – Intelligent Vehicle Network	2	Clever Devices IVN III W/Voice Annunciation, APC, Wireless LAN	Option	\$	69,124.75

Electrical - Pleasure						
Electrical – Pleasure	2	Radio Tacho Link Event Data Recorder	Option	\$	4,066.56	
Electrical – Pleasure	3	Radio	Option	\$	1,911.44	
Electrical – Pleasure	4	Radio Am/FM/CD	Option	\$	1,911.44	
Electrical - Pleasure	5	On-Board entertainment system including 6 video screen DVD CD-ROM player	Option	\$	9,883.59	
Electrical - Public Announcement						
Electrical – Public Announcement	2	REI Model 750040 PA W/Handheld Mic W/(6) Flush Mounted Speakers	Option	\$	(1,270.00)	
Electrical – Public Announcement	6	Rei Echo PA System	Option	\$	(497.00)	
Electrical - Video Surveillance						
Electrical – Video Surveillance	2	Apollo RoadRunner DVR 2TB 4 Camera System w/Audio	Option	\$	5,156.41	
Electrical – Video Surveillance	3	Apollo RoadRunner DVR 2TB 8 Camera System w/Audio	Option	\$	8,564.58	
Electrical – Video Surveillance	4	Apollo RoadRunner DVR 2TB 12 Camera System w/Audio	Option	\$	11,236.13	
Electrical – Video Surveillance	5	Apollo RoadRunner DVR 2TB 16 Camera System w/Audio	Option	\$	14,387.20	
Electrical – Video Surveillance	6	Apollo RoadRunner HDR DVR 2TB 4 Camera System & Audio	Option	\$	7,138.27	
Electrical – Video Surveillance	7	Apollo RoadRunner HDR DVR 2TB 8 Camera System & Audio	Option	\$	11,002.51	
Electrical – Video Surveillance	8	Apollo RoadRunner HDR DVR 2TB 12 Camera System & Audio	Option	\$	14,079.81	
Electrical – Video Surveillance	9	Apollo RoadRunner HDR DVR 2TB 16 Camera System & Audio	Option	\$	17,775.26	
Electrical – Video Surveillance	10	Apollo Wireless Data Download capable	Option	\$	937.83	
Electrical – Video Surveillance	11	Apollo Cellular "Live Look Through" Capable	Option	\$	1,615.22	
Electrical – Video Surveillance	12	Apollo Vehicle Information Management System (VIM)	Option	\$	6,826.40	
Electrical – Video Surveillance	13	Apollo video 4K DVR w/9 camera system w/ Audio	Option	\$	20,409.91	
Electrical – Video Surveillance	15	(4) Camera Pre Wire Package	Option	\$	1,368.19	
Electrical – Video Surveillance	16	SEON TX8 8 channel w/1 TB hard drive	Option	\$	5,257.01	
Electrical – Video Surveillance	18	SEON 2 TB hard drive upgrade	Option	\$	7,378.60	
Electrical – Video Surveillance	20	SEON CQ903A integrated IR Dome day/Night 600TVL interior camera, audio, 2.9 mm lens.	Option	\$	317.46	
Electrical – Video Surveillance	22	SEON CI904A Dome Day/Night 600TVL camera, audio, 3.6mm lens w/mount	Option	\$	428.12	
Electrical – Video Surveillance	34	March Network (8) Camera System	Option	\$	19,464.25	
Electrical – Video Surveillance	35	REI Bus Watch Digital	Option	\$	8,575.76	
Electrical – Video Surveillance	37	Mobileview IV Digital, (5) Cameras, 250 GB DVR, w/Audio	Option	\$	13,696.40	
Electrical – Video Surveillance	39	Mobileview MV3000 DVR	Option	\$	4,172.75	
Electrical – Video Surveillance	40	Rear View Camera System	Option	\$	643.85	
Electrical – Video Surveillance	48	Brigade 360 Camera	Option	\$	2,682.72	

Engine - Accessories						
Engine – Accessories	3	Williams Controls 45 Degree Throttle Pedal	Standard	Diesel Only	\$	58.13
Engine – Accessories	12	FEMCO Oil Drain Plug	Option	Diesel Only	\$	130.78
Engine – Accessories	13	Magnetic Drain Plug	Option	Diesel Only	\$	83.84
Engine – Accessories	14	Test Ports Shall Be Provided for Commonly Checked Functions on the Bus	Option	Diesel Only	\$	363.00
Engine – Accessories	18	Rear Run Box Rear Hand Throttle	Option	Diesel Only	\$	172.14
Engine – Accessories	19	Rear Run Box Engine Hour Meter	Option	Diesel Only	\$	267.15
Engine – Accessories	20	Rear Run Box A/C Hour Meter	Option	Diesel Only	\$	267.15
Engine – Accessories	21	Rear Run Box Voltmeter J1939	Option	Diesel Only	\$	685.21
Engine – Accessories	24	Mechanical Gauges - Murphy Oil Pressure and Coolant Temperature	Option	Diesel Only	\$	298.45
Engine - Diagnostics						
Engine – Diagnostics	1	Cummins Inline 6 Adapter Kit, Insite Basic	Option	Diesel Only	\$	5,572.03
Fare Box						
Fare Box	1	No Fare box, Power Circuit and Ground strap only	Option		\$	67.07
Fare Box	2	GFI 36" Fastfare	Option		\$	27,238.55
Fare Box	3	GFI 36" Odyssey	Option		\$	25,642.33
Fare Box	4	GFI 41" Fast Fare	Option		\$	27,238.55
Fare Box	5	GFI 41" Odyssey	Option		\$	25,642.33
Fare Box	14	Globe Transfer Cutter	Option		\$	234.74
HVAC						
HVAC	13	MCC Front Stepwell/Threshold Heater W/Brushless Motor (Each)	Option		\$	653.91
HVAC	24	UV Light HVAC Air Duct Purification Kit (Main Evaporator Compartment)	Option		\$	1,436.37
HVAC	25	UV Light HVAC Air Duct Purification Kit (Main Evaporator Compartment & Parcel Rack Evaporator)	Option		\$	2,749.79
HVAC	26	Brushless Parcel Rack Motors	Option		\$	558.90
HVAC	27	Evap Filter Roll, Poly Fiber with Intercept - MERV5	Option		\$	140.00
HVAC	28	Evap Filter Roll, Poly Fiber without Intercept - MERV5	Option		\$	84.23
HVAC	29	Evap Filter Roll, Filter Poly Fiber	Option		\$	210.76
HVAC	30	Evap Filter Roll, Filter Poly Fiber - MERV5	Option		\$	67.68
HVAC	31	90" Evap Filter Roll, Filter Poly Fiber - MERV8	Option		\$	223.39
Safety						
Safety	3	Amerex VH-25lb ABC Cylinder	Option		\$	1,414.02
Safety	6	Amerex Safety Net 2-Zone Fire Detection/Suppression System	Option		\$	4,840.07
Safety	9	Kiade - Ltd Spectrum	Option		\$	194.50
Safety	11	Fogmaker Fire Suppression System (water mist)	Option		\$	2,052.28
Safety	15	Remove Amerex	Option		\$	(2,112.00)
Safety	17	Twenty - Four Unit First Aid Kit	Option		\$	89.42
Safety	19	Blood Borne Pathogens Kit	Option		\$	68.19
Safety	20	Bio - Hazard Disposal Kit	Option		\$	68.19
Safety	21	High Temperature Protective Sleeves for Component Lines	Option		\$	325.28
Safety	23	Wheel Chocks (Per Set)	Option		\$	57.01
Towing & Hoisting						
Towing & Hoisting	1	Set Towing Adapters/Tow Bar	Option		\$	558.90
Towing & Hoisting	2	Set of Hoist Adapters (Includes the 4 Following Items)	Option		\$	335.34
Towing & Hoisting	9	Gladhands at front of coach- Towing Gladhands	Option		\$	530.96
Transmission						
Transmission	4	Allison B- 500R, GEN V	Option	Diesel only	\$	6,408.35
Transmission	10	Davco Electronic Fluid Level Gauge	Option		\$	558.90
Transmission	12	Transmission Oil Temperature Gauge (Dash and Rear Run Box)	Option		\$	393.47
W/C Restraints						
W/C Restraints	9	Q-Straint - Quantum Securement System	Option		\$	14,382.73
Wheel - Hubometer						
Wheel Hubometer	3	S&A Fleetwatch 392 Electronic	Option		\$	619.26
Wheel Hubometer	5	Engler (Stemco) Mechanical W/o Tenths W/o Guard	Option		\$	120.72

Wheel Hubometer	6	Engler Hubometer W/Powder Coat Guard	Option	\$	163.20
Wheel - Hubs					
Wheel Hubs	6	Hydraulic drop down snow chain system	Option	\$	4,138.10
Wheel - Tires					
Wheel - Tires	1	Customer Supplied	Option	\$	(3,690.00)
Wheels					
Wheels	6	Remove Spare Wheel	Option	\$	(165.00)
Wheels	9	(9) Aluminum Alcoa - Full Polish	Option	\$	2,278.08
Wheels	10	(9) Aluminum Alcoa - Full Polish W/Dura Bright Finish	Option	\$	2,371.97
Wheels	11	(9) Aluminum Alcoa - Machine Finish	Option	\$	2,026.57
Wheels	12	(9) Aluminum Alcoa - Machine Finish W/Dura Bright Finish	Option	\$	2,138.35
Windows					
Windows	7	Add Window Guards (Acrylic Liner and Film)	Option	\$	3,129.84
Windows	8	anti-graffiti 3M film (per inside window)	Option	\$	7,890.55
Windows	10	All windows equipped with liners attached	Option	\$	1,943.85
Windows	11	Double glazed frameless	Option	\$	1,631.99
Windows	13	Rear window	Option	\$	2,235.60

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 4, Technical Specifications

Solicitation Requirements:

Attachment G, Section 6: Technical Specifications

MCI Response:

Please find the following sections enclosed for your evaluation:

- **4A – MCI D45 CRT Overview**
- **4B – MCI D45 CRT LE Overview**
- **4C – MCI D4520 Overview**
- **4D – Floor Plans**
- **4J – Technical Deviations**

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4A – MCI D45 CRT Overview

Solicitation Requirements:

N/A

MCI Response:

The D45CRT.

Please see the attached [MCI D45 CRT & CRT CHARGE Specification Sheet](#) for more information.



MCI[®] D45 CRT

Specification sheet.

The legendary high-floor commuter transit workhorse now modernized with next generation innovation and style.



MCI® D45 CRT technical specs.

Increased fuel economy. Low total cost of ownership.

Dimensions

Overall Length (bumper to bumper)	45.10'	13.84 m
Wheelbase	315.00"	8.08 m
Front Overhang	79.00"	1.93 m
Rear Overhang	106.70"	2.68 m
Overall Width	102.00"	2.59 m
Overall Height	138.60"	3.48 m
Interior Height	78.00"	1.99 m
Front Track	84.84"	2.15 m
Rear Track (drive)	75.38"	1.91 m
Rear Track (trailing)	84.84"	2.15 m
Turning Radius	41.90"	14.33 m
Gross Vehicle Weight Rating	54,000 lb	22,680 kg
Luggage Compartment Volume*	560 cu ft	14.64 cu m

Safety + Performance

Standard Equipment

Electronic Stability Control (ESC)	Cruise Control
Automatic Traction Control (ATC)	MCI® A/C compressor
Disc brakes with 6 channel Antilock Braking System (ABS)	Davco Fuel Pro® filter with sight glass
Three-point passenger seat belts (multiple seat models available)	MP water circulating pump
Tilt and telescoping steering wheel	MCI exclusive spiral entrance stairway with aluminum step nosing & stainless-steel grab rails
Electrically locking baggage compartments	Passive steerable tag axle with unload feature
Electronically controlled high/low rise feature	Energy absorbing front and rear bumpers

Optional Equipment

Amerex fire detection and suppression	Video surveillance systems
SmartTire® integrated tire pressure monitoring system with always-on sensors	360° Camera system
Proheat auxiliary heater-45,000 BTU	Sliding battery tray
Bendix Fusion collision mitigation system	Curb lights

Standard Equipment

Engine Options	Cummins X12 w/engine brake, 410 hp, 1,450 lb-ft torque
Transmission	Allison B500 Gen V
Front Axle	ZF 17,000 lb (7,711 kg) with unitized wheel ends
Drive Axle	ZF 32,000 lb with pre-set wheel bearings
Tag Axle	ZF 16,500 lb (7,484 kg) with unitized wheel ends
Seating	56-passengers
Wheels	Hub-mounted steel, 22.5 x 9.0
Tires	Firestone FS400 315/80 R22.5 9.00" L-rated
Alternator	Borg Warner 55SI Dual 250A 24V
Brakes	Bendix ADB22X
Parking Brake	Spring brake on drive axle
Fuel System	191 US gal. usable volume (201 US gal. gross volume) aluminum tank. 15 US gal. DEF tank capacity.
Body Type	Stainless-steel frame with high strength low alloy steel in suspension areas for higher strength and fatigue life
Exterior Skin	One piece bonded aluminum roof skin and composite exterior body panels
Baggage Doors	Under floor pantograph-type composite baggage doors
Entrance Door	Electric operated bi-part style door
Electrical System	Parker Vansco fully multiplexed electrical system
Instrument Panel	Parker Vansco multi-function display including speedometer, oil pressure, water temperature, fuel level, voltmeter, air pressure and DEF (diesel exhaust fluid) level
Warning Lights	Real-time diagnostics of all operating systems
Cooling System	Below floor parallel radiator/charge air cooler module which quickly swings out for unrestricted service access
Fan System	Electrically driven fan array to maximize fuel efficiency and reliability
Steering System	Variable ratio power steering system
Suspension	Electrically controlled air suspension with high/low ride and kneeling functions
Batteries	Two 8D (1350 c.c.a. each)
Voltage	12 volt and 24 volt
Exterior Lights	12 volt LED, plus 90 mm halogen headlights
Destination Sign	Provisions for front, side and rear destination signs

Interior Design & Other Features

Standard Equipment

Large open parcel racks with cords, individual overhead LED reading lights and airflow controls
LED headlights
A mid-coach Braun wheelchair lift

Optional Equipment

Rear-mounted Braun wheelchair lift with 2 wheelchair positions
Parcel rack air conditioning
Fabric interior packages
Alcoa Durabrite® aluminum wheels
Rear window
Chemical-type lavatory without sink
Four Group 31 batteries with sliding tray
Enclosed parcel racks
Posi-lock fuel fill system

Entertainment Systems & Digital Amenities

Optional Equipment

REI audio/video system with dash mounted DVD & six 15" LCD wide-screen monitors
110V outlets with USB at each seat and 4000W Inverter
NFI Connect™ telematics maximizes up time by collecting key operating data.

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4B – MCI D45CRT LE Overview

Solicitation Requirements:

N/A

MCI Response:

The D45 CRT LE is available in clean-diesel (D45 CRT LE) and batter-electric configurations (D45 CRT LE CHARGE). The coaches feature a revolutionary patented low-entry (LE) vestibule with a seating area and ramp that significantly improves dwell times as well as the boarding and ride experience for passengers with mobility challenges.

Please see the attached [MCI D45 CRT LE Brochure](#) for more information.



MCI

D45 CRT LE

Accessibility on a whole new level.



MCIcoach.com/d-series

The MCI® D45 CRT LE commuter coach warmly welcomes all passengers with an innovative low-entry vestibule with a ramp and adjoining seating area designed with mobility devices in mind.

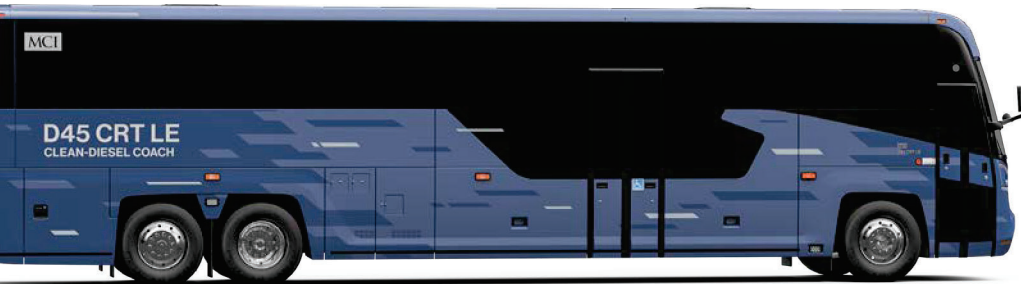
This breakthrough design offers a new standard of comfort and an unprecedented ease of entry and exit.

MCI

Models.

Available in clean-diesel and battery-electric configurations.

Whether your goal is to reduce emissions, lower operational costs or expand commuter express service, the Buy America compliant D45 CRT LE will prove to be one of the safest, most comfortable, and flexible transportation solutions available.



D45 CRT LE

Features a revolutionary patented low-entry (LE) vestibule with a seating area and ramp that significantly improves dwell times as well as the boarding and ride experience for passengers with mobility challenges.



D45 CRT LE CHARGE™

Battery-electric platform that is supported by New Flyer's 50 years of low and zero-emission propulsion experience and New Flyer Infrastructure Solutions™, a service dedicated to providing safe, sustainable, and reliable charging and mobility solutions.

Low + zero-emission.



Zero-emission

The D45 CRT LE CHARGE battery-electric coach offers zero-emissions, while delivering high-capacity commuter coach transportation.



Low-emission

The clean diesel D45 CRT LE coach complies with 2021 EPA X12 engine low emission standards. On a per passenger basis, our clean-diesel coaches offer lower emissions than any current hybrid car.

High-tech safety systems.

- ✓ Patented Digital Wheel End Sensing (DWES) systems help measure wheel end temperatures and monitor individual wheel ends for potential issues.
- ✓ Optional next-generation 360° camera provides a bird's-eye view around the entire coach to significantly aid vision while maneuvering at low speeds.
- ✓ Collision mitigation technology includes stationary object detection and lane departure warnings.

MCI

Mid-door entry & vestibule.

The mid-coach, ADA-compliant automated ramp is available in two lengths, both 30 inches wide, with a higher weight capacity than traditional lifts.

This allows the D45 CRT LE to accommodate a wider variety of mobility aids, including next-generation motorized wheelchairs and other devices.



1. Second door with automated ramp.
2. Lower-level vestibule area with capacity for up to five seats or two mobility devices.
3. Seats flip up to make space for mobility devices.
4. Optional Quantum automated wheelchair securement system shown.
5. Second step well.
6. 54-seat capacity with 49 elevated seats.
7. Two display monitors in the vestibule area.
8. Expansive windows in the vestibule seating area.

Benefits.

Easy accessibility, rapid entry and exit via two doors decreasing dwell time.

Dignified boarding, improved wheelchair securement and a comfortable riding experience for passengers with mobility disabilities.

New ramp provides loading times comparable to low-floor transit buses with flip ramps.

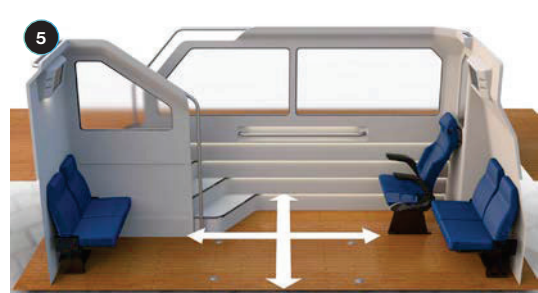


Seating Configurations

Once inside, the spacious vestibule comfortably accommodates up to five seated passengers or one seated passenger and two passengers with mobility devices. Possible configurations are illustrated.

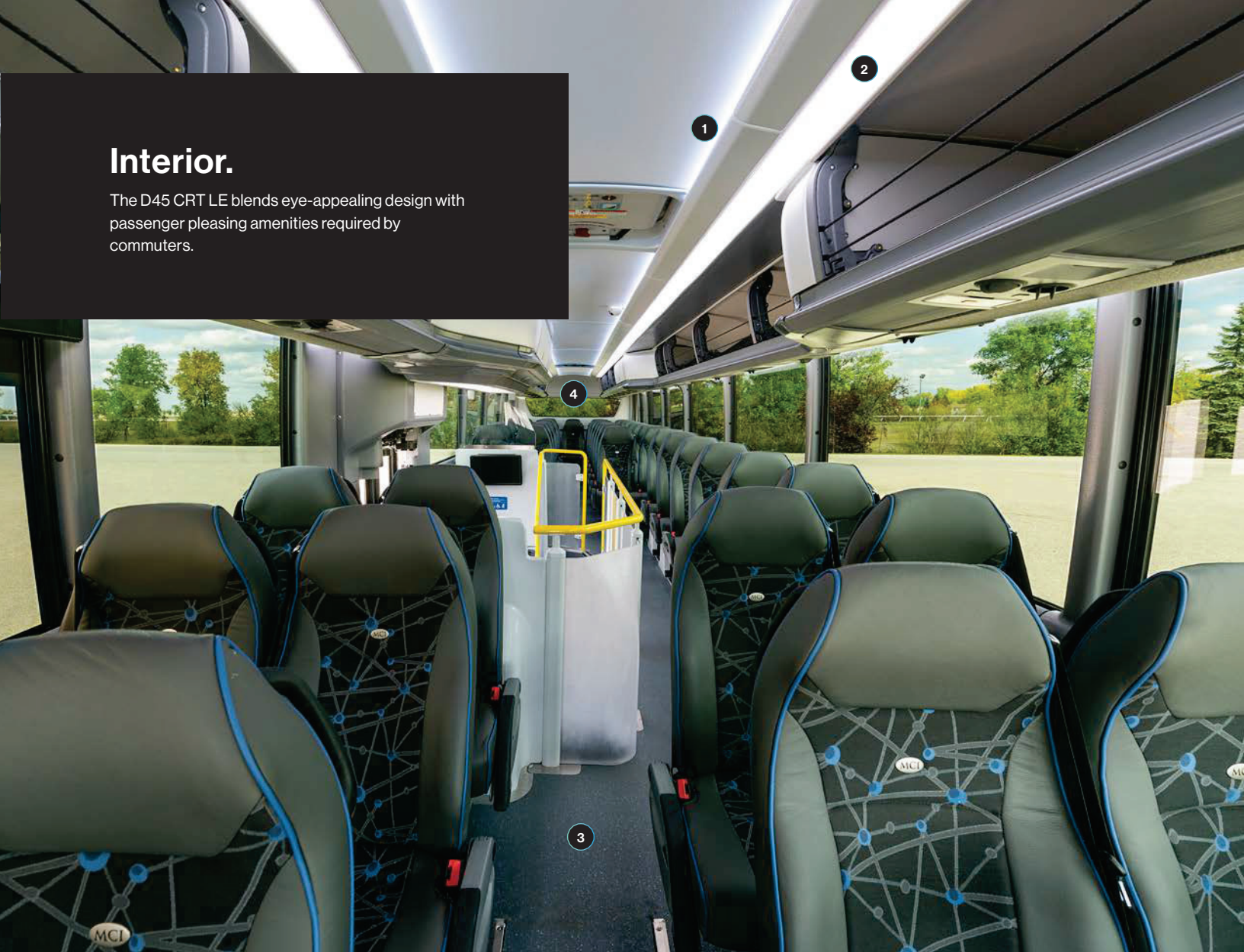
1. Five seats in the lower vestibule.
2. Single forward-facing position.
3. Rearward with Quantum.
4. Rearward and forward position.
5. Two forward positions.

1



Interior.

The D45 CRT LE blends eye-appealing design with passenger pleasing amenities required by commuters.



1. Standard LED indirect ceiling lighting.
2. Standard LED tube lights.
3. Integrated center aisle ramp improves ease of entry and exit.
4. Optional rear window.



Best-in-class parcel rack space.



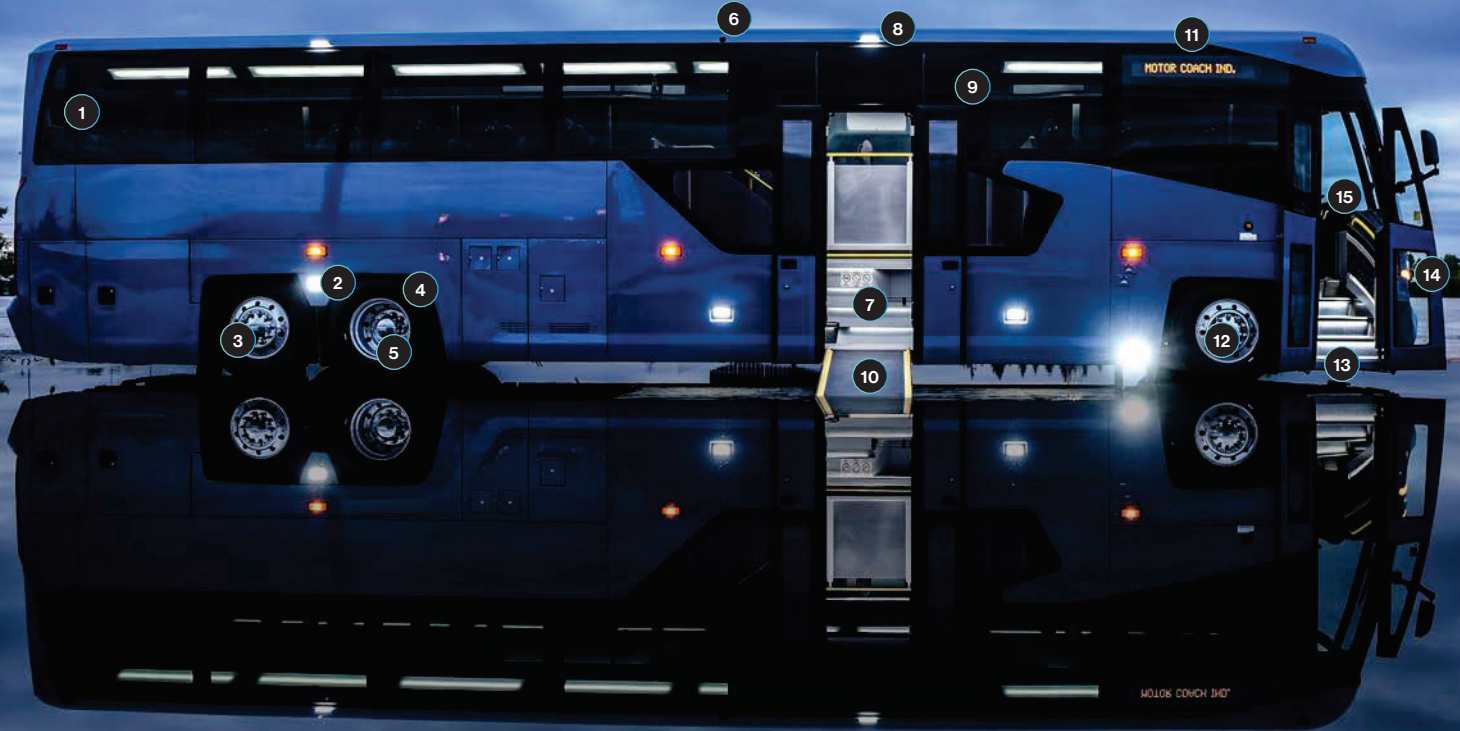
Adjustable passenger modules with LED integrated seatbelt signs.



Optional handles on the backs of seats enhance safety and mobility.

Exterior.

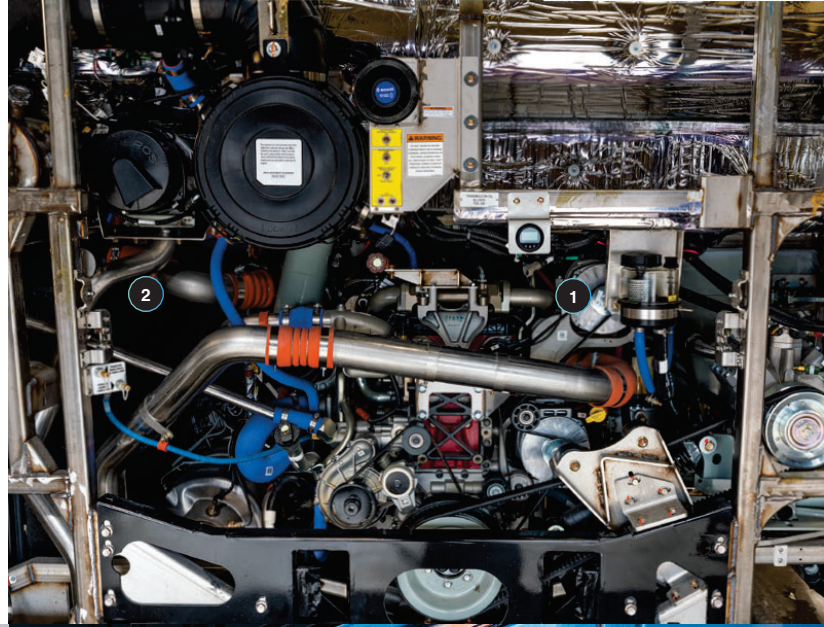
The D45 CRT LE blends modern design with the rugged, durable, heavy-duty operational qualities required by transit operators.



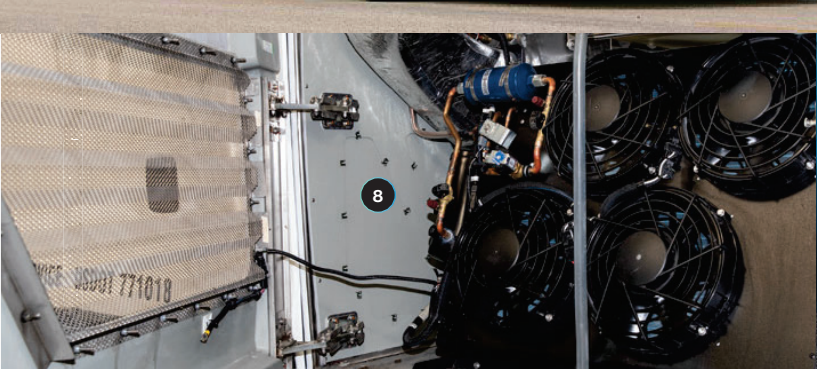
1. Large rear transom windows.
2. The optional LED rear docking light improves visibility.
3. Standard passive rear steering with Sachs shocks enhances MCI wide-ride performance with tight turning.
4. Digital wheel-end shutdown programming notifies the driver and initiates coach shutdown in the event of an over-temperature condition.
5. MDSS system improves operational reliability and includes standard kneeling and high/low rise features.
6. Optional 360° camera system.
7. Patent-pending low-entry vestibule with ample room for two passengers with mobility devices.
8. Optional drip rail lighting.
9. Laminated safety glass with dual-latch emergency release mechanism.
10. 32" clear width mid-coach door with ADA-compliant 1:6 sloped ramp rated to 1,000 lbs.
11. Provisions for front, side and rear destination signs.
12. Bendix ADB 22X brakes provide automotive-level stopping feel, common rotors to reduce parts and provide greater serviceability.
13. Wider front door with MCI patented spiral entryway.
14. Standard LED headlights and LED DRL/turn signal lights for reliability and high visual impact.
15. Optional Bendix Wingman Fusion system with adaptive cruise and collision mitigation technology.

MCI

1. The rugged brushless alternators reduce maintenance
2. Updated standard Amerex fire-suppression system provides a more reliable response
3. Optional rear route sign
4. Rear-rise, high-rise or low-rise suspension settings
5. Baggage compartment doors with keyed or optional electric locks
6. E-fan system for improved fuel efficiency and reliability



7. Robust lower structure in both front and rear, with energy-absorbing bumpers
8. The brushless motors on the HVAC evaporator and condenser motors significantly improve reliability and reduce maintenance with an expected 10-year life
9. Spare-tire roller to improve ease of access and removal of the spare
10. Optional fog lamps



Driver's area.

Updated cockpit with a redesigned, ergonomic dash featuring easier-to-read gauges on an integrated high-definition instrument panel that sits lower for better sight lines and puts intuitive controls within reach.



1. Notched dash for farebox installation
2. Multifunction dash display
3. Steering wheel with integrated controls for accessing diagnostic information via the dash display
4. Large driver's toll window
5. Choice of USSC or Recaro driver's seat
6. Ergonomic driver's workspace



MCI

Reliable design.

Our family of D-Series coaches, including the commuter coach, are known as workhorses in the public transit industry.



Our sturdy, full stainless steel frame resists the elements and provides dependable long-term structural integrity. Our innovative D45 CRT LE features increased stainless componentry and overall reduced parts count for simplicity.



Single-piece, thick-walled stainless steel tubing in critical areas such as our window posts, add strength, durability and excellent fit and finish.



Electrical systems are simplified, using less wiring and fewer modules. All compartments and connectors are tightly sealed for durability and environmental protection.

Reliable service and support.

MCI service and support delivers a relationship-driven and responsive approach to customer care.



Comprehensive support that includes in-field expertise, technical call center and 24/7 roadside assistance.



Ongoing technical training from the industry's only Automotive Service Excellence (ASE) accredited MCI Academy technician training center.



Customizable programs to fit your financial needs through MCI Financial Services.



On-the-go support with MCI Operator's App and MCI Companion App.



MCI Service Center - from routine maintenance and warranty to complex troubleshooting, you'll find all the help you need.



Parts support from NFI Parts®, the industry's largest parts supplier.

MCI

MCI D45 CRT LE specification highlights.

Legend

S	Standard in basic coach
O	Optional addition in basic coach

	Base Spec
Safety and Security	
Amerex fire-suppression system and engine compartment fire detection	S
Digital Wheel End Sensing (DWES) to detect wheel end faults	S
FMVSS 210 load compliant seat track and mounting system with infinite adjustability	S
Bendix® ESP (Electronic Stability Program)	S
Bendix® Wingman Fusion System with Adaptive Cruise Control and Collision Mitigation Functionality	O
High-visibility yellow ergonomic handrails throughout the vehicle	S
Display monitors in the vestibule area	O
Integrated SmarTire™ tire-pressure monitoring system with always-on sensors	O
Frameless single pane passenger emergency egress windows with laminated safety glass and dual-latch	S
Frameless dual pane passenger emergency egress windows with tempered / laminated safety glass and dual-latch	O
Spare tire compartment roller	S
Brigade 360 degree camera system	O
Brigade 500 GB (4 exterior cameras) or 1 TB (4 interior & 4 exterior cameras) digital recording system	O
Powertrain and Economy	
Cummins X12 w/engine brake, 410 hp, 1,450 lb-ft torque	S
Allison Gen V transmission with prognostics capability	S
Fuel economy optimized rear axle ratios	S
"MCI Connect" option for enhanced engine diagnostics	O
Relocated engine air intake system including standard pre-filter / water separator and enhanced engine compartment service lighting	S
2 x 250 Amp Delco (Borg Warner) 55 SI alternators	S
45,000 BTU ProHeat or 120,000 BTU Valeo (Spheros/Webasto) auxiliary heaters	O
Exterior	
Semi-monocoque low-corrosion stainless steel body	S
Fiberglass composite front and rear caps, exterior skin and baggage doors	S
Dual entry / egress locations - electric operated bi-part entrance and mid-coach doors	S
Front entry pantograph (plug style) door in lieu of bi-part door	O
Ultra durable front and rear bumper systems	S
Patent-pending headlight bezel design for easier service access	S
Long-life, high-visibility LED high/low beam forward lighting	S
Drip rail overhead lighting	O
New acrylic rear tail lamp panels	S
Fog lamps with impact resistant polycarbonate lenses	O
Hub-piloted steel wheels, 22.5 x 9.0 inch	S
Alcoa aluminum wheels with Durabrite coating, 22.5 x 9.0 inc	O
Firestone® tires 315/80 R22.5, L-rated	S
Michelin® tires 315/80 R22.5, L-rated	O

MCI

MCI D45 CRT LE specification highlights.

Legend

S	Standard in basic coach
O	Optional addition in basic coach

Handling, Ride and Braking

	Base Spec
Independent Front Suspension system with labyrinthically sealed unitized wheel ends - 17,000 lb rating	S
23,000 lb drive axle and 16,500 lb tag axle with independent suspension	S
Bendix® all-wheel ADB 22X™ disc brakes	S
Tilt and telescoping steering wheel with integrated controls and ZF variable ratio steering	S
Wide-ride suspension system with Sachs shocks	S
Passive rear steering system provides amazingly tight 40' 11" turning radius	S
Extreme duty tag axle unload valves for MDSS / Bendix air system	S

Passenger Interior, Appointments and Convenience

Patent-pending vestibule area with ample room for mobility challenged passengers and their companions, offering greatly reduced dwell times and greater independence	S
MCI-exclusive mid-coach door with vestibule area and integrated ramp conforming to the latest ADA 6:1 slope guidelines	S
Shorter vestibule ramp available for curbside loading applications	O
Best-in-class interior passenger space with comfortable seating for 54 passengers (53 passengers with 1 mobility device or 52 passengers with 2 mobility devices)	S
MCI-exclusive front spiral entrance stairway with ergonomic grab rails	S
USSC A-220 thin-back seat for improved passenger space, with separate headrest and integral 3-point seatbelts	S
Kiel 2050 or 1020 seating featuring modern styling and integral 3-point seatbelts	O
USSC GT seating with integrated headrest and FMVSS 210 compliant 3-point seatbelts	O
Quantum automatic restraint system	O
Rear window for improved passenger visibility and ambiance	O
Large rear transom windows	S
LED tube lights in ceiling	S
Enhanced LED interior lighting choices including stepwell nosing lights and window lights	O
Industry leading capacity parcel racks featuring more robust components and improved aesthetics	S
Enclosed parcel racks	O
Customizable fabric, flooring and interior trim options	S
Larger, re-configured lavatory with vandal resistant features	O

Driver's Cockpit, Instrumentation and Controls

New, multifunction dash display with greatly enhanced functionality, improved driver ergonomics, and "plain English" diagnostic messages	S
Multi-function steering wheel	S
Notched dash for easy installation of fare box	S
USSC or Recaro 3-point driver seats with seatbelt alarm	S
Enhanced pre-trip walk-around test check for easier inspections	S
Driver's toe kick area, streamlined LH console with larger cup holder and 12V plus USB charging ports	S
Power windshield blinds without guide rods that recess into the front upper cap when not in use	S
Unbreakable driver's defrost vents	S

MCI

MCI D45 CRT LE specification highlights.

Legend

S	Standard in basic coach
O	Optional addition in basic coach

Electronics Systems

	Base Spec
Latest generation Parker/Vansco fully multiplexed solid-state electrical system featuring optimized military-grade components	S
110V outlets w/USB at every seat, including 4000 Watt inverter and integral battery charger	O
Improved Wi-Fi system options	O
Saucon asset tracking system with geo-fencing and OBR (on-board recording) capability	O
Generic 12V power supply provided for Wi-Fi installation, as well as powering any operator-added accessory	S
Installation provisions for customer specific electronic components (fare boxes, cameras, destination signs, passenger counters, etc.)	S

Coach Operation and Performance

Brushless motors on HVAC evaporator and condenser for long life and low maintenance	S
Radiator and charge air cooler with state-of-the-art e-coated frame, tubes and fins, designed and tested for highly corrosive environments	S
Stainless steel, corrosion resistant coolant and charge air cooler tubes	S
Rotary main battery disconnect switch	S
MCI A/C compressor with improved tensioning system and idler	S
Service door hinges with greaseable fittings	S
Corrosion control enhancements including improved SST rear J-box, more SST bracketry and improved processes for applying HydroArmor in the factory (air tanks, under carriage coverage)	S
Improved docking and cornering light logic for enhanced low-speed visibility and passenger entry / exit	S
Flat composite baggage bay flooring for improved corrosion resistance and driver ease-of-use	S

Support, Services and Warranty

Standard 24-month limited warranty including 12-year structural warranty	S
Extended OEM warranties on engine and transmission	O

General Weights and Measurement

	Base Spec		Base Spec	
Overall Length (bumper to bumper)	45' 10"	(13.80 m)	Turning Radius	41' 9" 12.42 m
Wheelbase	315.00"	(8.00 m)	Gross Vehicle Weight	54,000 lb 24,494 kg
Front Overhang	78.25"	(1.99 m)	Total Luggage Compartment Volume	134 cu ft w/o parcel rack 3.82 cu m w/o parcel rack
Rear Overhang	150.25"	(3.82 m)		222 cu ft with parcel rack 6.23 cu m with parcel rack
Overall Width	102.00"	(2.59 m)	Fuel Tank Capacity (usable)	191 gal 692.73 L
Overall Height	138.00"	(3.51 m)	DEF Tank Capacity	15 gal 6.78 L
Interior Height	78.25"	(1.99 m)	Payload Capacity	16,000 lbs 7,257 kg
Front Track	84.84"	(2.15 m)		
Rear Track (drive)	75.38"	1.91 m		
Rear Track (trailing)	84.84"	2.15 m		

MCI



D45 CRT LE

MCIcoach.com/d-series



Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4C – MCI D4520 Overview

Solicitation Requirements:

N/A

MCI Response:

The D4520.

Please see the attached [MCI D4520 Specification Sheet](#) for more information.





MCI[®] D4520

Specification sheet.

The legendary workhorse, modernized with next generation innovation and style.



MCI® D4520 technical specs.

Increased fuel economy. Low total cost of ownership.

Dimensions

Overall Length (bumper to bumper)	45.10'	13.84 m
Wheelbase	315.00"	8.08 m
Front Overhang	79.00"	1.93 m
Rear Overhang	106.70"	2.68 m
Overall Width	102.00"	2.59 m
Overall Height	138.60"	3.48 m
Interior Height	78.00"	1.99 m
Front Track	84.84"	2.15 m
Rear Track (drive)	75.38"	1.91 m
Rear Track (trailing)	84.84"	2.15 m
Turning Radius	41.90"	14.33 m
Gross Vehicle Weight Rating	54,000 lb	22,680 kg
Luggage Compartment Volume*	560 cu ft	14.64 cu m

Safety + Performance

Standard Equipment

Electronic Stability Control (ESC)	Electrically locking baggage compartments
Automatic Traction Control (ATC)	Electronically controlled high/low rise feature
Disc brakes with 6 channel Antilock Braking System (ABS)	MCI® A/C compressor
Three-point passenger seat belts (multiple seat models available)	Davco Fuel Pro® filter with sight glass
Amerex fire detection and suppression	MP water circulating pump
SmarTire® integrated tire pressure monitoring system with always-on sensors	MCI exclusive spiral entrance stairway with aluminum step nosing & stainless-steel grab rails
Tilt and telescoping steering wheel	Passive steerable tag axle with unload feature
Cruise Control	

Optional Equipment

Proheat auxiliary heater-45,000 BTU	360° Camera system
Bendix Fusion collision mitigation system	Sliding battery tray
Video surveillance systems	Curb lights

Standard Equipment

Engine Options	Cummins X12 w/engine brake, 410 hp, 1,450 lb-ft torque
Transmission	Allison B500 Gen V
Front Axle	ZF 17,000 lb (7,711 kg) with unitized wheel ends
Drive Axle	ZF 23,000 lb with pre-set wheel bearings
Tag Axle	ZF 16,500 lb (7,484 kg) with unitized wheel ends
Seating	56-passengers
Wheels	Hub-mounted steel, 22.5 x 9.0
Tires	Firestone FS400 315/80 R22.5 9.00" L-rated
Alternator	Borg Warner 55SI Dual 250A 24V
Brakes	Bendix ADB22X
Parking Brake	Spring brake on drive axle
Fuel System	191 US gal. usable volume (201 US gal. gross volume) aluminum tank. 15 US gal. DEF tank capacity.
Body Type	Stainless-steel frame with high strength low alloy steel in suspension areas for higher strength and fatigue life
Exterior Skin	One piece bonded aluminum roof skin and composite exterior body panels
Baggage Doors	Underfloor pantograph-type composite baggage doors with central electrical locking system
Entrance Door	Electric-operated bi-part style door
Electrical System	Parker Vansco fully multiplexed electrical system
Instrument Panel	Parker Vansco multi-function display including speedometer, oil pressure, water temperature, fuel level, voltmeter, air pressure and DEF (diesel exhaust fluid) level
Warning Lights	Real-time diagnostics of all operating systems
Cooling System	Below floor parallel radiator/charge air cooler module which quickly swings out for unrestricted service access
Fan System	Electrically driven fan array to maximize fuel efficiency and reliability
Steering System	Variable ratio power steering system
Suspension	Electrically controlled air suspension with high/low ride and kneeling functions
Batteries	Two 8D (1350 c.c.a. each)
Voltage	12 volt and 24 volt
Exterior Lights	12 volt LED, plus 90 mm halogen headlights

Entertainment Systems & Digital Amenities

Standard Equipment

REI audio/video system with dash mounted DVD & six 15" LCD wide-screen monitors

Optional Equipment

- Wireless microphone
- iPod & MP3 connection
- WiFi system
- 110V outlets with USB at each seat and 4000W Inverter
- Saucon asset tracking system

Interior Design & Other Features

Standard Equipment

- Chemical-type lavatory without sink
- Large open parcel racks with cords, individual overhead LED reading lights and airflow controls
- LED headlights

Optional Equipment

- Rear-mounted Braun wheelchair lift with 2 wheelchair positions
- Parcel rack air conditioning
- Fabric interior packages
- Alcoa Durabrite® aluminum wheels
- Rear window

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4D – Floor Plans

Solicitation Requirements:

N/A

MCI Response:

Please find **Floor Plans** for each model proposed, enclosed for your evaluation.

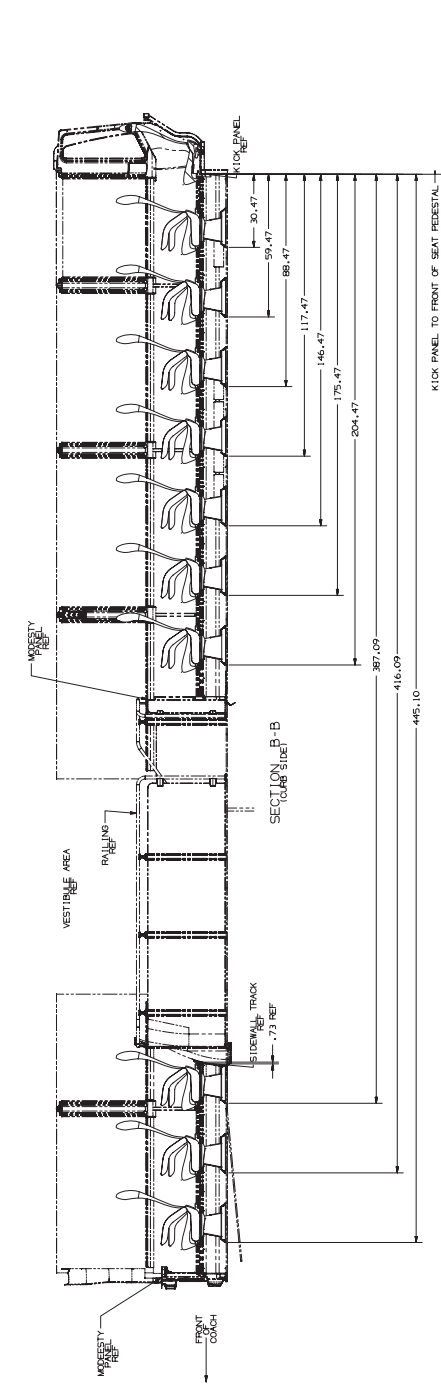
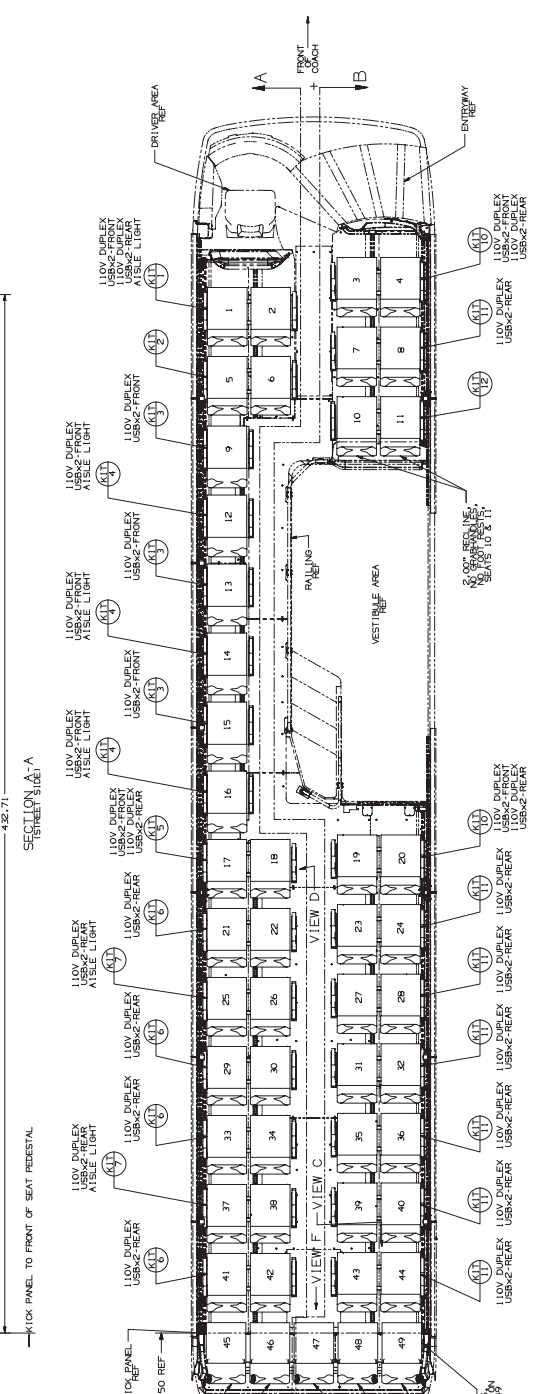
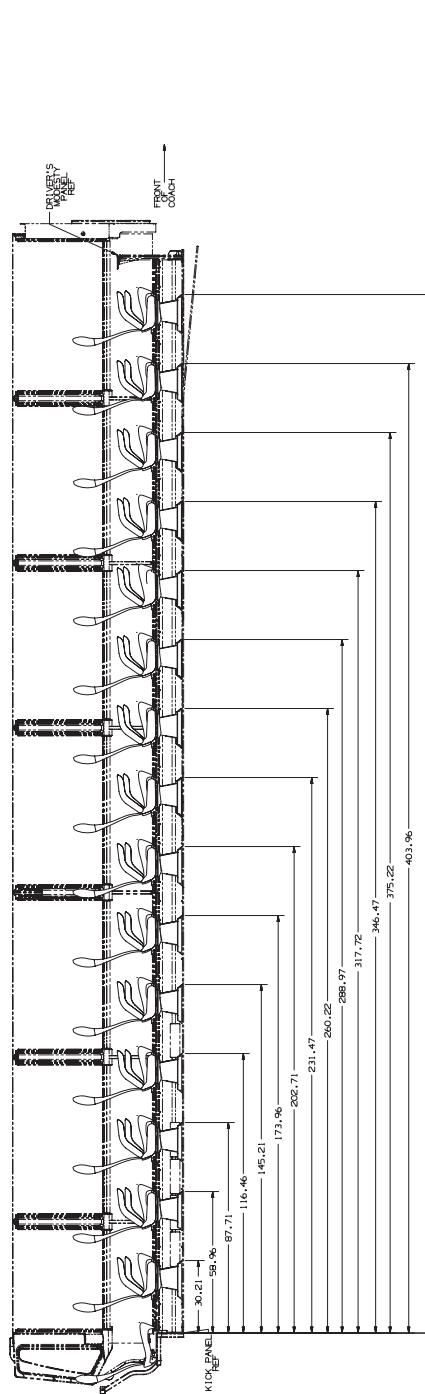
- **DWG 03-11-3310: D4520**
- **DWG 03-11-3420: D45 CRT & CRT CHARGE**
- **DWG 943499: D45 CRT LE & D45 CRT LE CHARGE (Upper Deck)**
- **DWG 965915: D45 CRT LE & D45 CRT LE CHARGE (Lower Deck)**

NOTE: FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED MPB BOM SHEET FOR PARTS LISTING

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PART # 943499

DESIGN REF. NOTES:
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- NOTES:
1. THE SEAT IS SUPPLIED WITH COVER OR PEDESTAL CAPS
 2. ALL DIMENSIONS ARE TO BE UNLESS OTHERWISE SPECIFIED IN THE DRAWING
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 4. SEAT HEIGHT MEASUREMENT IS TO BE TAKEN TO THE TOP OF THE SEAT CUSHION
 5. SEAT BALLBOUNDS SUCH AS REFER TO ITEM XXX IN KIT
 6. ALL DIMENSIONS ARE TO BE UNLESS OTHERWISE SPECIFIED IN THE DRAWING
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1	AS SHOWN	ISSUED FOR PRODUCTION	15-DEC-21	EDWARD YOUNG	EDWARD YOUNG
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3	AS SHOWN	REVISED			
4	AS SHOWN	REVISED			
5	AS SHOWN	REVISED			
6	AS SHOWN	REVISED			
7	AS SHOWN	REVISED			
8	AS SHOWN	REVISED			
9	AS SHOWN	REVISED			
10	AS SHOWN	REVISED			

NO.	SCALE	DESCRIPTION	DATE	BY	CHKD.
1	AS SHOWN	ISSUED FOR PRODUCTION	15-DEC-21	EDWARD YOUNG	EDWARD YOUNG
2	AS SHOWN	REVISED			
3	AS SHOWN	REVISED			
4	AS SHOWN	REVISED			
5	AS SHOWN	REVISED			
6	AS SHOWN	REVISED			
7	AS SHOWN	REVISED			
8	AS SHOWN	REVISED			
9	AS SHOWN	REVISED			
10	AS SHOWN	REVISED			

NO.	SCALE	DESCRIPTION	DATE	BY	CHKD.
1	AS SHOWN	ISSUED FOR PRODUCTION	15-DEC-21	EDWARD YOUNG	EDWARD YOUNG
2	AS SHOWN	REVISED			
3	AS SHOWN	REVISED			
4	AS SHOWN	REVISED			
5	AS SHOWN	REVISED			
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7	AS SHOWN	REVISED			
8	AS SHOWN	REVISED			
9	AS SHOWN	REVISED			
10	AS SHOWN	REVISED			

NO.	SCALE	DESCRIPTION	DATE	BY	CHKD.
1	AS SHOWN	ISSUED FOR PRODUCTION	15-DEC-21	EDWARD YOUNG	EDWARD YOUNG
2	AS SHOWN	REVISED			
3	AS SHOWN	REVISED			
4	AS SHOWN	REVISED			
5	AS SHOWN	REVISED			
6	AS SHOWN	REVISED			
7	AS SHOWN	REVISED			
8	AS SHOWN	REVISED			
9	AS SHOWN	REVISED			
10	AS SHOWN	REVISED			

NO.	SCALE	DESCRIPTION	DATE	BY	CHKD.
1	AS SHOWN	ISSUED FOR PRODUCTION	15-DEC-21	EDWARD YOUNG	EDWARD YOUNG
2	AS SHOWN	REVISED			
3	AS SHOWN	REVISED			
4	AS SHOWN	REVISED			
5	AS SHOWN	REVISED			
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10	AS SHOWN	REVISED			

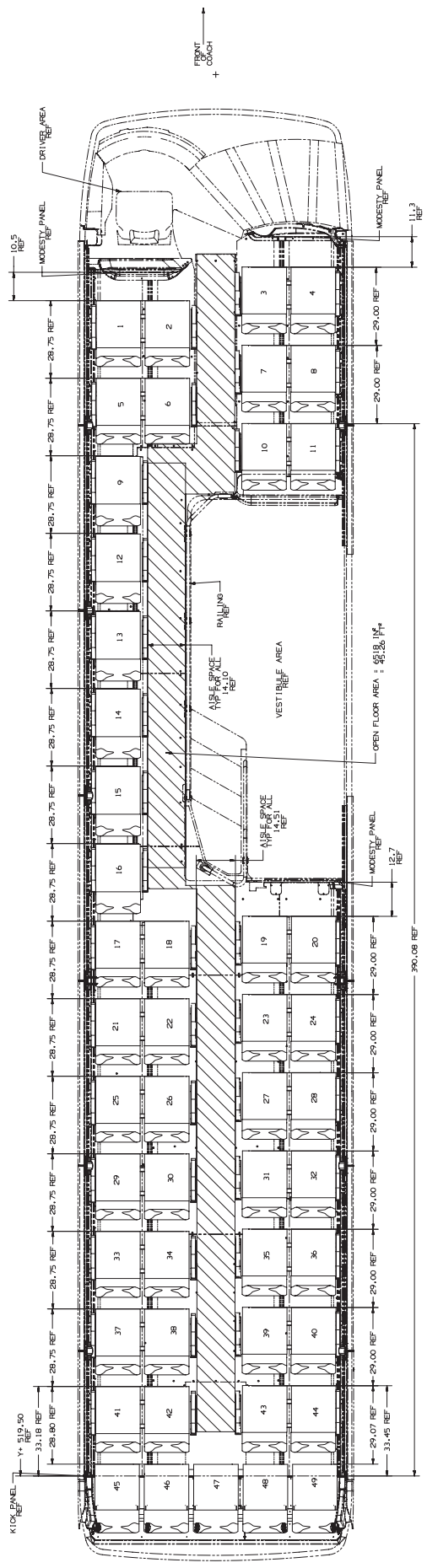
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2	AS SHOWN	REVISED			
3	AS SHOWN	REVISED			
4	AS SHOWN	REVISED			
5	AS SHOWN	REVISED			
6	AS SHOWN	REVISED			
7	AS SHOWN	REVISED			
8	AS SHOWN	REVISED			
9	AS SHOWN	REVISED			
10	AS SHOWN	REVISED			

NO.	SCALE	DESCRIPTION	DATE	BY	CHKD.
1	AS SHOWN	ISSUED FOR PRODUCTION	15-DEC-21	EDWARD YOUNG	EDWARD YOUNG
2	AS SHOWN	REVISED			
3	AS SHOWN	REVISED			
4	AS SHOWN	REVISED			
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6	AS SHOWN	REVISED			
7	AS SHOWN	REVISED			
8	AS SHOWN	REVISED			
9	AS SHOWN	REVISED			
10	AS SHOWN	REVISED			

NOTE: FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED MPB BOM SHEET FOR PARTS LISTING

THE INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY TO THE DRAWING AND ALL MATERIAL DELIVERED WITH IT MUST BE RETURNED TO THE DRAWING AND ALL MATERIAL DELIVERED WITH IT MUST BE RETURNED TO THE DRAWING WITHOUT THE PRIOR WRITTEN CONSENT OF THE GROUP INC. ONE OR MORE OF THE FOLLOWING RIGHTS ARE RESERVED: PATENT RIGHTS, TRADEMARK RIGHTS, COPYRIGHT RIGHTS, AND ALL OTHER RIGHTS RESERVED. ADDITIONAL INFORMATION CAN BE OBTAINED BY REFERENCING THREE DIMENSIONAL DESIGN DATA. CONTACT YOUR NET GROUP INC. REPRESENTATIVE AS REQUIRED.

PART #
943499



HIP-TO-KNEE CHART:
IFOR REFERENCE ONLY (BASED ON 17)

SEAT #/H/K (L/R)	HIP-TO-KNEE (IN)
1 & 2	28.00
3 & 4	28.75
5 & 6	27.75
7 & 8	28.00
9	27.75
10 & 11	28.00
12	27.75
13	27.75
14	27.75
15	27.75
16	27.75
17 & 18	27.75
19 & 20	30.20
21 & 22	27.75
23 & 24	28.00
25 & 26	27.75
27 & 28	28.00
29 & 30	27.75
31 & 32	28.00
33 & 34	27.75
35 & 36	28.00
37 & 38	27.75
39 & 40	28.00
41 & 42	27.75
43 & 44	28.00
45 & 46	27.75
48 & 49	28.00

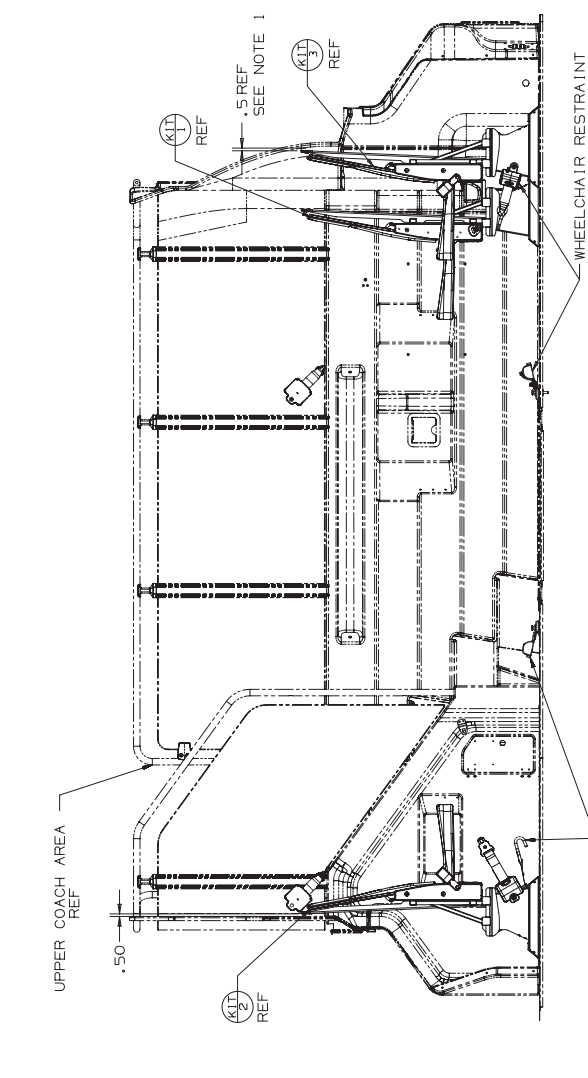
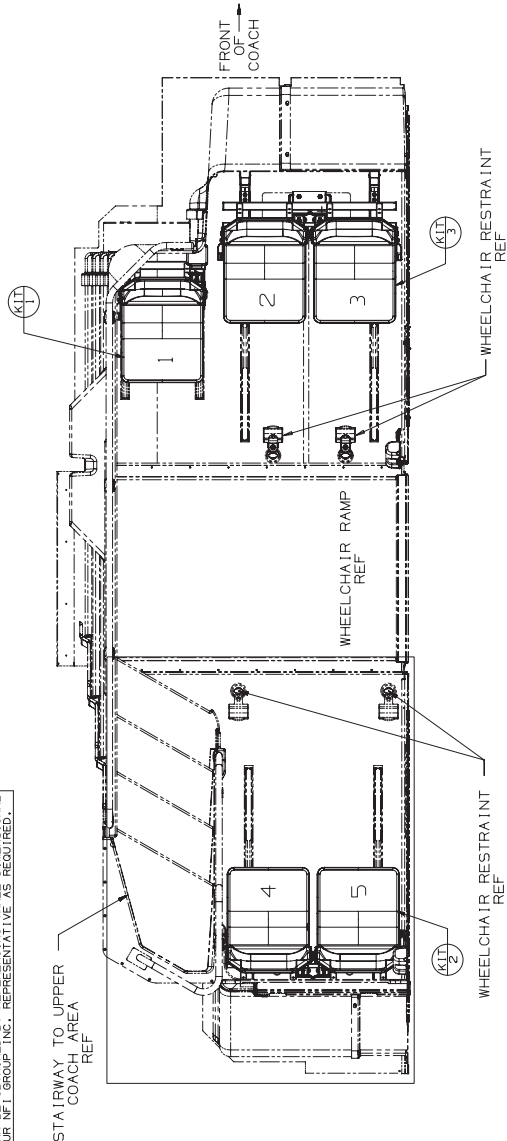
DO NOT SCALE DRAWING	TITLE	INSTR. SEATING U/D KIEL 2050 CRTLE 49P
DATE: 12-DEC-21	MATERIAL:	N/A
DRAWN BY: EDWARD YOUNG	FINISHES:	NOT APPLICABLE
DATE: 12-DEC-21	GROUP:	NET GROUP
REV: A	SCALE:	1:15
DESCRIPTION:	SHEET # OF #:	3 OF 3
	TO ENG. ALL ERRORS:	TO ENG. REPR.

PART N°
965915

NOTE: FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED MRP BOM SHEET FOR PARTS LISTING

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DESIGN REF NOTES:
 -KIEL NEMO VESTIBULE SEATS WITH 3PT PASSENGER RESTRAINT (VESTIBULE)
 -5 PASSENGERS ON LOWER DECK (VESTIBULE)
 -SEATS DO NOT HAVE RECLINE OPTION
 -SEAT POSITIONS 1 TO 5
 -FOR 45' CRTLE
 -DIESEL, ELECTRIC



LOOKING TOWARDS STREET SIDE OF COACH
(SIDE WALL REMOVED FOR CLARITY)

- NOTES:
1. POSITION SEAT AT SPECIFIED LOCATION IN THE COACH, ENSURE THAT THERE IS APPROXIMATELY A 1/2 INCH GAP TO ANY ADJACENT OBSTRUCTION WHEN SEATS ARE PLACED AS FAR REARWARD AS THEY CAN BE ON SEAT TRACKS.
 2. SPLIT BALLOONS SUCH AS (KIT 3) REFER TO ITEM XXX IN KIT ITEM 3. ALL SPLIT BALLOONS ARE REFERENCED ITEMS.
 3. IF THE SEAT IS SUPPLIED WITH PEDESTAL CAPS ATTACHED, REMOVE AND KEEP TO BE REINSTALLED.
 4. POSITION THE SEAT AT SPECIFIED LOCATION IN THE COACH, ENSURE THAT THERE IS APPROXIMATELY A 1/2 INCH GAP TO ANY ADJACENT OBSTRUCTION WHEN SEATS ARE PLACED AS FAR REARWARD AS THEY CAN BE ON SEAT TRACKS.
 5. AFTER LOCATION HAS BEEN DETERMINED MARK THE LOCATION ON THE FLOOR AND DRILL FOR EACH PEDESTAL. MOVE THE SEAT OUT OF THE WAY AND DRILL FOR EACH 1/2 INCH HOLES THROUGH TOP LAYER OF SEAT TRACK ONLY AT THE LOCATIONS MARKED, CENTERED ON THE SEAT TRACK PER DETAIL C.
 6. ENSURE T-BOLTS ARE ORIENTED IN THE FLOOR TRACK AS SPECIFIED BEFORE TORQUEING.
 7. TORQUE TO 54-60 FT-LBS.

QTY	U/M	ITEM	PART NO.	DESCRIPTION
1.000	EA	3	965916	KIT-SEATING L/D KIEL NEMO CRTLE 5P
18.000	EA	2	3R-11-32	BOLT-T HD-7/16X3 X .75 LG
18.000	EA	1	19T-3-226	NUT-HEX,SERR FLG-7/16-20UNF,W/THREAD COATING

MATERIAL	TREATMENT	WEIGHT	SIMILAR TO
N/A	N/A	N/A	N/A
TITLE INSTL-SEATING L/D KIEL NEMO CRTLE 5P			
INSPECT'D TOLS.-REC.NI			
.XX .XX .XX BOLTS R40.1, ANGLE TOL. ±.1°			

DATE (DD-MM-YY)	REV	DESCRIPTION
08-JUN-22	A	RELEASED TO PRODUCTION.

ECO-20164	ECO
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ECN-20164	ECO
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ECN-20164	ECO
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ECN-20164	ECO
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ECN-20164	ECO
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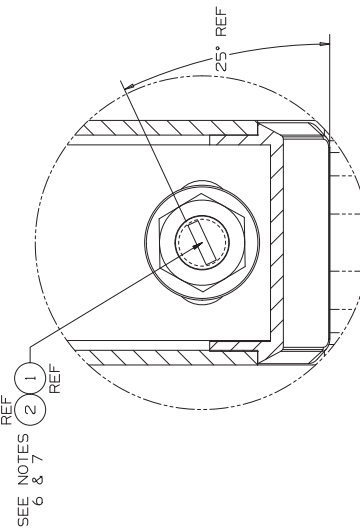
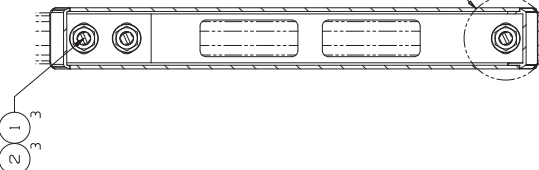
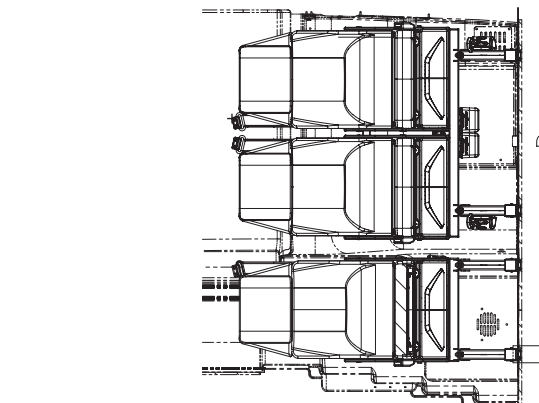
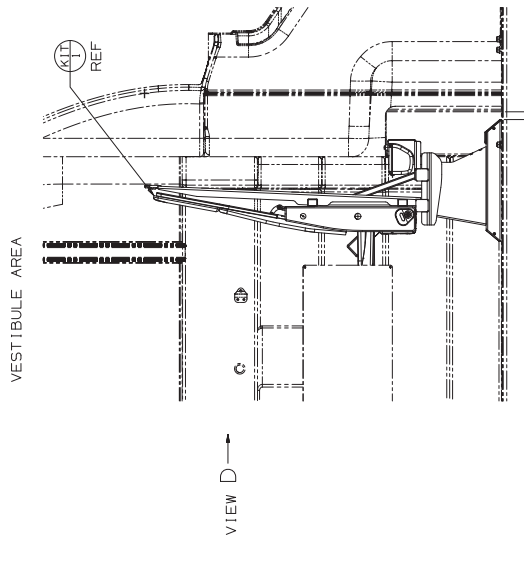
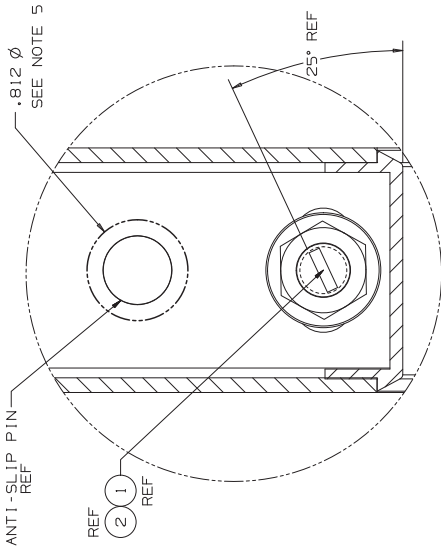
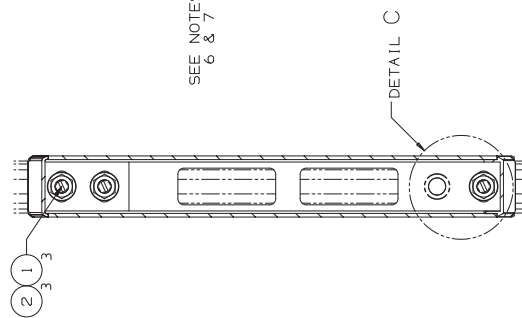
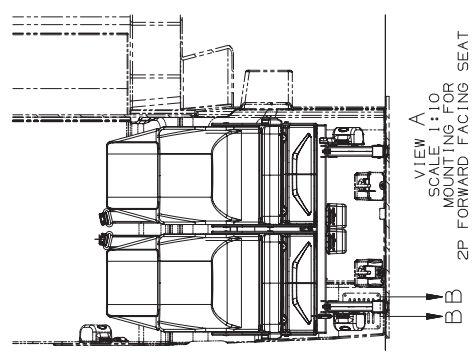
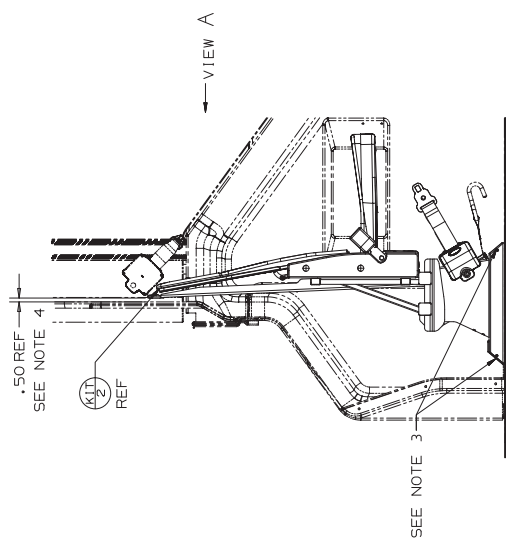
DO NOT SCALE DRAWING	DIMENSIONS IN 1"
ARE IN M.M.	
THD ANGLE	
DRAWN BY	EDWARD YELING
DATE (DD-MM-YY)	08-JUN-22

SCALE 1:12	D	1
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NOTE: FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED MRP BOM SHEET FOR PARTS LISTING

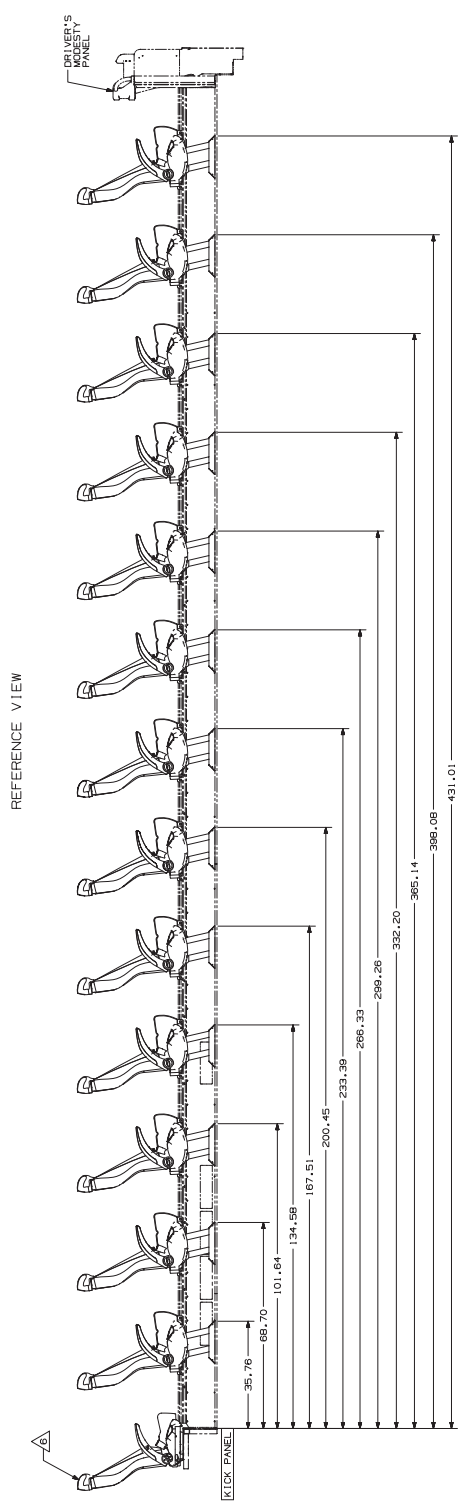
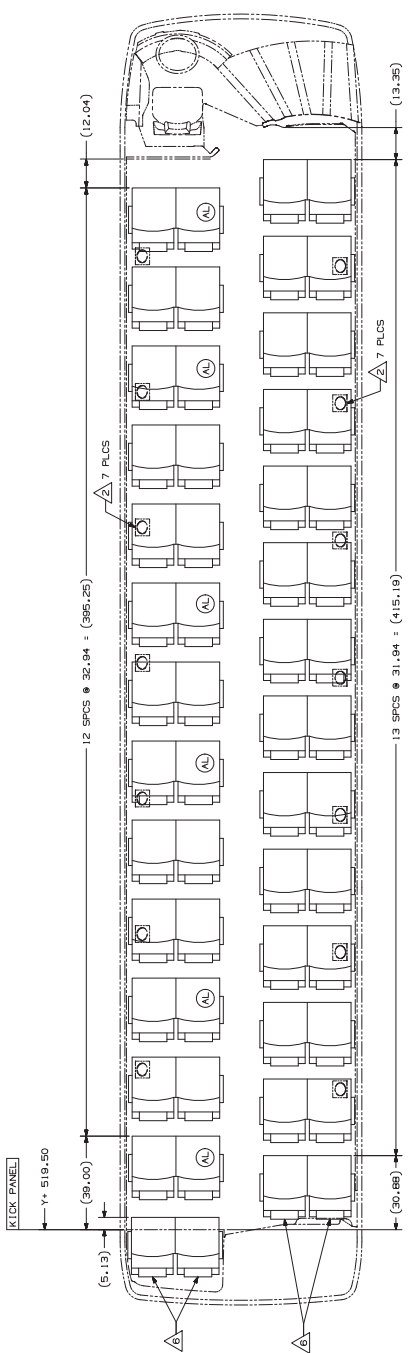
PART N°
965915



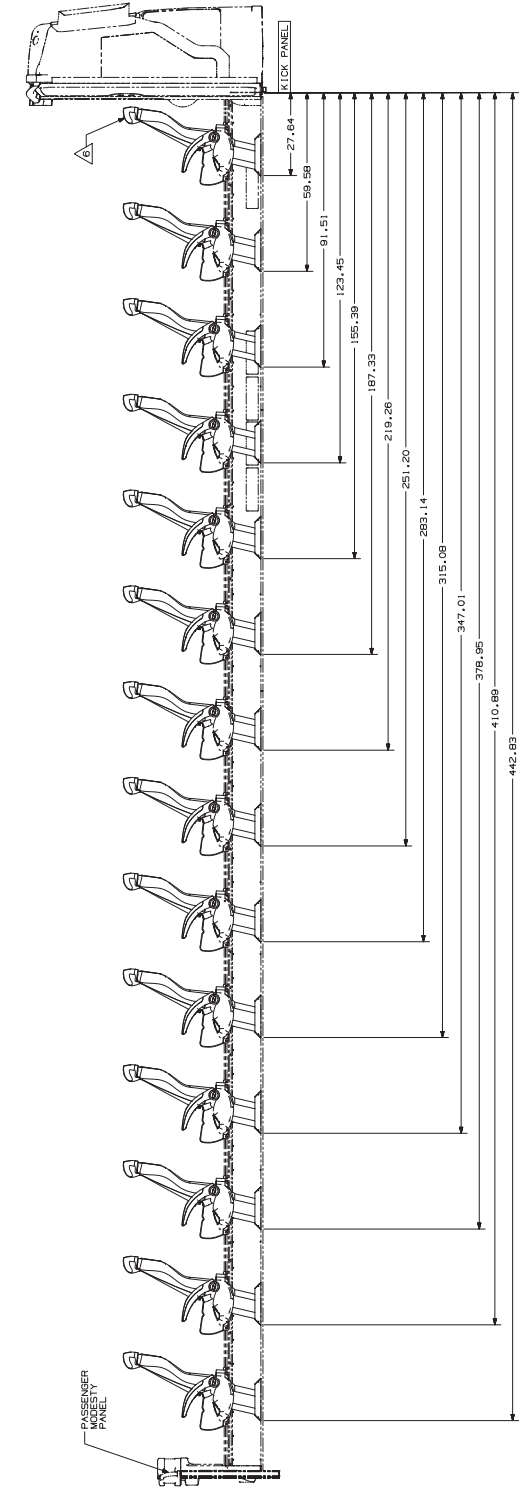
DETAIL F
SCALE 2:1
3 PLCS

DO NOT SCALE DRAWING	TITLE	
DIMENSIONS IN () ARE IN IN. & FRACTIONS	INSTL-SEATING L/D KIEL NEMO CRTLE 5P	
THD ANGLE	INSPECT'D TOLS. (REC. IN)	
DRAWN BY	NFI GROUP	
EDWARD YELING	PART N° 965915	
DATE (DD-MMM-YY)	SCALE 1:8	
08-JUN-22	SHEET 3 OF 3	
REV	REPORT ALL ERRORS TO ENG. DEPT.	
A	ECC-20184	
	ECO	

MATERIAL	TITLE	
N/A	INSTL-SEATING L/D KIEL NEMO CRTLE 5P	
TREATMENT	INSPECT'D TOLS. (REC. IN)	
N/A	NFI GROUP	
WEIGHT	PART N° 965915	
N/A	SCALE 1:8	
SIMILAR TO	SHEET 3 OF 3	
958144	REPORT ALL ERRORS TO ENG. DEPT.	
	ECC-20184	
	ECO	



ROADSIDE VIEW (LH)
SCALE 1:10



CURBSIDE VIEW (RH)
SCALE 1:10

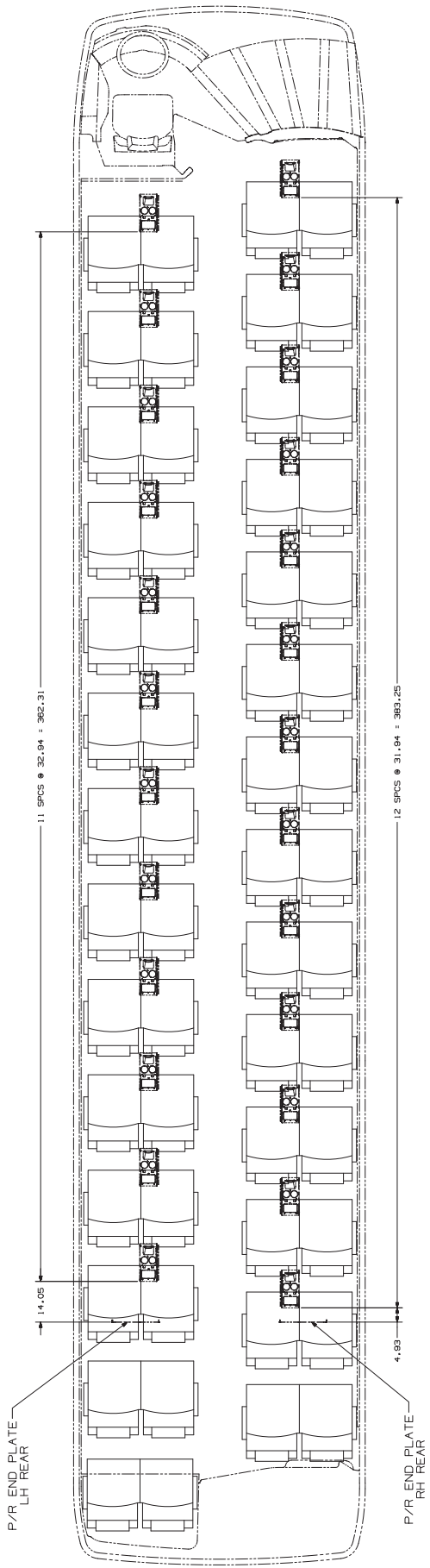
- NOTES:
1. AISLE LIGHT.
 2. RADIO SPEAKER LOCATION SHOWN FOR REFERENCE.
 3. RECOMMENDED MAXIMUM RECLINE SETTINGS:
LH-4.0°
RH-4.0°
RW-4.0°
 4. WITH PASSENGER 3-1/4" RECLINING SEATS, MAYA A220 SEATS BREAKDOWN:
16) LH SIDE 2-PASSENGER SEATS W/ AISLE LIGHT
14) RH SIDE 2-PASSENGER SEATS
11) 2-PASSENGER REAR CROSS SEAT

5. IMPORTANT: SEATS SHOWN ARE GENERAL SEATS. SEAT CONFIGURATION AND SEATING PACKAGE AS CONFIGURED BY PSP/OPS FOR EACH CSO.
6. FOOD TRAYS NOT BE EQUIPPED WITH AIRLINE STYLE AT MAXIMUM 2.0° RECLINE.
7. SEAT LOCATIONS TO MEET MCI PASSENGER SEATING DESIGN GUIDELINE 25-03-0052.
8. FRONT OF REAR CROSS SEAT W/ KICK PANEL TO FRONT OF REAR SEAT WITH TOLERANCE ±.20
9. PARCEL BACK SERVICE MODULE PANELS ARE SHOWN FOR POSITIONING PURPOSES ONLY.

HIP-TO-KNEE DISTANCE:
(FOR REFERENCE PURPOSES ONLY)

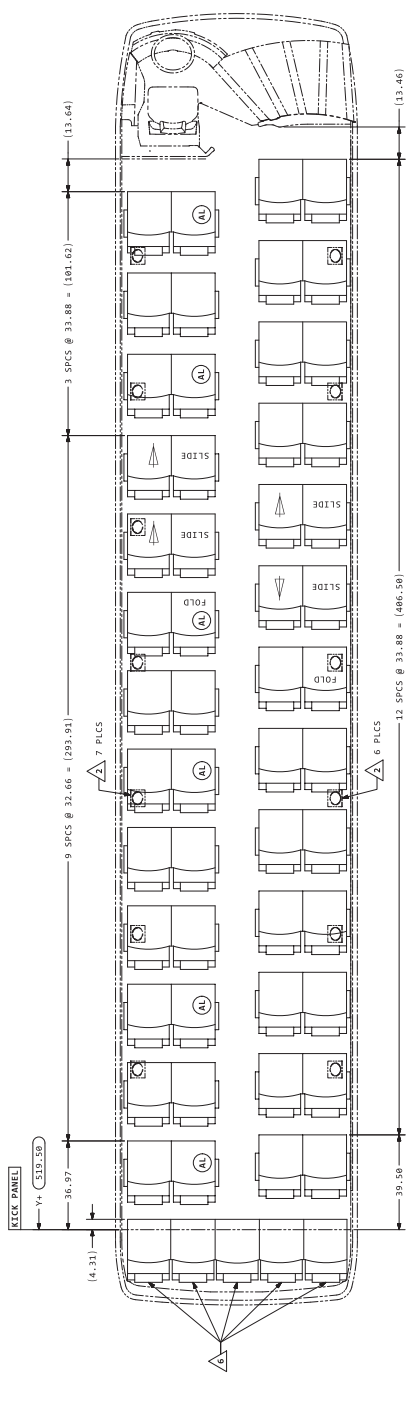
ROW #	LH	RH
1	29.29	30.60
2	31.81	30.81
3	31.81	30.81
4	31.81	30.81
5	31.81	30.81
6	31.81	30.81
7	31.81	30.81
8	31.81	30.81
9	31.81	30.81
10	31.81	30.81
11	31.81	30.81
12	31.81	30.81
13	31.81	30.81
RCS/14	32.75	30.81

73443 DSIR/CI ZBAU19 RELEASE TO PRODUCTION
DATE: 03-11-2019
MCI
MOTOROLA
SEAT LAYOUT -56P-W/O WCL-AMAYA A220-DH520
03-11-3310



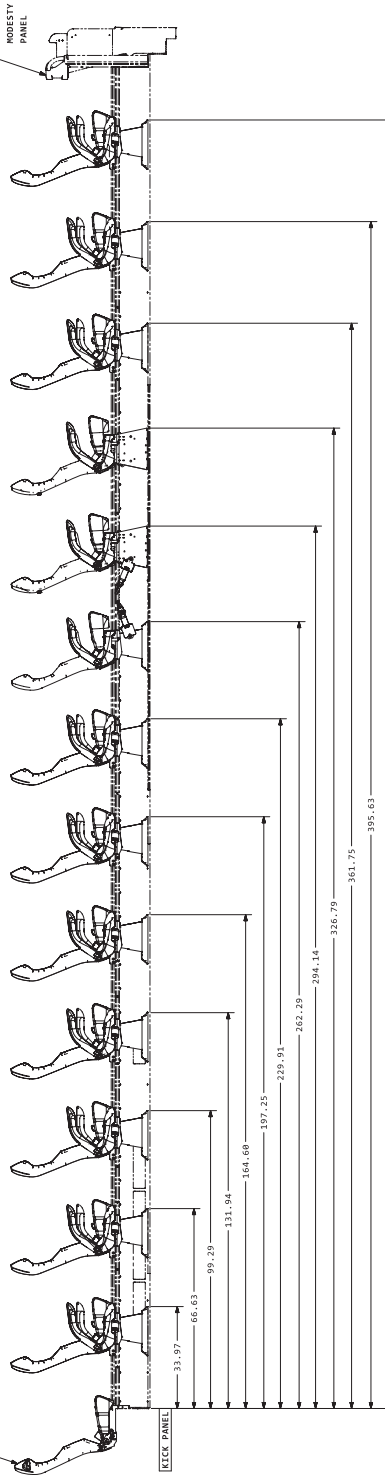
P/R SERVICE MODULE PANELS

A	73443	DSRPT	28A119	RELEASE TO PRODUCTION
REV	DATE	BY	CHK	APP
McDonnell Douglas AIRCRAFT SEATING SEAT LAYOUT - 56P - W/O WCL - AMAYA A220, D4520				
PART: 28A119 DATE: 03-11-2010 BY: CH CHK: 28A119				
DRAWING NUMBER: 03-11-3310				

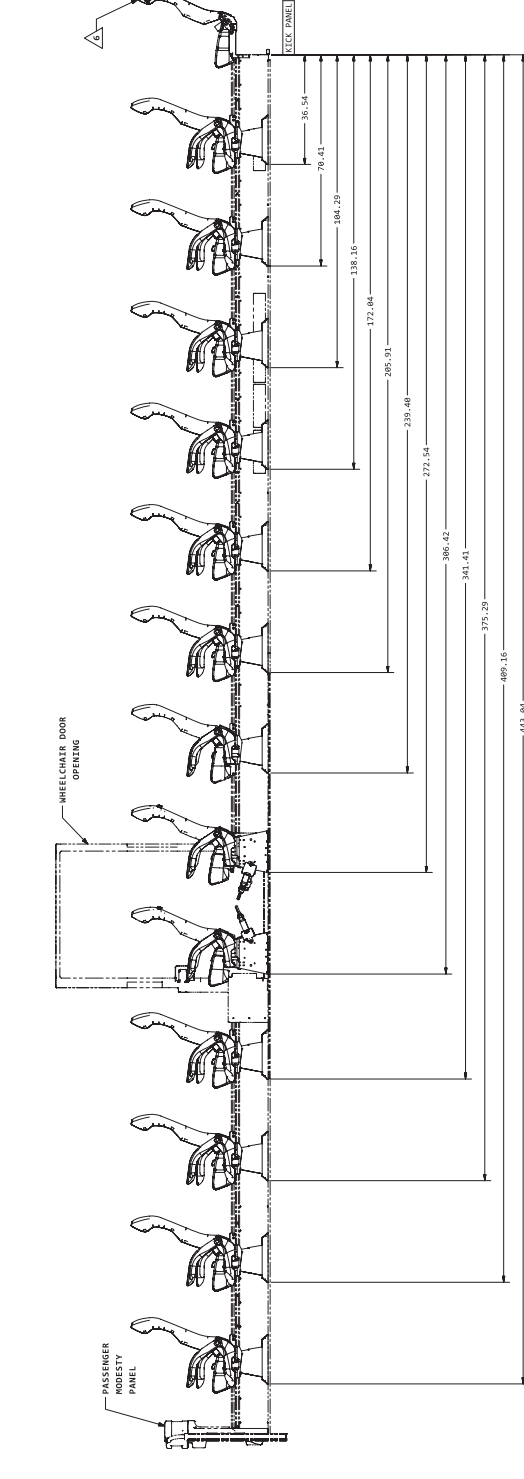


- NOTES:
- 1. (A) AISLE LIGHT.
 - 2. RADIO SPEAKER LOCATION SHOWN FOR REFERENCE.
 - 3. (A) DIMENSIONS IN PARENTHESES INDICATE SETTINGS (WHICH MAY BE CHANGED BY THE PASSENGER).
 - 4. THIS SEAT LAYOUT IS DESIGNED FOR KIEL AVANCE WITH PASSENGER 3-PT RESTRAINT SEATS.

- SEATS BREAKDOWN:
- (1) LH SIDE 2-PASSENGER SEATS W/ AISLE LIGHT
 - (2) LH SIDE 2-PASSENGER SEATS W/ SLIDING SEAT
 - (3) LH SIDE 2-PASSENGER FOLD-UP/FWD SLIDING SEAT
 - (4) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (5) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (6) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (7) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (8) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (9) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (10) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (11) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (12) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (13) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (14) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (15) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (16) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (17) LH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (18) RH SIDE 2-PASSENGER SEATS W/ AISLE LIGHT
 - (19) RH SIDE 2-PASSENGER SEATS W/ SLIDING SEAT
 - (20) RH SIDE 2-PASSENGER FOLD-UP/FWD SLIDING SEAT
 - (21) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (22) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (23) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (24) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (25) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (26) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (27) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (28) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (29) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (30) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (31) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (32) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (33) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (34) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (35) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (36) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (37) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (38) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (39) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (40) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (41) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (42) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (43) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (44) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (45) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (46) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (47) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (48) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (49) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS
 - (50) RH SIDE 2-PASSENGER SEATS W/ PEDESTAL MOUNTED WHEELCHAIR RESTRAINTS



REFERENCE VIEW



ROADSIDE VIEW (LH)

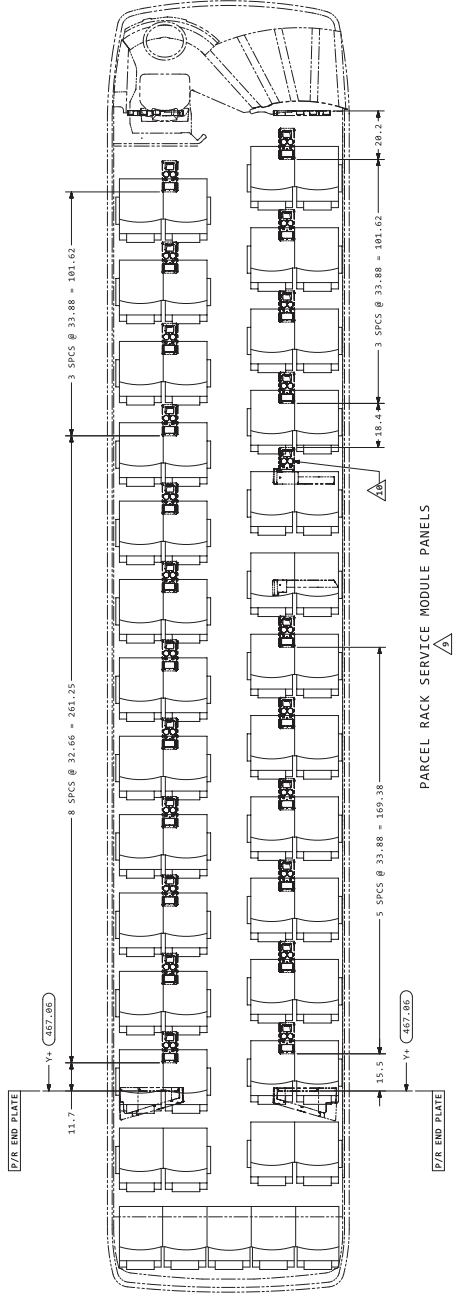


CURBSIDE VIEW (RH)

HIP-TO-KNEE DISTANCE:
(FOR REFERENCE PURPOSES ONLY)

ROW #	LH	RH
1	31.14	30.96
2	32.88	32.88
3	32.88	32.88
4	32.88	32.88
5	31.66	32.88
6	31.66	32.88
7	31.66	32.88
8	31.66	32.88
9	31.66	32.88
10	31.66	32.88
11	31.66	32.88
12	31.66	32.88
13	31.66	32.88
RCS	31.66	32.88

- 5. SEAT BACKS ARE TO BE EQUIPPED WITH AIRLINE STYLE FOOD TRAYS.
- 6. REAR CROSS SEAT TO BE LOCKED AT ZERO RECLINE.
- 7. SEAT LAYOUT TO BE IDENTICAL TO PASSENGER SEATING DESIGN GUIDELINE 25-03-0052.
- 8. ALL DIMENSIONS MEASURED FROM KIEK PANEL TO FRONT OF PEDESTAL SEAT WITH TOLERANCE ±.20
- 9. PARCEL RACK SERVICE MODULE PANELS ARE SHOWN FOR POSITIONING PURPOSES ONLY.
- 10. P/R SERVICE MODULE PANEL LOCATION ABOVE INDICATED SEAT IS FOR POSITIONING PURPOSES ONLY. CENTER READING LIGHTS OFFSET. CUSHION FACE TO CENTER OF SEAT.
- 11. (REF: 3.0" SHOWN ON BASIC INSTALLATION DRAWINGS)



Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4E – Technical Deviations

Solicitation Requirements:

N/A

MCI Response:

MCI is submitting a technically compliant bid as noted during the Approval Equal Process.

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 5, Warranty

Solicitation Requirements:

Attachment G, Section 7: Warranty Requirements

MCI Response:

Please find MCI's [Warranty Proposal](#), enclosed for your evaluation.



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
COACH MODEL	D45CRT CHARGE (Electric Coach)	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
Base Coach Warranty	Motor Coach Industries		2	Unlimited	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Coach Structure	Motor Coach Industries		3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	Motor Coach Industries		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	Motor Coach Industries		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Propulsion System (Traction System, Controllers/Inverters and Gear Box)	Siemens		2	100,000	All warranty claims to be submitted to Motor Coach Industries.
Energy Storage System (389KWH)	Xalt Energy / Motor Coach Industries		3	Unlimited	*Capacity fade is the relative reduction of the total amount of energy the battery system can store in a single charge for the purpose of powering the Coach as compared to capacity at beginning of life (BOL). Capacity fade is warranted to 80% of BOL total energy capacity at year 3 when: 1) capacity measurements are taken from a balanced ESS, and 2) ESS is maintained in the manner described in the MCI Service Manual.* *The string Battery Management System (BMS) controllers and Power Distribution Unit (PDU) are warranted for proper operation up to year 3 when the ESS is maintained in the manner described in the MCI Service Manual.*
Axle (Front and Rear)	ZF		5	300,000	All warranty claims to be submitted to MCI. Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
AC	Motor Coach Industries		2	Unlimited	Some limitations and exclusions may apply. Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	Bendix		1	Unlimited	Friction Material Excluded
COV Bid #22-217 Contract Deliverables MCI D45CRT CHARGE (TC) Xlsx D45CRT CHARGE					



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER			MILEAGE	COMMENTS
	PROVIDER	YEARS			
Door Systems	Motor Coach Industries	2		Unlimited	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Motor Coach Industries	2		Unlimited	
Wheelchair Ramp	Motor Coach Industries	2		100,000	
Electrical System	Parker	2		100,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker	1		Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Dupont	2		Unlimited	
Air Dryer	Motor Coach Industries	2		100,000	
DC to DC Converter	Motor Coach Industries	2		100,000	
Cooling System	Motor Coach Industries	2		100,000	
Hydraulic System	Motor Coach Industries	2		100,000	
Towing	Motor Coach Industries	1		50,000	
Road Calls	Motor Coach Industries	Component Warranty Period		Unlimited	
Diagnostic & Troubleshooting Time	Motor Coach Industries	Component Warranty Period		Unlimited	
Handling Charge 15%	Motor Coach Industries	Component Warranty Period		Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Low Voltage / High Voltage Electric Wiring and Harnesses	Motor Coach Industries	12		5,000,000	
Passenger Seats	Motor Coach Industries	2		100,000	Warranty excludes fabric and foam.
Surveillance System (including Cameras and Video Recorders)	Motor Coach Industries	2		100,000	
Brushless Main Evaporator Motor	Ametek	4.5		500,000	
Air Bellows	Motor Coach Industries	2		200,000	
Batteries	Interstate	1		Unlimited	
Pinon Seals	Motor Coach Industries	1		50,000	
Radius Rod Bushings	Motor Coach Industries	1		50,000	
Shocks and Bushings	Motor Coach Industries	1		50,000	
Swaybar Links	Motor Coach Industries	1		50,000	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY			COMMENTS
	PROVIDER	YEARS	MILEAGE	
Wheel Alignment	Motor Coach Industries	2	25,000	
Wheel Seals	Motor Coach Industries	1	50,000	
Tires	Motor Coach Industries	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
COACH MODEL	D45CRTeLE (Electric Coach)	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
Base Coach Warranty	Motor Coach Industries		2	Unlimited	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Coach Structure	Motor Coach Industries		3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	Motor Coach Industries		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	Motor Coach Industries		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Propulsion System (Traction System, Controllers/Inverters and Gear Box)	Siemens		2	100,000	All warranty claims to be submitted to Motor Coach Industries.
Energy Storage System (389KWH)	Xalt Energy / Motor Coach Industries		3	Unlimited	*Capacity fade is the relative reduction of the total amount of energy the battery system can store in a single charge for the purpose of powering the Coach as compared to capacity at beginning of life (BOL). Capacity fade is warranted to 80% of BOL total energy capacity at year 3 when: 1) capacity measurements are taken from a balanced ESS, and 2) ESS is maintained in the manner described in the MCI Service Manual.* *The string Battery Management System (BMS) controllers and Power Distribution Unit (PDU) are warranted for proper operation up to year 3 when the ESS is maintained in the manner described in the MCI Service Manual.*
Axle (Front and Rear)	ZF		5	300,000	All warranty claims to be submitted to MCI. Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
AC	Motor Coach Industries		2	Unlimited	Some limitations and exclusions may apply. Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	Bendix		1	Unlimited	Friction Material Excluded



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Door Systems	Motor Coach Industries	2	Unlimited	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Motor Coach Industries	2	Unlimited	
Wheelchair Ramp	Motor Coach Industries	2	100,000	
Electrical System	Parker	2	100,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker	1	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Dupont	2	Unlimited	
Air Dryer	Motor Coach Industries	2	100,000	
DC to DC Converter	Motor Coach Industries	2	100,000	
Cooling System	Motor Coach Industries	2	100,000	
Hydraulic System	Motor Coach Industries	2	100,000	
Towing	Motor Coach Industries	1	50,000	
Road Calls	Motor Coach Industries	Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	Motor Coach Industries	Component Warranty Period	Unlimited	
Handling Charge 15%	Motor Coach Industries	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Low Voltage / High Voltage Electric Wiring and Harnesses	Motor Coach Industries	12	5,000,000	
Passenger Seats	Motor Coach Industries	2	100,000	Warranty excludes fabric and foam.
Surveillance System (including Cameras and Video Recorders)	Motor Coach Industries	2	100,000	
Brushless Main Evaporator Motor	Ametek	4.5	500,000	
Air Bellows	Motor Coach Industries	2	200,000	
Batteries	Interstate	1	Unlimited	
Pinon Seals	Motor Coach Industries	1	50,000	
Radius Rod Bushings	Motor Coach Industries	1	50,000	
Shocks and Bushings	Motor Coach Industries	1	50,000	
Swaybar Links	Motor Coach Industries	1	50,000	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER			MILEAGE	COMMENTS
	PROVIDER	YEARS			
Wheel Alignment	Motor Coach Industries	2		25,000	
Wheel Seals	Motor Coach Industries	1		50,000	
Tires	Motor Coach Industries	2		24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
For Warranty Use Only					



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
COACH MODEL	D45CRTLE	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY		COMMENTS
	PROVIDER	YEARS / MILEAGE	
Base Coach Warranty	Motor Coach Industries	2 / Unlimited	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Coach Structure	Motor Coach Industries	3 / 150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	Motor Coach Industries	12 / 500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	Motor Coach Industries	12 / 500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins	2 / Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison	2 / Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	ZF	5 / 300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Motor Coach Industries	2 / Unlimited	Some limitations and exclusions may apply. Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	Bendix	1 / Unlimited	Friction Material Excluded
Door Systems	Motor Coach Industries	2 / Unlimited	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Cummins	2 / Unlimited	
Wheelchair Ramp	Motor Coach Industries	2 / 100,000	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Electrical System	Parker	2	100,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker	1	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Dupont	2	Unlimited	
Air Dryer	Motor Coach Industries	2	100,000	
Alternator	Motor Coach Industries	2	100,000	
Charge Air Cooler	Motor Coach Industries	2	100,000	
Cooling System	Motor Coach Industries	2	100,000	
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex	2	Unlimited	
Hydraulic System	Motor Coach Industries	2	100,000	
Starter	Motor Coach Industries	2	100,000	
Towing	Motor Coach Industries	1	50,000	
Road Calls	Motor Coach Industries	Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	Motor Coach Industries	Component Warranty Period	Unlimited	
Handling Charge 15%	Motor Coach Industries	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Low Voltage / High Voltage Electric Wiring and Harnesses	Motor Coach Industries	12	5,000,000	
Passenger Seats	Motor Coach Industries	2	100,000	Warranty excludes fabric and foam.
Surveillance System (including Cameras and Video Recorders)	Motor Coach Industries	2	100,000	
Fuel Storage & Delivery System	Motor Coach Industries	2	100,000	
Federal Emission	Motor Coach Industries	5	100,000	
Brushless Main Evaporator Motor	Amelek	4.5	500,000	
Air Bellows	Motor Coach Industries	2	200,000	
Batteries	Interstate	1	Unlimited	
Belts	Motor Coach Industries	0.5	50,000	

COV-BIT#22-217-Contract Deliverables with Description (1) (1) 10/21/2022 8:43 AM



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Engine Accessories	Motor Coach Industries	2	200,000	
Pinon Seals	Motor Coach Industries	1	50,000	
Radius Rod Bushings	Motor Coach Industries	1	50,000	
Shocks and Bushings	Motor Coach Industries	1	50,000	
Swaybar Links	Motor Coach Industries	1	50,000	
Wheel Alignment	Motor Coach Industries	2	25,000	
Wheel Seals	Motor Coach Industries	1	50,000	
Tires	Motor Coach Industries	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	Motor Coach Industries	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-idle Stop (NAS), and "Auto-Neutral" functions)
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
COACH MODEL	D4520	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY		COMMENTS
	PROVIDER	YEARS / MILEAGE	
Base Coach Warranty	Motor Coach Industries	2 / Unlimited	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Coach Structure	Motor Coach Industries	3 / 150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	Motor Coach Industries	12 / 500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	Motor Coach Industries	12 / 500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins	2 / Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison	2 / Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	ZF	5 / 300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Motor Coach Industries	2 / Unlimited	Some limitations and exclusions may apply. Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	Bendix	1 / Unlimited	Friction Material Excluded
Door Systems	Motor Coach Industries	2 / Unlimited	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Cummins	2 / Unlimited	
Wheelchair Ramp	Motor Coach Industries	2 / 100,000	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Electrical System	Parker	2	100,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker	1	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Dupont	2	Unlimited	
Air Dryer	Motor Coach Industries	2	100,000	
Alternator	Motor Coach Industries	2	100,000	
Charge Air Cooler	Motor Coach Industries	2	100,000	
Cooling System	Motor Coach Industries	2	100,000	
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex	2	Unlimited	
Hydraulic System	Motor Coach Industries	2	100,000	
Starter	Motor Coach Industries	2	100,000	
Towing	Motor Coach Industries	1	50,000	
Road Calls	Motor Coach Industries	Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	Motor Coach Industries	Component Warranty Period	Unlimited	
Handling Charge 15%	Motor Coach Industries	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Low Voltage / High Voltage Electric Wiring and Harnesses	Motor Coach Industries	12	500,000	
Passenger Seats	Motor Coach Industries	2	100,000	Warranty excludes fabric and foam.
Surveillance System (including Cameras and Video Recorders)	Motor Coach Industries	2	100,000	
Fuel Storage & Delivery System	Motor Coach Industries	2	100,000	
Federal Emission	Motor Coach Industries	5	100,000	
Brushless Main Evaporator Motor	Ametek	4.5	500,000	
Air Bellows	Motor Coach Industries	2	200,000	
Batteries	Interstate	1	Unlimited	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY			COMMENTS
	PROVIDER	YEARS	MILEAGE	
Belts	Motor Coach Industries	0.5	50,000	
Engine Accessories	Motor Coach Industries	2	200,000	
Pinon Seals	Motor Coach Industries	1	50,000	
Radiuse Rod Bushings	Motor Coach Industries	1	50,000	
Shocks and Bushings	Motor Coach Industries	1	50,000	
Swaybar Links	Motor Coach Industries	1	50,000	
Wheel Alignment	Motor Coach Industries	2	25,000	
Wheel Seals	Motor Coach Industries	1	50,000	
Tires	Motor Coach Industries	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	Motor Coach Industries	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
COACH MODEL	D45CRT	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY		COMMENTS
	PROVIDER	YEARS	
Base Coach Warranty	Motor Coach Industries	2	Unlimited
Basic Coach Structure	Motor Coach Industries	3	150,000
Chassis Structure (Integrity)	Motor Coach Industries	12	500,000
Chassis Structure (Corrosion)	Motor Coach Industries	12	500,000
Engine	Cummins	2	Unlimited
Transmission	Allison	2	Unlimited
Axle (Front and Rear)	ZF	5	300,000
A/C	Motor Coach Industries	2	Unlimited
Brake System	Bendix	1	Unlimited
Door Systems	Motor Coach Industries	2	Unlimited
Air Compressor	Cummins	2	Unlimited
Wheelchair Ramp	Motor Coach Industries	2	100,000



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Electrical System	Parker	2	100,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker	1	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Dupont	2	Unlimited	
Air Dryer	Motor Coach Industries	2	100,000	
Alternator	Motor Coach Industries	2	100,000	
Charge Air Cooler	Motor Coach Industries	2	100,000	
Cooling System	Motor Coach Industries	2	100,000	
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex	2	Unlimited	
Hydraulic System	Motor Coach Industries	2	100,000	
Starter	Motor Coach Industries	2	100,000	
Towing	Motor Coach Industries	1	50,000	
Road Calls	Motor Coach Industries	Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	Motor Coach Industries	Component Warranty Period	Unlimited	
Handling Charge 15%	Motor Coach Industries	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Low Voltage / High Voltage Electric Wiring and Harnesses	Motor Coach Industries	12	5,000,000	
Passenger Seats	Motor Coach Industries	2	100,000	Warranty excludes fabric and foam.
Surveillance System (including Cameras and Video Recorders)	Motor Coach Industries	2	100,000	
Fuel Storage & Delivery System	Motor Coach Industries	2	100,000	
Federal Emission	Motor Coach Industries	5	100,000	
Brushless Main Evaporator Motor	Amelek	4.5	500,000	
Air Bellows	Motor Coach Industries	2	200,000	
Batteries	Interstate	1	Unlimited	
Belts	Motor Coach Industries	0.5	50,000	

COV BIR #22-217 Contract Deliverables MCT D45CRT (TC) 02.xlsx D45CRT



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY			COMMENTS
	PROVIDER	YEARS	MILEAGE	
Engine Accessories	Motor Coach Industries	2	200,000	
Pinon Seals	Motor Coach Industries	1	50,000	
Radius Rod Bushings	Motor Coach Industries	1	50,000	
Shocks and Bushings	Motor Coach Industries	1	50,000	
Swaybar Links	Motor Coach Industries	1	50,000	
Wheel Alignment	Motor Coach Industries	2	25,000	
Wheel Seals	Motor Coach Industries	1	50,000	
Tires	Motor Coach Industries	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	Motor Coach Industries	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-idle Stop (NAS), and "Auto-Neutral" functions)
For Warranty Use Only				

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 6, Training

Solicitation Requirements:

N/A

MCI Response:

Please find MCI's [Training Proposal](#), enclosed for your evaluation.

CONTRACT DELIVERABLES LIST		CUSTOMER TRAINING			
CUSTOMER NAME	VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION				
BID/OPTION/SR NUMBER	22-21				
TECHNICAL SUMMARY					
BUS MODEL	D45CRT				
QUANTITY					
PROPULSION SYSTEM	Cummins X12				
ALTERNATOR	Delco				
VOLTAGE REGULATOR	Delco				
TRANSMISSION	Allison B500				
COOLING SYSTEM	Modine Efan				
AXLES	ZF				
LEVELING/KNEELING	Air Ride				
STEERING	Parker 24V				
ABS	Bendix				
AIR CONDITIONING	Bitzer Compressor 4 Cyl				
AUXILIARY HEATER	Proheat				
MULTIPLIX SYSTEM	Vansco				
DESTINATION SIGNS	None				
DOORS	Masats Bi-Part				
WHEELCHAIR LIFT/RAMP	Braun				
FIRE SUPPRESSION/GAS DETECTION	Amerex				
OTHER					
OTHER					
OTHER					
OTHER					
OTHER					
OTHER					
OTHER					
OTHER					
MCI Supplied Training					
DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID	REQUIREMENT	BILLABLE: Y/N
Operator Orientation		4	\$1,417.50	Recommended	
Maintenance Orientation		4	\$1,417.50	Recommended	
Multiplex System		16	\$5,670.00	Recommended	
Entrance and Exit Doors		4	\$1,417.50	Recommended	
HVAC Systems		16	\$5,670.00	Recommended	
Brake Systems and Wheel Ends		8	\$2,835.00	Recommended	
Air System		8	\$2,835.00	Recommended	
Suspension System		8	\$2,835.00	Recommended	
Steering System		8	\$2,835.00	Recommended	

USD

Electric Fan Drive		4	\$1,417.50	Recommended
Antilock Brake System		4	\$1,417.50	Recommended
Towing		4	\$1,417.50	Recommended
Preventive Maintenance		4	\$1,417.50	Recommended
Sub Total - MCI Training				
OEM/Subcontractor Supplied Training				
DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID	
Sub Total - OEM/Subcontractor Training				
Training Total (priced separate from the bus price)				

Sales Specialist
Motor Coach Industries

Suspension System		8	\$2,835.00	Recommended
Steering System		8	\$2,835.00	Recommended
Electric Fan Drive		4	\$1,417.50	Recommended
Antilock Brake System		4	\$1,417.50	Recommended
Towing		4	\$1,417.50	Recommended
Preventive Maintenance		4	\$1,417.50	Recommended
High Voltage Safety - Qualified Person eHazard		8	\$4,725.00	Recommended
Sub Total - MCI Training			\$37,327.50	
OEM/Subcontractor Supplied Training				
DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID	
Sub Total - OEM/Subcontractor Training				
Training Total (priced separate from the bus price)				

Sales Specialist
Motor Coach Industries

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 7, Tooling and Diagnostics

Solicitation Requirements:

N/A

MCI Response:

Please find MCI's [Tooling and Diagnostics Proposal](#), enclosed for your evaluation.

CONTRACT DELIVERABLES LIST		DIAGNOSTICS & TOOLS
CUSTOMER NAME	Virginia Department of Transportation	
BID/OPTION/SR NUMBER	22-21	
TECHNICAL SUMMARY		
BUS MODEL	D45CRT Le CHARGE/ D45CRT CHARGE	
QUANTITY	TBD	
PROPULSION SYSTEM	Siemens	
ALTERNATOR	N/A	
ENERGY STORAGE SYSTEM	MCI	
COOLING SYSTEM	Modine	
AXLES	ZF	
LEVELING/KNEELING	MDSS	
STEERING	PARKER-VANSCO	
ABS	BENDIX	
AIR CONDITIONING	MCC/MCI	
CABIN HEATER		
PLC	PARKER-VANSCO	
DESTINATION SIGNS	TBD	
DOORS	BODE	
WHEELCHAIR RAMP	BRAUN	
VIDEO SURVEILLANCE	TBD	
PROPERTY CONTACT INFORMATION		
CONTACT NAME:	To be populated by CPM	
FACILITY:		
ADDRESS:		
CITY/STATE:		
ZIP CODE:		
PHONE:		
EMAIL:		
SPECIAL INSTRUCTIONS:		

NOTE: TOOL KITS MAY BE SUBJECT TO CHANGE

**** All claims for concealed shortages must be reported within 20 days of shipment date. Shipping damages and / or loss must be noted on the delivering carrier waybill at the time of receipt of shipment. A copy of the carrier waybill and / or carrier inspection report must be submitted with your claim within 5 days of receipt of**

PAGE REFERENCE	COMMENTS	DESCRIPTION	BID QTY	UNIT SELLING PRICE to CUSTOMER	REQUIREMENT	BILLABLE: Y/N To be confirmed by CPM
		Diagnostic Equipment				
		DATA LOGGER - VECTOR GL1000	1	\$2,918.16	Recommended	Y
		SIEMENS SIADIS SOFTWARE (DOWNLOAD FROM NET)	1	\$0.00	Recommended	Y
		SIEMENS PCAN INTERFACE HARNESS	1	\$93.15	Recommended	Y
		USB CAN ADAPTER - SIADIS INTERFACE	1	\$364.50	Recommended	Y
		XALT SERVICE TOOL SOFTWARE	1	\$0.00	Recommended	Y
		XALT INTERFACE CABLE - BATTERIES	1	\$189.00	Recommended	Y
		NEXIQ USB LINK 2 - WIFI EDITION	1	\$1,039.49	Recommended	Y
		DIAGNOSTIC KIT - VANNER HBA/EBA	1	\$1,095.03	Recommended	Y
		SPHEROS DIAGNOSTIC SOFTWARE & CABLES	1	\$477.79	Recommended	Y
		ADAPTER HARNESS - SPHEROS INTERFACE	1	\$48.99	Recommended	Y
		LUMINATOR IPS SOFTWARE	1	\$287.05	Recommended	Y
		AMEREX SAFETYNET SOFTWARE & INTERFACE	1	\$623.81	Recommended	Y
		AMEREX DISCHARGE HOSE BLOWOUT ADAPTER	1	\$116.03	Recommended	Y
		AMEREX FIRE ALARM/SIMULATOR MODULE	1	\$335.07	Recommended	Y
		COOLANT SYSTEM PRESSURE TESTER	1	\$888.85	Recommended	Y
		KIT - COOLANT PRESSURE FILL	1	\$2,770.42	Recommended	Y
		FLUKE 2 IN 1 MULTIMETER - 1587FC	1	\$1,479.59	Recommended	Y
		MCMMASTER CONDUCTIVITY METER	1	\$509.63	Recommended	Y
		MODULAR TEST LEAD KIT	1	\$243.90	Recommended	Y
		TEST PROBE FLAT BLADE	1	\$35.01	Recommended	Y
		TEST PROBE BACK PROBE	1	\$31.82	Recommended	Y
		WIHA INSULATED MASTER ELECTRICIAN'S TOOL KIT	1	\$4,593.24	Recommended	Y
		WIHA 1/4 IN RATCHET SET INSULATED SAE	1	\$543.94	Recommended	Y
		WIHA 1/4 IN RATCHET SET INSULATED METRIC	1	\$543.89	Recommended	Y
		16 PC 3/8 DRIVE SOCKET SET	1	\$522.03	Recommended	Y
		3/8 EXTENSION SET	1	\$66.92	Recommended	Y
		WIHA OPEN END WRENCH INSULATED METRIC	1	\$650.16	Recommended	Y
		WIHA OPEN END WRENCH INSULATED SAE	1	\$807.84	Recommended	Y
		WIHA INSULATED SERRATED TWEEZERS STRAIGHT	1	\$67.31	Recommended	Y
		WIHA INSULATED SERRATED TWEEZERS ANGLED	1	\$93.76	Recommended	Y
		INSULATED TORQUE WRENCH 1/4"	1	\$746.55	Recommended	Y
		INSULATED TORQUE WRENCH 3/8"	1	\$796.50	Recommended	Y
		INSULATED TORQUE WRENCH 1/2"	1	\$857.25	Recommended	Y
		TORQUE SCREWDRIVER SET	1	\$481.68	Recommended	Y
		INSULATED CRIMPER 30 - 6 AWG 7"	1	\$58.39	Recommended	Y
		WIRE STRIPER 6 - 3/8 OVERALL 20 TO 10	1	\$55.30	Recommended	Y
		INSOLATED HEX KEY SET 10PC METRIC	1	\$281.88	Recommended	Y
		LONG SAE NATURAL INSULATED HEX KEY SET 12 PC	1	\$362.88	Recommended	Y
		BIT DRIVER	1	\$126.21	Recommended	Y
		STUBBY BIT DRIVER	1	\$44.48	Recommended	Y
		WIHA INSULATED "BITFLIP" SET	1	\$78.14	Recommended	Y
		MINI SCREW DRIVER SET	1	\$117.27	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC SMALL	1	\$751.63	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC MEDIUM	1	\$751.63	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC LARGE	1	\$751.63	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC XL	1	\$751.63	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC 2XL	1	\$826.78	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC 3XL	1	\$901.95	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC 4XL	1	\$977.10	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 2PC 5XL	1	\$1,052.27	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 1PC SMALL	1	\$597.39	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 1PC MEDIUM	1	\$597.39	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 1PC LARGE	1	\$597.39	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 1PC XL	1	\$597.39	Recommended	Y

		ARC FLASH PROTECTION CLOTHING KIT - 1PC 2XL	1	\$794.26	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 1PC 3XL	1	\$794.26	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 1PC 4XL	1	\$801.90	Recommended	Y
		ARC FLASH PROTECTION CLOTHING KIT - 1PC 5XL	1	\$801.90	Recommended	Y
		BALAFLAVA HEAD COVER ONE SIZE FITS ALL	1	\$41.36	Recommended	Y
		HARD HAT AND FACE SHIELD ONE SIZE FITS ALL	1	\$341.46	Recommended	Y
		FALL SAFTEY HARNESS 425LBS	1	\$232.79	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 7	1	\$136.69	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 8	1	\$136.69	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 8.5	1	\$136.69	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 9	1	\$136.69	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 9.5	1	\$136.69	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 10	1	\$136.69	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 10.5	1	\$190.92	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 11	1	\$158.72	Recommended	Y
		BLACK ELECTRICAL GLOVE KIT, SIZE 12	1	\$158.72	Recommended	Y
		OVER BOOTS SIZE 9	1	\$196.45	Recommended	Y
		OVER BOOTS SIZE 10	1	\$196.45	Recommended	Y
		OVER BOOTS SIZE 11	1	\$196.45	Recommended	Y
		OVER BOOTS SIZE 12	1	\$230.63	Recommended	Y
		OVER BOOTS SIZE 13	1	\$230.63	Recommended	Y
		OVER BOOTS SIZE 14	1	\$196.45	Recommended	Y
		HV BLANKET 3' X 3'	1	\$438.89	Recommended	Y
		BLANKET CLAMP 9-1/2" L, 5" OPENING	1	\$32.13	Recommended	Y
		GLOVE DUST 0.5OZ	1	\$13.04	Recommended	Y
		HOT STICK 6FT	1	\$459.00	Recommended	Y
		HOT STICK 8FT	1	\$665.86	Recommended	Y
		DEFIBRILLATOR ADULT	1	\$2,437.91	Recommended	Y
		BRADY PERSONAL LOCKOUT POUCH KIT	1	\$115.09	Recommended	Y
		STEEL LOCK HASP WITH TAB	1	\$13.93	Recommended	Y
		AMERICAN LOCK A1106RED	1	\$20.26	Recommended	Y
		LOCK OUT TAG	1	\$25.49	Recommended	Y
		HV WARNING SIGN	1	\$16.37	Recommended	Y
		ARC FLASH WARNING SIGN	1	\$12.73	Recommended	Y
		HV CAUTION TAPE	1	\$124.19	Recommended	Y
		STEERING WHEEL COVERS	1	\$58.28	Recommended	Y
		KIT-TOOLS,WHEEL BEARINGS	1	\$3,111.51	Recommended	Y
		KIT-TOOLS,WHEEL END REMOVAL	1	\$1,794.19	Recommended	Y
		KIT-TOOLS,DIFF SEAL SERVICE	1	\$1,564.80	Recommended	Y
		KIT-TOOL,BENDIX AIR DISC BRAKE	1	\$1,667.27	Recommended	Y
		KIT-TOWING COVER,ZF DRIVE AXLE	1	\$51.11	Recommended	Y
		TOOL-GAUGE,PAD AND ROTOR	1	\$48.36	Recommended	Y
		KIT-TOOLS,DIFFERENTIAL PINION GEN II SEAL SERVICE	1	\$1,923.75	Recommended	Y
		DISPLAY-DIAGNOSTIC,ECOTEMP	1	\$377.46	Recommended	Y
	Diagnostic software included in laptop: Cummins, Allison, Bendix, Wabco, and Nexiq adapter with CAN connectors.	KIT-JPRO DIAGNOSTIC TOOLBOX	1	\$7,255.63	Recommended	Y
	Free download software V7.3.8.7159 http://divapps.parker.com/divapps/iqan/VanscoVMMS.html and USB DLA driver 1.10 http://divapps.parker.com/divapps/iqan/VanscoDLA.html	PARKER REAL TIME MONITOR SOFTWARE	1	\$0.00	Recommended	Y
		KIT-ELECTRICAL CONNECTORS	1	\$924.75	Recommended	Y
		TOOL-HEADLAMP	1	\$201.27	Recommended	Y
		KIT-TOOL, CALIPER REMOVAL	1	\$580.81	Recommended	Y
		FIXTURE-MOUNTING	1	\$806.04	Recommended	Y
		INSERT-THREAD	1	\$134.49	Recommended	Y
		TOOL-DRIVER	1	\$806.04	Recommended	Y
		TOOL-DRIVER	1	\$365.09	Recommended	Y
		SLEEVE-PRESSURE	1	\$133.61	Recommended	Y
		SLEEVE-PRESSURE	1	\$207.60	Recommended	Y
		HANDLE-LONG	1	\$454.72	Recommended	Y
		PLATE-PRESSURE	1	\$1,167.00	Recommended	Y
		ROD-PULL	1	\$353.85	Recommended	Y
		PUMP-HYDRAULIC	1	\$3,754.05	Recommended	Y
		MANDREL-ASSEMBLY	1	\$750.76	Recommended	Y
		STRIKER	1	\$511.79	Recommended	Y
		PIN-CENTERING	1	\$206.93	Recommended	Y
		PULLER-TWO ARM	1	\$1,500.32	Recommended	Y
		SPINDLE-HYDRAULIC	1	\$1,772.79	Recommended	Y
		FIXTURE-ASSEMBLY	1	\$698.02	Recommended	Y
		FIXTURE-ASSEMBLY	1	\$444.68	Recommended	Y
		DEVICE-FORCING	1	\$1,303.18	Recommended	Y
		CABLE-KIT E-FAN USB TO RS232	1	\$152.29	Recommended	Y
		ADAPTOR-BLOWOUT,HOSE,DISCHARGE (AMEREX)	1	\$116.03	Recommended	Y
		HARNESS-ADAPTER,DIAGNOSTIC,CAN2	1	\$96.81	Recommended	Y
		TOOL ADAPTER-DIANOSTICS USB-HVAC	1	\$234.82	Recommended	Y
		USB DEVICE - AESYS	1	\$506.25	Recommended	Y
		SOFTWARE LICENSE - AESYS	1	\$0.00	Recommended	Y
				\$81,391.80		

Customer Programs Manager
New Flyer

Customer Representative

CONTRACT DELIVERABLES LIST		DIAGNOSTICS & TOOLS	COMMENTS	DESCRIPTION	BID QTY	UNIT SELLING PRICE to CUSTOMER	REQUIREMENT	BILLABLE: Y/N <i>To be confirmed by CPM</i>
CUSTOMER NAME	Virginia Department of Transportation							
BID/OPTION/SR NUMBER	22-21							
TECHNICAL SUMMARY	N/A							
BUS MODEL	D45CRT / CRT LE / D4520							
QUANTITY	TBD							
ENGINE	CUMMINS X12 11.8L, 410HP							
ALTERNATOR	DUAL DELCO 55SI 250AMP							
VOLTAGE REGULATOR	DELCO							
TRANSMISSION	ALLISON B500							
COOLING SYSTEM	MODINE E-FAN							
AXLES	ZF							
LEVELING/KNEELING	MDSS							
ABS	BENDIX							
AIR CONDITIONING	MC/IMCC							
PLC	PARKER VANSO							
DESTINATION SIGNS	TBD							
DOORS	MCL - Plug Door							
WHEELCHAIR RAMP	TBD							
FIRE SUPPRESSION	AMEREX							
APC	TBD							
AVA	TBD							
AVL	TBD							
VIDEO SURVEILLANCE	TBD							
SHIP DIAGNOSTICS & TOOLING TO:								
FACILITY:								
ADDRESS:								
CITY/STATE:								
ZIP CODE:								
CONTACT:								
PHONE:								
EMAIL:								
SPECIAL INSTRUCTIONS								
PAGE REFERENCE								
			Diagnosics					
			Diagnostic software included in laptop: Cummins, Allison, Bendix, Wabco, and Nexiq adapter with CAN connectors.	MODULE-SIMULATOR,AMEREX	1	\$335.07	Recommended	Y
			Free download at: https://www.modine.com/markets/commercial-vehicle/bus-coach/troubleshooting-diagnostics/	KIT-IPRO DIAGNOSTIC TOOLBOX (laptop)	1	\$7,592.40	Recommended	Y
			Free download software V7.3.8.7159 http://divapps.parker.com/divapps/qan/VanscoVMMS.html and USB DLA driver 1.10 http://divapps.parker.com/divapps/qan/VanscoDLA.html	MODINE COOLING SYSTEM SOFTWARE	1	\$0.00	Recommended	Y
				PARKER REAL TIME MONITOR SOFTWARE	1	\$0.00	Recommended	Y
				SOFTWARE FOR LUMINATOR DESTINATION SIGN	1	\$287.05	Recommended	Y
				USB DEVICE - AESYS	1	\$506.25	Recommended	Y
				SOFTWARE LICENSE - AESYS	1	\$0.00	Recommended	Y

NOTE: TOOL KITS MAY BE SUBJECT TO CHANGE

All claims for concealed shortages must be reported within 20 days of shipment date. Shipping damages and / or loss must be noted on the delivering carrier waybill at the time of receipt of shipment. A copy of the carrier waybill and / or carrier inspection report must be submitted with your claim within 5 days of receipt of shipment to New Elmer Customer Service

Tools								
	TOOL-HEADLAMP		1			\$201.27	Recommended	Y
	KIT-TOOL, CALIPER REMOVAL		1			\$808.65	Recommended	Y
	FIXTURE-MOUNTING		1			\$806.04	Recommended	Y
	INSERT-THREAD		1			\$1,923.75	Recommended	Y
	TOOL-DRIVER		1			\$337.84	Recommended	Y
	TOOL-DRIVER		1			\$365.09	Recommended	Y
	SLEEVE-PRESSURE		1			\$133.61	Recommended	Y
	SLEEVE-PRESSURE		1			\$207.60	Recommended	Y
	HANDLE-LONG		1			\$454.72	Recommended	Y
	PLATE-PRESSURE		1			\$1,068.88	Recommended	Y
	ROD-PULL		1			\$324.01	Recommended	Y
	PUMP-HYDRAULIC		1			\$3,754.05	Recommended	Y
	MANDREL-ASSEMBLY		1			\$750.76	Recommended	Y
	STRIKER		1			\$511.79	Recommended	Y
	PIN-CENTERING		1			\$206.93	Recommended	Y
	PULLER-TWO ARM		1			\$1,500.32	Recommended	Y
	SPINDLE-HYDRAULIC		1			\$1,772.79	Recommended	Y
	FIXTURE-ASSEMBLY		1			\$698.02	Recommended	Y
	FIXTURE-ASSEMBLY		1			\$444.68	Recommended	Y
	DEVICE-FORCING		1			\$1,303.18	Recommended	Y
	CABLE-KIT E-FAN USB TO RS232		1			\$152.29	Recommended	Y
	KIT-TOWING COVER,ZF DRIVE AXLE		1			\$51.11	Recommended	Y
	KIT-TOOLS, WHEEL-END REMOVAL		1			\$1,794.19	Recommended	Y
	KIT-TOOLS, WHEEL BEARING		1			\$3,111.51	Recommended	Y
	KIT-TOOLS, DIFF. PINION SEAL SERVICE		1			\$1,564.80	Recommended	Y
	TOOL-GAUGE, PAD AND ROTOR		1			\$53.19	Recommended	Y
	ADAPTOR-BLOWOUT,HOSE,DISCHARGE		1			\$116.03	Recommended	Y
	KIT-TOOL,BENDIX AIR DISC BRAKE		1			\$1,715.83	Recommended	Y
	KIT-ELECTRICAL CONNECTORS		1			\$1,119.60	Recommended	Y
	HARNES-ADAPTER,DIAGNOSTIC,CAN2		1			\$96.81	Recommended	Y
	TOOL ADAPTER-DIAGNOSTICS USB-HVAC		1			\$234.82	Recommended	Y
	KIT-ELECTRICAL CONNECTORS		1			\$1,119.60	Recommended	Y

Customer Programs Manager
New Flyer

0.65

Property Representative

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 8, Publications

Solicitation Requirements:

N/A

MCI Response:

Please find MCI's [Publications Proposal](#), enclosed for your evaluation.

PUBLICATIONS DELIVERABLES PROPOSAL

PUBLICATIONS rev a. September 8, 2022

Virginia Dept of Rail and Public Transportation

PRIMARY CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
PUBLICATIONS CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
COACH MODEL	D4520
QUANTITY	1
CUSTOMER PROGRAM MANAGER	
ENGINE	Engine - Cummins X12, 410 HP, 11.8 L, 1450 FT-LBS (EPA 2022)
TRANSMISSION	Allison Transmission - B500 Gen5
COOLING-ENGINE	Modine - eFan Rad
ABS	Bendix EC-80
AUXILIARY HEAT	Proheat X45
WHEELCHAIR LIFT	N/A
FSS	Amerex - Modulator System V25

Ship All Publication items (including updates) to:

Contact First Name:	
Contact Last Name:	
Title:	
Salutation:	
Facility:	
Address 1:	
Address 2:	
City:	
State / Province:	
Zip / Postal Code:	
Phone:	
Cell:	
Facsimile:	
Special Shipping Instructions:	
Other Info:	
Email Address Contact:	
Email Address Other 1:	
Email Address Other 2:	
Email Address Other 3:	

Contacts for Manual Bulletin Only

New Flyer Standard Coach Publications

This is for one D4520 Option Build of 1 Coach Only

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Operator's Manual (8.5x11 3-hole regular)	1	With First Coach Delivery	One on board each coach
Operator's Manual (8.5x11 3-hole regular)	0	With Last Coach Delivery	Basic
Driver's Info Card	1	With First Coach Delivery	One on board each coach
Driver's Guide	1	With First Coach Delivery	One on board each coach
Parts Manual	1	With Last Coach Delivery	Basic
Maintenance Manual	1	With Last Coach Delivery	Basic
Electrical Schematic Manual (11x17 3-hole regular paper)	1	With Last Coach Delivery	Basic
Ladder Logic Document (11x17 3-hole regular paper)	1	With Last Coach Delivery	Coach build specific
USB/CD	1	With Last Coach Delivery	USB Includes all MCI Manuals in PDF format plus optional OEM manuals identified with "" below

Sub Total

OEM Supplier Publications (Optional)

This is for one D4520 Option Build of 1 Coach Only

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Cummins X12 2022 EPA Engine OEM Vendor Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	Parts information available on Cummins Parts Website only
Fault Code Troubleshooting Manual	1	"	CD included in paper copy
Service Manual	1	"	CD included in paper copy
Operation & Maintenance Manual	1	"	CD included in paper copy
Owners Manual	1	"	PDF not available
ALLISON TRANSMISSION B500 OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
Service Manual - Gen 4/5	1	"	*
Parts Manual - Gen 4/5	1	"	*
Troubleshooting Manual - Gen 5	1	"	*
Quick Tech Troubleshooting Guide - Gen 5	1	"	*
Principle of Operations - Gen 5	1	"	*
Mechanics Tips - Gen 5	1	"	*
Operator's Manuals - Gen 5	1	"	*
Proheat OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
Installation and Service Manual	1	"	*

Modine Cooling System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
eFan Cooling System Diagnostic and Service Manual	1	"	*
Bendix ABS System OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
ABS Service Data Manual	1	"	*
Amerex FSS System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
System Operation and Maintenance Manual	1	"	*
Modular Controller Installation, Operation, and Instruction Manual	1	"	*
Sub Total			
Other New Flyer Costs			This is for one D4520 Option Build of 1 Coach Only
DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Standard Labour Hours required for Coach Manual Set Publishing	240	N/A	Not charged to the customer
Sub Total			
Grand Total			

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PUBLICATIONS DELIVERABLES PROPOSAL

PUBLICATIONS rev a. September 8, 2022

Virginia Dept of Rail and Public Transportation

PRIMARY CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
PUBLICATIONS CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
COACH MODEL	D45 CRT CHARGE
QUANTITY	1
CUSTOMER PROGRAM MANAGER	
PROPULSION SYSTEM	Siemens - ELFA2 Electric Drive System includes Traction Drive Motor, Inverters, E-drive Controls and related components
HIGH VOLTAGE SYSTEM ESS	XALT Systems - XPAND
COOLING-ENGINE	Modine - eFan Rad, electric coach
ABS	Bendix, 6-Channel
WHEELCHAIR RAMP	Braun NRFC30x78
FSS	N/A

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Cell:	
Facsimile:	
Special Shipping Instructions:	
Other Info:	
Email Address Contact:	
Email Address Other 1:	
Email Address Other 2:	
Email Address Other 3:	

New Flyer Standard Coach Publications

This is for one D45 CRT LE CHARGE Option Build of 1 Coach Only

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Operator's Manual (8.5x11 3-hole regular)	1	With First Coach Delivery	On board each coach
Operator's Manual (8.5x11 3-hole regular)	1	With Last Coach Delivery	Basic
Driver's Info Card	1	With First Coach Delivery	On board each coach
Emergency Response Guide	1	With First Coach Delivery	On board each coach
Parts Manual	1	With Last Coach Delivery	Basic
Maintenance Manual	1	With Last Coach Delivery	Basic
Electrical Schematic Manual (11x17 3-hole paper)	1	With Last Coach Delivery	Basic
Ladder Logic Document (11x17 3-hole regular paper)	1	With Last Coach Delivery	Coach build specific
USB/CD	1	With Last Coach Delivery	USB Includes all MCI Manuals in PDF format plus OEM manuals identified with "" below

Sub Total

OEM Supplier Publications

This is for one D45 CRT LE CHARGE Option Build of 1 Coach Only

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Siemens E-Drive Propulsion System OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier	Includes Traction Drive Motors, Inverters, E-drive Controls and related components. *
ELFA2 System User Guide (Safety, Installation, Operation, Maintenance, Diagnostics and Parts information documents)	1	"	*
SIADIS System Software Guide	1	"	*
XALT XPAND OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier	
XPAND Battery System Overview User Manual	1	"	*
BraunAbility Wheelchair Ramp OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	Includes Service, Parts, Troubleshooting and PM information
NRFC30x78 Ramp Service Manual	1	"	*
Modine Cooling System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
eFan Electric Coach Cooling System Diagnostic and Service Manual	1	"	*
Bendix ABS System OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
ABS Maintenance Manual	1	"	*

Sub Total

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Standard Labour Hours required for Coach Manual Set Publishing	240	N/A	Not charged to the customer
Sub Total			
Grand Total			

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PRIMARY CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
PUBLICATIONS CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
COACH MODEL	D45 CRT LE
QUANTITY	1
CUSTOMER PROGRAM MANAGER	
ENGINE	Engine - Cummins X12, 410 HP, 11.8 L, 1450 FT-LBS (EPA 2022)
TRANSMISSION	Allison Transmission - B500 Gen5
COOLING-ENGINE	Modine - eFan Rad
ABS	Bendix EC-80
AUXILIARY HEAT	N/A
WHEELCHAIR RAMP	Braun NRFC30x78
FSS	Amerex - Modulator System V25

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Other Info:	
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Email Address Other 1:	
Email Address Other 2:	
Email Address Other 3:	

Contacts for Manual Bulletin Only

New Flyer Standard Coach Publications

This is for one D45 CRT LE Option Build of 1 Coach Only

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Operator's Manual (8.5x11 3-hole regular)	1	With First Coach Delivery	One on board each coach
Operator's Manual (8.5x11 3-hole regular)	1	With Last Coach Delivery	Basic
Driver's Info Card	1	With First Coach Delivery	One on board each coach
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Electrical Schematic Manual (11x17 3-hole regular paper)	1	With Last Coach Delivery	Basic
Ladder Logic Document (11x17 3-hole regular paper)	1	With Last Coach Delivery	Coach build specific
USB/CD	1	With Last Coach Delivery	USB Includes all MCI Manuals in PDF format plus optional OEM manuals identified with "" below

Sub Total

OEM Supplier Publications (Optional)

This is for one D45 CRT LE Option Build of 1 Coach Only

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Fault Code Troubleshooting Manual	1	"	CD included in paper copy
Service Manual	1	"	CD included in paper copy
Operation & Maintenance Manual	1	"	CD included in paper copy
Owners Manual	1	"	PDF not available
ALLISON TRANSMISSION B500 OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
Service Manual - Gen 4/5	1	"	*
Parts Manual - Gen 4/5	1	"	*
Troubleshooting Manual - Gen 5	1	"	*
Quick Tech Troubleshooting Guide - Gen 5	1	"	*
Principle of Operations - Gen 5	1	"	*
Mechanics Tips - Gen 5	1	"	*
Operator's Manuals - Gen 5	1	"	*
Proheat OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
Installation and Service Manual	1	"	*

BraunAbility Wheelchair Ramp OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	Includes Service, Parts, Troubleshooting and PM information
NRFC30x78 Ramp Service Manual	1	"	*
Modine Cooling System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
eFan Cooling System Diagnostic and Service Manual	1	"	*
Bendix ABS System OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
ABS Service Data Manual	1	"	*
Amerex FSS System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
System Operation and Maintenance Manual	1	"	*
Modular Controller Installation, Operation, and Instruction Manual	1	"	*
Sub Total			
Other New Flyer Costs			This is for one D45 CRT LE Option Build of 1 Coach Only
DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Standard Labour Hours required for Coach Manual Set Publishing	240	N/A	Not charged to the customer
Sub Total			
Grand Total			

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PUBLICATIONS DELIVERABLES PROPOSAL

PUBLICATIONS rev a. September 8, 2022

Virginia Dept of Rail and Public Transportation

PRIMARY CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
PUBLICATIONS CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
COACH MODEL	D45 CRT LE CHARGE
QUANTITY	1
CUSTOMER PROGRAM MANAGER	
PROPULSION SYSTEM	Siemens - ELFA2 Electric Drive System includes Traction Drive Motor, Inverters, E-drive Controls and related components
HIGH VOLTAGE SYSTEM ESS	XALT Systems - XPAND
COOLING-ENGINE	Modine - eFan Rad, electric coach
ABS	Bendix, 6-Channel
WHEELCHAIR RAMP	Braun NRFC30x78
FSS	N/A

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Phone:	
Cell:	
Facsimile:	
Special Shipping Instructions:	
Other Info:	
Email Address Contact:	
Email Address Other 1:	
Email Address Other 2:	
Email Address Other 3:	

New Flyer Standard Coach Publications

This is for one D45 CRT LE CHARGE Option Build of 1 Coach Only

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Operator's Manual (8.5x11 3-hole regular)	1	With First Coach Delivery	On board each coach
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Ladder Logic Document (11x17 3-hole regular paper)	1	With Last Coach Delivery	Coach build specific
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Sub Total

OEM Supplier Publications

This is for one D45 CRT LE CHARGE Option Build of 1 Coach Only

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Siemens E-Drive Propulsion System OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier	Includes Traction Drive Motors, Inverters, E-drive Controls and related components. *
ELFA2 System User Guide (Safety, Installation, Operation, Maintenance, Diagnostics and Parts information documents)	1	"	*
SIADIS System Software Guide	1	"	*
XALT XPAND OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier	
XPAND Battery System Overview User Manual	1	"	*
BraunAbility Wheelchair Ramp OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	Includes Service, Parts, Troubleshooting and PM information
NRFC30x78 Ramp Service Manual	1	"	*
Modine Cooling System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
eFan Electric Coach Cooling System Diagnostic and Service Manual	1	"	*
Bendix ABS System OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
ABS Maintenance Manual	1	"	*

Sub Total

DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Standard Labour Hours required for Coach Manual Set Publishing	240	N/A	Not charged to the customer
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Grand Total			

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PUBLICATIONS CUSTOMER NAME	Virginia Dept of Rail and Public Transportation
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
COACH MODEL	D45 CRT
QUANTITY	1
CUSTOMER PROGRAM MANAGER	
ENGINE	Engine - Cummins X12, 410 HP, 11.8 L, 1450 FT-LBS (EPA 2022)
TRANSMISSION	Allison Transmission - B500 Gen5
COOLING-ENGINE	Modine - eFan Rad
ABS	Bendix EC-80
AUXILIARY HEAT	N/A
WHEELCHAIR LIFT	Braun, NUVL885RM24
FSS	Amerex - Modulator System V25

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Other Info:	
Email Address Contact:	
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Email Address Other 2:	
Email Address Other 3:	

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New Flyer Standard Coach Publications

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Sub Total

OEM Supplier Publications (Optional)

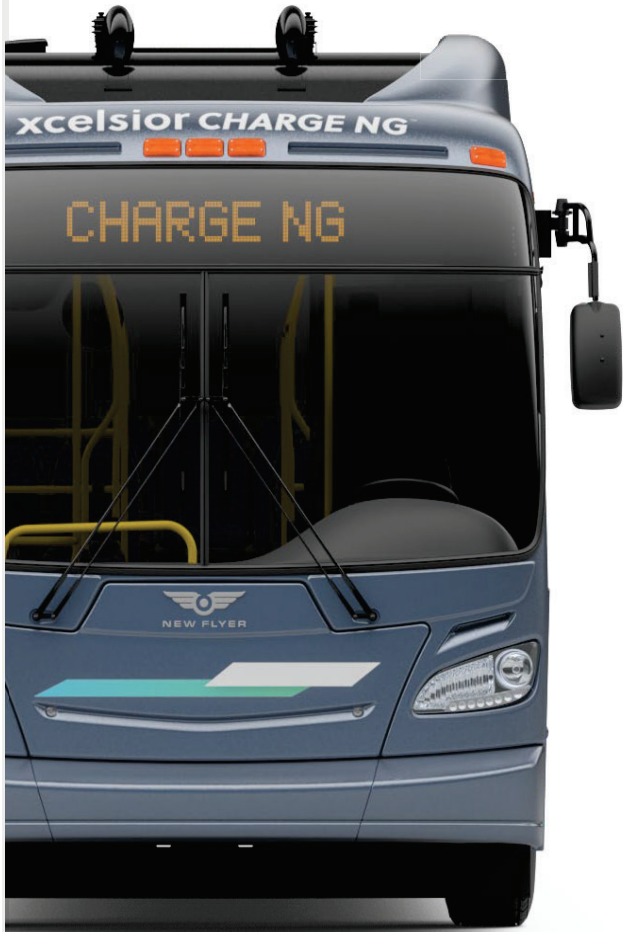
This is for one D45 CRT Option Build of 1 Coach Only

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Service Manual	1	"	CD included in paper copy
Operation & Maintenance Manual	1	"	CD included in paper copy
Owners Manual	1	"	PDF not available
ALLISON TRANSMISSION B500 OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
Service Manual - Gen 4/5	1	"	*
Parts Manual - Gen 4/5	1	"	*
Troubleshooting Manual - Gen 5	1	"	*
Quick Tech Troubleshooting Guide - Gen 5	1	"	*
Principle of Operations - Gen 5	1	"	*
Mechanics Tips - Gen 5	1	"	*
Operator's Manuals - Gen 5	1	"	*
Proheat OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
Installation and Service Manual	1	"	*

Braun Wheelchair Lift OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	Includes Service, Parts, Troubleshooting and PM information
Service Manual	1	"	*
Modine Cooling System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
eFan Cooling System Diagnostic and Service Manual	1	"	*
Bendix ABS System OEM Manual (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
ABS Service Data Manual	1	"	*
Amerex FSS System OEM Manual Set (includes only the following)		With First Coach Delivery or Soon After Receipt From Supplier	
System Operation and Maintenance Manual	1	"	*
Modular Controller Installation, Operation, and Instruction Manual	1	"	*
Sub Total			
Other New Flyer Costs			This is for one D45 CRT LE Option Build of 1 Coach Only
DESCRIPTION	QTY	CUSTOMER DELIVERY	COMMENTS
Standard Labour Hours required for Coach Manual Set Publishing	240	N/A	Not charged to the customer
Sub Total			
Grand Total			

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**Virginia Department of Rail and Public
Transportation**

IFB 6447

IFB

New Flyer of America

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

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Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 1, Letter of Transmittal

Solicitation Requirements:

N/A

New Flyer Response:

Please see attached New Flyer's **Letter of Transmittal** to Virginia Department of Rail and Public Transportation.

Please indicate your acceptance by providing a Purchase Order to New Flyer, attention:

Adrian Graca, Business Segment Director, Urban Transit Fleets
204.470.5521

Adrian_Graca@newflyer.com



October 11, 2022

Pamela Copeland
Commonwealth of Virginia
1111 East Broad Street
Richmond Virginia 23219

Subject: IFB # 6447 Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty, 12 Year (29 ft. – 60 ft sizes)

Dear Pamela,

New Flyer is honored to have the opportunity to submit our response to the Commonwealth of Virginia for proposal IFB #6447. This proposal is for the manufacture and delivery of Low Floor Transit Buses (35 ft, 40 ft, and 60 ft).

As outlined in our proposal New Flyer is proposing our proven Xcelsior® platform. This platform has undergone the 12-year durability standard tests at Altoona, Exova Shaker Table testing, and has been proven in service at over 270 transit systems across North America.

Best Long-Term Partner for the Commonwealth of Virginia

New Flyer is the leading manufacturer of heavy-duty transit buses in North America. We began manufacturing buses in 1930, and over the years, have designed and built a variety of bus models that include the most diverse drive systems available, focusing on today's heavy-duty urban transit industry.

New Flyer has delivered over 48,000 transit buses of which 8,600 are powered by electric motors and battery propulsion and 1,900 are zero-emission. Since 2000, New Flyer has consistently maintained its leading market share of the combined U.S. and Canadian heavy-duty transit bus manufacturing industry. Its customers include all 25 of the 25 largest transit agencies in the U.S. and Canada, and approximately 500 agencies operate our buses. Our customer base is comprised of properties of varying sizes, from small counties to the larger agencies from the east coast to the west coast. As a result, we have gained tremendous experience in executing contracts of all configurations, the Commonwealth of Virginia included.

New Flyer is driven by a team over 3,300 people strong across eight facilities in North America. We have assembly/manufacturing facilities, parts distribution and service centers, regional product support managers and sales, service and training personnel across America to support the hundreds of customers we proudly serve. Our four assembly/manufacturing facilities are located in St. Cloud, MN; Crookston, MN; Anniston, AL; and Winnipeg, MB.

In June of 2013 New Flyer acquired North American Bus Industry (NABI), including both bus and parts organizations. This acquisition created synergistic opportunities that allows New Flyer to offer our customers a more diverse product offering, as well as enhancing our ever-growing parts network and customer-service capabilities. Coupled with the acquisition of Daimler Buses North America (DBNA) Orion aftermarket parts business in March of 2013, New Flyer supports over 35,000 heavy-duty buses still in service today. This

represents approximately 43% of the estimated 80,000 active heavy-duty transit buses in the U.S. and Canada.

New Flyer's supply chain includes over 150 component suppliers. More than 80% of them are in the U.S., across 25 states. New Flyer is truly invested in providing support and care for the entire time you operate our buses.

Quality Assurance and Operational Excellence

New Flyer initiated Operational Excellence in its manufacturing processes in 2008, with the vision to provide and maintain a safe, clean, and efficient working environment for all employees while delivering exceptional first-time quality and defined processes. New Flyer utilizes lean manufacturing and 5S techniques to ensure its team has the best tools and stations to successfully complete the job, and strongly believes in quality at the source. New Flyer is proud to have been the first bus manufacturer to achieve all three certifications for its manufacturing processes: ISO 9001 (quality management), ISO 14001 (environmental management), and ISO 45001 (safety).

Service Support

New Flyer's Service Team supports over 51% of the installed fleet in North America with the goal of keeping your fleet running with service and support that exceeds your expectations. Our vast service network consists of four regional teams with over 20 regional product support managers. These teams are supported by technical service specialists that develop and provide solutions, coordinate activities and information with the New Flyer engineering team and oversee the daily workflow of field information. You will also have access to our internet-based warranty lifecycle management system that will enable you to streamline your warranty claims and warranty parts processing. It will give you total visibility into the claims process from start to finish, increasing ease of management and creating efficiencies across the entire warranty life cycle.

Training

The New Flyer Institute and MCI Academy delivers world-class training to our customers. For decades, we have worked closely with customers to design and deliver training to improve skill sets, allowing you to invest in your employees. We deliver content via different delivery methods, which gives you the flexibility you want, including classroom training, on-the-job training and eLearning. Through the MCI Academy, certificate and diploma courses are available to further develop specific skill sets.

In November of 2021, the MCI Academy received an ASE Training Managers Council National Excellence in Training Award, marking it the fifth consecutive time the MCI Academy has earned the award, and the only time a recipient has won five times.

Xcelsior®

Xcelsior®, launched in 2010, is New Flyer's highly successful next-generation transit bus, designed to provide best-in-class features that reduce overall life-cycle costs for our customers, and improve the passenger and driver experience. Design highlights include an 8% reduction in weight, the industry's quietest ride (based on Altoona tests), improved accessibility including a 1:6 slope ratio and reduced maintenance expense. It is currently available in 35-foot, 40-foot and 60-foot models, with a full range of available propulsion options. New Flyer has delivered over 14,000 Xcelsior heavy-duty transit bus models, together accumulating over one billion miles of revenue service.

Built to Rely On®

New Flyer continues building on its nearly 90-year legacy of innovation to deliver advanced transit solutions that meet the complex demands of communities today and into the future. In pursuit of building efficient, sustainable, and connected multi-modal solutions across North America, it is our mission to keep advancing. Whether it's our people, our facilities, or our products, we strive to evolve ourselves to be your partner for life and support you for the life of your vehicles.

Thank you for the opportunity to submit this proposal. We would be pleased to have the opportunity to meet and present our proposal to your organization to describe the value we offer and how we can address and support the Commonwealth of Virginia's goals and objectives.

Sincerely,
NEW FLYER OF AMERICA INC.

A handwritten signature in black ink that reads "Barry Karlenzig". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

Barry Karlenzig
Technical Sales Manager
204.590.8394
Barry_Karlenzig@newflyer.com

CC: Louis Quaglia – Regional Sales Manager
Adrian Graca - Business Segment Director – Urban Transit Fleets
Stephanie Laubenstein – Director, Sales & Business Development

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 2, New Flyer Qualifications

Solicitation Requirements:

N/A

New Flyer Response:

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

2A – New Flyer Corporate Overview

Solicitation Requirements:

N/A

New Flyer Response:

Passengers around the world are seeking modern transportation options they can feel good about as traffic congestion, costs and air quality continue to saddle today's growing cities. That is why New Flyer is engineering progressive mobility solutions through buses, technology, and infrastructure that serves our communities and makes our cities smarter, while safeguarding precious resources. In doing so, we are creating jobs, fortifying North America's infrastructure, and modernizing the industry and the world around us.

North America's Transit Bus Leader

New Flyer is North America's heavy-duty transit bus leader and offers the most advanced product line under the Xcelsior® and Xcelsior CHARGE® brands. It also offers infrastructure development through NFI Infrastructure Solutions™, a service dedicated to providing safe, sustainable, and reliable charging and mobility solutions. New Flyer actively supports over 35,000 heavy-duty transit buses (New Flyer, NABI, and Orion) currently in service, of which 8,600 are powered by electric motors and battery propulsion and 1,900 are zero-emission. Since 2000, New Flyer has consistently maintained its leading market share, and its customers include all 25 of the 25 largest transit agencies in the United States and Canada, and approximately 500 agencies operate our buses.

Further information is available at www.newflyer.com.

Our Products

New Flyer has over 50 years of experience in manufacturing zero-emission buses (ZEBs), with more electric buses on the road in North America than any other manufacturer. We are also the only North American manufacturer offering all three types of zero-emission transit bus (battery-electric, fuel cell-electric, and trolley-electric). New Flyer is committed to developing smart mobility solutions and working with public and private stakeholders in transportation to support building Smart Cities and communities across North America. New Flyer was the first bus manufacturer in the world to sign on to the Shared Mobility Principles for Livable Cities, and we are engineering progressive transit technology to serve your communities and make your cities smarter, while safeguarding your precious resources.

History of Innovation

New Flyer was founded in 1930 and is now the largest transit bus manufacturer in North America, with fabrication, manufacturing, and service centers in the United States and Canada. We continue building on our 90+ year legacy of innovation to deliver innovative mobility solutions and technology that meets the demands of communities today, and into the future. Historic highlights of New Flyer's transit leadership and technology advancement are below.

- 1930: Founded in Winnipeg, Manitoba
- 1968: First electric trolley
- 1988: First diesel-hybrid bus
- 1990: First low-floor bus in North America
- 2008: First LED headlights in the industry
- 2010: Introduced industry-leading Xcelsior® bus platform
- 2012: Introduced first battery-electric bus

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

- 2017: Introduced next-generation, battery-electric bus (Xcelsior CHARGE™)
- 2017: Opened the Vehicle Innovation Center in Anniston, Alabama
- 2018: Delivered 10,000th Xcelsior®
- 2019: Launched Connect 360™, New Flyer Infrastructure Solutions™ (now NFI Infrastructure Solutions™) and New Flyer's AV program
- 2020: Launched National Community Benefit Framework and Anniston Workforce Development Program
- 2020: Announced first automated heavy-duty transit bus deployment in North America (with Connecticut Department of Transportation)
- 2021: Unveiled the Xcelsior AV™, North America's first automated transit bus
- 2021: Unveiled the Xcelsior CHARGE NG™, New Flyer's next-generation, zero-emission, battery-electric bus

Locations

New Flyer is driven by a team over 3,300 people strong across more than ten facilities in North America. New Flyer's manufacturing is supported by four major manufacturing facilities located in Anniston, AL; Crookston, MN; St. Cloud, MN; and Winnipeg, MB. In 2018, New Flyer announced that all four facilities became capable of manufacturing zero-emission, battery-electric buses. Its facility in Anniston, Alabama, is also home to NFI's Vehicle Innovation Center (VIC), opened late 2017 and dedicated to the exploration and advancement of bus and coach technology connecting people to places. It remains the first and only innovation lab of its kind in North America.

Quality Assurance and Operational Excellence

New Flyer initiated Operational Excellence in its manufacturing processes in 2008, with the vision to provide and maintain a safe, clean, and efficient working environment for all employees while delivering exceptional first-time quality and defined processes. New Flyer utilizes lean manufacturing and 5S techniques to ensure its team has the best tools and stations to successfully complete the job, and strongly believes in quality at the source. New Flyer is proud to have been the first bus manufacturer to achieve all three certifications for its manufacturing processes: ISO 9001 (quality management), ISO 14001 (environmental management), and OHSAS 18001 (occupational health and safety management).

Built to Rely On®

New Flyer continues building on its nearly 90-year legacy of innovation to deliver advanced transit solutions that meet the complex demands of communities today and into the future. In pursuit of building efficient, sustainable, and connected multi-modal solutions across North America, it is our mission to keep advancing. Whether it's our people, our facilities, or our products, we strive to evolve ourselves to be your partner for life and support you for the life of your vehicles. Further details are available at newflyer.com.

NFI Group

New Flyer operates as New Flyer of America Inc. and New Flyer Industries Canada ULC, subsidiaries of NFI Group Inc. ("NFI"). With 7,500 team members in ten countries, NFI is a leading global bus manufacturer of mass mobility solutions under the brands New Flyer® (heavy-duty transit buses), MCI® (motor coaches), Alexander Dennis Limited (single and double-deck buses), Plaxton (motor coaches), ARBOC® (low-floor cutaway and medium-duty buses), and NFI Parts®. NFI currently offers the widest range of sustainable drive systems available, including zero-emission electric (trolley, battery, and fuel cell), natural gas, electric hybrid, and clean diesel. In total, NFI supports its installed base of over 105,000 buses and coaches around the world. NFI common shares are traded on the Toronto Stock Exchange under the symbol NFI.

News and information is available at www.nfigroup.com, www.newflyer.com, www.mcicoach.com, www.arbocsv.com, www.alexander-dennis.com, and www.nfi.parts.

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Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
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2B – Financial Statements

Solicitation Requirements:

Contractor shall provide electronic reports in Microsoft Excel format on a quarterly basis showing total invoiced sales data, which means all invoices issued within the reporting period. Reports shall be provided no later the 15th of the next month following the end of the calendar quarter, reporting total invoiced sales and return transactions that took place in the immediately preceding quarter. Reports shall be sent to the DPS Contracting Officer.

New Flyer Response:

New Flyer of America Inc is a wholly owned subsidiary of NFI Group Inc. (NFI), a leading independent global bus manufacturer of mass mobility solutions.

With over 9,000 team members operating from more than 50 facilities across ten countries, NFI is a leading independent global bus manufacturer providing a comprehensive suite of mass transportation solutions under brands: New Flyer® (heavy-duty transit buses), Alexander Dennis Limited (single and double deck buses), Plaxton (motor coaches), MCI® (motor coaches), ARBOC® (low-floor cutaway and medium-duty buses), and NFI Parts™. NFI buses and motor coaches incorporate the widest range of drive systems available including clean diesel, natural gas, diesel-electric hybrid, and zero-emission electric (trolley, battery, and fuel cell). In total, NFI now supports over 105,000 buses and coaches currently in service around the world.

NFI Group is a publicly traded corporation, with common shares traded on the Toronto Stock Exchange under the symbol NFI.

For the fiscal year ended December 27, 2020, NFI Group generated revenue and Adjusted EBITDA of approximately \$2.4 billion USD and \$158 million USD, respectively. In addition, our backlog remains solid at USD \$4.5 billion of firm and option orders.

Consolidated Audited Financial Statements for the past four (4) years may be accessed at:

<https://www.nfigroup.com/financial-information/quarterly-annual-results>

Virginia Department of Rail and Public Transportation

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Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

2C – Vendor Data Sheet

Solicitation Requirements:

Attachment C: Vendor Data Sheet

New Flyer Response:

Please find **Attachment C, Vendor Data Sheet**, enclosed for your evaluation.

VENDOR DATA SHEET

The following information is required as part of the Bidder's response to this solicitation. Failure to complete and provide this sheet may result in bid being declared nonresponsive. (In the case of a Combined Two-Step IFB, it may cause the Technical Proposal to be determined to be not acceptable.)

1. Qualification: The Bidder must have the capability and capacity in all respects to satisfy fully all of the contractual requirements.
2. Bidder's Primary Contact:
Name: Stephanie Laubenstein Phone: 204.391.1788 Email: Stephanie_Laubenstein@newflyer.com
3. Years in Business: Indicate the length of time Bidder has been in business providing this type of good or service:
33 Years 0 Months
4. eVA Vendor ID or DUNS Number: DUNS Number 621887959
5. Indicate below a listing of at least four (4) current or recent accounts, either commercial or governmental, that the Bidder is servicing, has serviced, or has provided similar goods/services. Include the length of service and the name, address, and telephone number of the point of contact.
 - A. Company: Potomac and Rappahannock Transportation Commission Contact: Perrin Palistrant (Director of Maintenance)
Phone: (703) 580-6162 Email: _____
ppalistrant@omniride.com
Dates of Service: January 2021 \$ Value: -
 - B. Company: Georgia Regional Transportation Authority Contact: Darryl Howell (Transit Program Manager)
Phone: (404) 893-3024 Email: DHowell@ATLtransit.ga.gov
Dates of Service: August 2022 \$ Value: -
 - C. Company: Antelope Valley Transit Authority Contact: Martin Tompkins (CEO)
Phone: (661) 755-9629 Email: mtompkins@avta.com
Dates of Service: January 2022 \$ Value: -
 - D. Company: Nashville Metropolitan Transit Authority Contact: Carl Rokus (Director of Maintenance)
Phone: (615) 880-3272 Email: carl.rokus@nashville.gov
Dates of Service: January 2022 \$ Value: -

I certify the accuracy of this information.

Signed:  Title: Director, Sales and Business Development Date: 10 Oct 22

Virginia Department of Rail and Public Transportation

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Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
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2D – Small Business Subcontracting Plan

Solicitation Requirements:

Attachment D

A. Complete the subcontractor plan as specified in the electronic response; or

B. Download the “paper response” form, complete the subcontractor plan section, and submit as an attachment with the bid response.

New Flyer Response:

Not applicable to New Flyer of America.

Virginia Department of Rail and Public Transportation

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Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

2E – State Corporation Commission Form

Solicitation Requirements:

Attachment E: State Corporation Commission Form

New Flyer Response:

Please find [Attachment E, State Corporation Commission Form](#), enclosed for your evaluation.

STATE CORPORATION COMMISSION FORM

The following information is required as part of the Bidder's response to this solicitation. Failure to complete and provide this form may result in bid being declared nonresponsive. (In the case of a Combined Two-Step IFB, it may cause the Technical Proposal to be determined to be not acceptable.)

Virginia State Corporation Commission ("SCC") registration information: The Bidder:

is a corporation or other business entity with the following SCC identification number:

-OR-

is not a corporation, limited liability company, limited partnership, registered limited liability partnership, or business trust

-OR-

is an out-of-state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting any employees or agents in Virginia who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the Bidder in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contracts by which such goods were sold and shipped into Virginia from Bidder's out-of-state location)

-OR-

is an out-of-state business entity that is including with this bid an opinion of legal counsel which accurately and completely discloses the undersigned Bidder's current contacts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of § 13.1-757 or other similar provisions in Titles 13.1 or 50 of the Code of Virginia.

****NOTE**** >> Check the following box if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact business in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number after the due date for bids (the Commonwealth reserves the right to determine in its sole discretion whether to allow such waiver):

Signature: Stephanie Laubenstein Date: 10 Oct 22

Name: Stephanie Laubenstein

Print

Title: Director, Sales and Business Development

Name of Firm: New Flyer of America Inc.

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
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2F – NDAA 2020 Section 7613 Compliance Form

Solicitation Requirements:

Attachment F: NDAA 2020 Section 7613 Compliance Form

New Flyer Response:

Please find [Attachment F, NDAA 2020 Section 7613 Compliance Form](#), enclosed for your evaluation.

NDA 2020 Section 7613 Compliance Form

Regarding compliance with Section 7613 of the National Defense Authorization Act for Fiscal Year 2020 (NDA 2020), subsection 49 U.S.C. § 5323 (u), the undersigned Bidder:

IS COMPLIANT with the provisions of this subsection and certifies the manufacturer is not “owned or controlled by, is a subsidiary of, or is otherwise related legally or financially to a corporation based in” certain foreign countries covered by the restrictions outlined.

IS NOT COMPLIANT with the provisions of this subsection and certifies the manufacturer is “owned or controlled by, is a subsidiary of, or is otherwise related legally or financially to a corporation based in” certain foreign countries covered by the restrictions outlined.

For more information regarding the restriction criteria and the provisions of subsection 49 U.S.C. § 5323 (u), visit the FTA Frequently-Asked-Questions for Section 7613 at the following link: <https://www.transit.dot.gov/funding/procurement/frequently-asked-questions-regarding-section-7613-national-defense>

PLEASE NOTE: Failure to provide this information, may result in your bid being declared non-responsive

Signature:  Date: 10 Oct 22

Name: Stephanie Laubenstein
Print

Title: Director, Sales and Business Development

Name of Firm: New Flyer of America Inc.

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

2G – Federal Certifications

Solicitation Requirements:

Attachment J: Federal Certifications

- *Certification and Restrictions on Lobbying*
- *Government-Wide Debarment and Suspension*
- *Bus Testing Certification*
- *Transit Vehicle Manufacturer (TVM) Certification*

New Flyer Response:

Please find the following forms enclosed for your evaluation.

- **Certification and Restrictions on Lobbying**
- **Government-Wide Debarment and Suspension**
- **Bus Testing Certification**
- **Transit Vehicle Manufacturer (TVM) Certification**

Altoona test reports have not been attached but may be viewed directly here:

<https://www.altoonabustest.psu.edu/bus-list.aspx>

Please refer to the corresponding Bus Number (Report):

Model	Bus Number
XD35 / XD40	1211
XD60	1302
XDE35 / XDE40	1015
XDE60	1410
XE35 / XE40	1405 / 1915
XE60	1903
XHE35 / XHE40	1808
XHE60	1615
XN35 / XN40	1403
XN60	1118

Federal Certifications

CERTIFICATION AND RESTRICTIONS ON LOBBYING

I, Stephanie Laubenstein hereby certify
(Name and title of official)

On behalf of New Flyer of America Inc. that:
(Name of Bidder/Company Name)

- No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- If any funds other than federal appropriated funds have been paid or will be paid to any person influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form — LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification and understands that the provisions of 31 U.S.C. Section 3801, et seq., are applicable thereto.

Name of Bidder/Company Name: New Flyer of America Inc.

Type or print name: Stephanie Laubenstein

Signature of authorized representative: [Signature] Date 10 , Oct , 22

Signature of notary and SEAL: [Signature]



Christy L. Davidson
A Notary Public for the Province of Manitoba.
My Commission Expires: May 19, 2013
711 Kernaghan Avenue
Winnipeg, Manitoba R2C 3T4

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.

Name of Bidder/Company Name: New Flyer of America Inc.

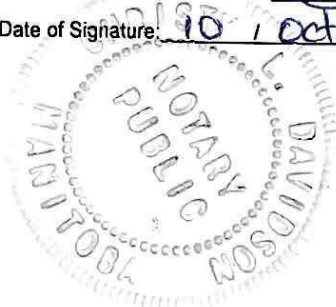
Type or print name: Stephanie Laubenstein

Signature of authorized representative: *[Signature]*

Signature of notary and SEAL: *[Signature]*

Date of Signature: 10 / Oct / 2022

Christy L. Davidson
A Notary Public for the Province of Manitoba.
My Commission Expires: May 19, 2023
711 Kernaghan Avenue
Winnipeg, Manitoba R2C 3T4



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.

BIDDER/COMPANY

Name of Bidder/Company New Flyer of America Inc.

Signature of Representative *Stephanie Laubenstein*

Type or Print Name Stephanie Laubenstein

Title Director, Sales and Business Development Date 10, Oct, 22

NOTARY

Type or Print Name _____

Signature of Notary *Christy L. Davidson*

Place Notary SEAL Here:

Christy L. Davidson
A Notary Public for the Province of Manitoba
My Commission Expires: May 19, 2023
711 Kernaghan Avenue
Winnipeg, Manitoba R2C 3T4



Not Applicable (New Flyer of America Inc. is not a lower tier participant, in addition, NFOA does not have any lower tier participants as part of this proposal)

Attachment J
IFB6447

**GOVERNMENT-WIDE DEBARMENT AND SUSPENSION
(NONPROCUREMENT)**

Instructions for Certification By signing and submitting this bid or proposal, the prospective lower tier participant is providing the signed certification set out below.

(1) It will comply and facilitate compliance with U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 CFR part 1200, which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 CFR part 180,

(2) To the best of its knowledge and belief, that its Principals and Subrecipients at the first tier:

a. Are eligible to participate in covered transactions of any Federal department or agency and are not presently:

1. Debarred,
2. Suspended,
3. Proposed for debarment,
4. Declared ineligible,
5. Voluntarily excluded, or
6. Disqualified,

b. Its management has not within a three-year period preceding its latest application or proposal been convicted of or had a civil judgment rendered against any of them for:

1. Commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction, or contract under a public transaction,
2. Violation of any Federal or State antitrust statute, or,
3. Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making any false statement, or receiving stolen property,

c. It is not presently indicted for, or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses listed in the preceding subsection 2.b of this Certification,

d. It has not had one or more public transactions (Federal, State, or local) terminated for cause or default within a three-year period preceding this Certification,

e. If, at a later time, it receives any information that contradicts the statements of subsections 2.a —2.d above, it will promptly provide that information to FTA,

f. It will treat each lower tier contract or lower tier subcontract under its Project as a covered lower tier contract for purposes of 2 CFR part 1200 and 2 CFR part 180 if it:

1. Equals or exceeds \$25,000,,
2. Is for audit services, or,
3. Requires the consent of a Federal official, and

g. It will require that each covered lower tier contractor and subcontractor:

1. Comply and facilitate compliance with the Federal requirements of 2 CFR parts 180 and 1200, and
2. Assure that each lower tier participant in its Project is not presently declared by any Federal department or agency to be:

- a. Debarred from participation in its federally funded Project,
- b. Suspended from participation in its federally funded Project,
- c. Proposed for debarment from participation in its federally funded Project,
- d. Declared ineligible to participate in its federally funded Project,
- e. Voluntarily excluded from participation in its federally funded Project, or
- f. Disqualified from participation in its federally funded Project, and

3. It will provide a written explanation as indicated on a page attached in FTA's TrAMS platform or the Signature Page if it or any of its principals, including any of its first tier Subrecipients or its Third-Party Participants at a lower tier, is unable to certify compliance with the preceding statements in this Certification Group.

(3) It will provide a written explanation as indicated on a page attached in FTA's TrAMS platform or the Signature Page if it or any of its principals, including any of its first tier Subrecipients or its Third-Party Participants at a lower tier, is unable to certify compliance with the preceding statements in this Certification Group.

Certification

Contractor: _____

Signature of Authorized Official: _____ Date ____ / ____ / ____

Name and Title of Contractor's Authorized Official: _____

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

2H – FMVSS Compliance

Solicitation Requirements:

The bidder shall submit with bid, documentation certifying that the offered vehicle meets all applicable Federal Motor Vehicle Safety Standard (FMVSS) Regulations. Vehicle must comply with all applicable FMVSS for Low Floor Transit Buses, Commuter Coach Buses, and Trolleys.

New Flyer Response:

Please find the [FFMVSS Certificate](#) enclosed for your evaluation.

CER 8.8 Federal Motor Vehicle Safety Standards

The Proposer and (if selected) Contractor shall submit (1) manufacturer’s FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or (2) manufacturer’s certified statement that the contracted buses will not be subject to FMVSS regulations.

Company name: New Flyer of America Inc.

Name of signer: Stephanie Laubenstein

Title: Director, Sales and Business Development



10 Oct 22

Authorized signature

Date

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 3, Pricing Schedule

Solicitation Requirements:

Attachment H, Pricing Schedule

New Flyer Response:

Please find [Attachment H, Pricing Schedule](#), enclosed for your evaluation.

**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft. - 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XD35
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$476,990.00	\$475,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$476,990.00	\$475,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$480,690.00	\$479,190.00
			\$477,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 24500 Lb	
Wheelbase	State Vehicle Wheelbase: 226.75inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 36 ft	
Overall Exterior Width	State Vehicle Width: 11 ft	
Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Axle/Springs/Frame	As required for vehicle GVWR	Y
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y
Interior width at Seat Level	Minimum 91"	Y
Interior Height	Minimum 75" at center aisle	Y
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Suspension	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Drive Shaft	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XD40
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$481,990.00	\$480,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$481,990.00	\$480,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$485,690.00	\$484,190.00
			\$482,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 28,500 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Minimum 91"	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Exhaust System	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.		N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		Y	
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	Y	New Flyer standard is our NFI which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	N	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft. - 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XD60
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity	Volume Discount	11 + / each
Base Price		\$779,990.00	\$778,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$779,990.00	\$778,490.00
Delivery Price (flat fee)		\$3,806.25	\$3,806.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$783,796.25	\$782,296.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 40,765 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Interior Height	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Exhaust System	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be include in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XDE35

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity	1 to 5 / each	6 to 10 / each
Base Price		\$708,990.00	\$707,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$708,990.00	\$707,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$712,690.00	\$711,190.00
			\$705,990.00
			0.00%
			\$705,990.00
			\$3,700.00
			\$712,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year 2023	
GVWR	State Vehicle GVWR: 27000 Lb	
Wheelbase	State Vehicle Wheelbase: 226.75 inch	
Engine	State Engine (Minimum 6.7 liters): 6.7L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 36.3 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Interior Height Minimum 91"	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Exhaust System	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety Guard required. Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XDE40

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity	1 to 5 / each	6 to 10 / each
Base Price		\$713,990.00	\$712,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$713,990.00	\$712,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$717,690.00	\$716,190.00
			\$714,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year 2023	
GVWR	State Vehicle GVWR: 43660 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 6.7L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Minimum 91"	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Exhaust System	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required. Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XDE60
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$1,065,990.00	\$1,064,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$1,065,990.00	\$1,064,490.00
Delivery Price (flat fee)		\$10,000.00	\$10,000.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,075,990.00	\$1,074,490.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year: 2023	
GVWR	State Vehicle GVWR: 42100 Lb	
Wheelbase	State Vehicle Wheelbase: 293 Rear inch	
Engine	State Engine (Minimum 6.7 liters): 6.7L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 61 ft	
Overall Exterior Width	State Vehicle Width: 11 ft	
Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Axle/Springs/Frame	As required for vehicle GVWR	Y
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y
Interior width at Seat Level	Minimum 91"	Y
Interior Height	Minimum 75" at center aisle	Y
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Drive Shaft	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be include in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier laminated to lower surface and moisture sealed edges.	N		New Flyer standard is Plywood
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.	N		New Flyer standard is 1 hatch
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.	Y		
Air Condition	System: _____ Thermoking _____ STAT-AC			
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper	Y		
OPTIONAL EQUIPMENT	Model Number/Order Code		MSRP BASE PRICE	Contract Base Price
Please list all optional equipment, additional safety options, paint schemes, graphics/wraps, and accessories below that your firm can provide beyond the factory options.				
Please refer to Optional Equipment attachment				
			\$ -	\$ -
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For unlisted options (not listed above), please provide a description, number of years, and price)				
	% Off MSRP/Catalog/List			
	%			
Extended Warranty and Price (include coverage description, number of years, and price)	Coverage		MSRP/LIST PRICE	Contract Price
Cummins Engine (CNG)	Years 3.4.5 (Total 5 Years)	Limited Ext Warranty (coverage will be as per supplier's warranty document)	\$ 6,850.00	\$ 6,850.00
Cummins Engine (Diesel)	Years 3.4.5 (Total 5 Years)	Limited Ext Warranty (coverage will be as per supplier's warranty document)	\$ 5,150.00	\$ 5,150.00
Cummins Engine (ISB Hybrid)	Years 3.4.5 (Total 5 Years)	Limited Ext Warranty (coverage will be as per supplier's warranty document)	\$ 4,750.00	\$ 4,750.00
Cummins Engine (ISL Hybrid)	Years 3.4.5 (Total 5 Years)	Limited Ext Warranty (coverage will be as per supplier's warranty document)	\$ 5,150.00	\$ 5,150.00
Allison Hybrid System	Years 3.4.5 (Total 5 Years)	Limited Ext Warranty (coverage will be as per supplier's warranty document)	\$ 23,367.00	\$ 23,367.00
BAE Hybrid System (HDS200)	Years 3.4.5 (Total 5 Years)	Limited Ext Warranty (coverage will be as per supplier's warranty document)	\$ 15,000.00	\$ 15,000.00
Allison Transmission (B400R)	Years 3.4.5 (Total 5 Years)	Limited Ext Warranty (coverage will be as per supplier's warranty document)	\$ 2,900.00	\$ 2,900.00
Post-Warranty Maintenance	Contract Amount			
Labor (hourly rate)	\$ / per hour		\$350.00	
Parts (Discount Percentage)	% discount off of list/MSRP			0

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)

Manufacturer and/or Dealer Name:		New Flyer of America / XE35 (440Kwh)	
<p>This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>			

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$909,990.00	\$908,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C. Requirements, #11)		\$909,990.00	\$908,490.00
Delivery Price (flat fee)		\$10,081.25	\$10,081.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$920,071.25	\$918,571.25
			\$917,071.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023 _____	
GVWR	State Vehicle GVWR: _____ 27600 lb _____	
Wheelbase	State Vehicle Wheelbase: _____ 283.7 _____	
Battery Access Door/Disconnect Switch	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y
Battery	State Vehicle Length: _____ 36 ft _____	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Width: _____ 11 ft _____	
Overall Exterior Width	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in _____	
Exterior Height	As required for vehicle GVWR	Y
Axle/Springs/Frame	Maximum 14.0" x 4.5"	Y
Ground to Step Threshold	Minimum 91"	Y
Interior width at Seat Level		

Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor. White/Yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____, 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger. 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	
Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door. Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	Our standard is NF ramp which is 1:7 slope that significantly exceeds ADA regulations. Please attach SIB 580-001

Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months or 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.

All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.

The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.

Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.

IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)

Manufacturer and/or Dealer Name:	New Flyer of America / XE40 (440Kwh)
<p>This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Discount for volume level:			
Base Price		\$919,990.00	\$918,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C. Requirements, #11)		\$919,990.00	\$918,490.00
Delivery Price (flat fee)		\$10,081.25	\$10,081.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$930,071.25	\$928,571.25
			\$916,990.00
			0.00%
			\$916,990.00
			\$10,081.25
			\$927,071.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023 _____	
GVWR	State Vehicle GVWR: _____ 44533 lb _____	
Wheelbase	State Vehicle Wheelbase: _____ 283.7 _____	
Battery Access Door/Disconnect Switch	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y
Battery	State Vehicle Length: _____ 41 ft _____	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Width: _____ 11 ft _____	
Overall Exterior Width	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in _____	
Exterior Height	As required for vehicle GVWR	Y
Axle/Springs/Frame	Maximum 14.0" x 4.5"	Y
Ground to Step Threshold	Minimum 91"	Y
Interior width at Seat Level		

Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, side and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor. White/Yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____, 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger. 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	
Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	Our standard is NF ramp which is 1:7 slope that significantly exceeds ADA regulations. Please attach SIB 580-001

Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.

All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.

The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.

Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.

**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XE60 (520Kwh)

This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in **Attachment A**. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$1,399,990.00	\$1,398,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV. Specification, Section C. Requirements, #11)		\$1,399,990.00	\$1,398,490.00
Delivery Price (flat fee)		\$21,163.75	\$21,163.75
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,421,153.75	\$1,419,653.75
			11+ / each
			\$1,396,990.00
			0.00%
			\$1,396,990.00
			\$21,163.75
			\$1,418,153.75

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!

Feature	Description	Meets Specs? Y/N	Comments
Year Model 2022 or current production model year	Model Year _____ 2023 _____		
GVWR	State Vehicle GVWR: _____ 72320 lb _____		
Wheelbase	State Vehicle Wheelbase: _____ 293 and 229 in. _____		
Battery Access Door/Disconnect Switch		Y	
Battery	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: _____ 60 ft. _____ 10 in _____		
Overall Exterior Width	State Vehicle Width: _____ 11 ft _____		

Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in. _____		
Axle/Springs/Frame	As required for vehicle GVWR	Y	
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y	
Interior width at Seat Level	Minimum 91"	Y	
Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs; (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 Interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross-bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand held web cutter.	Y
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	the coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU / hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	We don't have rear heater. We have cabin heating, floor heating and
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	N
Steering	Power steering with tilt steering wheel	Y
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to the recipient via electronic customer specific data portal.	Y
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y
Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier laminated to lower surface and moisture sealed edges.	Our standard is plywood. SIB 450-001
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.	Y
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.	Y
Air Condition	State AC System: _____ The smoking _____	Y
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper	

<p>Body Manufacturer's Electronic Customer-Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) • Bus body electrical schematics • List of items shipped with bus 	<p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category Proof of completed test to accompany bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p> <p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	<u>New Flyer of America /XHE40</u>
<p>This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Discount for volume level:			
Base Price		\$1,235,990.00	\$1,232,990.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C. Requirements, #11)		\$1,235,990.00	\$1,234,490.00
Delivery Price (flat fee)		\$10,081.25	\$10,081.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,246,071.25	\$1,244,571.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023 _____	
GVWR	State Vehicle GVWR: _____ 28850 lb _____	
Wheelbase	State Vehicle Wheelbase: _____ 283.7 _____	
Battery Access Door/Disconnect Switch	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y
Battery	State Vehicle Length: _____ 41ft _____	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Width: _____ 11 ft _____	
Overall Exterior Width	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in. _____	
Exterior Height	As required for vehicle GVWR	Y
Axle/Springs/Frame	Maximum 14.0" x 4.5"	Y
Ground to Step Threshold	Minimum 91"	Y
Interior width at Seat Level		

Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor. White/Yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____, 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger. 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	
Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	Our standard is NF ramp which is 1:7 slope that significantly exceeds ADA regulations. Please attach SIB 580-001

Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months or 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.

All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.

The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.

Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.

**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XHE60

This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in **Attachment A**. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Discount for volume level:			
Base Price		\$1,692,990.00	\$1,691,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV. Specification, Section C. Requirements, #11)		\$1,692,990.00	\$1,691,490.00
Delivery Price (flat fee)		\$21,163.75	\$21,163.75
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,714,153.75	\$1,712,653.75
			11 + / each
			\$1,689,990.00
			0.00%
			\$1,689,990.00
			\$21,163.75
			\$1,711,153.75

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!

Feature	Description	Meets Specs? Y/N	Comments
Year Model 2022 or current production model year	Model Year _____ 2023 _____		
GVWR	State Vehicle GVWR: _____ 72320 lb _____		
Wheelbase	State Vehicle Wheelbase: _____ 293 and 229 in. _____		
Battery Access Door/Disconnect Switch		Y	
Battery	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: _____ 60 ft. _____ 10 in _____		
Overall Exterior Width	State Vehicle Width: _____ 11 ft _____		

Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in. _____		
Axle/Springs/Frame	As required for vehicle GVWR	Y	
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y	
Interior width at Seat Level	Minimum 91"	Y	
Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs; (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 Interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross-bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand held web cutter.	Y
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N
Rear Heater	Minimum of 40,000 BTU / hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y
Steering	Power steering with tilt steering wheel	Y
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to the recipient via electronic customer specific data portal.	Y
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y
Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier laminated to lower surface and moisture sealed edges.	N
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.	Y
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.	Y
Air Condition	State AC System: _____ Thermoking _____	
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) • Bus body electrical schematics • List of items shipped with bus 	<p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category <u>Proof of completed test to accompany bid</u>. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p> <p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XN35

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$530,990.00	\$529,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$530,990.00	\$529,490.00
Delivery Price (flat fee)		\$3,375.00	\$3,375.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$534,365.00	\$532,865.00
			\$531,365.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 27000 Lb	
Wheelbase	State Vehicle Wheelbase: 226.75inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 36 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Minimum 91"	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Exhaust System	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required. Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	New Flyer Standard is NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	New Flyer standard is Allison B400R with 6 speed Performance
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XN40

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$535,990.00	\$534,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$535,990.00	\$534,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$539,690.00	\$538,190.00
			\$536,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 43660 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Interior Height	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Exhaust System	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	Y	N	Y
Interior	Panel, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer Standard is NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XN60
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity	Volume Discount	
Base Price	\$928,990.00	0.00%	\$927,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)	\$928,990.00		\$927,490.00
Delivery Price (flat fee)	\$3,806.25		\$3,806.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only	\$932,796.25		\$931,296.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!			
Feature	Description	Meets Specs? Y/N	Comments
Year Model 2022 or current production model year	Model Year _____ 2023		
GVWR	State Vehicle GVWR: 72320 Lb		
Wheelbase	State Vehicle Wheelbase: 283.7 inch		
Engine	State Engine (Minimum 6.7 liters): 8.9L		
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft		
Overall Exterior Width	State Vehicle Width: 11 ft		
Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in		
Axle/Springs/Frame	As required for vehicle GVWR	Y	
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y	
Interior width at Seat Level	Minimum 91"	Y	
Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Drive Shaft	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y	
Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y	

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be include in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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Battery Charging Infrastructure (Equipment Only - No infrastructure/installation prices)	Model Number/Order Code	Please provide options. (Equipment only - no installation)	MSRP/LIST PRICE	CONTRACT PRICE
Plug-In Chargers				
Equipment - ABB HVC-C150kW Depot Charger with 1 Dispenser	ABB HVC-C150kW Depot Charger with 1 Dispenser	ABB HVC-C150kW Depot Charger with 1 Dispenser/Charge Box with single 7m CCS1 cable; Sequential Charging; Power cabinet metal frame; Depot Charge box pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 131,342
Equipment - ABB HVC-C150kW Depot Charger with 2 Dispensers	ABB HVC-C150kW Depot Charger with 2 Dispensers	ABB HVC-C150kW Depot Charger with 2 Dispenser/Charge Box with single 7m CCS1 cable each; Sequential Charging; Power cabinet metal frame; Depot Charge box pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 154,415
Equipment - ABB HVC-C150kW Depot Charger with 3 Dispensers	ABB HVC-C150kW Depot Charger with 3 Dispensers	ABB HVC-C150kW Depot Charger with 3 Dispenser/Charge Box with single 7m CCS1 cable each; Sequential Charging; Power cabinet metal frame; Depot Charge box pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 172,934
Equipment - Heliox Flex DC 180kW Depot Charger with 1 Dispenser	Heliox Flex DC 180kW Depot Charger with 1 Dispenser	Heliox Flex DC 180kW Depot Charger with 1 dispenser (Column) with single 7m CCS1 cable; Dynamic Charging; column pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$ 127,430
Equipment - Heliox Flex DC 180kW Depot Charger with 2 Dispensers	Heliox Flex DC 180kW Depot Charger with 2 Dispensers	Heliox Flex DC 180kW Depot Charger with 2 dispensers (Column) with single 7m CCS1 cable each; Dynamic Charging; column pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$ 150,858
Equipment - Heliox Flex DC 180kW Depot Charger with 3 Dispensers	Heliox Flex DC 180kW Depot Charger with 3 Dispensers	Heliox Flex DC 180kW Depot Charger with 3 dispensers (Column) with single 7m CCS1 cable each; Dynamic Charging; column pedestal; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$ 172,444
Overhead/Opportunity Chargers				
Equipment - ABB HVC-PD 300kW Overhead Charger - Mast Pantograph	ABB HVC-PD 300kW Overhead Charger - Mast Pantograph	ABB HVC-PD 300kW Overhead Charger with Mast and Pantograph; Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 367,227
Equipment - ABB HVC-PD 300kW Overhead Charger - Ceiling Mounted Pantograph	ABB HVC-PD 300kW Overhead Charger - Ceiling Mounted Pantograph	ABB HVC-PD 300kW Overhead Charger with Pantograph for Ceiling Mount (No Mast); Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 403,090
Equipment - ABB HVC-PD 450kW Overhead Charger - Mast Pantograph	ABB HVC-PD 450kW Overhead Charger - Mast Pantograph	ABB HVC-PD 450kW Overhead Charger with Mast and Pantograph; Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$ 456,119

Equipment - ABB HVC-PD 450kW Overhead Charger - Ceiling Mounted pantograph	ABB HVC-PD 450kW Overhead Charger - Ceiling Mounted Pantograph	ABB HVC-PD 450kW Overhead Charger with Pantograph for Ceiling Mount (No Mast); Power cabinet metal frame; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software (Operator Pro) - Year 1; Freight	NA	\$	491,981
Equipment - Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:1	Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:1	Heliox Flex DC 180kW Depot Charger with Pantograph (250A) for Ceiling Mount; Dynamic Charging; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	150,608
Equipment - Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:2	Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:2	Heliox Flex DC 180kW Depot Charger with 2 Pantographs (250A) for Ceiling Mount; Dynamic Charging; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	190,929
Equipment - Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:3	Heliox Flex DC 180kW Charger with Overhead Pantograph System 1:3	Heliox Flex DC 180kW Depot Charger with 3 Pantographs (250A) for Ceiling Mount; Dynamic Charging; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	234,599
Equipment - Heliox Ultra Fast 360kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 360kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 360kW Depot Charger with Pantograph (600A) for Ceiling Mount; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	257,033
Equipment - Heliox Ultra Fast 450kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 450kw Charger with Overhead Pantograph System/ Structurally mounted	Heliox Ultra Fast 450kW Depot Charger with Pantograph (600A) for Ceiling Mount; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	374,159
Equipment- Heliox Ultra Fast 360kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 360kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 360kW Depot Charger with Mast and Pantograph (600A); Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	369,997
Equipment- Heliox Ultra Fast 450kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 450kw Charger with Overhead Charging Mast Mounted Pantograph	Heliox Ultra Fast 450kW Depot Charger with Mast and Pantograph (600A); Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Charger Monitoring Software - Year 1; Freight	NA	\$	487,124
Mobile Charger					
Equipment - Heliox Fast DC 50 kW Mobile Charger	Heliox Fast DC 50 kW Mobile Charger	Heliox Fast DC 50 kW Mobile Charger with single 3m CCS1 cable; Onsite Commissioning; Standard Warranty (2 years); Charger Wireless Connection - Year 1; Freight	NA	\$	55,235

New Flyer 35'
Options Price Sheet

Category	Description	Diesel	CNG	Hybrid	Electric	Fuel Cell	Price
Body BRT STYLING							
Body – BRT STYLING	BRT Exterior Styling Package (Front & Rear) with One Piece Windshield	N/A	N/A	N/A	N/A	N/A	
Body – BRT STYLING	BRT Roof Fairings Front and Rear	Option	Inc In Base	Inc In Base	Inc In Base	Inc In Base	\$ 2,274.72
BODY – PASSENGER SEATS							
BODY - PASSENGER SEATS	35 Passenger Seating	Option	Option	Option	Option	Option	\$ 726.57
BODY - PASSENGER SEATS	ADD additional double flip seat in lieu of fixed seat	Option	Option	Option	Option	Option	\$ 1,955.03
BODY - PASSENGER SEATS	Delete one set of fixed seats	Option	Option	Option	Option	Option	\$ (697.51)
Fuel							
Fuel	Fuel Gauge on Dash	Inc in Base	Inc in Base	Inc in Base	Inc in Base	Option	\$ 2,349.62
Fuel	EMCO - Posi/Lock Blue Urea Dispensing System	Option	N/A	Option	N/A	N/A	\$ 795.72
Fuel	Standard Gravity Fill	Option	N/A	Option	N/A	N/A	\$ 11.18
Fuel Filter							
Fuel Filter	Davco Fuel Pro 384, Heated	Option	N/A	Option	N/A	N/A	\$ 468.59
Fuel Filter	Racor 490R30 Filter W/Thumbpump	Option	N/A	Option	N/A	N/A	\$ 378.42
Fuel Filter	Davco Fuel Pro 384, Heated	Option	N/A	Option	N/A	N/A	\$ 468.59
Fuel Filter	Racor 490R30 Filter W/Thumbpump	Option	N/A	Option	N/A	N/A	\$ 378.42
Hybrid							
Hybrid	BAE Hybrid System HDS200 - AP53-32K (32Kwh Battery)	N/A	N/A	Option	N/A	N/A	\$ 21,517.65
Passenger Seat Options							
Passenger Seat Options	35 Passenger Seating - Citiseat	Option	Option	Option	Option	Option	\$ (1,832.07)
Passenger Seat Options	AMSECO - 6466	Option	Option	Option	Option	Option	\$8,508.13
Passenger Seat Options	AMSECO - 6566	Option	Option	Option	Option	Option	\$17,233.85
Passenger Seat Options	AMSECO - 2005/6466 Suburbans	Option	Option	Option	Option	Option	\$9,711.50
Passenger Seat Options	AMSECO Vision	Option	Option	Option	Option	Option	\$5,067.28
Passenger Seat Options	AMSECO - CR50 Seat Inserts	Option	Option	Option	Option	Option	\$2,660.55
Passenger Seat Options	4 One Aries	Option	Option	Option	Option	Option	\$ 5,263.84
Passenger Seat Options	4 One - Citipro	Option	Option	Option	Option	Option	\$ 2,991.76
Passenger Seat Options	4 One Gemini Seating	Option	Option	Option	Option	Option	\$ (2,357.65)
Passenger Seat Options	Kiel Ideo	Option	Option	Option	Option	Option	\$ 519.11
Passenger Seat Options	Add (3) Passenger Seats to Curbside Wheelwell	Option	Option	Option	Option	Option	\$ 1,306.43
Passenger Seat Options	Add (2) Passenger Seats to Curbside Wheelwell	Option	Option	Option	Option	Option	\$ 926.80
Passenger Seat Options	Hinged Rear Settee	Option	Option	Option	Option	Option	\$ 470.31
Passenger Seat Options	Dual USB charging station throughout seating layout	Option	Option	Option	Option	Option	\$ 2,516.03

All options listed below are the same for each bus length worksheet.

Category	Description	Designation	Propulsion (if applicable)	Price
Air				
Air	Shop Air Connection (Milton S790)			\$ 5.96
Air	Bendix AD9, (300 ci Purge)			\$ 40.35
Air	Bendix Adip, Heated			\$ 492.95
Air	Graham White QBA 15 "Sludge Buster", Heated			\$ 468.03
Air	Kingston Auto Drain Valve AT Ping Tank			\$ 221.74
Body- Bike Rack				
Body – Bike Rack	Sportworks Apex 3 - 3 Position Bike, Stainless Steel			\$ -
Body – Bike Rack	Sportworks - 2 Position Bike, Black Powder Coated			\$ 2,166.16
Body – Bike Rack	Sportworks - 2 Position Bike, Stainless Steel			\$ 1,358.00
Body – Bike Rack	Sportworks - 2 Position Bike, Stainless Steel			\$ 1,667.24

Body – Bike Rack	Sportworks - 3 Position Bike, Black Powder Coated	\$	2,895.99
Body – Bike Rack	Sportworks - Trilogy 3 Position Bike, Stainless Steel	\$	2,713.19
Body – Bike Rack	Bike Rack 5" Spot Mirror	\$	78.28
Body - Driver's Barrier			
Body – Driver's Barrier	Wrap Around Fiberglass W/O Schedule Rack Cutouts	\$	(154.78)
Body – Driver's Barrier	Plexiglass Drivers Security Enclosure	\$	3,989.22
Body – Driver's Barrier	Plexiglass Drivers Security Enclosure, two pieces	\$	4,304.71
Body – Driver's Barrier	Other Option - Specify (Arrow Global Enclosure) MV308 Slide/Stow door components w/ Extended glass	\$	8,980.24
Body – Driver's Barrier	Other Option - Specify (Vapor Enclosure) vShield Driver's Barrier	\$	7,538.98
Body - Driver's Seat			
Body – Driver Seat	Recaro Ergo Metro w/Fabric Seat and Back w/Gray Fabric Boxing	\$	391.93
Body – Driver Seat	Recaro MCI	\$	1,221.90
Body – Driver Seat	USSC 9100 ALX w/Fabric Seat and Back w/Gray Fabric Boxing	\$	(58.13)
Body – Driver Seat	USSC 9100 ALX - 3 w/Fabric Seat and Back w/Gray Fabric Boxing	\$	258.21
Body – Driver Seat	Add Armrest (Right Side only)	\$	207.50
Body – Driver Seat	Add Shoulder Belt	\$	322.76
Body – Driver Seat	Add 3-Point, Horizontally Adjustable D - Loop	\$	630.16
Body – Driver Seat	Driver's Seat Vacancy Alarm	\$	164.46
Body – Driver Seat	Safety Orange Shoulder Belt (US SC ALX)	\$	104.51
Body – Driver Seat	Silicon Foam At Lower Seat Cushion (USSC)	\$	1,629.19
Body – Driver Seat	Holdsworth Fabric	\$	576.37
Body – Driver Seat	USSC Q90 ALX	\$	384.24
Body – Driver Seat	USSC G2A -2pt Drivers Seat	\$	522.57
Body - Exit Door			
Body – Exit Door	Standard Melamine Panels on Lower Section Both Sides of Rear Exit Door	\$	931.84
Body – Exit Door	Upper Clear Plexiglas Modesty Panels Both Sides of Rear Exit Door	\$	2,155.95
Body – Exit Door	Other Option - Road side Exit door	\$	27,945.00
Body - Floor Covering			
Body – Floor Covering	Gerflor Tarabus Gaya Wood (vinyl simulated woodgrain)	\$	424.70
Body – Floor Covering	Composite Sub Floor	\$	3,876.53
Body - Mirror, Exterior			
Body – Mirror, Exterior	Safe Fleet One Piece 8" x 8" Flat Glazing W/Stainless Steel Arms, Remote Both Sides	\$	(63.32)
Body – Mirror, Exterior	Safe Fleet One Piece 8" x 8" Flat Glazing W/S.S. Arms, Manual W/6" Spot Mirror	\$	300.59
Body – Mirror, Exterior	Safe Fleet 8" x 15" 2 Piece, Heated, Remote Both Sides	\$	58.76
Body – Mirror, Exterior	Safe Fleet 9" x 11" 2 Piece, Heated, Remote Both Sides	\$	(419.56)
Body – Mirror, Exterior	Safe Fleet 9" x 13" Class "A" 2 Piece, Heated, Remote Both Sides	\$	125.25
Body – Mirror, Exterior	Safe Fleet 10" x 13"; 2 Piece (Flat & Convex), Heated, Remote Both Sides	\$	634.25
Body - Mirror, Interior			
Body – Mirror, Interior	Mirror - 8 1/2" X 16"	\$	33.12
Body – Mirror, Interior	Mirror - Front Door 6" Round on Header Door	\$	27.70

Body - Paint & Decal		\$	-
Body - Paint & Decal	(2) Colors, with and without Black Mask At Windows	\$	1,441.96
Body - Paint & Decal	(3) Colors, with and without Black Mask At Windows	\$	1,833.19
Body - Paint & Decal	Clear Coat Complete Bus	\$	1,441.96
Body - Paint & Decal	Remove Roof Numbers	\$	195.62
Body - Passenger Signal		\$	-
Body - Passenger Signal	Pullcords - Above Windows (Neutral Or Yellow) w/Touch Pad At W/C Positions	\$	52.26
Body - Passenger Signal	Touch Tape (At Window Mullions)	\$	1,175.20
Body - Passenger Signal	Additional Amber Stop Request Lamp Mounted on Driver's Dash	\$	56.19
Body - Passenger Signal	Button in the Parcel Rack	\$	17.65
Body - Rear Door		\$	-
Body - Rear Door	Electric Operated Front/Rear Door Motor and Control	\$	5,174.12
Body - Rear Door	Touch Bars (Air Open/Spring Close)	\$	1,241.88
Body - Rear Door	Touch Bars w/Driver Override	\$	254.48
Body - Rear Door	Touch Tape in Place of Touch Bars	\$	406.97
Body - Rear Door	Vapor Class Acoustic (Photo Sensor)	\$	2698.3692
Body - Rear Door	Vapor V Touch (Electronic Touch Bar)	\$	385.43
Body - Rear Door	Vapor Optical Pressure Wave Switch	\$	2,592.94
Body - Rear Door	Exterior Air Release (Front Door Control Valve)	\$	113.26
Body - Rear Door	Driver Push Button Door Controls	\$	102.70
Body - Rear Door	Remove Rear Door, Add Two Seats	\$	(3,018.06)
Body - Rear Door	Ventura electric rear door	\$	18,378.87
Body - Roof Hatch		\$	-
Body - Roof Hatch	One (1) Roof Hatch Position - Rear	\$	(567.51)
Body - Roof Hatch	Electric Hatch with Driver Control (per Position)	\$	390.11
Body - Roof Hatch	Glass Hatch in Lieu of Standard	\$	1,037.74
Body - Schedule Rack		\$	-
Body - Schedule Rack	Innocom Schedule Racks 3.75" x 7" x 1.5"	\$	23.95
Body - Schedule Rack	Innocom Schedule Racks 8.62" x 11" x 1"	\$	30.95
Body - Schedule Rack	22" x 21" Black, RH Load Open Back	\$	38.88
Body - Schedule Rack	Transit Information Products - 19" x 21" OBIC 19/214P1LTRMC	\$	384.49
Body - Schedule Rack	Transit Information Products - 19" x 21" OBIC10P2LTRMC	\$	560.44
Body - Stanchions/Grab Rails		\$	-
Body - Stanchions/Grab Rails	Powder Coated Vertical Stanchions only	\$	(171.29)
Body - Stanchions/Grab Rails	Farebox Guard Rail	\$	282.37
Body - Stanchions/Grab Rails	Luggage Rack 68", Two -Tier with Fixed Shelf's	\$	4,179.82
Body - Stanchions/Grab Rails	Vinyl Coated Nylon Grab Straps (Cost per Handle)	\$	55.90
Body - Stanchions/Grab Rails	SSTL Spring Loaded Grab Handle (Cost per Handle)	\$	39.43

Body – Stanchions/Grab Rails	non-vinyl-coated nylon grab straps (per handle, color to be chosen by agency)	\$	54.32
Cooling System			
Cooling System	Modine Electric Cooling Fan System	\$	391.23
Cooling System	E - Coat Radiator, CAC & Hydraulic Cooler	\$	18.30
Cooling System	Radiator Tank Guard	\$	145.59
Cooling System	Proheat Model X50 (50,000 btu) Coolant Heater	\$	(335.34)
Cooling System	Proheat Model X45 (45,000 btu) Coolant Heater	\$	(95.01)
Cooling System	Electric Coolant Auxiliary Heater	\$	(190.03)
Electrical		\$	-
Electrical	24 Volt to 13.6 Volt DC - DC Converter, 30 Ampere Output, Model 1645 - 24 - 12 - 30, Manufactured By Wilmore Electronics Co., Inc. or Equivalent	\$	1,011.46
Electrical - Accessories			
Electrical – Accessories	12 V Cigarette-Style Light Adaptor for PC Auxiliary Power - Drivers Area	\$	7.50
Electrical - Automatic Passenger Counter			
Electrical – Automatic Passenger Counter	UTA Automatic Passenger Counter System with GPS, WLAN Capabilities	\$	19,594.35
Electrical – Automatic Passenger Counter	UTA APC Sensors, Cabling, CPU only	\$	3,164.48
Electrical – Automatic Passenger Counter	Wiring provisions IAW APC manufacture	\$	3,164.48
Electrical – Automatic Passenger Counter	Strategic Mapping APC system	\$	10,589.76
Electrical - Auxiliary Lights			
Electrical – Auxiliary Lights	Two (2) Dialight 7" Diameter LED Auxiliary Brake Lights	\$	88.63
Electrical – Auxiliary Lights	4 LED Brake Strip Lamps	\$	129.11
Electrical – Auxiliary Lights	Exterior Curb Lamps, Front & Rear - Dialight	\$	(88.89)
Electrical – Auxiliary Lights	Triangle Amber LED Yield Sign - Dialight	\$	351.81
Electrical – Auxiliary Lights	Two (2) Red LED Brake Strip Lamps	\$	64.23
Electrical – Auxiliary Lights	Remove LED Auxiliary Brake Lights (DEDUCT)	\$	(44.06)
Electrical – Auxiliary Lights	LED Beacon Light	\$	280.96
Electrical - Battery & Battery Chargers			
Electrical – Battery & Battery Chargers	(4) DEKA Group 32 Top Post Chargers	\$	(82.36)
Electrical – Battery & Battery Chargers	DEKA AGM Type 8D/Group 32	\$	331.53

Electrical – Battery & Battery Chargers	(4) Odyssey Group 32	\$	109.60
Electrical – Battery & Battery Chargers	Ultra Capacitors - KBI KAPower	\$	4,022.50
Electrical – Battery & Battery Chargers	Remove Anderson 350 Jump Start	\$	(105.14)
Electrical – Battery & Battery Chargers	Change to provide ESS *263* kWh battery pack (operating range up to 85 miles*)	(electric only)	(\$12,600.00)
Electrical – Battery & Battery Chargers	*Change to provide ESS 436 kWh battery pack (operating range up to 204 miles*)	(electric only)	*\$35,000.00*
Electrical – Battery & Battery Chargers	Change to provide ESS *440* kWh battery pack (operating range up to 190 miles*)	(electric only)	*\$40,165.83*
Electrical – Battery & Battery Chargers	Change to provide ESS 545 kWh battery pack (operating range up to 251 miles*)	(electric only)	*\$75,165.83*
Electrical - Communication/Radio		#VALUE!	
Electrical – Communication/Radio	Motorola APX4500	\$	10,079.49
Electrical – Communication/Radio	Motorola CM200 and CM300, 45W, 439 - 470- MHZ	\$	3,721.08
Electrical – Communication/Radio	Harris Radio	\$	11,371.80
Electrical – Communication/Radio	DC Power Filter for Radio Wiring	\$	520.39
Electrical – Communication/Radio	Additional Flush Mounted Speakers (per Pair)	\$	61.94
Electrical – Communication/Radio	ASP930T Radio Antenna with RG58 Coax Cable and TNC Connector	\$	86.93
Electrical – Communication/Radio	Antenna Specialist ASP- 572	\$	97.28
Electrical – Communication/Radio	Customer Specified Two Way Radio and Installation	\$	10,079.49
Electrical – Communication/Radio	customer specific antenna, ground plane, and cable runs installation	\$	25.40
Electrical - Destination Sign		\$	-
Electrical – Destination Sign	Twin Vision Silver Series Sign (16 X160) Front & Side	\$	396.82
Electrical – Destination Sign	Twin Vision Silver Series Sign (24 X 200) Front & Side	\$	3,229.07
Electrical – Destination Sign	Twin Vision Smart Series II (16 X160) Front & Side	\$	142.89
Electrical – Destination Sign	Twin Vision Smart Series II (24 X 200) Front & Side	\$	127.79
Electrical – Destination Sign	Twin Vision 100% Amber LED, Front, Curb Side, Rear	\$	(212.75)
Electrical – Destination Sign	Twin Vision 100% Amber LED, Rear	\$	158.50
Electrical – Destination Sign	Twin Vision 24 X 200 Front Amber LED Sign	\$	2,374.44

Electrical – Destination Sign	Luminator Spectrum 100% Amber LED Front ,Curbside, Rear	\$	13,418.72
Electrical – Destination Sign	Luminator White LED Front, Curb-side and Rear	\$	693.64
Electrical – Destination Sign	Add Twin Vision Smart Series II w/ rear camera, Rear Sign	\$	642.94
Electrical – Destination Sign	Add Street Side Sign (Twin Vision Amber LED)	\$	1,339.90
Electrical – Destination Sign	Add Street Side Sign (Twin Silver Series LED)	\$	2,026.01
Electrical – Destination Sign	Remove Rear Sign (DEDUCT)	\$	(671.32)
Electrical – Destination Sign	Heated Front Sign Glazing	\$	113.86
Electrical – Destination Sign	Transign, (3) Character, Metal Housing	\$	(39.55)
Electrical – Destination Sign	Twin Vision Electronic Front Dash Sign	\$	(145.75)
Electrical – Destination Sign	Hanover Display LED Amber Destination Signs (model# OL028, OL054 & OL64J)	\$	(554.55)
Electrical - Destination Sign Programming		\$	-
Electrical – Destination Sign Programming	Luminator USB & Integrated Programming Software	\$	558.81
Electrical – Destination Sign Programming	Twin Vision Elyse 2 USB	\$	65.17
Electrical – Destination Sign Programming	Twin Vision Software Package	\$	493.64
Electrical - Equipment Storage Box		\$	-
Electrical – Equipment Storage Box	UTA APC Sensors, Cabling, CPU only	\$	17,581.46
Electrical – Equipment Storage Box	Strategic Mapping sensors, cabling, CPU only	\$	10,589.76
Electrical - Lights, Exterior		\$	-
Electrical – Lights, Exterior	Tail Lights - Manufacturer Dialite LED, Fixture Size - 7" Diameter	\$	186.67
Electrical - Intelligent Vehicle Network		\$	-
Electrical – Intelligent Vehicle Network	Clever Devices IVN III W/Voice Annunciation, APC, Wireless LAN	\$	38,236.24
Electrical – Intelligent Vehicle Network	AVAIL IVN W/MDC, GPS, APC, WLAN	\$	34,988.84
Electrical – Intelligent Vehicle Network	Init Voice Annunciator/AVL/GPS/APC/WLAN	\$	51,738.30

Electrical - Pleasure			\$	-
Electrical – Pleasure	Radio Tacho Link Event Data Recorder		\$	5,982.86
Electrical – Pleasure	Radio Am/FM/CD		\$	617.12
Electrical - Public Announcement			\$	-
Electrical – Public Announcement	Drivers Speaker W/Separate Volume Control		\$	24.85
Electrical – Public Announcement	REI Model 750040 PA W/Handheld Mic W/(6) Flush Mounted Speakers		\$	(1,123.22)
Electrical – Public Announcement	Luminator IVS W/GPS Capability, w/LED Sign, W/O Mapping		\$	8,553.27
Electrical – Public Announcement	DR700 Vehicle Logic Unit W/GPS Capability, w/LED Sign, W/O Mapping	Inc In Base	\$	16,388.07
Electrical – Public Announcement	Rei Echo PA System		\$	(1,195.26)
Electrical – Public Announcement	Shure Brothers Lapel Microphone w/REI PA System		\$	1,623.90
Electrical – Public Announcement	Midwest Lapel Microphone (Use w/Voice Annunciation System)		\$	180.59
Electrical – Public Announcement	One Additional Pair of Interior Speakers		\$	61.94
Electrical – Public Announcement	One Additional exterior Speaker Each		\$	31.80
Electrical – Public Announcement	REI w/switch mounted in Driver's Area		\$	1,623.90
Electrical - Video Surveillance			\$	-
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 4 Camera System w/Audio		\$	5,004.88
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 8 Camera System w/Audio		\$	8,258.38
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 12 Camera System w/Audio		\$	10,772.23
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 16 Camera System w/Audio		\$	13,766.69
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 4 Camera System & Audio		\$	6,990.87
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 8 Camera System & Audio		\$	10,700.54
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 12 Camera System & Audio		\$	13,621.69
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 16 Camera System & Audio		\$	17,163.55
Electrical – Video Surveillance	Apollo Wireless Data Download capable		\$	518.09
Electrical – Video Surveillance	Apollo Cellular "Live Look Through" Capable		\$	1,617.79
Electrical – Video Surveillance	Apollo Vehicle Information Management System (VIM)		\$	6,840.98

Electrical – Video Surveillance	Apollo video 4K DVR w/9 camera system w/ Audio	\$	12,189.63
Electrical – Video Surveillance	(4) Camera Pre Wire Package	\$	162.92
Electrical – Video Surveillance	SEON 2 TB hard drive upgrade	\$	4,338.46
Electrical – Video Surveillance	SEON C0903A integrated IR Dome day/Night 600TVL interior camera, audio, 2.9 mm lens.	\$	283.70
Electrical – Video Surveillance	SEON CA904EI Day/Night 600TVL camera, exterior (w/infrared, no audio), 3.6 mm lens.	\$	414.98
Electrical – Video Surveillance	SEON C1904A Dome Day/Night 600TVL camera, audio, 3.6mm lens w/mount	\$	283.70
Electrical – Video Surveillance	SEON LMK LCD monitor, 5.6 inch, AC charger, battery pack	\$	395.77
Electrical – Video Surveillance	Safety Vision RR6000 Pro w/(4) Digital Color Cameras, 120 GB DVR, w/Audio	\$	13,204.50
Electrical – Video Surveillance	March Network (8) Camera System	\$	16,135.53
Electrical – Video Surveillance	REI Bus Watch Digital	\$	7,495.12
Electrical – Video Surveillance	Add Additional Color Camera	\$	306.29
Engine - Accessories			
Engine – Accessories	STD Donaldson (RBX00- 2277) - Air Intake Restriction	Diesel/CNG/Hybrid Only	\$ 26.75
Engine – Accessories	Spin on Filters Supplied By Engine Manufacturer	Diesel/CNG/Hybrid Only	\$ 1,555.71
Engine – Accessories	Sample Test Port - Titan Probalizer OD-1014	Diesel/CNG/Hybrid Only	\$ (40.35)
Engine – Accessories	FEMCO Oil Drain Plug	Diesel/CNG/Hybrid Only	\$ 93.16
Engine – Accessories	Rear Run Box Rear Hand Throttle	Diesel/CNG/Hybrid Only	\$ 5.49
Fare Box			
Fare Box	GFI 36" Fastfare	\$	-
Fare Box	GFI 41" Fast Fare	\$	16,945.15
Fare Box	Diamond Model SV w/Two (2) Vaults	\$	16,945.15
Fare Box	Main T1 Fare box w/Two V1 Vaults in Standard Paint Colors	\$	1,775.83
Fare Box	Main M 4 Fare box w/Two V4 Vaults in Standard Paint Colors	\$	1,335.94
Fare Box	Main SL 5 Fare box w/Two V5 Vaults in Standard Paint Colors	\$	1,107.85
Fare Box	Globe Transfer Cutter	\$	3,390.35
HVAC			
HVAC	TK System w/X430Compressor	\$	68.32
HVAC	TK Electric HVAC System	Diesel	\$ (1,151.87)
HVAC	TK Electric HVAC System	Hybrid (Allison BAE)	\$ 23,334.08
HVAC	TK Pressure and Return Gauges Mounted to Unit	\$	1,872.71
HVAC	MCC Front Stepwell/Threshold Heater W/Brushless Motor (Each)	\$	438.04
HVAC	Suttrak All Electric Air Conditioning - Roof Mount	\$	402.39
HVAC	Suttrak All Electric Air Conditioning - Rear Mount	\$	79,570.86
HVAC	ACT Convection Heater	\$	50,663.61
HVAC		\$	488.77

HVAC	Air Purification System	\$	8,406.18
HVAC	Other Option - Air Purification System (Puradigm FLOW100 12V)	\$	3,184.61
HVAC	Sanuv Air Filtration System	\$	9,531.98
Safety		\$	-
Safety	Amerex V-25lb ABC System	Diesel	2,815.85
Safety	Amerex VH-25lb ABC Cylinder	Diesel	8,788.59
Safety	Amerex V-30lb ABC Cylinder	CNG	(53.23)
Safety	Amerex Safety Net 2-Zone Fire Detection/Suppression System		4,150.01
Safety	Kidde - Dual Spectrum		(940.04)
Safety	Kidde TLSE Spectrum		5,634.19
Safety	Fogmaker Fire Suppression System (water mist)		277.67
Safety	Remove Amerex	CNG	(3,820.71)
Safety	Twenty - Four Unit First Aid Kit		82.23
Safety	Ten Unit First Aid Kit		82.23
Safety	Blood Borne Pathogens Kit		40.82
Safety	Bio - Hazard Disposal Kit		40.86
Safety	(3) 20 - Minute Road Flares		58.73
Safety	Wheel Chocks (Per Set)		136.15
Steering		\$	-
Steering	TRW Electric Assisted Steering		2,488.03
Steering	Douglas Autotech 'Double-Knuckle' Steering Column (PN 9003148-C)		396.42
Towing & Hoisting		\$	-
Towing & Hoisting	Set Towing Adapters/Tow Bar		224.12
Towing & Hoisting	Set of Hoist Adapters (Includes the 4 Following Items)		291.37
Transmission		\$	-
Transmission	Voith D854.6	Diesel/CNG	(2,045.57)
Transmission	ZF 6AP1400B	Diesel/CNG	(156.49)
Transmission	Titan Probalizer OD- 1014		(39.91)
Transmission	Keyed Transmission Lockout Switch on Dash		1,097.08
W/C Restraints		\$	-
W/C Restraints	AMSECO - A.R.M.		644.00
W/C Restraints	AMESCO Passive rear-facing restraints (rear facing barriers)		1,848.99
W/C Restraints	Q'Straint - QRT		814.60
W/C Restraints	Q'Straint - ORT 360		1,165.03
W/C Restraints	Q'Straint - Q'UBE 3-Point Securement Station		943.70
W/C Restraints	Q'Straint - Quantum Securement System		28,911.65
W/C Restraints	Q'Straint/Sure-Lok - OMNI Floor Anchor System		139.87
W/C Restraints	Q'Straint Slide N Click floor mount restraint system		814.60
W/C Restraints	Q- Pod W/C Restraint System		5,494.69
W/C Restraints	AMESCO Dual Auto Lock W/C Restraint System		928.33
W/C Restraints	Sure LOK - RTT Electric		928.33
Wheel Chair Ramp (low-floor only) / Lift (high-floor only)		\$	-
Wheel Chair Ramp (low-floor only) / Lift (high-floor only)	Lift- U Model LU11, 1:6 Ratio, Front Door only	\$	1,006.02

Wheel Chair Ramp (low-floor only) / Lift (high-floor only)	LIFT- U Model LU18, Dual- Mode 1:6 (Street)/1:8 (Sidewalk)	\$	2,794.50
Wheel - Brakes			
Wheel – Brakes	MGM "E-Stroke" Electronic Brake Monitoring System – Disc Brakes	\$	3,626.33
Wheel - Hubometer			
Wheel Hubometer	Veeder Root w/o Tenth's w/o Guard	\$	88.15
Wheel Hubometer	S&A Fleetwatch 392 Electronic	\$	737.74
Wheel Hubometer	E J Ward Data System (Includes Receiver, Display Unit and Antenna)	\$	1,394.75
Wheel Hubometer	Engler (Stemco) Mechanical W/o Tenth's W/o Guard	\$	64.73
Wheel Hubometer	Engler Hubometer W/Powder Coat Guard	\$	102.33
Wheel - Tires			
Wheel – Tires	Michelin XZU2 (305/70R/22.5)	\$	3,129.84
Wheel – Tires	Michelin X incity Z (305/70R/22.5)	\$	3,129.84
Wheel – Tires	Goodyear G152 (305/70R/22.5)	\$	3,129.84
Wheels			
Wheels	(7) Aluminum Alcoa - Full Polish	\$	2,026.95
Wheels	(7) Aluminum Alcoa - Full Polish W/Dura Bright Finish	\$	2,399.97
Wheels	(7) Aluminum Alcoa - Machine Finish	\$	1,415.93
Wheels	(7) Aluminum Alcoa - Machine Finish W/Dura Bright Finish	\$	1,826.90
Wheels	Remove Spare Wheel	\$	(914.33)
Wheels	Add Dura Flange to Alcoa	\$	3,181.26
Windows			
Windows	Laminated Safety Glass (1/4") - Framed Fixed	\$	243.47
Windows	Hidden Framed Bonded - Fixed	\$	5,300.15
Windows	Hidden Framed Bonded - Transom -openable	\$	3,987.82
Windows	Add Window Guards (Acrylic Liner and Film)	\$	3,189.23
Windows	anti-graffiti 3M film (per inside window)	\$	4,457.23
Windows	All windows equipped with liners attached	\$	1,872.32

Heavy Duty - 40 Foot
Options Price Sheet

Category	Description	Diesel	CNG	Hybrid	Electric	Fuel Cell	Price
Body BRT STYLING							
Body – BRT STYLING	BRT Exterior Styling Package (Front & Rear) with One Piece Windshield	N/A	N/A	N/A	N/A	N/A	
Body – BRT STYLING	BRT Roof Fairings Front and Rear	Option	Inc In Base	Inc In Base	Inc In Base	Inc In Base	\$ 2,274.72
BODY – PASSENGER SEATS							
BODY - PASSENGER SEATS	35 Passenger Seating	Option	Option	Option	Option	Option	\$ 726.57
BODY - PASSENGER SEATS	ADD additional double flip seat in lieu of fixed seat	Option	Option	Option	Option	Option	\$ 1,955.03
BODY - PASSENGER SEATS	Delete one set of fixed seats	Option	Option	Option	Option	Option	\$ (697.51)
Fuel							
Fuel	Fuel Gauge on Dash	Inc in Base	Inc in Base	Inc in Base	Inc in Base	Option	\$ 2,349.62
Fuel	EMCO - Posi/Lock Blue Urea Dispensing System	Option	N/A	Option	N/A	N/A	\$ 795.72
Fuel	Standard Gravity Fill	Option	N/A	Option	N/A	N/A	\$ 11.18
Fuel Filter							
Fuel Filter	Davco Fuel Pro 384, Heated	Option	N/A	Option	N/A	N/A	\$ 468.59
Fuel Filter	Racor 490R30 Filter W/Thumbpump	Option	N/A	Option	N/A	N/A	\$ 378.42
Fuel Filter	Davco Fuel Pro 384, Heated	Option	N/A	Option	N/A	N/A	\$ 468.59
Fuel Filter	Racor 490R30 Filter W/Thumbpump	Option	N/A	Option	N/A	N/A	\$ 378.42
Hybrid							
Hybrid	BAE Hybrid System HDS200 - AP53-32K (32Kwh Battery)	N/A	N/A	Option	N/A	N/A	\$ 21,517.65
Passenger Seat Options							
Passenger Seat Options	35 Passenger Seating - Citiseat	Option	Option	Option	Option	Option	\$ (1,832.07)
Passenger Seat Options	AMSECO - 6466	Option	Option	Option	Option	Option	\$8,508.13
Passenger Seat Options	AMSECO - 6566	Option	Option	Option	Option	Option	\$17,233.85
Passenger Seat Options	AMSECO - 2005/6466 Suburbans	Option	Option	Option	Option	Option	\$9,711.50
Passenger Seat Options	AMSECO Vision	Option	Option	Option	Option	Option	\$5,067.28
Passenger Seat Options	AMSECO - CR50 Seat Inserts	Option	Option	Option	Option	Option	\$2,660.55
Passenger Seat Options	4 One Aries	Option	Option	Option	Option	Option	\$ 5,263.84
Passenger Seat Options	4 One - Citipro	Option	Option	Option	Option	Option	\$ 2,991.76
Passenger Seat Options	4 One Gemini Seating	Option	Option	Option	Option	Option	\$ (2,357.65)
Passenger Seat Options	Kiel Ideo	Option	Option	Option	Option	Option	\$ 519.11
Passenger Seat Options	Add (3) Passenger Seats to Curbside Wheelwell	Option	Option	Option	Option	Option	\$ 1,306.43
Passenger Seat Options	Add (2) Passenger Seats to Curbside Wheelwell	Option	Option	Option	Option	Option	\$ 926.80
Passenger Seat Options	Hinged Rear Settee	Option	Option	Option	Option	Option	\$ 470.31
Passenger Seat Options	Dual USB charging station throughout seating layout	Option	Option	Option	Option	Option	\$ 2,516.03

All options listed below are the same for each bus length worksheet.

Category	Description	Propulsion (if applicable)	Price
Air			
Air	Shop Air Connection (Milton S790)		\$ 5.96
Air	Bendix AD9, (300 ci Purge)		\$ 40.35
Air	Bendix Adip, Heated		\$ 492.95
Air	Graham White QBA 15 "Sludge Buster", Heated		\$ 468.03
Air	Kingston Auto Drain Valve AT Ping Tank		\$ 221.74
Body- Bike Rack			
Body – Bike Rack	Sportworks Apex 3 - 3 Position Bike, Stainless Steel		\$ 2,166.16
Body – Bike Rack	Sportworks - 2 Position Bike, Black Powder Coated		\$ 1,358.00
Body – Bike Rack	Sportworks - 2 Position Bike, Stainless Steel		\$ 1,667.24

Body – Bike Rack	Sportworks - 3 Position Bike, Black Powder Coated	\$	2,895.99
Body – Bike Rack	Sportworks - Trilogy 3 Position Bike, Stainless Steel	\$	2,713.19
Body – Bike Rack	Bike Rack 5" Spot Mirror	\$	78.28
Body - Driver's Barrier			
Body – Driver's Barrier	Wrap Around Fiberglass W/O Schedule Rack Cutouts	\$	(154.78)
Body – Driver's Barrier	Plexiglass Drivers Security Enclosure	\$	3,989.22
Body – Driver's Barrier	Plexiglass Drivers Security Enclosure, two pieces	\$	4,304.71
Body – Driver's Barrier	Other Option - Specify (Arrow Global Enclosure) MV308 Slide/Stow door components w/ Extended glass	\$	8,980.24
Body – Driver's Barrier	Other Option - Specify (Vapor Enclosure) vShield Driver's Barrier	\$	7,538.98
Body - Driver's Seat			
Body – Driver Seat	Recaro Ergo Metro w/Fabric Seat and Back w/Gray Fabric Boxing	\$	391.93
Body – Driver Seat	Recaro MCI	\$	1,221.90
Body – Driver Seat	USSC 9100 ALX w/Fabric Seat and Back w/Gray Fabric Boxing	\$	(58.13)
Body – Driver Seat	USSC 9100 ALX - 3 w/Fabric Seat and Back w/Gray Fabric Boxing	\$	258.21
Body – Driver Seat	Add Armrest (Right Side only)	\$	207.50
Body – Driver Seat	Add Shoulder Belt	\$	322.76
Body – Driver Seat	Add 3-Point, Horizontally Adjustable D - Loop	\$	630.16
Body – Driver Seat	Driver's Seat Vacancy Alarm	\$	164.46
Body – Driver Seat	Safety Orange Shoulder Belt (US SC ALX)	\$	104.51
Body – Driver Seat	Silicon Foam At Lower Seat Cushion (USSC)	\$	1,629.19
Body – Driver Seat	Holdsworth Fabric	\$	576.37
Body – Driver Seat	USSC Q90 ALX	\$	384.24
Body – Driver Seat	USSC G2A -2pt Drivers Seat	\$	522.57
Body - Exit Door			
Body – Exit Door	Standard Melamine Panels on Lower Section Both Sides of Rear Exit Door	\$	931.84
Body – Exit Door	Upper Clear Plexiglas Modesty Panels Both Sides of Rear Exit Door	\$	2,155.95
Body – Exit Door	Other Option - Road side Exit door	\$	27,945.00
Body - Floor Covering			
Body – Floor Covering	Gerflor Tarabus Gaya Wood (vinyl simulated woodgrain)	\$	424.70
Body – Floor Covering	Composite Sub Floor	\$	3,876.53
Body - Mirror, Exterior			
Body – Mirror, Exterior	Safe Fleet One Piece 8" x 8" Flat Glazing W/Stainless Steel Arms, Remote Both Sides	\$	(63.32)
Body – Mirror, Exterior	Safe Fleet One Piece 8" x 8" Flat Glazing W/S.S. Arms, Manual W/6" Spot Mirror	\$	300.59
Body – Mirror, Exterior	Safe Fleet 8" x 15" 2 Piece, Heated, Remote Both Sides	\$	58.76
Body – Mirror, Exterior	Safe Fleet 9" x 11" 2 Piece, Heated, Remote Both Sides	\$	(419.56)
Body – Mirror, Exterior	Safe Fleet 9" x 13" Class "A" 2 Piece, Heated, Remote Both Sides	\$	125.25
Body – Mirror, Exterior	Safe Fleet 10" x 13"; 2 Piece (Flat & Convex), Heated, Remote Both Sides	\$	634.25
Body - Mirror, Interior			
Body – Mirror, Interior	Mirror - 8 1/2" X 16"	\$	33.12
Body – Mirror, Interior	Mirror - Front Door 6" Round on Header Door	\$	27.70

Body - Paint & Decal		\$	-
Body - Paint & Decal	(2) Colors, with and without Black Mask At Windows	\$	1,441.96
Body - Paint & Decal	(3) Colors, with and without Black Mask At Windows	\$	1,833.19
Body - Paint & Decal	Clear Coat Complete Bus	\$	1,441.96
Body - Paint & Decal	Remove Roof Numbers	\$	195.62
Body - Passenger Signal		\$	-
Body - Passenger Signal	Pullcords - Above Windows (Neutral Or Yellow) w/Touch Pad At W/C Positions	\$	52.26
Body - Passenger Signal	Touch Tape (At Window Mullions)	\$	1,175.20
Body - Passenger Signal	Additional Amber Stop Request Lamp Mounted on Driver's Dash	\$	56.19
Body - Passenger Signal	Button in the Parcel Rack	\$	17.65
Body - Rear Door		\$	-
Body - Rear Door	Electric Operated Front/Rear Door Motor and Control	\$	5,174.12
Body - Rear Door	Touch Bars (Air Open/Spring Close)	\$	1,241.88
Body - Rear Door	Touch Bars w/Driver Override	\$	254.48
Body - Rear Door	Touch Tape in Place of Touch Bars	\$	406.97
Body - Rear Door	Vapor Class Acoustic (Photo Sensor)	\$	2698.3692
Body - Rear Door	Vapor V Touch (Electronic Touch Bar)	\$	385.43
Body - Rear Door	Vapor Optical Pressure Wave Switch	\$	2,592.94
Body - Rear Door	Exterior Air Release (Front Door Control Valve)	\$	113.26
Body - Rear Door	Driver Push Button Door Controls	\$	102.70
Body - Rear Door	Remove Rear Door, Add Two Seats	\$	(3,018.06)
Body - Rear Door	Ventura electric rear door	\$	18,378.87
Body - Roof Hatch		\$	-
Body - Roof Hatch	One (1) Roof Hatch Position - Rear	\$	(567.51)
Body - Roof Hatch	Electric Hatch with Driver Control (per Position)	\$	390.11
Body - Roof Hatch	Glass Hatch in Lieu of Standard	\$	1,037.74
Body - Schedule Rack		\$	-
Body - Schedule Rack	Innocom Schedule Racks 3.75" x 7" x 1.5"	\$	23.95
Body - Schedule Rack	Innocom Schedule Racks 8.62" x 11" x 1"	\$	30.95
Body - Schedule Rack	22" x 21" Black, RH Load Open Back	\$	38.88
Body - Schedule Rack	Transit Information Products - 19" x 21" OBIC 19/214P1LTRMC	\$	384.49
Body - Schedule Rack	Transit Information Products - 19" x 21" OBIC10P2LTRMC	\$	560.44
Body - Stanchions/Grab Rails		\$	-
Body - Stanchions/Grab Rails	Powder Coated Vertical Stanchions only	\$	(171.29)
Body - Stanchions/Grab Rails	Farebox Guard Rail	\$	282.37
Body - Stanchions/Grab Rails	Luggage Rack 68", Two -Tier with Fixed Shelf's	\$	4,179.82
Body - Stanchions/Grab Rails	Vinyl Coated Nylon Grab Straps (Cost per Handle)	\$	55.90
Body - Stanchions/Grab Rails	SSTL Spring Loaded Grab Handle (Cost per Handle)	\$	39.43

Body – Stanchions/Grab Rails	non-vinyl-coated nylon grab straps (per handle, color to be chosen by agency)	\$	54.32
Cooling System			
Cooling System	Modine Electric Cooling Fan System	\$	391.23
Cooling System	E - Coat Radiator, CAC & Hydraulic Cooler	\$	18.30
Cooling System	Radiator Tank Guard	\$	145.59
Cooling System	Proheat Model X50 (50,000 btu) Coolant Heater	\$	(335.34)
Cooling System	Proheat Model X45 (45,000 btu) Coolant Heater	\$	(95.01)
Cooling System	Electric Coolant Auxiliary Heater	\$	(190.03)
Electrical		\$	-
Electrical	24 Volt to 13.6 Volt DC - DC Converter, 30 Ampere Output, Model 1645 - 24 - 12 - 30, Manufactured By Wilmore Electronics Co., Inc. or Equivalent	\$	1,011.46
Electrical - Accessories			
Electrical – Accessories	12 V Cigarette-Style Light Adaptor for PC Auxiliary Power - Drivers Area	\$	7.50
Electrical - Automatic Passenger Counter			
Electrical – Automatic Passenger Counter	UTA Automatic Passenger Counter System with GPS, WLAN Capabilities	\$	19,594.35
Electrical – Automatic Passenger Counter	UTA APC Sensors, Cabling, CPU only	\$	3,164.48
Electrical – Automatic Passenger Counter	Wiring provisions IAW APC manufacture	\$	3,164.48
Electrical – Automatic Passenger Counter	Strategic Mapping APC system	\$	10,589.76
Electrical - Auxiliary Lights			
Electrical – Auxiliary Lights	Two (2) Dialight 7" Diameter LED Auxiliary Brake Lights	\$	88.63
Electrical – Auxiliary Lights	4 LED Brake Strip Lamps	\$	129.11
Electrical – Auxiliary Lights	Exterior Curb Lamps, Front & Rear - Dialight	\$	(88.89)
Electrical – Auxiliary Lights	Triangle Amber LED Yield Sign - Dialight	\$	351.81
Electrical – Auxiliary Lights	Two (2) Red LED Brake Strip Lamps	\$	64.23
Electrical – Auxiliary Lights	Remove LED Auxiliary Brake Lights (DEDUCT)	\$	(44.06)
Electrical – Auxiliary Lights	LED Beacon Light	\$	280.96
Electrical - Battery & Battery Chargers			
Electrical – Battery & Battery Chargers	(4) DEKA Group 32 Top Post Chargers	\$	(82.36)
Electrical – Battery & Battery Chargers	DEKA AGM Type 8D/Group 32	\$	331.53

Electrical – Battery & Battery Chargers	(4) Odyssey Group 32	\$	109.60
Electrical – Battery & Battery Chargers	Ultra Capacitors - KBI KAPower	\$	4,022.50
Electrical – Battery & Battery Chargers	Remove Anderson 350 Jump Start	\$	(105.14)
Electrical – Battery & Battery Chargers	Change to provide ESS *520* kWh battery pack (operating range up to 225 miles*)	(electric only)	*\$62,950.18*
Electrical – Battery & Battery Chargers	Change to provide ESS 545 kWh battery pack (operating range up to 243 miles*)	(electric only)	*\$75,165.18*
	Change to provide ESS 654 kWh battery pack (operating range up to 285 miles*)	(electric only)	*\$97,950.18*
Electrical - Communication/Radio			#VALUE!
Electrical – Communication/Radio	Motorola APX4500	\$	10,079.49
Electrical – Communication/Radio	Motorola CM200 and CM300, 45W, 439 - 470- MHZ	\$	3,721.08
Electrical – Communication/Radio	Harris Radio	\$	11,371.80
Electrical – Communication/Radio	DC Power Filter for Radio Wiring	\$	520.39
Electrical – Communication/Radio	Additional Flush Mounted Speakers (per Pair)	\$	61.94
Electrical – Communication/Radio	ASP930T Radio Antenna with RG58 Coax Cable and TNC Connector	\$	86.93
Electrical – Communication/Radio	Antenna Specialist ASP- 572	\$	97.28
Electrical – Communication/Radio	Customer Specified Two Way Radio and Installation	\$	10,079.49
Electrical – Communication/Radio	customer specific antenna, ground plane, and cable runs installation	\$	25.40
Electrical - Destination Sign		\$	-
Electrical – Destination Sign	Twin Vision Silver Series Sign (16 X160) Front & Side	\$	396.82
Electrical – Destination Sign	Twin Vision Silver Series Sign (24 X 200) Front & Side	\$	3,229.07
Electrical – Destination Sign	Twin Vision Smart Series II (16 X160) Front & Side	\$	142.89
Electrical – Destination Sign	Twin Vision Smart Series II (24 X 200) Front & Side	\$	127.79
Electrical – Destination Sign	Twin Vision 100% Amber LED, Front, Curb Side, Rear	\$	(212.75)
Electrical – Destination Sign	Twin Vision 100% Amber LED, Rear	\$	158.50
Electrical – Destination Sign	Twin Vision 24 X 200 Front Amber LED Sign	\$	2,374.44
Electrical – Destination Sign	Luminator Spectrum 100% Amber LED Front ,Curbside, Rear	\$	13,418.72

Electrical – Destination Sign	Luminator White LED Front, Curb-side and Rear	\$	693.64
Electrical – Destination Sign	Add Twin Vision Smart Series II w/ rear camera, Rear Sign	\$	642.94
Electrical – Destination Sign	Add Street Side Sign (Twin Vision Amber LED)	\$	1,339.90
Electrical – Destination Sign	Add Street Side Sign (Twin Silver Series LED)	\$	2,026.01
Electrical – Destination Sign	Remove Rear Sign (DEDUCT)	\$	(671.32)
Electrical – Destination Sign	Heated Front Sign Glazing	\$	113.86
Electrical – Destination Sign	Transign, (3) Character, Metal Housing	\$	(39.55)
Electrical – Destination Sign	Twin Vision Electronic Front Dash Sign	\$	(145.75)
Electrical – Destination Sign	Hanover Display LED Amber Destination Signs (model# OL028, OL054 & OL64J)	\$	(554.55)
Electrical - Destination Sign Programming		\$	-
Electrical – Destination Sign Programming	Luminator USB & Integrated Programming Software	\$	558.81
Electrical – Destination Sign Programming	Twin Vision Elyse 2 USB	\$	65.17
Electrical – Destination Sign Programming	Twin Vision Software Package	\$	493.64
Electrical - Equipment Storage Box		\$	-
Electrical – Equipment Storage Box	UTA APC Sensors, Cabling, CPU only	\$	17,581.46
Electrical – Equipment Storage Box	Strategic Mapping sensors, cabling, CPU only	\$	10,589.76
Electrical - Lights, Exterior		\$	-
Electrical – Lights, Exterior	Tail Lights - Manufacturer Diallite LED, Fixture Size - 7" Diameter	\$	186.67
Electrical - Intelligent Vehicle Network		\$	-
Electrical – Intelligent Vehicle Network	Clever Devices IVN III W/Voice Announcement, APC, Wireless LAN	\$	38,236.24
Electrical – Intelligent Vehicle Network	AVAIL IVN W/MDC, GPS, APC, WLAN	\$	34,988.84
Electrical – Intelligent Vehicle Network	Init Voice Enunciator/AVL/GPS/APC/WLAN	\$	51,738.30
Electrical - Pleasure		\$	-

Electrical – Pleasure	Radio Tacho Link Event Data Recorder	\$	5,982.86
Electrical – Pleasure	Radio Am/FM/CD	\$	617.12
Electrical - Public Announcement		\$	-
Electrical – Public Announcement	Drivers Speaker W/Separate Volume Control	\$	24.85
Electrical – Public Announcement	REI Model 750040 PA W/Handheld Mic W/(6) Flush Mounted Speakers	\$	(1,123.22)
Electrical – Public Announcement	Luminator IVS W/GPS Capability, w/LED Sign, W/O Mapping	\$	8,553.27
Electrical – Public Announcement	DR700 Vehicle Logic Unit W/GPS Capability, w/LED Sign, W/O Mapping	\$	16,388.07
Electrical – Public Announcement	Rei Echo PA System	\$	(1,195.26)
Electrical – Public Announcement	Shure Brothers Lapel Microphone w/REI PA System	\$	1,623.90
Electrical – Public Announcement	Midwest Lapel Microphone (Use w/Voice Annunciation System)	\$	180.59
Electrical – Public Announcement	One Additional Pair of Interior Speakers	\$	61.94
Electrical – Public Announcement	One Additional exterior Speaker Each	\$	31.80
Electrical – Public Announcement	REI w/switch mounted in Driver's Area	\$	1,623.90
Electrical - Video Surveillance		\$	-
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 4 Camera System w/Audio	\$	5,004.88
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 8 Camera System w/Audio	\$	8,258.38
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 12 Camera System w/Audio	\$	10,772.23
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 16 Camera System w/Audio	\$	13,766.69
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 4 Camera System & Audio	\$	6,990.87
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 8 Camera System & Audio	\$	10,700.54
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 12 Camera System & Audio	\$	13,621.69
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 16 Camera System & Audio	\$	17,163.55
Electrical – Video Surveillance	Apollo Wireless Data Download capable	\$	518.09
Electrical – Video Surveillance	Apollo Cellular "Live Look Through" Capable	\$	1,617.79
Electrical – Video Surveillance	Apollo Vehicle Information Management System (VIM)	\$	6,840.98
Electrical – Video Surveillance	Apollo video 4K DVR w/9 camera system w/ Audio	\$	12,189.63
Electrical – Video Surveillance	(4) Camera Pre Wire Package	\$	162.92

Electrical – Video Surveillance	SEON 2 TB hard drive upgrade	\$	4,338.46
Electrical – Video Surveillance	SEON C0903A integrated IR Dome day/Night 600TVL interior camera, audio, 2.9 mm lens.	\$	283.70
Electrical – Video Surveillance	SEON CA904EI Day/Night 600TVL camera, exterior (w/infrared, no audio), 3.6 mm lens.	\$	414.98
Electrical – Video Surveillance	SEON C1904A Dome Day/Night 600TVL camera, audio, 3.6mm lens w/mount	\$	283.70
Electrical – Video Surveillance	SEON LMK LCD monitor, 5.6 inch, AC charger, battery pack	\$	395.77
Electrical – Video Surveillance	Safety Vision RR6000 Pro w/(4) Digital Color Cameras, 120 GB DVR, w/Audio	\$	13,204.50
Electrical – Video Surveillance	March Network (8) Camera System	\$	16,135.53
Electrical – Video Surveillance	REI Bus Watch Digital	\$	7,495.12
Electrical – Video Surveillance	Add Additional Color Camera	\$	306.29
Engine - Accessories			
Engine – Accessories	STD Donaldson (RBX00- 2277) - Air Intake Restriction	Diese/CNG/Hybrid Only	\$ 26.75
Engine – Accessories	Spin on Filters Supplied By Engine Manufacturer	Diese/CNG/Hybrid Only	\$ 1,555.71
Engine – Accessories	Sample Test Port - Titan Probalizer OD-1014	Diese/CNG/Hybrid Only	\$ (40.35)
Engine – Accessories	FEMCO Oil Drain Plug	Diese/CNG/Hybrid Only	\$ 93.16
Engine – Accessories	Rear Run Box Rear Hand Throttle	Diese/CNG/Hybrid Only	\$ 5.49
Engine - Tune Up Kit			
Engine – Tune Up Kit	Cummins Tune - Up Kit (Includes the Following)		\$ 8,579.37
Fare Box			
Fare Box	GFI 36" Fastfare		\$ 16,945.15
Fare Box	GFI 41" Fast Fare		\$ 16,945.15
Fare Box	Diamond Model SV w/Two (2) Vaults		\$ 1,775.83
Fare Box	Main T1 Fare box w/Two V1 Vaults in Standard Paint Colors		\$ 1,335.94
Fare Box	Main M 4 Fare box w/Two V4 Vaults in Standard Paint Colors		\$ 1,107.85
Fare Box	Main SL 5 Fare box w/Two V5 Vaults in Standard Paint Colors		\$ 3,390.35
Fare Box	Globe Transfer Cutter		\$ 68.32
HVAC			
HVAC	TK System w/X430Compressor		\$ (1,151.87)
HVAC	TK Electric HVAC System	Diesel	\$ 23,334.08
HVAC	TK Electric HVAC System	Hybrid (Allison BAE)	\$ 1,872.71
HVAC	TK Pressure and Return Gauges Mounted to Unit		\$ 438.04
HVAC	MCC Front Stepwell/Threshold Heater W/Brushless Motor (Each)		\$ 402.39
HVAC	Suttrak All Electric Air Conditioning - Roof Mount		\$ 79,570.86
HVAC	Suttrak All Electric Air Conditioning - Rear Mount		\$ 50,663.61
HVAC	ACT Convection Heater		\$ 488.77

HVAC	Air Purification System	\$	8,406.18
HVAC	Other Option - Air Purification System (Paradigm FLOW100 12V)	\$	3,184.61
HVAC	Sanuv Air Filtration System	\$	9,531.98
Safety		\$	-
Safety	Amerex V-25lb ABC System	Diesel	2,815.85
Safety	Amerex VH-25lb ABC Cylinder	Diesel	8,788.59
Safety	Amerex V-30lb ABC Cylinder	CNG	(53.23)
Safety	Amerex Safety Net 2-Zone Fire Detection/Suppression System		4,150.01
Safety	Kidde - Dual Spectrum		(940.04)
Safety	Kidde TLSE Spectrum		5,634.19
Safety	Fogmaker Fire Suppression System (water mist)		277.67
Safety	Remove Amerex	CNG	(3,820.71)
Safety	Twenty - Four Unit First Aid Kit		82.23
Safety	Ten Unit First Aid Kit		82.23
Safety	Blood Borne Pathogens Kit		40.82
Safety	Bio - Hazard Disposal Kit		40.86
Safety	(3) 20 - Minute Road Flares		58.73
Safety	Wheel Chocks (Per Set)		136.15
Steering		\$	-
Steering	TRW Electric Assisted Steering		2,488.03
Steering	Douglas Autotech 'Double-Knuckle' Steering Column (PN 9003148-C)		396.42
Towing & Hoisting		\$	-
Towing & Hoisting	Set Towing Adapters/Tow Bar		224.12
Towing & Hoisting	Set of Hoist Adapters (Includes the 4 Following Items)		291.37
Transmission		\$	-
Transmission	Voith D854.6	Diesel/CNG	(2,045.57)
Transmission	ZF 6AP1400B	Diesel/CNG	(156.49)
Transmission	Titan Probalizer OD- 1014		(39.91)
Transmission	Keyed Transmission Lockout Switch on Dash		1,097.08
W/C Restraints		\$	-
W/C Restraints	AMSECO - A.R.M.		644.00
W/C Restraints	AMESCO Passive rear-facing restraints (rear facing barriers)		1,848.99
W/C Restraints	Q'Straint - QRT		814.60
W/C Restraints	Q'Straint - ORT 360		1,165.03
W/C Restraints	Q'Straint - Q'UBE 3-Point Securement Station		943.70
W/C Restraints	Q'Straint - Quantum Securement System		28,911.65
W/C Restraints	Q'Straint/Sure-Lok - OMNI Floor Anchor System		139.87
W/C Restraints	Q'Straint Slide N Click floor mount restraint system		814.60
W/C Restraints	Q- Pod W/C Restraint System		5,494.69
W/C Restraints	AMESCO Dual Auto Lock W/C Restraint System		928.33
W/C Restraints	Sure LOK - RTT Electric		928.33
Wheel Chair Ramp (low-floor only) / Lift (high-floor only)		\$	-
Wheel Chair Ramp (low-floor only) / Lift (high-floor only)	Lift- U Model LU11, 1:6 Ratio, Front Door only	\$	1,006.02

Wheel Chair Ramp (low-floor only) / Lift (high-floor only)	LIFT- U Model LU18, Dual- Mode 1:6 (Street)/1:8 (Sidewalk)	\$	2,794.50
Wheel - Brakes			
Wheel – Brakes	MGM "E-Stroke" Electronic Brake Monitoring System – Disc Brakes	\$	3,626.33
Wheel - Hubometer			
Wheel Hubometer	Veeder Root w/o Tenth's w/o Guard	\$	88.15
Wheel Hubometer	S&A Fleetwatch 392 Electronic	\$	737.74
Wheel Hubometer	E J Ward Data System (Includes Receiver, Display Unit and Antenna)	\$	1,394.75
Wheel Hubometer	Engler (Stemco) Mechanical W/o Tenth's W/o Guard	\$	64.73
Wheel Hubometer	Engler Hubometer W/Powder Coat Guard	\$	102.33
Wheel - Tires			
Wheel – Tires	Michelin XZU2 (305/70R/22.5)	\$	3,129.84
Wheel – Tires	Michelin X incity Z (305/70R/22.5)	\$	3,129.84
Wheel – Tires	Goodyear G152 (305/70R/22.5)	\$	3,129.84
Wheels			
Wheels	(7) Aluminum Alcoa - Full Polish	\$	2,026.95
Wheels	(7) Aluminum Alcoa - Full Polish W/Dura Bright Finish	\$	2,399.97
Wheels	(7) Aluminum Alcoa - Machine Finish	\$	1,415.93
Wheels	(7) Aluminum Alcoa - Machine Finish W/Dura Bright Finish	\$	1,826.90
Wheels	Remove Spare Wheel	\$	(914.33)
Wheels	Add Dura Flange to Alcoa	\$	3,181.26
Windows			
Windows	Laminated Safety Glass (1/4") - Framed Fixed	\$	243.47
Windows	Hidden Framed Bonded - Fixed	\$	5,300.15
Windows	Hidden Framed Bonded - Transom -openable	\$	3,987.82
Windows	Add Window Guards (Acrylic Liner and Film)	\$	3,189.23
Windows	anti-graffiti 3M film (per inside window)	\$	4,457.23
Windows	All windows equipped with liners attached	\$	1,872.32

Heavy Duty - 60 Foot
Options Price Sheet

Category	Description	Diesel	CNG	Hybrid	Electric	Fuel Cell	Price
Body BRT STYLING							
Body – BRT STYLING	BRT Roof Fairings Front and Rear	Option	Inc In Base	Inc In Base	Inc In Base	Inc In Base	\$2,957
BODY - PASSENGER SEATS							
BODY - PASSENGER SEATS	59 Passenger Seating	Base is 52 Pass	Base is 52 Pass	Base is 52 Pass	Base is 52 Pass	Base is 52 Pass	\$ 5,946.56
BODY - PASSENGER SEATS	ADD additional double flip seat in lieu of fixed seat	Option	Option	Option	Option	Option	\$ 1,955.03
BODY - PASSENGER SEATS	Remove one set of fixed seats	Option	Option	Option	Option	Option	\$ (697.51)
Fuel							
Fuel	Fuel Gauge on Dash	Inc in Base	Inc in Base	Inc in Base	Inc in Base	Option	\$ 2,351.85
Fuel	Fuel Gauge on Dash	Inc in Base	Inc in Base	Inc in Base	Inc in Base	\$ 2,102.04	\$ 2,351.85
Fuel	EMCO - Posi/Lock Blue Urea Dispensing System	Option	N/A	Option	N/A	N/A	\$ 795.87
Fuel	Fuel Gauge on Dash	Inc in Base	Inc in Base	Inc in Base	Inc in Base	\$ 2,102.04	\$ 2,351.85
Fuel Filter							
Fuel Filter	Davco Fuel Pro 384, Heated	Option	N/A	Option	N/A	N/A	\$ 468.59
Fuel Filter	Racor 490R30 Filter W/Thumbpump	Option	N/A	Option	N/A	N/A	\$ 378.42
Fuel Filter	Davco Fuel Pro 384, Heated	Option	N/A	Option	N/A	N/A	\$ 468.59
Fuel Filter	Racor 490R30 Filter W/Thumbpump	Option	N/A	Option	N/A	N/A	\$ 378.42
Hybrid							
Hybrid	BAE Hybrid System HDS200 - APS3-32K (32kWh Battery)	N/A	N/A	Option	N/A	N/A	\$ 21,517.65
Passenger Seat Options							
Passenger Seat Options	57 Passenger Seating - Citiseat	Option	Option	Option	Option	Option	\$ (2,450.22)
Passenger Seat Options	AMSECO - 6466	Option	Option	Option	Option	Option	\$ 6,717.98
Passenger Seat Options	AMSECO - 6566	Option	Option	Option	Option	Option	\$ 16,533.38
Passenger Seat Options	AMSECO - 2005/6466 Suburbans	Option	Option	Option	Option	Option	\$ 9,392.87
Passenger Seat Options	AMSECO Vision	Option	Option	Option	Option	Option	\$ 2,890.63
Passenger Seat Options	AMSECO - CR50 Seat Inserts	Option	Option	Option	Option	Option	\$ 3,044.89
Passenger Seat Options	4 One Aries	Option	Option	Option	Option	Option	\$ 5,217.89
Passenger Seat Options	4 One Gemini Seating	Option	Option	Option	Option	Option	\$ (4,047.55)
Passenger Seat Options	Kiel Ideo	Option	Option	Option	Option	Option	\$ 3,655.21
Passenger Seat Options	Add (3) Passenger Seats to Curbside Wheelwell	Option	Option	Option	Option	Option	\$ 1,306.71
Passenger Seat Options	Add (2) Passenger Seats to Curbside Wheelwell	Option	Option	Option	Option	Option	\$ 926.66
Passenger Seat Options	Hinged Rear Settee	Option	Option	Option	Option	Option	\$ 470.59
Passenger Seat Options	Dual USB charging station throughout seating layout	Option	Option	Option	Option	Option	\$ 3,353.40

All options listed below are the same for each bus length worksheet.

Category	Description	Designation	Propulsion (if applicable)	Price
Air				
Air	Shop Air Connection (Milton S790)			\$ 6.66
Air	Bendix AD9, (300 ci Purge)			\$ 45.11
Air	Bendix Adip, Heated			\$ 551.02
Air	Graham White QBA 15 "Sludge Buster", Heated			\$ 523.17
Air	Kingston Auto Drain Valve At Ping Tank			\$ 247.86
Body- Bike Rack				
Body – Bike Rack	Sportworks Apex 3 - 3 Position Bike, Stainless Steel			\$ 2,421.34
Body – Bike Rack	Sportworks - 2 Position Bike, Black Powder Coated			\$ 1,517.98
Body – Bike Rack	Sportworks - 2 Position Bike, Stainless Steel			\$ 1,863.64
Body – Bike Rack	Sportworks - 3 Position Bike, Black Powder Coated			\$ 3,237.13
Body – Bike Rack	Sportworks - Trilogy 3 Position Bike, Stainless Steel			\$ 3,032.81

Body – Bike Rack	Bike Rack 5" Spot Mirror	\$	87.50
Body - Driver's Barrier			
Body – Driver's Barrier	Wrap Around Fiberglass W/O Schedule Rack Cutouts	\$	(173.02)
Body – Driver's Barrier	Plexiglass Drivers Security Enclosure	\$	4,459.15
Body – Driver's Barrier	Plexiglass Drivers Security Enclosure, two pieces	\$	4,811.81
Body – Driver's Barrier	Other Option - Specify (Arrow Global Enclosure) MV308 Slide/Stow door components w/ Extended glass	\$	10,038.11
Body – Driver's Barrier	Other Option - Specify (Vapor Enclosure) vShield Driver's Barrier	\$	8,427.07
Body - Driver's Seat			
Body – Driver Seat	Recaro Ergo Metro w/Fabric Seat and Back w/Gray Fabric Boxing	\$	438.10
Body – Driver Seat	Recaro MCI	\$	1,365.84
Body – Driver Seat	USSC 9100 ALX w/Fabric Seat and Back w/Gray Fabric Boxing	\$	(64.97)
Body – Driver Seat	USSC 9100 ALX - 3 w/Fabric Seat and Back w/Gray Fabric Boxing	\$	288.63
Body – Driver Seat	Add Armrest (Right Side only)	\$	231.94
Body – Driver Seat	Add Shoulder Belt	\$	360.79
Body – Driver Seat	Add 3 -Point, Horizontally Adjustable D - Loop	\$	704.39
Body – Driver Seat	Driver's Seat Vacancy Alarm	\$	183.84
Body – Driver Seat	Safety Orange Shoulder Belt (US SC ALX)	\$	116.83
Body – Driver Seat	Silicon Foam At Lower Seat Cushion (USSC)	\$	1,821.11
Body – Driver Seat	Holdsworth Fabric	\$	644.27
Body – Driver Seat	USSC Q90 ALX	\$	429.51
Body – Driver Seat	USSC G2A -2pt Drivers Seat	\$	584.13
Body - Exit Door			
Body – Exit Door	Standard Melamine Panels on Lower Section Both Sides of Rear Exit Door	\$	1,041.61
Body – Exit Door	Upper Clear Plexiglas Modesty Panels Both Sides of Rear Exit Door	\$	2,409.92
	Other Option - 5 Door-bus configuration	\$	62,473.84
Body - Floor Covering			
Body – Floor Covering	Gerflor Tarabus Gaya Wood (vinyl simulated woodgrain)	\$	474.73
Body – Floor Covering	Composite Sub Floor	\$	4,960.42
Body - Mirror, Exterior			
Body – Mirror, Exterior	Safe Fleet One Piece 8" x 8" Flat Glazing W/Stainless Steel Arms, Remote Both Sides	\$	(70.78)
Body – Mirror, Exterior	Safe Fleet One Piece 8" x 8" Flat Glazing W/S.S. Arms, Manual W/6" Spot Mirror	\$	336.00
Body – Mirror, Exterior	Safe Fleet 8" x 15" 2 Piece, Heated, Remote Both Sides	\$	65.68
Body – Mirror, Exterior	Safe Fleet 9" x 11" 2 Piece, Heated, Remote Both Sides	\$	(468.98)
Body – Mirror, Exterior	Safe Fleet 9" x 13" Class "A" 2 Piece, Heated, Remote Both Sides	\$	140.00
Body – Mirror, Exterior	Safe Fleet 10" x 13" 2 Piece (Flat & Convex), Heated, Remote Both Sides	\$	708.97
Body - Mirror, Interior			
Body – Mirror, Interior	Mirror - 8 1/2" X 16"	\$	37.02
Body – Mirror, Interior	Mirror - Front Door 6" Round on Header Door	\$	30.96
Body - Paint & Decal			
Body – Paint & Decal	(2) Colors, with and without Black Mask At Windows	\$	1,611.83

Body – Paint & Decal	(3) Colors, with and without Black Mask At Windows	\$	2,049.14
Body – Paint & Decal	Clear Coat Complete Bus	\$	1,611.83
Body – Paint & Decal	Remove Roof Numbers	\$	218.66
Body - Passenger Signal			
Body – Passenger Signal	Pullcords - Above Windows (Neutral Or Yellow) w/Touch Pad At W/C Positions	\$	58.41
Body – Passenger Signal	Touch Tape (At Window Mullions)	\$	1,313.64
Body – Passenger Signal	Additional Amber Stop Request Lamp Mounted on Driver's Dash	\$	62.81
Body – Passenger Signal	Button in the Parcel Rack	\$	19.73
Body - Rear Door			
Body – Rear Door	Electric Operated Front/Rear Door Motor and Control	\$	5,783.63
Body – Rear Door	Touch Bars (Air Open/Spring Close)	\$	1,388.17
Body – Rear Door	Touch Bars w/Driver Override	\$	284.46
Body – Rear Door	Touch Tape in Place of Touch Bars	\$	454.91
Body – Rear Door	Vapor Class Acoustic (Photo Sensor)	\$	2,766.34
Body – Rear Door	Vapor V Touch (Electronic Touch Bar)	\$	430.83
Body – Rear Door	Vapor Optical Pressure Wave Switch	\$	2,898.39
Body – Rear Door	Exterior Air Release (Front Door Control Valve)	\$	126.60
Body – Rear Door	Driver Push Button Door Controls	\$	114.80
Body – Rear Door	Remove Rear Door, Add Two Seats	\$	(3,373.59)
Body – Rear Door	Ventura electric rear door (One exit door)	\$	20,543.90
Body - Roof Hatch			
Body – Roof Hatch	One (1) Roof Hatch Position - Rear	\$	(634.36)
Body – Roof Hatch	Electric Hatch with Driver Control (per Position)	\$	436.07
Body – Roof Hatch	Glass Hatch in Lieu of Standard	\$	1,159.99
Body - Schedule Rack			
Body – Schedule Rack	Innocom Schedule Racks 3.75" x 7" x 1.5"	\$	26.78
Body – Schedule Rack	Innocom Schedule Racks 8.62" x 11" x 1"	\$	34.60
Body – Schedule Rack	22" x 21" Black, RH Load Open Back	\$	43.46
Body – Schedule Rack	Transit Information Products - 19" x 21" OBIC 19/214P1LTRMC	\$	429.78
Body – Schedule Rack	Transit Information Products - 19" x 21" OBIC10P2LTRMC	\$	626.46
Body - Stanchions/Grab Rails			
Body – Stanchions/Grab Rails	Powder Coated Vertical Stanchions only	\$	(191.47)
Body – Stanchions/Grab Rails	Farebox Guard Rail	\$	315.63
Body – Stanchions/Grab Rails	Luggage Rack 68", Two - Tier with Fixed Shelf's	\$	4,672.21
Body – Stanchions/Grab Rails	Vinyl Coated Nylon Grab Straps (Cost per Handle)	\$	62.49
Body – Stanchions/Grab Rails	SSTL Spring Loaded Grab Handle (Cost per Handle)	\$	44.08
Body – Stanchions/Grab Rails	non-vinyl-coated nylon grab straps (per handle, color to be chosen by agency)	\$	60.72
Cooling System			
Cooling System	Modine Electric Cooling Fan System	\$	437.32
Cooling System	E - Coat Radiator, CAC & Hydraulic Cooler	\$	20.45

Cooling System	Radiator Tank Guard	\$	162.74
Cooling System	Proheat Model X50 (50,000 btu) Coolant Heater	\$	(374.84)
Cooling System	Proheat Model X45 (45,000 btu) Coolant Heater	\$	(106.21)
Cooling System	Electric Coolant Auxiliary Heater	\$	(212.41)
Electrical		\$	-
Electrical	24 Volt to 13.6 Volt DC - DC Converter, 30 Ampere Output, Model 1645 - 24 - 12 - 30, Manufactured By Wilmore Electronics Co., Inc. or Equivalent	\$	1,130.61
Electrical - Accessories		\$	-
Electrical - Accessories	12 V Cigarette-Style Light Adaptor for PC Auxiliary Power - Drivers Area	\$	8.38
Electrical - Automatic Passenger Counter		\$	-
Electrical - Automatic Passenger Counter	UTA Automatic Passenger Counter System with GPS, WLAN Capabilities	\$	21,902.57
Electrical - Automatic Passenger Counter	UTA APC Sensors, Cabling, CPU only	\$	3,537.26
Electrical - Automatic Passenger Counter	Wiring provisions IAW APC manufacture	\$	3,537.26
Electrical - Automatic Passenger Counter	Strategic Mapping APC system	\$	11,837.23
Electrical - Auxiliary Lights		\$	-
Electrical - Auxiliary Lights	Two (2) Dialight 7" Diameter LED Auxiliary Brake Lights	\$	99.07
Electrical - Auxiliary Lights	4 LED Brake Strip Lamps	\$	144.31
Electrical - Auxiliary Lights	Exterior Curb Lamps, Front & Rear - Dialight	\$	(99.36)
Electrical - Auxiliary Lights	Triangle Amber LED Yield Sign - Diallight	\$	393.25
Electrical - Auxiliary Lights	Two (2) Red LED Brake Strip Lamps	\$	71.79
Electrical - Auxiliary Lights	Remove LED Auxiliary Brake Lights (DEDUCT)	\$	(49.25)
Electrical - Auxiliary Lights	LED Beacon Light	\$	314.06
Electrical - Battery & Battery Chargers		\$	-
Electrical - Battery & Battery Chargers	(4) DEKA Group 32 Top Post	\$	(92.06)
Electrical - Battery & Battery Chargers	DEKA AGM Type 8D/Group 32	\$	370.58
Electrical - Battery & Battery Chargers	(4) Odyssey Group 32	\$	122.51
Electrical - Battery & Battery Chargers	Ultra Capacitors - KBI KAPower	\$	4,496.35
Electrical - Battery & Battery Chargers	Remove Anderson 350 Jump Start	\$	(117.52)

Electrical – Battery & Battery Chargers	Change to provide ESS *350* kWh battery pack (operating range up to 101 miles*)	(electric only)	*(\$59,851.29)*
Electrical – Battery & Battery Chargers	Change to provide ESS 436 kWh battery pack (operating range up to 106 miles*)	(electric only)	*(\$56,351.29)*
Electrical – Battery & Battery Chargers	Change to provide ESS 545 kWh battery pack (operating range up to 151 miles*)	(electric only)	*\$15,314.54*
Electrical – Battery & Battery Chargers	Change to provide ESS 654 kWh battery pack (operating range up to 174 miles*)	(electric only)	*\$35,000.00*
Electrical – Battery & Battery Chargers	Change to provide ESS *763* kWh battery pack (operating range up to ?? miles*)	(electric only)	*\$75,000.00*
Electrical - Communication/Radio			\$ -
Electrical – Communication/Radio	Motorola APX4500		\$ 11,266.86
Electrical – Communication/Radio	Motorola CM200 and CM300, 45W, 439 - 470- MHZ		\$ 4,159.42
Electrical – Communication/Radio	Harris Radio		\$ 12,711.40
Electrical – Communication/Radio	DC Power Filter for Radio Wiring		\$ 581.69
Electrical – Communication/Radio	Additional Flush Mounted Speakers (per Pair)		\$ 69.23
Electrical – Communication/Radio	ASP930T Radio Antenna with RG58 Coax Cable and TNC Connector		\$ 97.17
Electrical – Communication/Radio	Antenna Specialist ASP- 572		\$ 108.74
Electrical – Communication/Radio	Customer Specified Two Way Radio and Installation		\$ 11,266.86
Electrical – Communication/Radio	customer specific antenna, ground plane, and cable runs installation		\$ 28.39
Electrical - Destination Sign			\$ -
Electrical – Destination Sign	Twin Vision Silver Series Sign (16 X160) Front & Side		\$ 443.56
Electrical – Destination Sign	Twin Vision Silver Series Sign (24 X 200) Front & Side		\$ 3,609.45
Electrical – Destination Sign	Twin Vision Smart Series II (16 X160) Front & Side		\$ 159.72
Electrical – Destination Sign	Twin Vision Smart Series II (24 X 200) Front & Side		\$ 142.84
Electrical – Destination Sign	Twin Vision 100% Amber LED, Front, Curb Side, Rear		\$ (237.81)
Electrical – Destination Sign	Twin Vision 100% Amber LED, Rear		\$ 177.17
Electrical – Destination Sign	Twin Vision 24 X 200 Front Amber LED Sign		\$ 2,654.15
Electrical – Destination Sign	Luminator Spectrum 100% Amber LED Front ,Curbside, Rear		\$ 14,999.45
Electrical – Destination Sign	Luminator White LED Front, Curb-side and Rear		\$ 775.35

Electrical – Destination Sign	Add Twin Vision Smart Series II w/ rear camera, Rear Sign	\$	718.67
Electrical – Destination Sign	Add Street Side Sign (Twin Vision Amber LED)	\$	1,497.74
Electrical – Destination Sign	Add Street Side Sign (Twin Silver Series LED)	\$	2,264.68
Electrical – Destination Sign	Remove Rear Sign (DEDUCT)	\$	(750.40)
Electrical – Destination Sign	Heated Front Sign Glazing	\$	127.27
Electrical – Destination Sign	Transign, (3) Character, Metal Housing	\$	(44.20)
Electrical – Destination Sign	Twin Vision Electronic Front Dash Sign	\$	(162.91)
Electrical – Destination Sign	Hanover Display LED Amber Destination Signs (model# OL028, OL054 & OL64)	\$	(619.88)
Electrical - Destination Sign Programming			
Electrical – Destination Sign Programming	Luminator, USB & Integrated Programming Software	\$	624.64
Electrical – Destination Sign Programming	Twin Vision Elyse 2 USB	\$	72.84
Electrical – Destination Sign Programming	Twin Vision Software Package	\$	551.79
Electrical - Equipment Storage Box			
Electrical – Equipment Storage Box	UTA APC Sensors, Cabling, CPU only	\$	19,652.56
Electrical – Equipment Storage Box	Strategic Mapping sensors, cabling, CPU only	\$	11,837.23
Electrical - Lights, Exterior			
Electrical – Lights, Exterior	Tail Lights - Manufacturer Dialite LED, Fixture Size - 7" Diameter	\$	208.66
Electrical - Intelligent Vehicle Network			
Electrical – Intelligent Vehicle Network	Clever Devices IVN III W/Voice Annunciation, APC, Wireless LAN	\$	42,740.47
Electrical – Intelligent Vehicle Network	AVAIL IVN W/MDC, GPS, APC, WLAN	\$	39,110.52
Electrical – Intelligent Vehicle Network	Init Voice Enunciator/AVI/GPS/APC/WLAN	\$	57,833.07
Electrical - Pleasure			
Electrical – Pleasure	Radio Tacho Link Event Data Recorder	\$	6,687.64
Electrical – Pleasure	Radio Am/FM/CD	\$	689.81

Electrical - Public Announcement		
Electrical – Public Announcement	Drivers Speaker W/Separate Volume Control	\$ 27.78
Electrical – Public Announcement	REI Model 750040 PA W/Handheld Mic W/(6) Flush Mounted Speakers	\$ (1,255.53)
Electrical – Public Announcement	Luminator 1VS W/GPS Capability, w/LED Sign, W/O Mapping	\$ 9,560.85
Electrical – Public Announcement	DR700 Vehicle Logic Unit W/GPS Capability, w/LED Sign, W/O Mapping	\$ 18,318.58
Electrical – Public Announcement	Rei Echo PA System	\$ (1,336.06)
Electrical – Public Announcement	Shure Brothers Lapel Microphone w/REI PA System	\$ 1,815.19
Electrical – Public Announcement	Midwest Lapel Microphone (Use w/Voice Announcement System)	\$ 201.87
Electrical – Public Announcement	One Additional Pair of Interior Speakers	\$ 69.23
Electrical – Public Announcement	One Additional exterior Speaker Each	\$ 35.55
Electrical – Public Announcement	REI w/switch mounted in Driver's Area	\$ 1,815.19
Electrical - Video Surveillance		
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 4 Camera System w/Audio	\$ 5,594.46
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 8 Camera System w/Audio	\$ 9,231.22
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 12 Camera System w/Audio	\$ 12,041.20
Electrical – Video Surveillance	Apollo RoadRunner DVR 2TB 16 Camera System w/Audio	\$ 15,388.41
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 4 Camera System & Audio	\$ 7,814.39
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 8 Camera System & Audio	\$ 11,961.07
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 12 Camera System & Audio	\$ 15,226.32
Electrical – Video Surveillance	Apollo RoadRunner HDR DVR 2TB 16 Camera System & Audio	\$ 19,185.42
Electrical – Video Surveillance	Apollo Wireless Data Download capable	\$ 579.12
Electrical – Video Surveillance	Apollo Cellular "Live Look Through" Capable	\$ 1,808.37
Electrical – Video Surveillance	Apollo Vehicle Information Management System (VIM)	\$ 7,646.85
Electrical – Video Surveillance	Apollo video 4K DVR w/9 camera system w/ Audio	\$ 13,625.57
Electrical – Video Surveillance	(4) Camera Pre Wire Package	\$ 182.11
Electrical – Video Surveillance	SEON 2 TB hard drive upgrade	\$ 4,849.53

Electrical – Video Surveillance	SEON C0903A integrated IR Dome day/Night 600TVL interior camera, audio, 2.9 mm lens.	\$	317.12
Electrical – Video Surveillance	SEON CA904EI Day/Night 600TVL camera, exterior (w/infrared, no audio), 3.6 mm lens.	\$	463.87
Electrical – Video Surveillance	SEON C1904A Dome Day/Night 600TVL camera, audio, 3.6mm lens w/mount	\$	317.12
Electrical – Video Surveillance	SEON LMK LCD monitor, 5.6 inch, AC charger, battery pack	\$	442.39
Electrical – Video Surveillance	Safety Vision RR6000 Pro w/(4) Digital Color Cameras, 120 GB DVR, w/Audio	\$	14,759.99
Electrical – Video Surveillance	March Network (8) Camera System	\$	18,036.30
Electrical – Video Surveillance	REI Bus Watch Digital	\$	8,378.04
Electrical – Video Surveillance	Add Additional Color Camera	\$	342.37
Engine - Accessories			
Engine – Accessories	STD Donaldson (RBX00- 2277) - Air Intake Restriction	Diesel/CNG/Hybrid Only	\$ 29.90
Engine – Accessories	Spin on Filters Supplied By Engine Manufacturer	Diesel/CNG/Hybrid Only	\$ 1,738.97
Engine – Accessories	Sample Test Port - Titan Probalizer OD-1014	Diesel/CNG/Hybrid Only	\$ (45.11)
Engine – Accessories	FEMCO Oil Drain Plug	Diesel/CNG/Hybrid Only	\$ 104.13
Engine – Accessories	Rear Run Box Rear Hand Throttle	Diesel/CNG/Hybrid Only	\$ 6.13
Fare Box			
Fare Box	GFI 36" Fastfare	\$	18,941.29
Fare Box	GFI 41" Fast Fare	\$	18,941.29
Fare Box	Diamond Model SV w/Two (2) Vaults	\$	1,985.02
Fare Box	Main T1 Fare box w/Two V1 Vaults in Standard Paint Colors	\$	1,493.31
Fare Box	Main M 4 Fare box w/Two V4 Vaults in Standard Paint Colors	\$	1,238.36
Fare Box	Main SL 5 Fare box w/Two V5 Vaults in Standard Paint Colors	\$	3,789.74
Fare Box	Globe Transfer Cutter	\$	76.37
HVAC			
HVAC	TK System w/X430Compressor	\$	(1,287.56)
HVAC	TK Electric HVAC System	Diesel	\$ 45,074.88
HVAC	TK Electric HVAC System	Hybrid Allison	\$ 4,617.94
HVAC	TK Pressure and Return Gauges Mounted to Unit	\$	489.64
HVAC	MCC Front Stepwell/Threshold Heater W/Brushless Motor (Each)	\$	449.79
HVAC	Suttrak All Electric Air Conditioning - Roof Mount	\$	88,944.31
HVAC	Suttrak All Electric Air Conditioning - Rear Mount	\$	56,631.79
HVAC	ACT Convection Heater	\$	546.35
HVAC	Air Purification System	\$	9,396.43
HVAC	Other Option - Air Purification System (Paradigm FLOW100 12V)	\$	3,559.76
HVAC	Sanuv Air Filtration System	\$	10,654.85
Safety			
Safety	Amerex V-25lb ABC System	Diesel	\$ 5,854.86
Safety	Amerex VH-25lb ABC Cylinder	Diesel	\$ 14,996.85
Safety	Amerex V-30lb ABC Cylinder	CNG	\$ (59.50)

Safety	Amerex Safety Net 2-Zone Fire Detection/Suppression System	\$	4,638.88
Safety	Kiddle - Dual Spectrum	\$	(1,050.77)
Safety	Kiddle TLSE Spectrum	\$	6,297.90
Safety	Fogmaker Fire Suppression System (water mist)	\$	310.38
Safety	Remove Amerex	CNG	(4,270.79)
Safety	Twenty - Four Unit First Aid Kit	\$	91.91
Safety	Ten Unit First Aid Kit	\$	91.91
Safety	Blood Borne Pathogens Kit	\$	45.63
Safety	Bio - Hazard Disposal Kit	\$	45.67
Safety	(3) 20 - Minute Road Flares	\$	65.65
Safety	Wheel Chocks (Per Set)	\$	152.19
Steering			
Steering	TRW Electric Assisted Steering	\$	2,781.12
Steering	Douglas Autotech 'Double-Knuckle' Steering Column (PN 9003148-C)	\$	443.11
Towing & Hoisting			
Towing & Hoisting	Set Towing Adapters/Tow Bar	\$	250.52
Towing & Hoisting	Set of Hoist Adapters (Includes the 4 Following Items)	\$	325.69
Transmission			
Transmission	Voith D854.6	Diesel/CNG	(624.74)
Transmission	ZF 6AP1400B	Diesel/CNG	(624.74)
Transmission	Titan Probalizer OD- 1014	\$	(44.61)
Transmission	Keyed Transmission Lockout Switch on Dash	\$	1,226.31
W/C Restraints			
W/C Restraints	AMSECO - A.R.M.	\$	719.86
W/C Restraints	AMESCO Passive rear-facing restraints (rear facing barriers)	\$	2,066.80
W/C Restraints	Q'Straint - QRT	\$	910.56
W/C Restraints	Q'Straint - ORT 360	\$	1,302.27
W/C Restraints	Q'Straint - Q'UBE 3 - Point Securement Station	\$	1,054.87
W/C Restraints	Q'Straint - Quantum Securement System	\$	32,317.44
W/C Restraints	Q'Straint/Sure-Lok - OMNI Floor Anchor System	\$	156.35
W/C Restraints	Q'Straint Slide N Click floor mount restraint system	\$	910.56
W/C Restraints	Q - Pod W/C Restraint System	\$	6,141.97
W/C Restraints	AMESCO Dual Auto Lock W/C Restraint System	\$	1,037.69
W/C Restraints	Sure LOK - RTT Electric	\$	1,037.69
Wheel Chair Ramp (low-floor only) / Lift (high-floor only) (high-floor only)			
Wheel Chair Ramp (low-floor only) / Lift (high-floor only)	Lift- U Model LU11, 1:6 Ratio, Front Door only	\$	1,124.53
Wheel Chair Ramp (low-floor only) / Lift (high-floor only)	LIFT- U Model LU18, Dual- Mode 1:6 (Street)/1:8 (Sidewalk)	\$	3,123.69
Wheel - Brakes			
Wheel - Brakes	MGM "E-Stroke" Electronic Brake Monitoring System - Disc Brakes	\$	4,053.52
Wheel - Hubometer			
Wheel Hubometer	Veeder Root w/o Tenth's w/o Guard	\$	98.53
Wheel Hubometer	S&A Fleetwatch 392 Electronic	\$	824.64
Wheel Hubometer	E J Ward Data System (Includes Receiver, Display Unit and Antenna)	\$	1,559.05

Wheel Hubometer	Engler (Stemco) Mechanical W/o Tenths W/o Guard	\$	72.36
Wheel Hubometer	Engler Hubometer W/Powder Coat Guard	\$	114.39
Wheel - Tires			
Wheel – Tires	Michelin XZU2 (305/70R/22.5)	\$	5,372.75
Wheel – Tires	Michelin X incity Z (305/70R/22.5)	\$	5,372.75
Wheel – Tires	Goodyear G152 (305/70R/22.5)	\$	5,372.75
Wheels			
Wheels	(7) Aluminum Alcoa - Full Polish	\$	2,265.73
Wheels	(7) Aluminum Alcoa - Full Polish W/Dura Bright Finish	\$	2,682.69
Wheels	(7) Aluminum Alcoa - Machine Finish	\$	1,582.72
Wheels	(7) Aluminum Alcoa - Machine Finish W/Dura Bright Finish	\$	2,042.11
Wheels	Remove Spare Wheel	\$	(1,022.03)
Wheels	Add Dura Flange to Alcoa	\$	5,813.82
Windows			
Windows	Laminated Safety Glass (1/4") - Framed Fixed	\$	272.15
Windows	Hidden Framed Bonded - Fixed	\$	8,121.60
Windows	Hidden Framed Bonded - Transom -openable	\$	6,955.84
Windows	Add Window Guards (Acrylic Liner and Film)	\$	4,429.40
Windows	anti-graffiti 3M film (per inside window)	\$	6,134.93
Windows	All windows equipped with liners attached	\$	3,061.22

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 4, Technical Specifications

Solicitation Requirements:

Attachment G, Section 6: Technical Specifications

New Flyer Response:

Please find the following sections enclosed for your evaluation:

- **4A – Xcelsior® Overview**
- **4B – Xcelsior® CNG Overview**
- **4C – Xcelsior® Clean Diesel Overview**
- **4D – Xcelsior® Battery-Electric Overview**
- **4E – Xcelsior® Fuel-Cell Overview**
- **4F – Xcelsior® Hybrid-Electric (Allison)**
- **4G – Floor Plans**
- **4H – Axle Overview**
- **4I – Driver’s Controls Overview**
- **4J – Wheelchair Ramp Overview**
- **4K – Structure and Corrosion Overview**
- **4L – Exterior and Interior Noise Levels Overview**
- **4M – Technical Deviations**

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4A – Xcelsior® Overview

Solicitation Requirements:

N/A

New Flyer Response:

New Flyer Xcelsior® – Smart mobility solutions

In 2007, New Flyer worked closely with customer focus groups to understand what changes were necessary to take our low-floor bus to the next level. This valuable input led us to the launch of the Xcelsior® in 2010. The Xcelsior® is designed to provide best-in-class features that reduce overall life cycle costs for our customers and improve the passenger and driver experience.



To date, New Flyer has more than **14,000 Xcelsior® buses** delivered or on order.

Broad Range of Vehicle Options

Xcelsior® has the broadest range of vehicle options in the industry. It is currently available in 35’, 40’ and 60’ models, with a full range of available propulsion options.

Vehicle Length			Propulsion					
35'	40'	60'	Diesel	CNG	Hybrid	Trolley-Electric	Battery-Electric	Hydrogen Fuel Cell
•	•	•	•	•	•	•	•	•

In addition to the propulsion options noted above, New Flyer also offers a wide range of available engineered features which allow each transit agency to customize the Xcelsior® to meet their service needs.

Best Overall Reliability

New Flyer buses are often called the “workhorses” of their fleet. During New Product Development, we conduct rigorous testing to assure vehicle performance and reliability. These tests include Altoona structural durability, Bodycote (shaker table), HVAC testing, side and front crashworthiness testing, emergency obstacle avoidance testing, and testing for engine cooling systems, interior and exterior noise testing, and suspension/ride quality testing.

Ongoing product improvements are developed based on feedback received from our customer service team, who continually monitors in service issues as well as MTBR metrics with our customers.

New Flyer Xcelsior® Design Highlights

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Performance

We have successfully reduced the weight on Xcelsior® by 8% compared to previous models, which has delivered an improvement in fuel economy. The Xcelsior® XDE40 (diesel-electric hybrid) achieved the best fuel economy ever recorded at Altoona: 5.88 mpg and delivers up to 8% in fuel savings.

Weight reductions were achieved on the Xcelsior® by optimizing the structure and incorporating lighter weight components such as the single reduction axle and lighter-weight seats wherever possible. The suspension was optimized to reduce weight and a portion of the passenger flooring is composite as standard.

In addition, we have ongoing initiatives internally and with our suppliers to continue to find ways to reduce vehicle weight. We anticipate that Xcelsior® will achieve the following additional life cycle savings due to reduced vehicle weight and improved weight distribution:

- **Longer Tire Life:** Recent studies have shown that a 1% reduction in weight can result in a 2% increase in tire mileage.
- **Longer Brake Life:** We anticipate brake linings on to last longer. Recent studies have documented longer brake material life as a result of weight reduction.

Quieter Ride

New Flyer has provided the industry's quietest heavy-duty transit vehicle, both for passengers (interior noise) and your communities (exterior noise), based on Altoona Test results. We have reduced the noise levels on Xcelsior® through:

- Single-reduction rear axle.
- Roof-mounted air-conditioning.
- Improved insulation in the engine compartment.

New Flyer's engineers, together with experts in acoustic design, spent a lot of time understanding the methods of noise transfer through the vehicle and devised ways to interrupt the noise path for an overall quieter bus.

Automotive Styling

Xcelsior® features that deliver improved styling include:

- The industry's first LED headlight pods.
- Bumpers integrated into the style of the bus.
- Integrated roofline that provides BRT styling without added weight & cost.
- Redesigned drip rails, which are less visible.
- Virtually no visible fasteners.
- True flush windows designed to fit into the fiberglass side panels.

Accessibility

As the company that first introduced low-floor buses to North America, we recognize the importance of ensuring our buses meet the accessibility needs of all passengers. Xcelsior® improves on the original design with the following features:

- Best-in-class step height of 14 inches un-kneeled and 10" kneeled.
- The front door opening was widened by two inches (33.8" clear opening between handles).
- SmartRider™ enables kneeling to variable heights and minimizes the slope difference between a low-floor ramp and the bus floor, achieving a 1:6 slope ratio with a self-leveling feature that can withstand up to 1,000 lbs.

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

- Increased space in entryway to make it easier on passengers.

Passenger Experience

We strive to provide a comfortable and safe trip experience for your passengers. Xcelsior® offers the following improvements over prior models:

- Improved ride quality with improvements to the suspension system and reduced un-sprung weight.
- Roof-mounted HVAC system, for improved efficiency, better weight distribution and ride quality.
- Improved visibility by narrowing the window posts from 12" to 5".
- Improved passenger lighting.
- Increased headroom by 3 inches and head clearance over the interior lights on the upper rear deck.
- Upgraded proprietary stanchion layout (no castings).
- Available glass roof hatches which are 50% larger, allows natural light.
- Increased number of forward-facing seats from 27 to 35.
- Increased overall seating capacity from 39 to 40.
- Incorporated barriers to enhance the safety for seated passengers.

Driver Experience

Engaged and aware drivers are a critical element to providing exceptional and safe transit service to passengers. Xcelsior® is designed to improve the comfort and experience for your drivers, with the following features:

- The overall dash design has been upgraded with a more contemporary, ergonomic design.
- We have introduced the industry's only electronic instrument panel, which is more modern in appearance and functionality and has a three-year warranty standard. The standard LCD display can be programmed for customer specific messages or graphics.
 - Up to 31 illuminated tell tales and up to four LCD screen displays to ensure your drivers are fully aware of the vehicle status at all times.
- The new recessed overhead control panel above the driver's window gives access to the controls and instrumentation and gives the overall area a cleaner appearance.
- The driver's field of view has been improved with smaller window pillars and dash clearance.
- Industry's first LED headlights were introduced for better visibility, which can also accommodate many of today's bike racks with no interference.

Maintenance Access Points

We want to help our customers reduce the amount of time and money spent on maintenance. To do this, we have designed Xcelsior® with features that improve the accessibility to components and systems for regular maintenance, such as:

- Improved access to engine turbocharger and auxiliary heater.
- Separate battery compartment located forward of engine compartment for increased battery life.
- Hinged upper rear service doors for access to EPA 2010 exhaust and air intake components.
- Removable corner pillars.
- Swing-out fan belt guard.

Reduced Maintenance Expense

In addition to our improvements to overall bus reliability, and design of features improving maintenance accessibility for our customers, New Flyer has also incorporated a number of components into the Xcelsior® design which have inherent lower life cycle costs. These features include:

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

- Industry's first LED headlights with best-in-class 6-year warranty; we estimate that these LED headlights will save you approximately \$2400 over 12 years.
- Lower-maintenance all-wheel disc brakes, requiring approximately 50% the labor of drum brakes and less expensive replacement parts.
- Fiberglass exterior panels with optional side impact panels.

Please see the attached [Xcelsior® Family Brochure](#).



xcelstor

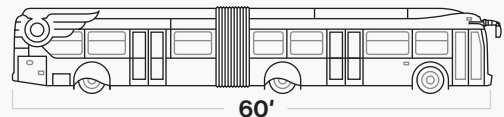
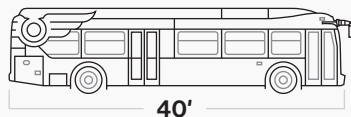
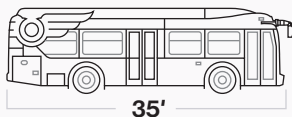
**Battery-Electric | Fuel Cell-Electric | CNG
Hybrid-Electric | Clean Diesel | Trolley-Electric**



Smart mobility solutions.

New Flyer has been leading innovation in mobility for 90 years, and today supports growing North American cities with sustainable buses, technology, and infrastructure.

Available in 3 Lengths



Best-in-class features.

Enhanced Safety & Accessibility. SmartRider™ enables kneeling to variable heights and minimizes the slope difference between a low-floor ramp and the bus floor. SmartRider™ ramp achieves a 1:6 slope ratio with a self-leveling feature.



Passenger Capacity

Industry-leading passenger carrying capacity.

35' Xcelsior®
Seated 32 people
Standees 33 people

40' Xcelsior®
Seated 40 people
Standees 43 people

60' Xcelsior®
Seated 61 people
Standees 62 people



Performance

Weighs 8% less than previous models achieved through structure optimization and lighterweight supplier components, leading to improved efficiency and lower operating costs.

Delivers up to 8% fuel savings, reducing overall cost of ownership.

Lowest noise levels in the industry for Xcelsior CHARGE NG™ battery-electric propulsion.



Low and Zero-Emission Options



Battery-electric buses can save you up to **\$400,000** in fuel costs over its 12-year life.



Hydrogen fuel cell provides **long-range** operations with a fully zero-emission solution.



CNG buses emit **virtually no visible particulate matter** or black soot.



Clean diesel technology reduces particulate emissions by **90%** and NOx emissions by **95%**.



BRT Options

Customize to suit your BRT needs:

- ✓ Street-side exit doors
- ✓ Wider doors
- ✓ Bridge plates or ramps
- ✓ Interior & exterior bike racks
- ✓ Preferred seating layouts
- ✓ Integrated roof line for hybrid and CNG without added weight & cost
- ✓ No visible fasteners
- ✓ Flush windows

Visit newflyer.com/xcelsior to learn more.

Measurements	35'	40'	60'
Length	36' 3" (11.05m) Over bumpers; 35' 5" (10.80m) Over body	41' 0" (12.50m) Over bumpers; 40' 2" (12.24m) Over body	60' 10" (18.54m) Over bumpers; 60' 0" (18.29m) Over body
Width	102" (2.6m)	102" (2.6m)	102" (2.6m)
Roof Height Diesel (XD) Hybrid (XDE) CNG (XN) Electric (XE)	10' 6" (3.2m) over A/C 10' 10" (3.3m) over cooling fans 11' 1" (3.38m) over roof enclosures 11' 1" (3.38m) over charging rails	10' 6" (3.2m) over A/C 10' 10" (3.3m) over cooling fans 11' 1" (3.38m) over roof enclosures 11' 1" (3.38m) over charging rails	10' 6" (3.2m) over A/C 10' 10" (3.3m) over cooling fans 11' 1" (3.38m) over roof enclosures 11' 1" (3.38m) over charging rails
Step Height	14" (356mm)	14" (356mm)	14" (356mm)
Front Step Height (Kneeled)	10" (254mm)	10" (254mm)	10" (254mm)
Interior Height – Floor to Ceiling	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach
Tire Size	305/70R22.5	305/70R22.5	305/70R22.5
Aisle Width	21" to 24" (559mm to 610mm) (varies with seat model)	21" to 24" (559mm to 610mm) (varies with seat model)	22" to 24" (559mm to 610mm) (varies with seat model)
Wheelbase	226.75" (5.8m)	283.75" (7.2m)	229" (5.8m) Front / 293" (7.4m) rear
Propulsion			
Transmission Hybrid	Allison; Voith and ZF options available Allison hybrid drive; BAE HybriDrive®	Allison; Voith and ZF options available Allison hybrid drive; BAE HybriDrive®	Allison; Voith and ZF options available Allison hybrid drive; BAE HybriDrive®
Engine Options Diesel (XD) Hybrid (XDE) CNG (XN) Electric (XE)	Cummins L9 Cummins B6.7 Cummins L9 CNG Siemens electric drive system; Standard or optional high gradeability motor	Cummins L9 Cummins B6.7 Cummins L9 CNG Siemens electric drive system; Standard or optional high gradeability motor	Cummins L9 Cummins L9 Cummins L9 CNG Siemens electric drive system; ZF AVE130 in-wheel motor center drive axle
Passenger Capacity (With wheelchair barrier protection)			
Seats	Up to 32	Up to 40	Up to 61 (with one exit door)
Standees	Up to 35	Up to 44	Up to 62 (with one exit door)
Accessibility			
Doors	2	2	2 or 3 (option for up to 5 doors)
Wheelchair Accessibility	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door
Wheelchair Locations	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available such as bridge plates)
Weight (Approximate weights; *Varies with ESS configuration)			
Curb Weight Diesel (XD) Hybrid (XDE) CNG (XN) Electric (XE)	24,500 lb (11,113 kg) 27,000 lb (12,247 kg) 27,000 lb (12,247 kg) 27,600 lb (12,519 kg)*	27,750 lb (12,587 kg) 29,100 lb (13,200 kg) 29,600 lb (13,426 kg) 28,850 lb (13,086 kg)*	40,765 lb (18,490 kg) 42,100 lb (19,096 kg) 43,300 lb (19,640 kg) 44,700 lb (20,276 kg)*
Approach Angle			
Approach/Departure/Breakover Angles	9°/9°/12°	9°/9°/9°	9°/9°/12° (front) 9° (back)
Turning Radius (Body, with aluminum wheels; *Varies with wheel type)			
Turning Radius	39' (11.9m)*	43.5' (13.3)*	42' (12.8m)*
Main Components			
Floor	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck). Tarabus, Altro, RCA	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck). Tarabus, Altro, RCA	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck). Tarabus, Altro, RCA
Electrical System	Parker Vansco	Parker Vansco	Parker Vansco
Cooling System	Electric cooling fans (EMP, Modine)	Electric cooling fans (EMP, Modine)	Electric cooling fans (EMP, Modine)
Fuel Tank	Polyethylene fuel tanks: 100 gallon (379 L); 125 gallon (473 L); Stainless steel tanks: 100 gallon (379 L) 125 gallon (473 L)	Polyethylene fuel tanks: 100 gallon (379 L); 125 gallon (473 L); Stainless steel tanks: 100 gallon (379 L) 125 gallon (473 L)	Polyethylene fuel tanks: 100 gallon (379 L); 125 gallon (473 L); Stainless steel tanks: 100 gallon (379 L) 125 gallon (473 L)
HVAC Diesel (XD) Hybrid (XDE) CNG (XN) Electric (XE)	Thermo King RLF or RLFEA Series System Thermo King RLF Series System Thermo King TE15 or TEA15 Thermo King TE15	Thermo King RLF or RLFEA Series System Thermo King RLF Series System Thermo King TE15 or TEA15 Thermo King TE15	Thermo King RLF or RLFEA Series System (front & rear) Thermo King RLF or RLFEA Series System (front & rear) Thermo King RLF (front) TE15 (rear) Thermo King RLFE (front) TE15 (rear)
Axles	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; ZF AVN 132 Center disc brake; MAN HY-1350 Rear disc brakes; Single reduction axle

xcelstor[®]

newflyer.com/xcelstor



VIC | VEHICLE INNOVATION CENTER

Learn more about this technology at the Vehicle Innovation Center
newflyer.com/vic

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4B – Xcelsior® CNG Overview

Solicitation Requirements:

N/A

New Flyer Response:

Why Low-Emission CNG Mobility is Needed Now

Deploying zero-emission and low-emission heavy-duty vehicle technology on a scalable basis is critical. Swift action is needed to reduce emissions and restore air quality (as is legally required under the federal Clean Air Act) for approximately 166 million Americans who reside in areas with exceedingly poor air quality.

Zero-emission and low-emission mobility solutions are also needed to combat global climate change and aggressively reduce greenhouse gas (GHG) emissions from heavy-duty vehicles, which are the fastest growing segment of U.S. transportation for energy use and emissions.

Compressed natural gas (CNG) population offers a direct solution to these challenges. Introduced to market in 1994, New Flyer's heavy-duty CNG transit bus can meet the low-emission needs of North American transit agencies today.

Compressed Natural Gas (CNG) Propulsion Evolution

CNG is made by compressing natural gas and is stored and distributed in hard containers. For transit buses, this occurs in cylindrical tanks ("cylinders") normally placed on the roof. Commercial adoption and deployment of CNG propulsion in the U.S. started in the 1980s. CNG offers a 90% nitrogen oxide ("NOx") emissions reduction over conventional diesel-powered vehicles and is commercially available on an immediate basis.

Today, CNG is produced across all applications, with more than 175,000 natural gas vehicles on U.S. roads and 23 million worldwide (all weight classes / vehicle applications). CNG is a safe, sustainable, and reliable bus propulsion technology with:

- Over 20% of all transit buses in the U.S. are now running on compressed natural gas (CNG) or liquidized natural gas (LNG).
- Popularity of natural gas vehicles continues to grow, with 35 U.S. airports mandating natural gas vehicles in private fleets, and over 50% of new refuse trucks running on natural gas.

Beyond direct environmental benefits, CNG lends consistency in operation and design across the transit industry with all bus manufacturers who produce CNG buses in North America doing so using the same CNG tank technology.

CNG Impact

CNG-powered buses reduce NOx emissions by 90% over conventional diesel-powered vehicles and emit virtually no visible particulate matter or black soot at the tailpipe. This means CNG buses directly reduce GHG emissions and smog. CNG buses do not require complex infrastructure or energy needs and can be immediately deployed and scaled – creating a feasible low-emission mobility solution for public transit. This allows transit agencies across North America to immediately drive down GHG emissions and enhance their ability to meet clean transit, zero-emission, smart mobility, climate change, and sustainability goals in an expedient manner.

Why Choose CNG

CNG is available now and can instantly reduce emissions

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

- Commercial CNG technology and supporting infrastructure is available right now.
- With reduction of emissions in mind, transit agencies have turned to CNG as a readily available, safe, and dependable low-emission solution to reduce fleet NOx (nitrogen oxides) emissions by 90% over conventional diesel-powered vehicles.
- CNG buses emit virtually no visible PM or black soot at the tailpipe.

CNG is proven and immediately scalable

- CNG technology is not new. It has been used in North America for over 25 years.
- Unlike battery-electric propulsion, there is no infrastructure gap when evaluating forecasted vehicle use and powering requirements for CNGs.
- Natural gas is used as a motor fuel in approximately 175,000 vehicles in the United States, and 23 million worldwide.

CNG is a safe and reliable technology

- As with all vehicle fuels, natural gas can be used safely if simple, common sense procedures are followed.
 - Safety precautions must be undertaken by transit agencies to safely store and maintain CNG fueled buses, particularly in repair bays and fuel islands.
 - Items such as special lighting, gas detection, and specific training for technicians servicing and fueling CNG buses must be considered.
- Natural gas vehicles have an excellent safety record for two primary reasons:
 - The properties of the fuel itself and the integrity of the natural gas vehicle and its fuel delivery system (i.e., storage containers, fuel lines, valves, and pressure relief devices).
 - CNG cylinders must pass extreme test requirements as detailed in Federal Motor Vehicle Safety Standard (FMVSS) 304 and CSA ANSI NGV2 in the U.S before they can be certified and installed on a vehicle.
- Natural gas has a limited range of flammability: it will not burn in concentrations below about 5% or above about 15% when mixed with air. Gasoline and diesel burn at much lower concentrations and ignite at lower temperatures.
- There is no evidence CNG buses pose any greater risk of fire or explosion than diesel buses. Natural gas buses have on-board gas detectors and other safety equipment specially designed to ensure safe operation.

CNG offers efficient, affordable clean technology

- Dollar-for-dollar, natural gas vehicles deliver the most cost-effective NOx emissions reductions while Natural Gas provides long-term fuel price stability and cost savings (source: NGV America).
- CNG fuel costs less than diesel fuel with savings estimated over 40%, meaning the typical CNG bus could pay for itself in just a little more than 3 years (source: National Renewable Energy Laboratory or "NREL").
- CNG buses are less maintenance-intensive than traditional diesel engine buses.

Why Choose New Flyer

- Direct emission reduction: New Flyer CNG powered buses reduce fleet NOx (nitrogen oxides) emissions by 90% over conventional diesel-powered vehicles.
- Extensive experience: Since 1994, New Flyer has delivered almost 14,000 CNG buses to transit agencies across the United States and Canada. Today, its CNG technology is built on the Xcelsior® transit bus model.
- Unmatched safety: New Flyer continually references and integrates industry-leading safety measures and best practices to its manufacturing process, including recommendations of the Federal Motor

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Carrier Safety Administration (“FMCSA”) and National Fire Protection Association (“NFPA”) 2019 – both of which are considered to be industry standards.

- Proven design and performance: New Flyer has delivered over 15,500 Xcelsior heavy-duty transit bus models, together accumulating over one billion miles of revenue service.
- Commitment to clean, safe, and sustainable transit: Every day, New Flyer buses carry millions of people to their destinations – this is not a responsibility we take lightly. Together with leading transit agencies, we are proud to deliver safe, low-emission mobility solutions to communities across North America.

Emission Standards

- New Flyer CNG buses conform to the EPA and NHTSA comprehensive Heavy-Duty National Program that reduces greenhouse gas emissions and fuel consumption for heavy-duty highway vehicles.
- According to the EPA and NHTSA, vehicles manufactured in model years 2014-2018 reduce CO2 emissions by about 270 million metric tons and save about 530million barrels of oil over the life of vehicles.
- Further details located at <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-phase-1-greenhouse-gas-emissions-standards-and> .

Since 1994, New Flyer has delivered over 13,000 CNG buses throughout North America. New Flyer has successfully deployed CNG buses (in thirty-five foot, forty-foot, and sixty-foot length) to cities in Canada and the U.S., including:

- | | | |
|--------------|-----------------|--------------------|
| • Atlanta | • Los Angeles | • Pasadena |
| • Birmingham | • Miami-Dade | • Phoenix |
| • Boston | • Nassau County | • Portland |
| • Calgary | • New York City | • San Bernardino |
| • Columbus | • Oceanside | • San Diego |
| • Dallas | • Omaha | • Vancouver |
| • Fort Worth | • Orange County | • Washington, D.C. |
| • Las Vegas | • Orlando | • Whistler |

Please see the attached **Xcelsior® CNG brochure** for more information.



xcelstor[®] CNG

Your low-emission mobility solution.



Green transit solutions.

Deploying low and zero-emission technology is a critical part of reducing greenhouse gas (GHG) emissions.

Introduced to market in 1994, New Flyer's heavy-duty compressed natural gas (CNG) transit bus can meet your transit agency's low-emission needs today.

Facts.

CNG lends consistency in operation and design across the transit industry: all bus manufacturers who produce CNG buses in North America do so using the same CNG tank technology.

CNG offers direct solutions to your low-emission challenges.

With clean, safe, and readily available technology, CNG propulsion **emits 90% less nitrogen oxide (NOx) than diesel engines** - and meets particulate matter levels without the need of a filter.

Benefits of Xcelstor[®] CNG.



Breathability

CNG buses emit virtually no visible particulate matter or black soot at the tailpipe, lending cleaner, more breathable air to your community.



Easy Transition

With fewer infrastructure resources than battery-electric buses, CNG buses can be immediately deployed and scaled, helping to transition your fleets to low and zero-emission.



Extended Range

CNG buses provide an extended range of 350 - 400 miles.



Cost-Effective

The price of natural gas remains steady and less expensive than diesel.



Low-Maintenance

CNG buses are easier to maintain than traditional diesel engine buses.

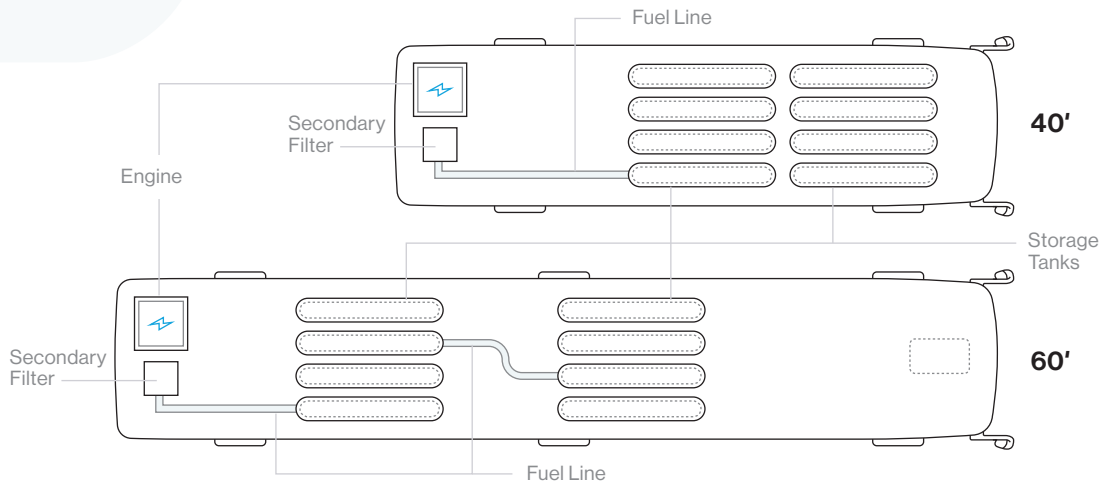


Particulate Filter-Free

CNG eliminates the need for particulate filters and regeneration cycles.

How it works.

CNG is made by compressing natural gas. It is stored in cylindrical tanks placed on the roof and distributed via a main fuel supply line.



A CNG fuel system transfers high-pressure natural gas from the storage tank through the main fuel supply line to a fuel block manifold and filter.

The natural gas pressure level is reduced using a pressure regulator — to be compatible with the engine fuel injection system. Fuel is then introduced into the intake manifold or combustion chamber.

Over 25 years of innovating CNG technology.

New Flyer has delivered nearly 13,000 CNG buses to transit agencies across the United States and Canada. Today, its CNG technology is built on the Xcelsior® transit bus model.

Unmatched Safety

New Flyer continually references and integrates industry-leading safety measures and best practices to its manufacturing process, including recommendations of the Federal Motor Carrier Safety Administration ("FMCSA") and National Fire Protection Association ("NFPA") 2019 – both of which are considered to be industry standards.

Proven Design + Performance

New Flyer has delivered over 15,000 Xcelsior® heavy-duty transit bus models, together accumulating over one billion miles of revenue service.

Commitment to Clean, Safe, Sustainable Transit

Every day, New Flyer buses carry millions of people to their destinations – this is not a responsibility we take lightly. Together with leading transit agencies, we are proud to deliver safe, low-emission mobility solutions to communities across North America.



Why choose a New Flyer CNG bus?

New Flyer has been your CNG leader for more than 25 years and offers unmatched expertise in the design and deployment of low-emission transit buses.

Facts.

New Flyer CNG buses conform to the EPA and NHTSA comprehensive Heavy-Duty National Program that reduces greenhouse gas emissions and fuel consumption for heavy-duty highway vehicles.

	35' <i>XN35</i>	40' <i>XN40</i>	60' <i>XN60</i>
Measurements			
Length	36' 3" (11.05m) Over bumpers; 35' 5" (10.80m) Over body	41' 0" (12.50m) Over bumpers; 40' 2" (12.24m) Over body	60' 10" (18.54m) Over bumpers; 60' 0" (18.29m) Over body
Width	102" (2.6m)	102" (2.6m)	102" (2.6m)
Roof Height	11' 1" (3.3m) Over charging rails	11' 1" (3.3m) Over charging rails	11' 1" (3.3m) Over charging rails
Step Height	14" (356mm)	14" (356mm)	14" (356mm)
Front Step Height (Kneeled)	10" (254mm)	10" (254mm)	10" (254mm)
Interior Height – Floor to Ceiling	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach
Tire Size	305/70R22.5	305/70R22.5	305/70R22.5
Aisle Width	22" to 24" (559mm to 610mm) (varies with seat model)	22" to 24" (559mm to 610mm) (varies with seat model)	22" to 24" (559mm to 610mm) (varies with seat model)
Wheelbase	226.75" (5.8m)	283.75" (7.2m)	229" (5.8m) Front / 293" (7.4m) rear

Propulsion			
Transmission	Allison; Voith and ZF options available	Allison; Voith and ZF options available	Allison; Voith and ZF options available
Engine Options	Cummins L9 CNG	Cummins L9 CNG	Cummins L9 CNG

Passenger Capacity (With wheelchair barrier protection)			
Seats	Up to 32	Up to 40	Up to 61 (with one exit door)
Standees	Up to 33	Up to 43	Up to 62 (with one exit door)

Accessibility			
Doors	2	2	2 or 3 (option for up to 5 doors)
Wheelchair Accessibility	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door
Wheelchair Locations	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available)

Approach Angle			
Approach/Departure/Breakover Angles	9°/9°/12°	9°/9°/9°	9°/9°/12° (front) 9° (back)

Turning Radius (Body, with aluminum wheels; *Varies with wheel type)			
Turning Radius	39' (11.9m)*	44' (13.4m)*	44' (13.4m)*

Main Components			
Floor	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck). Tarabus, Altro, RCA	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck). Tarabus, Altro, RCA	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck). Tarabus, Altro, RCA
Electrical System	Parker Vansco	Parker Vansco	Parker Vansco
Cooling System	Electric cooling fans (EMP, Modine)	Electric cooling fans (EMP, Modine)	Electric cooling fans (EMP, Modine)
Fuel Tank	Type 4 Natural Gas Vehicle Fuel Cylinder: 3300 SCF at 3600 psi service pressure	Type 4 Natural Gas Vehicle Fuel Cylinder: 3300 SCF at 3600 psi service pressure	Type 4 Natural Gas Vehicle Fuel Cylinder: 3300 SCF at 3600 psi service pressure
HVAC	Thermo King TE15 (rear)	Thermo King TE15 (rear)	Thermo King RLFE (front) TE15 (rear)
Axles	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; ZF AVN 132 Center disc brake; MAN HY-1350 Rear disc brakes; Single reduction axle



xcelstor[®] CNG

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Welcome to cleaner, smarter mobility.

VIC | VEHICLE INNOVATION CENTER

Learn more about this technology at the Vehicle Innovation Center
newflyer.com/vic

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4C – Xcelior® Clean Diesel Overview

Solicitation Requirements:

N/A

New Flyer Response:

In 2007, New Flyer worked closely with customer focus groups to understand what changes were necessary to New Flyer clean diesel buses and diesel-electric hybrid buses conform to the EPA and NHTSA comprehensive Heavy-Duty National Program that reduces greenhouse gas emissions and fuel consumption for heavy-duty highway vehicles.

New Flyer embraced regulations more than 20 years ago and developed solutions to meet standards that reduced diesel engine emissions while improving fuel-efficiency. This achieved significant emission reduction, including particulate emissions reduction of 90% and NOx emissions reduction of 95%.

New Flyer's new clean diesel and diesel-electric hybrid buses feature engines that use a four-step process to filter harmful emissions from the exhaust. Specifically, New Flyer transit buses are equipped with the latest engine and after-treatment technology from Cummins Inc. to reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) and other pollutants.

Cost-effective gains can be made by strategically replacing older and larger diesel engines in locations with the greatest potential for air quality gains. Compared to diesel engine technology less than 12 years old, cities updating their heavy-duty transit bus fleets with clean diesel technology have tremendous air quality benefits to their community. This also provides a solid transition to responsibly deploy reliable zero-emission battery-electric and fuel cell buses.

Since 2009, New Flyer has delivered over 4,400 clean-diesel buses throughout North America, with nearly 900 clean-diesel buses currently on order. New Flyer has successfully deployed clean diesel buses (in thirty-five, forty-foot, and sixty-foot lengths) to cities in Canada and the United States, including:

Albuquerque	Minneapolis
Baltimore	New York City
Boston	Oakland
Calgary	Omaha
Cleveland	Portland
Denver	Seattle (Everett)
Honolulu	Vancouver
Houston	Washington, DC

Please see the attached Sales Information Bulletin [SIB 219-002 Exhaust and After Treatment Systems](#) showcasing our exhaust and after treatment system.

Please see the attached [Xcelior® Clean Diesel brochure](#) for more information.

CNG Exhaust System

Product Features

The exhaust system consists of the following components:

- Muffler and Tailpipe Assembly
- Turbo Outlet Exhaust Tube
- Flexible Exhaust Bellows
- Muffler Inlet Exhaust Tube
- Exhaust Blanket

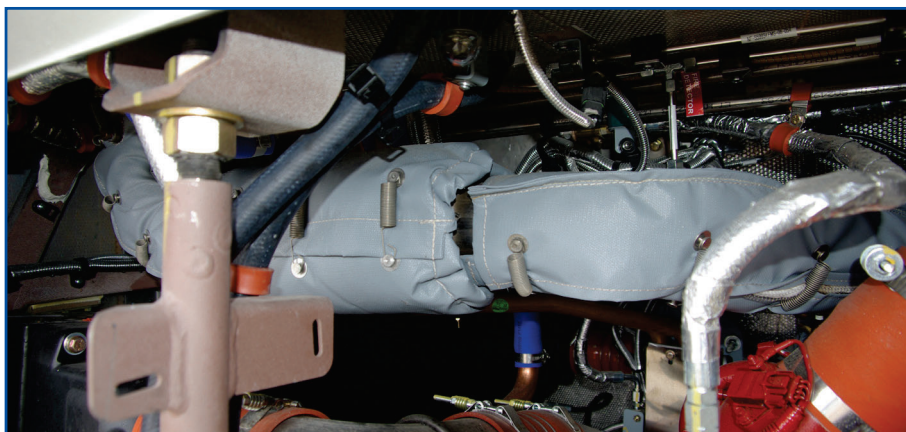
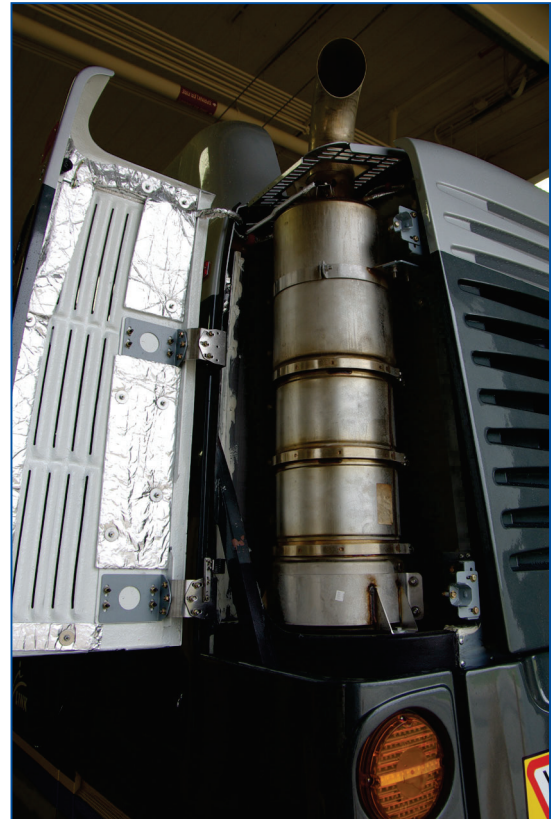
The exhaust system is mounted using isolator mounting brackets, muffler clamps, V-bands, and U-clamps.

The 8.9-liter ISL G has meets EPA 2018 emissions standards using Stoichiometric cooled-Exhaust Gas Recirculation (SEGR) spark-ignited combustion technology to create a high-performance natural gas engine.

Cooled EGR, in combination with stoichiometric combustion (the ideal combustion process in which fuel and oxygen are completely consumed), creates an oxygen-free exhaust, allowing the use of Three-Way Catalyst (TWC) after treatment as the only after treatment necessary.

TWCs are effective, simple, passive devices that are packaged as a muffler and are maintenance free. The ISL G does not require active after treatment such as DPFs or SCR.

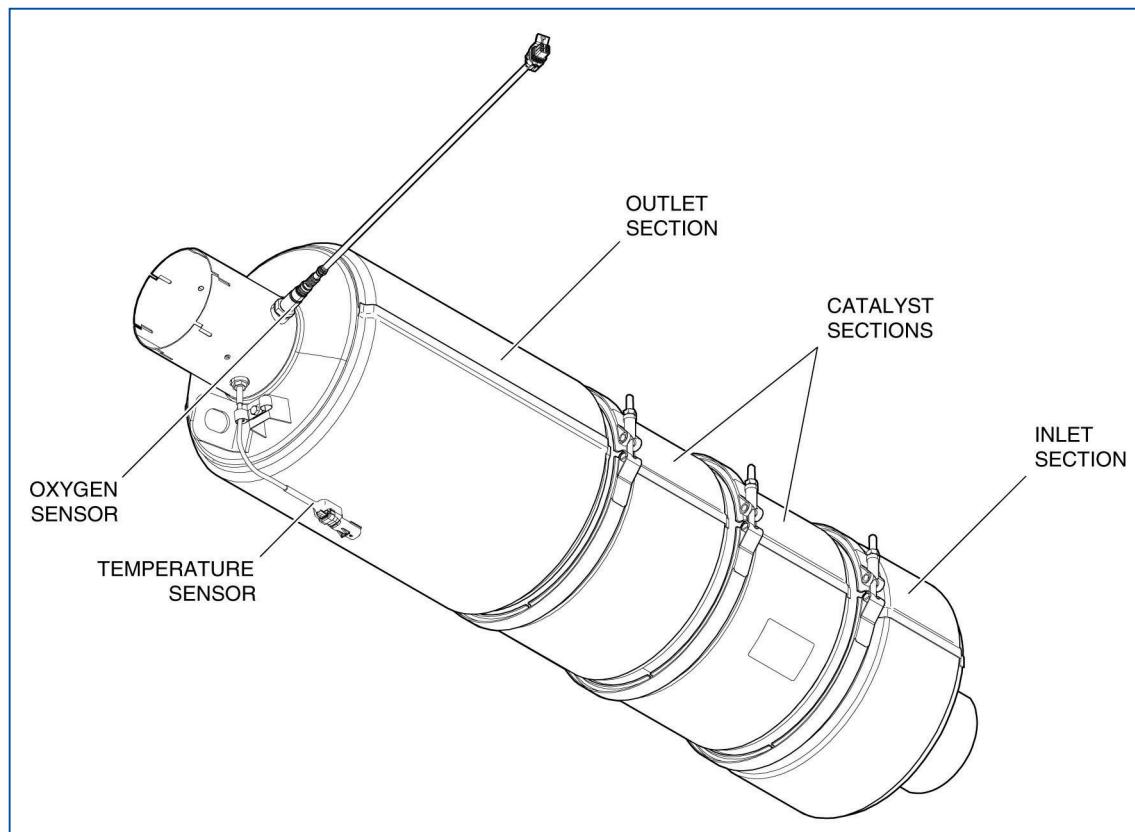
New Flyer has installed this system on thousands of delivered CNG buses since 2007.

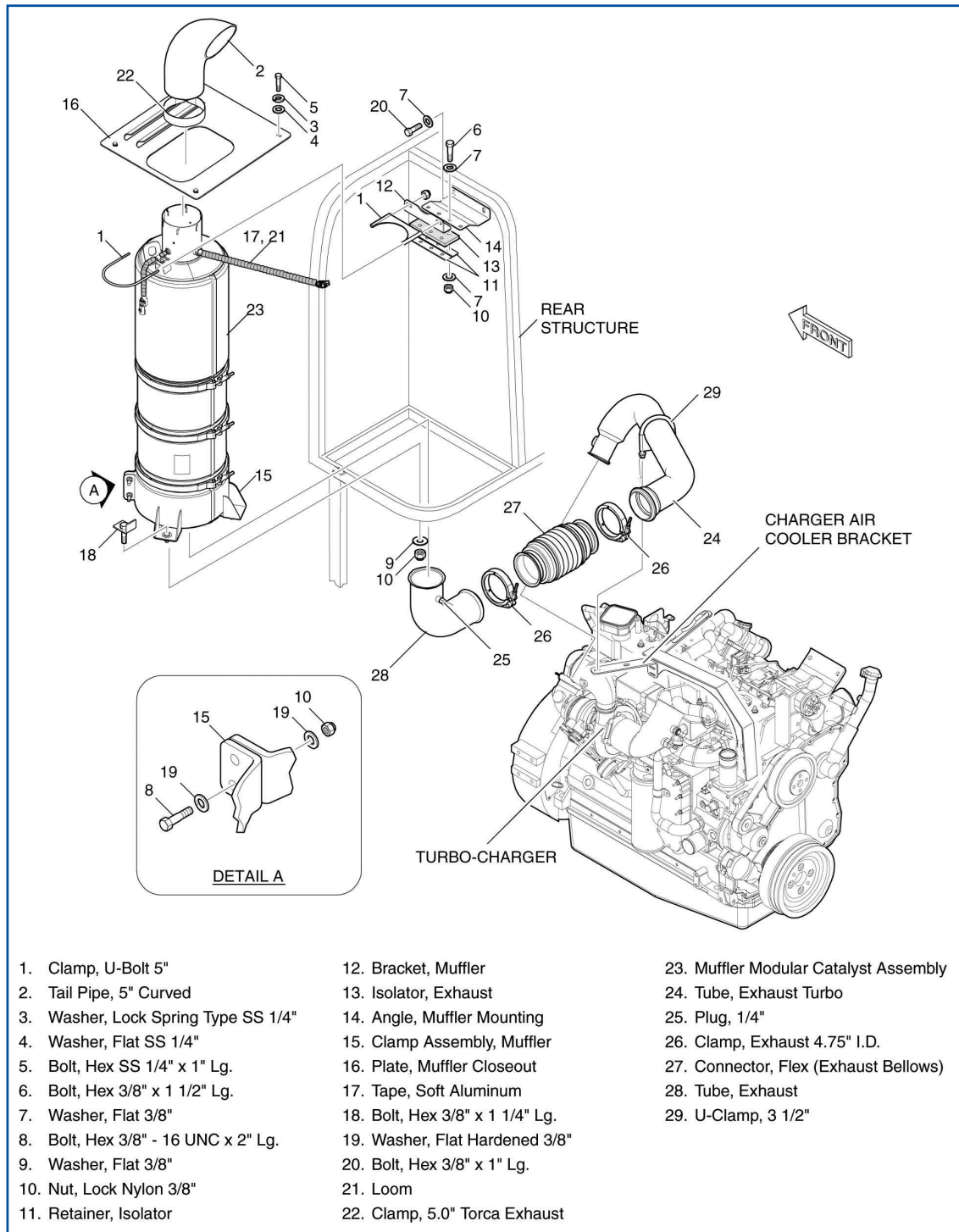


Service and Repair

The exhaust system should be inspected for restrictions and leaks whenever exhaust system components are serviced or replaced. Kinks or crimped piping can result in excessive back-pressure which can cause increased fuel consumption, power loss, and possible engine damage. Exhaust leaks are commonly the result of loose clamps, corroded or punctured exhaust tubes or muffler. Damaged parts should be replaced and loose clamps should be tightened securely.

The muffler consists of four segments: an inlet section, two catalyst sections (TWC) and an outlet section. The muffler also incorporates an oxygen sensor and a temperature sensor located at the muffler outlet. The engine ECM monitors the outputs from sensors. The Cummins supplied Three-Way Catalyst after treatment system is maintenance free.







xcelstor[®] CLEAN DIESEL

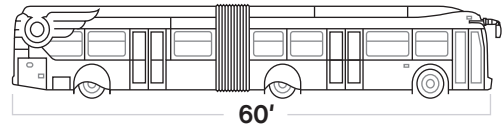
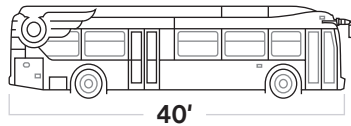
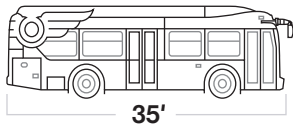
Safe and efficient mobility.



Transitioning fleets to low and zero-emission.

Clean diesel mobility is a responsible alternative that improves air quality and lowers emissions relative to the buses they are replacing during the transition to low and zero-emission.

Available in 3 Lengths



New Flyer has been leading innovation in mobility for 90 years, and today supports growing North American cities with sustainable buses, technology, and infrastructure.

Facts.

New Flyer has successfully deployed over 6,400 clean diesel buses throughout North America since 2010. Today, its clean diesel technology is built on the Xcelstor[®] transit bus model.

Best-in-class features.

Enhanced Safety & Accessibility.

SmartRider™ enables kneeling to variable heights and minimizes the slope difference between a low-floor ramp and the bus floor. SmartRider™ ramp achieves a 1:6 slope ratio with a self-leveling feature.



Passenger Capacity

Industry-leading passenger carrying capacity.

35' Xcelsior®

Seated 32 people
Standees 35 people

40' Xcelsior®

Seated 40 people
Standees 44 people

60' Xcelsior®

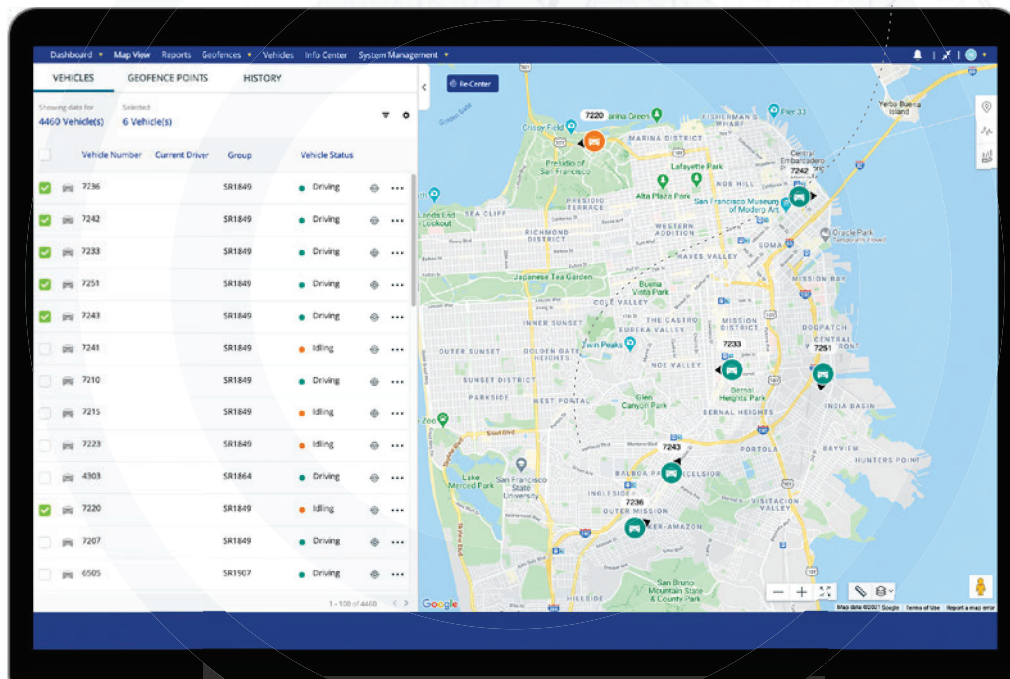
Seated 61 people
Standees 62 people



Performance

Weighs 8% less than previous models achieved through structure optimization and lighterweight supplier components, leading to improved efficiency and lower operating costs.

Delivers up to 8% fuel savings, reducing overall cost of ownership.



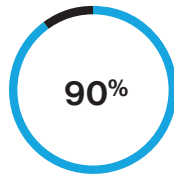
NFI Connect™.

NFI Connect™ is an exclusive and state-of-the-art telematics solution designed to give you greater and smarter oversight of your whole operation, improving bus uptime and lowering costs, without requiring more work.

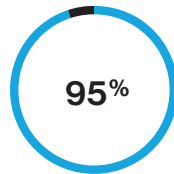
Clean diesel technology.

Proven Technology.

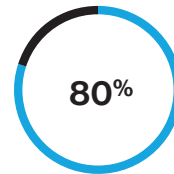
Clean diesel technology evolved around the year 2000 and has made a significant difference in air quality. It combines ultra-low sulfur diesel fuel, advanced engines, and effective emissions controls, resulting in a highly efficient and virtually smoke-free engine that can achieve lower emissions, reduce GHGs, and reduce the cost of bus operation.



Reduction in non-methane hydrocarbon (NMHC) emissions.



Reduction in NOx emissions.



Reduction in particulate matter emissions.

Emission standards.

New Flyer clean diesel buses conform to the EPA and NHTSA comprehensive Heavy-Duty National Program that reduces greenhouse gas emissions and fuel consumption for heavy-duty highway vehicles.

According to the EPA and NHTSA, the final phase 2 greenhouse gas emissions standards (including heavy-duty vehicles produced from 2021-2027) are expected to:



Lower CO2 emissions by approximately 1.1 billion metric tons.



Save vehicle owners fuel costs of about \$170 billion.



Reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.



Measurements

	35' XD35	40' XD40	60' XD60
Length	36' 3" (11.05m) Over bumpers; 35' 5" (10.80m) Over body	41' 0" (12.50m) Over bumpers; 40' 2" (12.24m) Over body	60' 10" (18.54m) Over bumpers; 60' 0" (18.29m) Over body
Width	102" (2.6m)	102" (2.6m)	102" (2.6m)
Roof Height	10' 6" (3.2m) over A/C	10' 6" (3.2m) over A/C	10' 6" (3.2m) over A/C
Step Height	14" (356mm)	14" (356mm)	14" (356mm)
Front Step Height (Kneeled)	10" (254mm)	10" (254mm)	10" (254mm)
Interior Height – Floor to Ceiling	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach
Tire Size	305/70R22.5	305/70R22.5	305/70R22.5
Aisle Width	21" to 24" (559mm to 610mm) (varies with seat model)	21" to 24" (559mm to 610mm) (varies with seat model)	22" to 24" (559mm to 610mm) (varies with seat model)
Wheelbase	226.75" (5.8m)	283.75" (7.2m)	229" (5.8m) Front / 293" (7.4m) rear

Propulsion

Transmission	Allison; Voith and ZF options available	Allison; Voith and ZF options available	Allison; Voith and ZF options available
Engine Options	Cummins L9	Cummins L9	Cummins L9

Passenger Capacity (With wheelchair barrier protection)

Seats	Up to 32	Up to 40	Up to 61 (with one exit door)
Standees	Up to 35	Up to 44	Up to 62 (with one exit door)

Accessibility

Doors	2	2	2 or 3 (option for up to 5 doors)
Wheelchair Accessibility	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door	32" (813mm) wide, 1:6 slope NFIL or SmartRider™ ramp, front door
Wheelchair Locations	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available such as bridge plates)

Approach Angle

Approach/Departure/Breakover Angles	9°/9°/12°	9°/9°/9°	9°/9°/12° (front) 9° (back)
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Turning Radius

(Body, with aluminum wheels; *Varies with wheel type)

Turning Radius	39' (11.9m)*	43.5' (13.3)*	42' (12.8m)*
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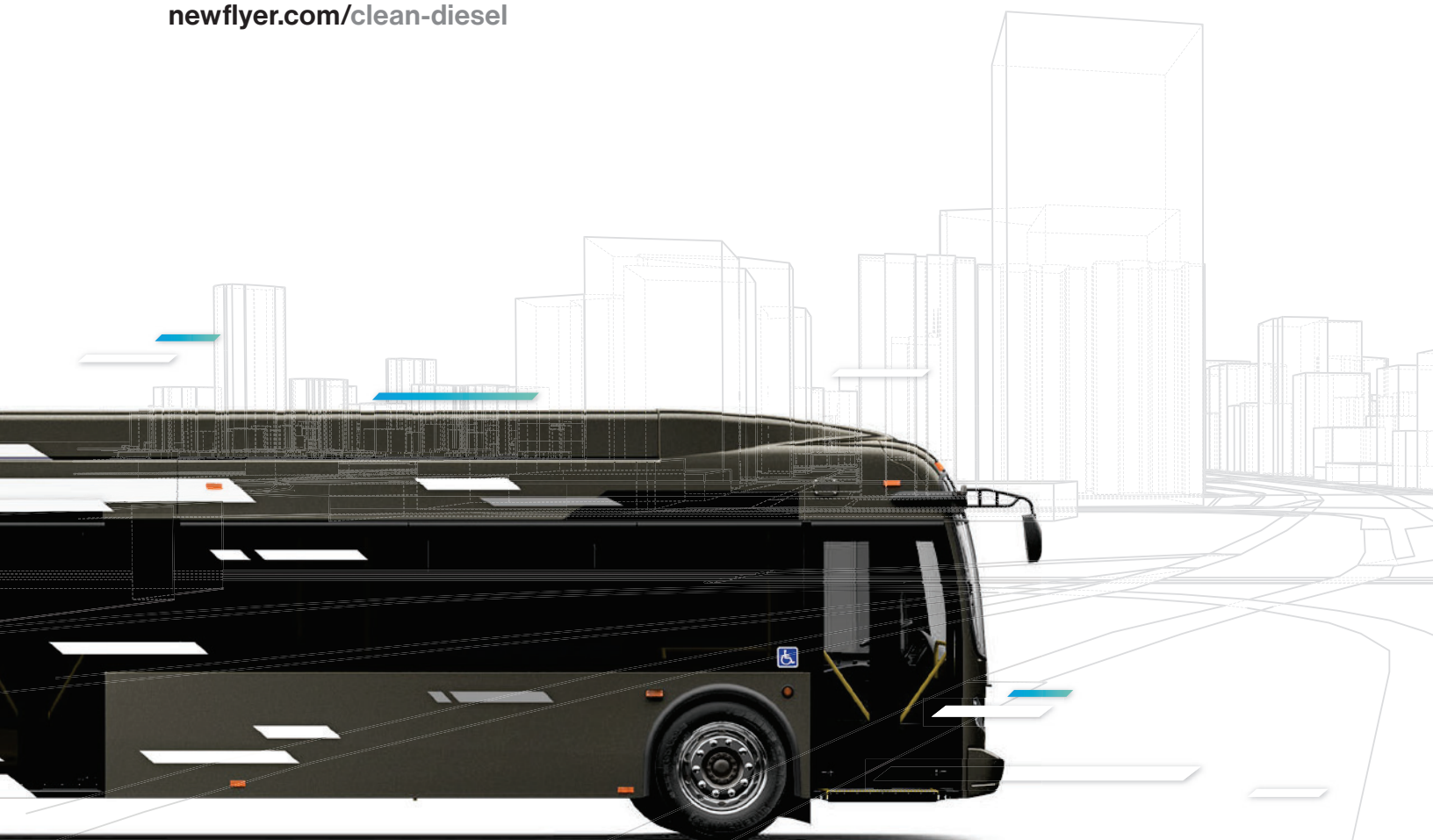
Main Components

Floor	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck), Tarabus, Altro, RCA	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck), Tarabus, Altro, RCA	Composite at rear interior step, ACQ Plywood remainder (dB Ply used on upper deck), Tarabus, Altro, RCA
Electrical System	Parker Vansco	Parker Vansco	Parker Vansco
Cooling System	Electric cooling fans (EMP, Modine)	Electric cooling fans (EMP, Modine)	Electric cooling fans (EMP, Modine)
Fuel Tank	Polyethylene fuel tanks: 100 gallon (379 L); 125 gallon (473 L); Stainless steel tanks: 100 gallon (379 L) 125 gallon (473 L)	Polyethylene fuel tanks: 100 gallon (379 L); 125 gallon (473 L); Stainless steel tanks: 100 gallon (379 L) 125 gallon (473 L)	Polyethylene fuel tanks: 100 gallon (379 L); 125 gallon (473 L); Stainless steel tanks: 100 gallon (379 L) 125 gallon (473 L)
HVAC	Thermo King RLF or RLFEA Series System	Thermo King RLF or RLFEA Series System	Thermo King RLF or RLFEA Series System (front & rear)
Axles	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; ZF AVN 132 Center disc brake; MAN HY-1350 Rear disc brakes; Single reduction axle



xcelstor® *CLEAN DIESEL*

newflyer.com/clean-diesel



VIC | VEHICLE INNOVATION CENTER

Learn more about this technology at the Vehicle Innovation Center
newflyer.com/VIC

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4D – Xcelsior® Battery-Electric Overview

Solicitation Requirements:

N/A

New Flyer Response:

Xcelsior CHARGE NG™ incorporates three distinct technology advancements to deliver a high-performance bus, including next generation high energy batteries that extend range up to 13%, advanced protective battery packaging designed for easy install and simpler serviceability, and a new lightweight electric traction drive system with up to 90% energy recovery.

High energy, long range batteries utilize an active liquid cooling system to maintain temperature and respond quickly to increases in power demand and environmental loads. The batteries are also better insulated, lending optimal temperature maintenance, prolonged battery life, and greater power efficiency. Finally, the Siemens ELFA 3 traction system delivers up to 90% energy recovery and weighs 69% less than ELFA 2, allowing greater passenger capacity and lending more efficient design through compact inverters and embedded drive controllers.

Please see the attached [Xcelsior® CHARGE NG brochure](#) for more information.



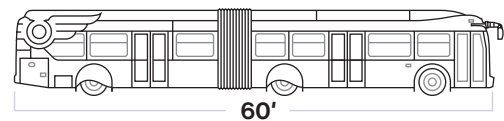
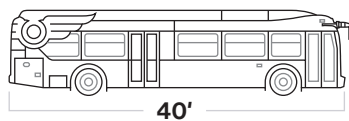
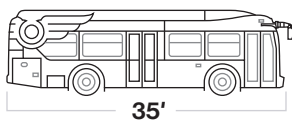
xcelstor *CHARGE NG*[™]

Our next generation, battery-electric,
zero-emission bus.



Xcelstor CHARGE NG[™] is New Flyer's next generation battery-electric, zero-emission bus. It is lighter, simpler, has longer range with better energy recovery and is smart city capable – making it the most advanced electric bus on the market.

Available in 3 Lengths



Three distinct technology advancements to deliver a high-performance bus.



High-Energy Batteries

Next generation high-energy batteries.



Battery Packaging

Advanced protective battery packaging designed for easy installation and streamlined maintenance.

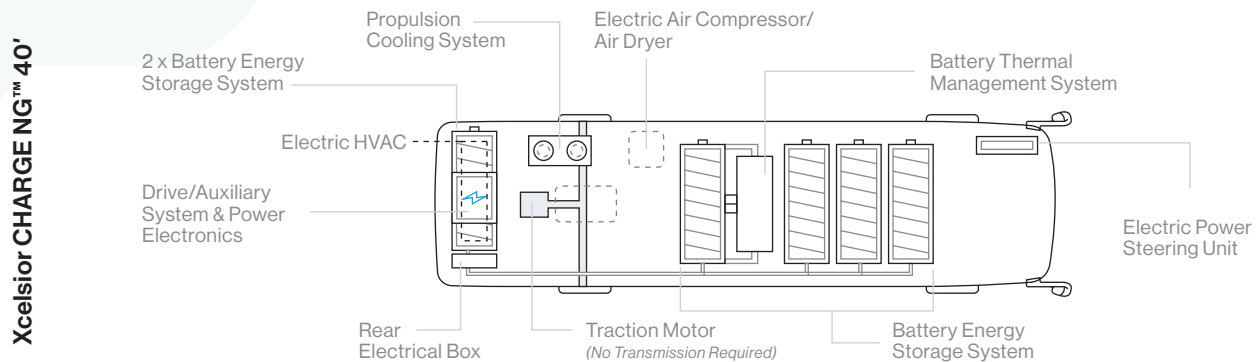


Traction Propulsion System

A new lightweight electric traction propulsion system with up to 90% energy recovery.

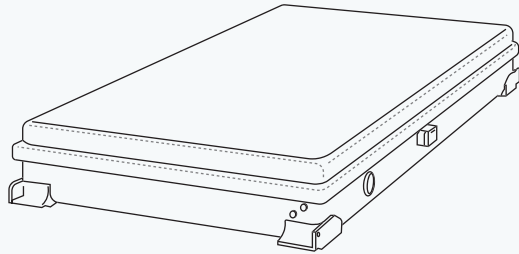
How it works.

The Xcelsior CHARGE NG™ uses an electric motor powered by energy stored in rechargeable batteries.



Technology advancements.

1 More efficient and streamlined battery enclosure.



A standardized waterproof battery enclosure is mounted on the rooftop and in the propulsion compartment using a "plug and play" approach, lending simplicity and efficiency in design, install, maintenance and manufacturing.

Rooftop application uses a modular approach with a simplified mounting system comprised of two rails running the length of the bus.

The same standardized battery enclosure is also mounted in the propulsion compartment on a rack. With this approach, the same battery enclosure can be mounted in any position on the bus.

Simpler

- ✓ One simple and standardized approach for better quality, consistency, and accuracy.
- ✓ If a battery needs to be replaced, the module can be removed and replaced with a new/backup module. The module needing troubleshooting can be serviced in the shop while the bus with the new/backup module onboard returns to service.
- ✓ With every battery having the same enclosure, service manuals are the same for every single bus model and length.
- ✓ Service parts are reduced by 90% going from 250 to less than 50 parts.

Waterproof

- ✓ With an ingress protection rating of IP67, the battery enclosure is 100% waterproof if submerged in water, which greatly reduces the likelihood of water leaking into the battery enclosure.
- ✓ With an ingress protection rating of IP69 for dust, high temperatures, and high-pressure washing, there is 100% protection from intrusion of dust or water particles. This is ideal for demanding operating conditions, and situations where sanitization and rigorous cleaning is undertaken.

More Efficient

- ✓ Modules are better insulated resulting in better management of battery temperature for optimal performance.

Easier to Service

- ✓ The casings are built using a reinforced composite fiber that is non-conductive.
- ✓ Service technicians can simply and safely plug in or unplug the battery module with less exposure to high-voltage electricity.

Lighter

- ✓ The standardized battery enclosure is lighter in weight, increasing the maximum passenger capacity on the bus by 4 additional standees.

2 High-grade Siemens traction system.

ELFA 3 is Siemens' next generation traction system that introduces a more efficient design with compact inverters and embedded drive controllers.

Safer

It's easier and safer to maintain with shorter cable runs and touch-safe high voltage connections.

Smaller

It's smaller and lighter allowing for increased passenger capacity.

More Efficient

- Minimal rack requiring no covers.
- Shorter cable runs offer decreased risk of issues or faults, improved electromagnetic compatibility (EMC) and greater power efficiency.
- Delivers up to 90% energy recuperation.
- Delivers smooth, quiet, emission-free driving (with no engine noise, no idling, and zero local emissions).
- Better torque accuracy.

3 Next generation, high-energy batteries.

The batteries are made of world-class energy storage systems (ESS), engineered for safe, robust, and reliable use in transit.

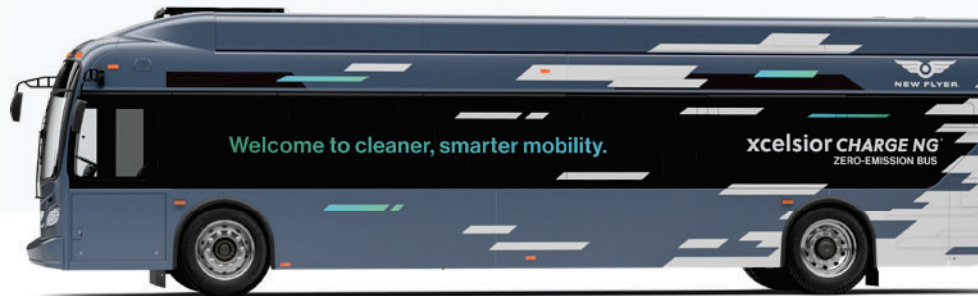
The battery chemistry is Lithium Nickel Manganese Cobalt (NMC), providing the best balance of energy, power, safety, and life.

Extended Range

Range is extended by 13% without compromising quality.

More Energy

- 13% more energy available.
- Greater capture of regenerative energy (during braking at top state of charge).



CONNECT 360™

Connect 360™ is included on every new Xcelsior CHARGE NG™. Learn more at nfigroup.com/connect.



Additional range capability with improved driver performance.



Decision-making information to optimize charging strategies.



Intelligence on how to preserve battery energy throughout the day.



Reduced operating cost and maximum fleet utilization.

Connect 360™, operated by **NFI Connect™**, is a customizable performance dashboard that provides smart analytic reporting to expand insight and intelligence for managing your Xcelsior CHARGE NG™ battery-electric bus.





12-Year comprehensive warranty available on batteries, inverters and electric motors.

Six minutes of rapid recharge time with a 450 kW charger equals 1.5 hours of operation.

Rapid charge configuration fully compliant with OppCharge and charging protocols.

OPRcharge

SAE

Charging.

New Flyer buses are interoperable with charging equipment that supports all heavy-duty electric vehicles. You can customize your Energy Storage Systems (ESS) and charging solutions so you can develop the right ESS and infrastructure solution for your needs.

Xcelsior CHARGE NG™ is interoperable with charging systems available from:

SIEMENS

ABB

-chargepoint+

helioX

On-Route Charging

The on-route rapid charger provides the means for the Xcelsior CHARGE NG™ to stay in service 24 hours daily. To charge, the bus stops underneath the charger and the pantograph makes contact with the charge bars.

Plug-In Charging

Plug-in chargers are available as a supplement or alternative to on-route rapid chargers and can be used for overnight, mid-day and on-route charging. Depot charging for a full charge requires 3.8 hours for a 525 kWh ESS.

The 40' Xcelsior CHARGE has a range of up to 251 miles (525 kWh)* on a single charge, but with on-route charging, range is unlimited.

* Range per FTA Altoona test protocol - HVAC off.

Length	ESS (kWh)	Range (Miles)
35'	350	179
	440	220
40'	350	174
	440	213
	525	251
60'	525	153



Functionality + accessibility.



Kneeling

SmartRider™ enables kneeling to variable heights and minimizes the slope difference between a low-floor ramp and the bus floor.



Self-Leveling

SmartRider™ ramp achieves a 1:6 slope ratio with a self-leveling feature that can withstand up to 1000lbs.



Capacity

Industry-leading passenger carrying capacity with up to 84 total (40 seated and 44 standees).

NFI Infrastructure Solutions™

NFI Infrastructure Solutions™ is a service dedicated to providing safe, reliable, smart and sustainable charging and mobility solutions.

Learn what Infrastructure Solutions can do for you at nfigroup.com/IS

What our Infrastructure Solutions team provides.

Supports mobility projects from start to finish.

Focuses on energy management optimization.

Provides infrastructure planning and development.

Provides cohesive transition of bus fleets to zero-emission electric technology.

	35' XE35	40' XE40	60' XE60
Measurements			
Length	36' 3" (11.05m) Over bumpers; 35' 5" (10.80m) Over body	41' 0" (12.50m) Over bumpers; 40' 2" (12.24m) Over body	60' 10" (18.54m) Over bumpers; 60' 0" (18.29m) Over body
Width	102" (2.6m)	102" (2.6m)	102" (2.6m)
Roof Height	11' 1" (3.3m) Over charging rails	11' 1" (3.3m) Over charging rails	11' 1" (3.3m) Over charging rails
Step Height	14" (356mm)	14" (356mm)	14" (356mm)
Front Step Height (Kneeled)	10" (254mm)	10" (254mm)	10" (254mm)
Interior Height – Floor to Ceiling	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach	79" (2m) Over front and rear axle; 95" (2.4m) Mid-coach
Tire Size	305/70R22.5	305/70R22.5	305/70R22.5
Wheelbase	226.75" (5.8m)	283.75" (7.2m)	229" (5.8m) Front / 293" (7.4m) rear

Propulsion			
Motor	Siemens electric drive system; Standard or optional high gradeability motor	Siemens electric drive system; Standard or optional high gradeability motor	Siemens electric drive system; ZF AVE130 in-wheel motor center drive axle
Rated Power	160 kW	160 kW	320 kW
Rated Torque (*Based on 1:5.67 ratio axle)	1,033 lb-ft	1,033 lb-ft	2,066 lb-ft

Passenger Capacity	*Based on 160 kWh (35'/40') & 213 kWh (60') ESS configurations, with ELFA 2 Siemens Traction System		
Seats	Up to 32*	Up to 40*	Up to 61 (with one exit door)*
Standees	Up to 35*	Up to 44*	Up to 62 (with one exit door)*

Accessibility			
Doors	2	2	2 or 3 (option for up to 5 doors)
Wheelchair Accessibility	32" (813mm) Wide, 1:6 slope; Flip out NFIL ramp, front door	32" (813mm) wide, 1:6 slope; Flip out NFIL ramp, front door	32" (813mm) wide, 1:6 slope; Flip out NFIL ramp, front door
Wheelchair Locations	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available)	2 - Front location, rear location also available (other options available)

Approach Angle			
Approach/Departure/Breakover Angles	9°/9°/12°	9°/9°/9°	9°/9°/12° (front) 9° (back)

Turning Radius (Body, with aluminum wheels; *Varies with wheel type)			
Turning Radius	39' (11.9m)*	43.5' (13.3m)*	42' (12.8m)*

Main Components			
Floor	Marine grade plywood floor; Optional composite floor; Composite rear interior step; Tarabus, Altro, RCA floor covering	Marine grade plywood floor; Optional composite floor; Composite rear interior step; Tarabus, Altro, RCA floor covering	Marine grade plywood floor; Optional composite floor; Composite rear interior step; Tarabus, Altro, RCA floor covering
Electrical System	Parker Vansco	Parker Vansco	Parker Vansco
Propulsion Cooling System	Electric cooling fans	Electric cooling fans	Electric cooling fans
HVAC	Thermo King TE15 (rear)	Thermo King TE15 (rear)	Thermo King RLFE (front) TE15 (rear)
Axles	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; MAN HY-1350 Rear disc brakes; Single reduction axle	MAN VOK 07 Front disc brakes; ZF AVN 132 Center disc brake; MAN HY-1350 Rear disc brakes; Single reduction axle

Energy Storage System			
Long Range (Rapid charging available)	350 kWh, 440 kWh	350 kWh, 440 kWh, 525 kWh	525 kWh



xcelstor *CHARGE NG*[™]

newflyer.com/NG



VIC | VEHICLE INNOVATION CENTER

Learn more about this technology at the Vehicle Innovation Center
newflyer.com/VIC

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4E – Xcelsior® Fuel-Cell Overview

Solicitation Requirements:

N/A

New Flyer Response:

The Xcelsior CHARGE FC™ uses environmentally friendly hydrogen and fuel-cell technology to create electricity and to charge batteries for zero-emission extended-range, saving 85-175 tons of greenhouse gas per year from tailpipe emissions compared to a traditional diesel bus. With a range of over 370 miles, the bus can be refueled in 6-20 minutes depending on the model and operating conditions and requires no overnight plug-in electrical re-charging. The only tailpipe output is clean water vapor.

Xcelsior CHARGE FC™ incorporates four distinct technology advancements to deliver a robust, long-range, high-performance hydrogen fuel cell-electric bus, including a lighter, simpler, and more efficient heavy-duty fuel cell power module that is easier to service; recyclable, high-power batteries delivering a longer range of over 370 of miles of highway driving without refueling; a redesigned waterproof (IP 67 and IP 69 rated) battery enclosure providing improved serviceability; and a high-grade, electric drive traction system with up to 90% energy recovery.

The new FCmove™-HD+ fuel cell power module from Ballard Power Systems introduces a more compact and robust design with lifecycle cost reductions achieved through lower maintenance requirements, higher reliability, and fewer parts. The integrated design houses all subcomponents in a single enclosure; it is smaller, lighter, and uses 50% fewer parts, making it easier to service and maintain. It offers over 97% fuel cell power availability while in service, and a wider operating range across a variety of climates.

High-power, rapid-charge batteries utilize an active liquid cooling system to maintain consistent temperatures and respond quickly to increases in power demand and environmental loads. The batteries are more efficient in demanding applications, offer 40% more energy, and deliver 44% more range at highway speeds without compromising quality. The batteries are also appropriate for Li-Cycle's closed-loop lithium-ion battery recycling program that facilitates full-circle sustainable mobility and material recapture through recovery of critical materials from lithium-ion batteries and reintroducing them into the supply chain.

The Siemens ELFA™ 3 traction system delivers up to 90% energy recovery through regenerative braking and weighs 69% less than ELFA™ 2, delivering a more efficient design through compact inverters and embedded drive controllers.

Please see the attached [Xcelsior® CHARGE FC brochure](#) for more information.



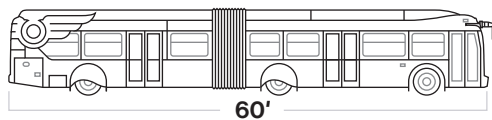
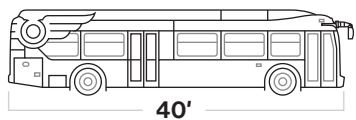
xcelstor CHARGE FC™

Our next generation, fuel cell-electric, zero-emission transit bus.



Xcelstor CHARGE FC™ delivers longer range, better energy recovery and is smart city capable – making it the most advanced hydrogen fuel cell-electric bus in North America.

Available in 2 Lengths



Four distinct technology advancements to deliver a high-performance bus.



High-Power Batteries

The newest high-power, rapid-charge batteries.



Battery Packaging

Advanced protective battery packaging designed for easy installation and streamlined maintenance.



Fuel Cell Power Module

A new high-performing fuel cell power module that is simpler, more robust, and has a lower lifecycle cost.



Traction Propulsion System

A new lightweight electric traction propulsion system with up to 90% energy recovery.

Technology advancements.

1 Fuel cell power module.

FCmove™-HD+ is Ballard Power Systems' next generation heavy-duty fuel cell power module for zero-emission vehicle applications that introduces a more compact and robust design with substantial lifecycle cost reductions.

Reduced lifecycle cost is achieved through lower maintenance requirements, higher reliability, and fewer parts.

Simplified System Integration

- ✓ All subsystems are integrated into one enclosure.
- ✓ Easier to service and takes up less space on the bus.

Increased Reliability

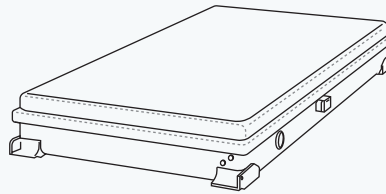
- ✓ Delivers >97% fuel cell power availability while in service.
- ✓ More robust components.
- ✓ With an IP69K rating, the module is 100% protected from intrusion of dust and water particles.

More Efficient

- ✓ Wide operating range across temperatures of -30°C (-22°F) to +50°C (122°F).
- ✓ Freeze start to -25°C (-13°F) without external energy or use of special start procedures.

2 Battery packaging.

A standardized waterproof battery enclosure is mounted on the rooftop using a "plug and play" approach, lending simplicity and efficiency in design, install, maintenance and manufacturing.



Rooftop application uses a modular approach with a simplified mounting system comprised of two rails running the length of the bus.

Simpler

- ✓ One simple and standardized approach for better quality, consistency, and accuracy.
- ✓ If a battery needs to be replaced, the module can be removed and replaced with a new/backup module. The module needing troubleshooting can be serviced in the shop while the bus with the new/backup module onboard returns to service.
- ✓ With every battery having the same enclosure, service manuals are the same for every single bus model and length.
- ✓ Service parts are reduced by 90% going from 250 to less than 50 parts.

Waterproof

- ✓ With an ingress protection rating of IP67, the battery enclosure is 100% waterproof if submerged in water, which greatly reduces the likelihood of water leaking into the battery enclosure.
- ✓ With an ingress protection rating of IP69K for dust, high temperatures, and high-pressure washing, there is 100% protection from intrusion of dust or water particles. This is ideal for demanding operating conditions, and situations where sanitization and rigorous cleaning is undertaken.

More Efficient

- ✓ Modules are better insulated resulting in better management of battery temperature for optimal performance.

Easier to Service

- ✓ The casings are built using a reinforced composite fiber that is non-conductive.
- ✓ Service technicians can simply and safely plug in or unplug the battery module with less exposure to high-voltage electricity.

Lighter

- ✓ The standardized battery enclosure is lighter in weight.

3 The newest high-power batteries.

The batteries are made of world-class energy storage systems (ESS), engineered for safe, robust, and reliable use in transit.

The battery chemistry is Lithium Nickel Manganese Cobalt (NMC), providing the best balance of energy, power, safety, and life.

More Energy

- ✓ 40% more energy available
- ✓ Greater capture of regenerative energy (during braking at top state of charge).

Extended Range

Range at highway speeds is extended by 44% without compromising quality.

More Efficient

Better controlled and more consistent cell temperature in high-demand applications.

4 High-grade Siemens traction system.

ELFA 3 is Siemens' next generation traction system that introduces a more efficient design with compact inverters and embedded drive controllers.

Safer

Easier and safer to maintain with shorter cable runs and touch-safe high voltage connections.

Smaller

Smaller and lighter, taking up less space on the bus.

More Efficient

- ✓ Minimal rack requiring no covers.
- ✓ Shorter cable runs offer decreased risk of issues or faults, improved electromagnetic compatibility (EMC) and greater power efficiency.
- ✓ Delivers up to 90% energy recuperation.
- ✓ Delivers smooth, quiet, emission-free driving (with no engine noise, no idling, and zero local emissions).
- ✓ Better torque accuracy.

Extended range with zero emissions.

New Flyer fuel cell technology is a unique and innovative way to obtain extended-range operation similar to existing transit vehicles using a fully zero-emission solution.



Robust Design

Built on the proven Xcelsior® platform, the Xcelsior CHARGE FC™ utilizes the same robust electric propulsion system as the Xcelsior CHARGE NG™ battery-electric bus, featuring industry-proven Siemens and ZF components.



Eco Friendly

Hydrogen is clean, abundant, and can be reformed into hydrogen from natural gas (methane) or created from renewable sources such as wind or solar energy through electrolysis.

The Xcelsior CHARGE FC™ will save 85-135 tons of greenhouse gases per year from tailpipe emissions compared to a diesel bus.



Extended Range

The Xcelsior CHARGE FC™ can travel 370+ miles on a single refueling and requires no off-board electric recharging.



Zero Emissions



Clean

The only output from the tailpipe is water vapor.



370+ miles

How it works.

Xcelsior CHARGE FC™ is an electric vehicle that uses compressed hydrogen as an energy source.



Integration with Battery-Electric Technology



Smart Refueling

BALLARD™

Powered by Ballard Fuel Cells

What is a fuel cell? It is a device that converts chemical energy into electric energy.

A series of chemical reactions splits hydrogen into protons and a current of electrons and then combines them with oxygen, which produces water. The flow of electrons is the electric current. The electric current is used to power the batteries and ultimately power the bus.

Fueling

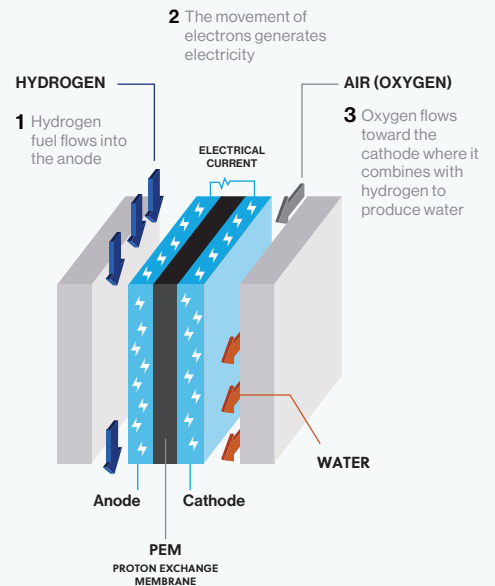
40-foot: 6 - 10 min

60-foot: 12 - 20 min

**depending on operating conditions*

Equipped with either or both TN1 or TN5 fill receptacles or a multi-fill port configuration. Receptacles can also be equipped with IR transmitters or hardwired communication ports to support fast filling at smart fill stations.

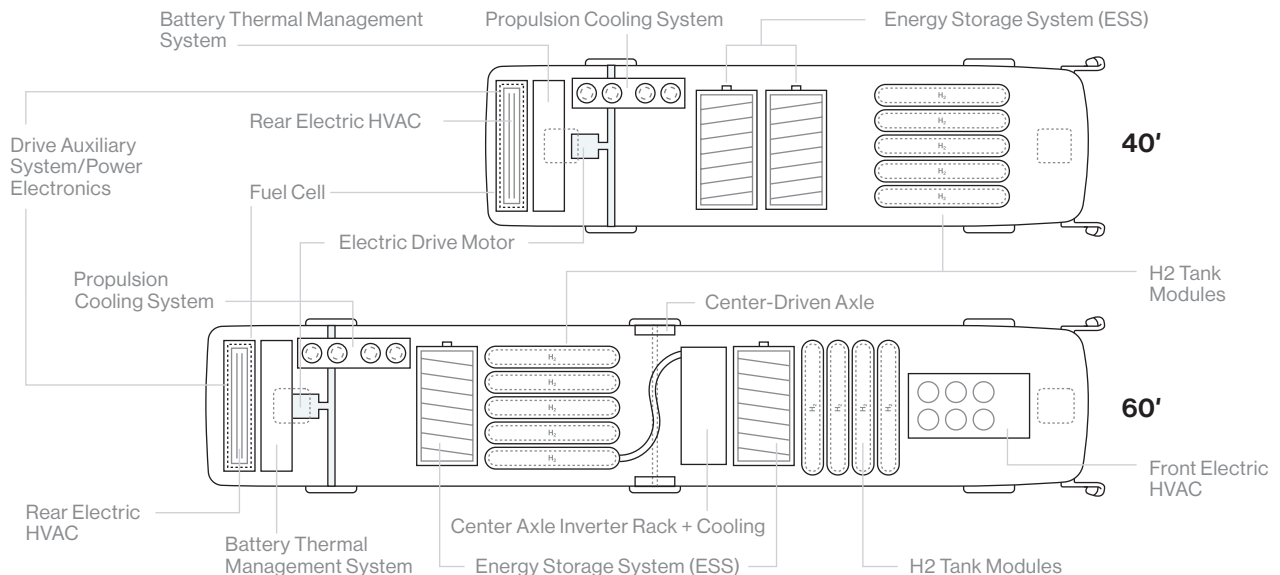
Lightweight Type 4 HGV2 tanks with 95% usable capacity.



Technology

Fuel cell-electric buses combine the best of battery electric bus technology with an on-board power generator (fuel cell).

Fuel cell-electric buses use a battery-dominant hybrid architecture, where the batteries are large enough to handle all vehicle performance needs while the fuel cell acts like a continuous battery charger to extend the range of the vehicle.



Functionality + accessibility.



Kneeling

SmartRider™ enables kneeling to variable heights and minimizes the slope difference between a low-floor ramp and the bus floor.



Self-Leveling

SmartRider™ ramp achieves a 1:6 slope ratio with a self-leveling feature that can withstand up to 1000lbs.



Capacity

Industry-leading passenger carrying capacity with up to 82 total (40 seated and 42 standees).



CONNECT 360™

Connect 360™, operated by NFI Connect™, is a customizable performance dashboard that provides smart analytic reporting to expand insight and intelligence for managing your Xcelsior CHARGE FC™ fuel cell-electric bus.

Connect 360™ is included on every new Xcelsior CHARGE FC™. Learn more at nfigroup.com/connect



Additional range capability with improved driver performance.



Intelligence on how to preserve battery energy throughout the day.



Decision-making information to optimize charging strategies.



Reduced operating cost and maximum fleet utilization.



NFI Infrastructure Solutions™

NFI Infrastructure Solutions™ is a service dedicated to providing safe, reliable, smart and sustainable charging and mobility solutions.

Learn what Infrastructure Solutions can do for you at nfigroup.com/IS

What our Infrastructure Solutions team provides.

Supports mobility projects from start to finish.

Focuses on energy management optimization.

Provides infrastructure planning and development.

Provides cohesive transition of bus fleets to zero-emission electric technology.

	40' XHE40	60' XHE60
Measurements		
Length	41' 0" (12.50m) over bumpers 40' 2" (12.24m) over body	60' 10" (18.54m) over bumpers 60' 0" (18.29m) over body
Width	102" (2.6m)	102" (2.6m)
Roof Height	11' 1" (3.3m)	11' 1" (3.3m)
Step Height	14" (356mm)	14" (356mm)
Front Step Height (Kneeled)	10" (254mm)	10" (254mm)
Interior Height – Floor to Ceiling	79" (2m) over front and rear axle; 95" (2.4m) mid-coach	79" (2m) over front and rear axle; 95" (2.4m) mid-coach
Tire Size	305/70R22.5	305/70R22.5
Wheelbase	283.75" (7.2m)	229" (5.8m) front / 293" (7.4m) rear

Propulsion		
Motor	Siemens Electric Drive System Optional High Gradeability Motor	Siemens Electric Drive System ZF AVE130 In-Wheel Motor Center Drive Axle Optional High Gradeability Motor
Rated Power	160 kW	320 kW
Rated Torque (*Based on 1:5.67 ratio axle)	1,033 lb-ft	2,066 lb-ft

Passenger Capacity (*Based on 150kWh ESS configuration)		
Seats	Up to 40*	Up to 52 (with one exit door)*
Standees	Up to 42*	Up to 73 (with one exit door)*

Accessibility		
Doors	2	2 or 3 (option for up to 5 doors)
Wheelchair Accessibility	32" (813mm) wide, 1:6 slope Flip out NFIL ramp, front door	32" (813mm) wide, 1:6 slope Flip out NFIL ramp, front door
Wheelchair Locations	2 - front location, rear location also available (other options available)	2 - front location, rear location also available (other options available)

Approach Angle		
Approach/Departure/Breakover Angles	9°/9°/9°	9°/9°/12° (front) 9° (back)

Turning Radius (Body, with aluminum wheels; *varies with wheel type)		
Turning Radius	43.5' (13.3)*	42' (12.8m)*

Main Components		
Floor	Marine Grade Plywood Floor Optional Composite Floor Composite Rear Interior Step Tarabus, Altro, RCA Floor Covering	Marine Grade Plywood Floor Optional Composite Floor Composite Rear Interior Step Tarabus, Altro, RCA Floor Covering
Electrical System	Parker Vansco	Parker Vansco
Cooling System	Electric cooling fans	Electric cooling fans
HVAC	Thermo King TE15 (rear)	Thermo King RLFE (front) TE15 (rear)
Axles	MAN VOK 07 front disc brakes MAN HY-1350 rear disc brakes, single reduction axle	MAN VOK 07 front disc brakes, ZF AVN 132 center disc brake MAN HY-1350 rear disc brakes, single reduction axle

Energy Storage System		
Fuel Cell	Ballard Power Systems FCmove™-HD+	Ballard Power Systems FCmove™-HD+
Equivalent Battery Energy	734 kWh base configuration	Up to 1030 kWh
Hydrogen Storage Capacity	37.5 kg (base)	56 kg
Net Power	100 kW	100 kW



xcelstor *CHARGE FC*[™]

newflyer.com/FC



VIC | VEHICLE INNOVATION CENTER

Learn more about this technology at the Vehicle Innovation Center
newflyer.com/vic

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4F – Xcelsior® Hybrid-Electric (Allison)

Solicitation Requirements:

N/A

New Flyer Response:

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4G – Floor Plans

Solicitation Requirements:

Bidders shall submit a base floor plan (for each make/model and length/size) and technical data for each vehicle offered...

New Flyer Response:

Please find **Floor Plans** for each model proposed, enclosed for your evaluation.

- **DWG 467165: 35-foot**
- **DWG 435744: 40-foot**
- **DWG 596238: 60-foot**

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4H – Axle Overview

Solicitation Requirements:

N/A

New Flyer Response:

Front Axle and Suspension

Product Features

The front suspension system consists of the front axle with disc brakes and its brake components: air springs (bellows), height control valves, radius arm assembly, shock absorbers, axle stops and mechanical brake components. The front axle can be fitted with an anti-lock brake system (ABS). This suspension design also consists of a steering damper located in the curb-side wheel-well. Wheel parts are swivel-mounted on kingpins.

Please see the attached Sales Information Bulletin [SIB 203-002 Front Axle and Suspension](#) for the proposed buses.

Rear Axle and Suspension

Product Features

The rear axle with disc brakes and suspension installation, consists of a M.A.N. HY-1350-F axle and a rear suspension assembly. The air springs and shock absorbers are mounted to structural supports in support brackets in the vehicle structure. Two lower radius rods are bolted to the main beam of the suspension unit and to mounting blocks in the vehicle structure. Two upper radius rods connect the axle housing to mounting blocks in the vehicle structure. The brake chambers are mounted directly to the disc brake caliper.

Please see the attached Sales Information Bulletin [SIB-204-002 Rear Axle and Suspension](#) for the proposed buses.

Center Axle

Product Features

The center axle with disc brakes and suspension installation consists of a ZF AVN 132 axle. The special design of the drop-center axle makes it possible to lower the floor level of the bus at the center axle to only 405 mm. Passengers benefit from the more comfortable entrance and exit facilities.

Please see the attached Sales Information Bulletin [SIB-204-003 Center Axle](#) for the proposed buses.

Front Axle and Suspension

Product Features

The front suspension system consists of the front axle with disc brakes and its brake components: air springs (bellows), height control valves, radius arm assembly, shock absorbers, axle stops and mechanical brake components. Front axle can be fitted with an anti-lock brake system (ABS). This suspension design also consists of a steering damper located in the curb-side wheel-well. Wheel parts are swivel-mounted on king-pins.

Benefits

- An estimated cost savings of \$1,225 over 12 years for all disc brakes (front and rear) compared to drum brakes
- Less brake noise
- Brakes run cooler
- Larger suspension travel (4" jounce – 4" rebound) to allow for better suspension travel and a smoother ride for customers
- Drop axle allows for lower kneeling and better ramp slope

Operations

Knorr Brakes

Brakes contain internal automatic adjustments.

Ride Height

Suspension travel consists of 4" jounce and 4" rebound. Ride height for the front suspension is measured between the axle beam and the rubber stop mounted to the frame of the vehicle.

Height Control Valve

The height of the air springs is controlled by height control valves on both front and rear axles. One height control valve on the front axle retains the height of the body in relation to the axle under all loading conditions. The valve has three ports (one for air supply, one for air springs and one for exhaust) and a control arm. A two degree "center dead zone" allows for minor bounces in the suspension without modifying the ride height. Barksdale Leveling Valves are standard.

Axle Specifications

Manufacturer	M.A.N.
Model Number	VOK-07F
Type	Cast iron dropped beam with hollow center sections, steered, non-driven
Lubrication	M.A.N. utilizes non-serviceable maintenance-free wheel bearings
Gross axle weight rating	15,873 lbs



Radius Arm Assemblies

The front axle is positioned at the front by four rubber bushed radius arm assemblies, which are also the reaction members of the driving, braking and cornering forces from the road to the bus understructure. The radius rods have been specially designed for reduced axle noise.

Shock Absorbers

The two KONI front shock absorbers are a double-acting, telescoping type and consist of a piston assembly, a piston rod, a compression head assembly, an inner cylinder, an intermediate cylinder, a dust tube, and a rod seal.

Axle Stops

Elastomeric axle stops are provided between the axle and frame on each side of the axles to prevent axle and/or frame damage in severe bounce conditions and to allow emergency operation of the vehicle if one or more air bellows are deflated. Front axle stops are incorporated internally in the front air spring/bellows.

Rear Axle and Suspension

Product Features

The rear axle with disc brakes and suspension installation consists of a M.A.N. HY-1350-F axle and a rear suspension assembly. The air springs and shock absorbers are mounted to structural supports in support brackets in the vehicle structure. Two lower radius rods are bolted to the main beam of the suspension unit and to mounting blocks in the vehicle structure. Two upper radius rods connect the axle housing to mounting blocks in the vehicle structure. The brake chambers are mounted directly to the disc brake caliper.

Benefits

- An estimated cost savings of \$1,225 over 12 years for all disc brakes (front and rear) compared to drum brakes
- Less brake noise
- Brakes run cooler
- Noise reduction due to hypoid-gearing single-reduction rear axle
- Air bags moved outboard to offer better ride quality and less body roll

Operations

Rear Axle

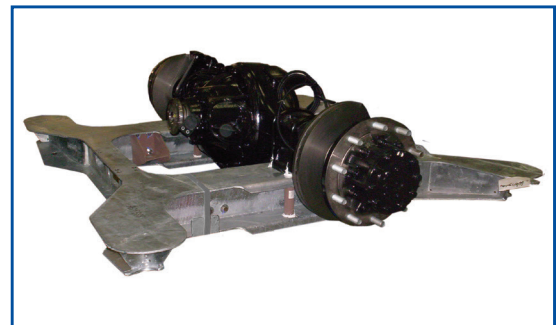
This rigid, driven, non-steerable axle is made of high-quality spherical center castings, utilizing a single-stage power reduction gear train. Power is transferred through a differential/ hypoid gear set-up. The power flows from the transmission through the driveshaft to the pinion gear set and differential carrier.

Power is then transmitted along the left and right axle shafts to the corresponding wheel ends, which consists of unitized wheel bearings/hubs.

The wheels and tires represent the final stage of power transfer to the road surface.

Axle Specifications

Maximum Axle Load	28,660 lbs
Input Torque	7080.59 lbs-ft
Overall width without tires	83.58 inches
Width across hubs	73.27 inches
Spring Track	37.52 inches
Flange to axle centerline, horizontal	2.76 inches 70 mm
Qty. of wheel studs / hole circle diameter	10/335 mm
Weight without wheel, with oil	1556 lbs



Rear Suspension

The rear suspension assembly consists of a one-piece galvanized steel suspension beam assembly. The assembly incorporates four mounting pads for the air springs, mount supports for the four shock absorbers, two lower radius rods and the rear axle.

Air Springs (Bellows)

The air springs act as the vertical flexible connection between the axles and body to minimize road shocks. Four rolling lobe-type bellows are standard for the rear suspension. The bellows are mounted to a suspension frame which is bolted to the rear axle.

Height Control Valve

The height of the air springs is controlled by height-control valves on both front and rear axles. Two Barksdale height-control valves on the rear axle retain the height of the body in relation to the axles under all loading conditions. Each valve has three ports (air supply, air springs and exhaust). A two degree “center dead zone” allows for minor bounces in the suspension, without modifying the ride height.

Radius Arm Assemblies

The axle is positioned at the rear by rubber-bushed radius arm assemblies, which are also the reaction members of the driving, braking and cornering forces from the road to the bus understructure. The rear axle has four rubber-bushed (lubrication-free) radius rods to locate the axle position and to transmit the driving, braking, and cornering forces from the road to the bus understructure. The radius rods have been specially selected for reduced axle noise. Stabilizer bars are not utilized.

Shock Absorbers

The four KONI rear shock absorbers are a double-acting, telescoping type and consist of a piston assembly, piston rod, compression head assembly, inner cylinder, intermediate cylinder, dust tube, and a rod seal.

Axle Stops

Elastomeric axle stops are provided between the axle and frame on each side of the axles to prevent axle and/or frame damage in severe bounce conditions and to allow emergency operation of the vehicle if one or more air bellows are deflated.

Center Axle

Product Features

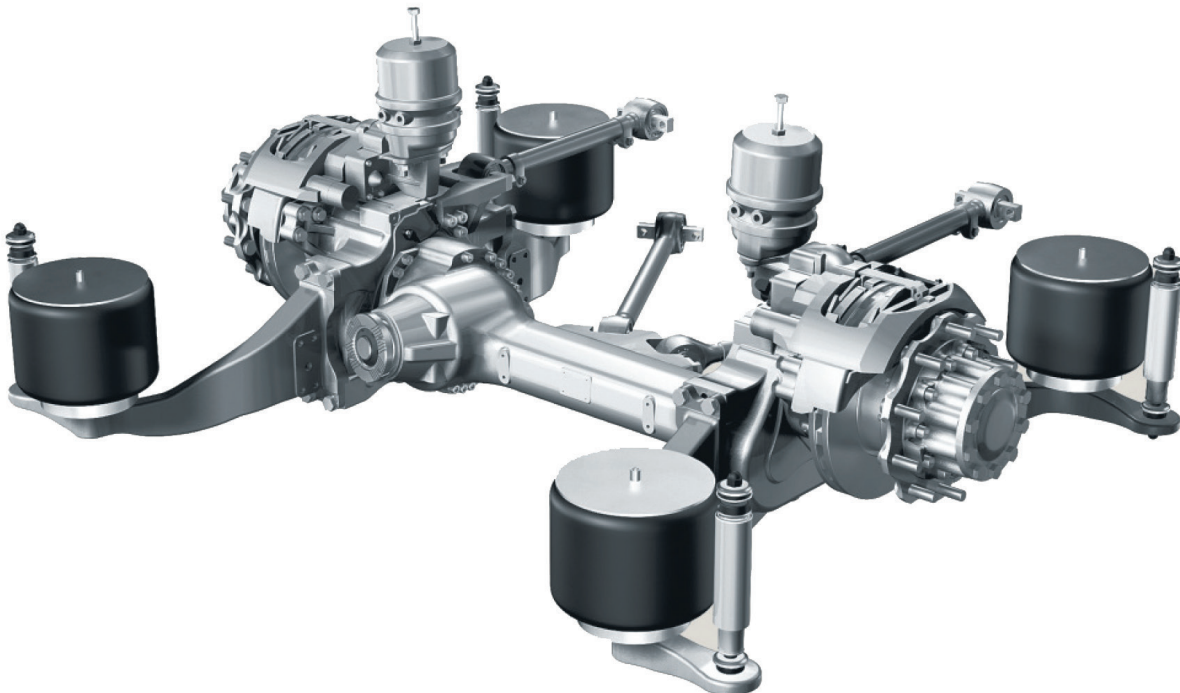
The center axle with disc brakes and suspension installation consists of a ZF AVN 132 axle. The special design of the drop-center axle makes it possible to lower the floor level of the bus at the center axle to only 405 mm. Passengers benefit from the more comfortable entrance and exit facilities.

Benefits

- An estimated cost savings of \$1,225 over 12 years for all disc brakes (front, center and rear) compared to drum brakes
- Quicker passenger boarding and exiting
- Time spent at transit stops is reduced and overall transit times are also shorter
- The AV 132 is extremely quiet, a very welcome benefit in city buses considering their limited scope for sound insulation
- It is painted completely black except for the mounting surfaces which are coated with rust inhibitor

AXLE SPECIFICATIONS

Vehicle width	2500 - 2600 mm
Maximum axle load	11500 kg
Standard tire size	305/70R22.5 twin
Standard wheel size	22.5" x 8.25"
Brakes	Disc
Axle weight (oil filled)	589 kg
Axle system weight	799 kg



Operations

Center Axle

The center suspension beams are integrated into the axle. The assembly incorporates four mounting pads for the air springs, mount supports for the four shock absorbers and four lower radius rods.

Air Springs (Bellows)

The air springs act as the vertical flexible connection between the axles and body to minimize road shocks. Four rolling lobe-type bellows are standard for the center suspension. The bellows are mounted to the suspension beams which are bolted to the center axle.

Height Control Valve

The height of the air springs is controlled by height-control valves on both front, center and rear axles. Two Barksdale height-control valves on the center axle retain the height of the body in relation to the axles under all loading conditions. Each valve has three ports (air supply, air springs, and exhaust). A two degree "center dead zone" allows for minor bounces in the suspension, without modifying the ride height.

Radius Arm Assemblies

The center axle has four rubber-bushed (lubrication-free) radius rods to locate the axle position and to transmit the driving, braking, and cornering forces from the road to the bus understructure. The radius rods have been specially designed for reduced axle noise. Stabilizer bars are not utilized.

Shock Absorbers

The four KONI center shock absorbers are a double-acting, telescoping type and consist of a piston assembly, piston rod, compression head assembly, inner cylinder, intermediate cylinder, dust tube, and a rod seal.

Axle Stops

Elastomeric axle stops are provided between the axle and frame on each side of the axles to prevent axle and/or frame damage in severe bounce conditions and to allow emergency operation of the vehicle if one or more air bellows are deflated.

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4I – Driver’s Controls Overview

Solicitation Requirements:

N/A

New Flyer Response:

The New Flyer Xcelsior® comes standard with the industry’s first electronic instrument panel. The electronic instrument panel is proprietary to New Flyer and was designed by Parker-Vansco. This automotive-like cluster, housed in a more streamlined, contemporary dash, features integrated inputs, outputs, gauges, LCDs, telltales and user buttons. It has two CAN ports for built-in pocket gateway functionality and bridges the drivetrain J1939 to chassis J1939.

Engaged and aware drivers are a critical element to providing exceptional and safe transit service to passengers.

The New Flyer Xcelsior is designed to improve the comfort and experience for your drivers, with the following features:

- The overall dash design has been upgraded with a more contemporary, ergonomic design.
- We have introduced the industry’s only electronic instrument panel, which is more modern in appearance and functionality and has a three-year warranty standard. The standard LCD display can be programmed for customer specific messages or graphics.
 - Up to 31 illuminated tell tales and up to four LCD screen displays to ensure your drivers are always fully aware of the vehicle status.
- The new recessed overhead control panel above the driver’s window gives access to the controls and instrumentation and gives the overall area a cleaner appearance.
- The driver’s field of view has been improved with smaller window pillars and dash clearance.
- Industry’s first LED headlights were introduced for better visibility, which can also accommodate many of today’s bike racks with no interference.

Please see the attached Sales Information Bulletin [SIB 350-001 Driver's Controls](#) for the proposed buses.

Driver's Controls

Instrument Panel

Xcelsior® comes standard with the industry's first electronic instrument panel. The electronic instrument panel is proprietary to New Flyer and was designed by Parker-Vansco. This automotive-like cluster, housed in a more streamlined, contemporary dash, features integrated inputs, outputs, gauges, LCDs, tell tales and user buttons. It has two CAN ports for built-in pocket gateway functionality and bridges the drivetrain J1939 to chassis J1939.

Additional features:

- USB device port
- Total of 27 inputs:
 - 3 Wake Ups Active High
 - 12 Digital Active Low
 - 6 Digital Active High
 - 5 Analogs (3 Position Switch Settings)
 - 1 Frequency Input
- Total of 3 outputs:
 - 2 High Side Outputs 2 A max.
 - 1 Low Side Output 2.5 A max.
- User-programmable routing table for passing or blocking of J1939 Messages
- User-programmable inputs, outputs, gauges, tell tales, and LCDs
- Uses a standard off-the-shelf USB A-B cable to communicate with a PC
- Uploading, downloading and diagnostics are all done from one point on the vehicle
 - The instrument cluster serves as built-in service tool
- Advanced Diagnostics
 - Real time diagnostics
 - All documentation is stored in the VMMs
 - Monitor all inputs and outputs from one location
 - Monitor analog voltage
 - 'Force' inputs or outputs On or OFF
 - Upload logs and error codes



Steering Wheel

The steering wheel provided is a black hard plastic type with two spokes, 18 inches in diameter and with a center hub horn button.

Steering Column

The steering column is a 900 Series steering column manufactured by Douglas Autotech. A single-lever actuation system provides both tilt and telescoping action. The column tilts up and down in 21° and 7° increments.



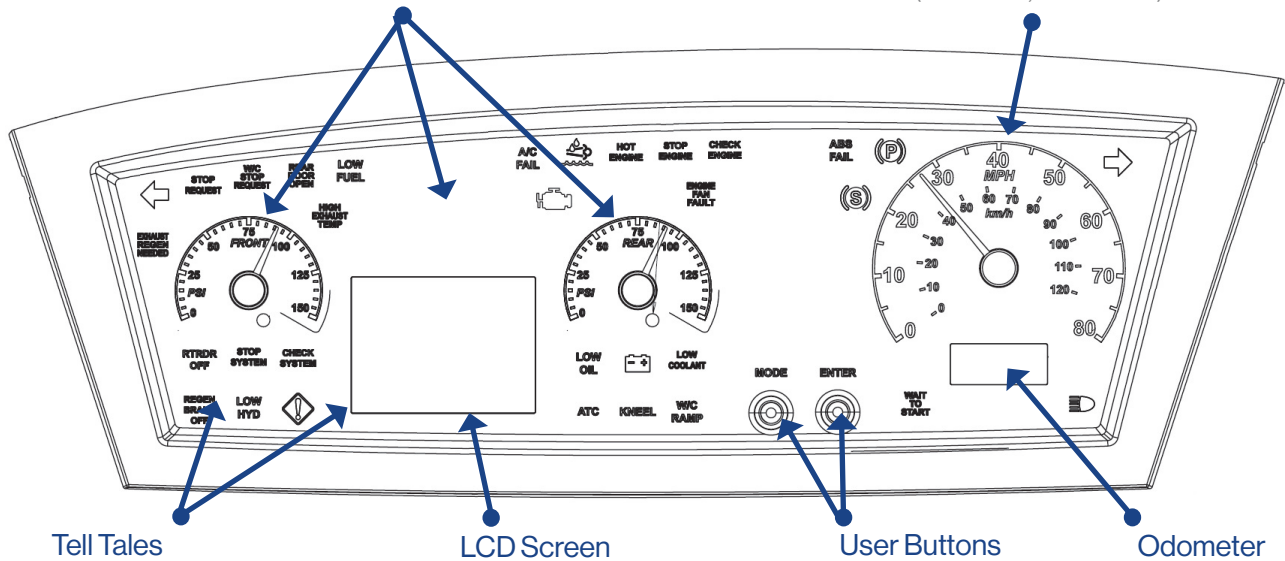
Xcelsior® Electronic Instrument Cluster

Air Pressure Gauges

- Two gauges in 40' bus
- Third gauge positioned above LCD screen in 60' bus

Speedometer

(MPH in US, KPH in CAN)



Tell Tales

- Up to 31 standard tell tales illuminate on dash
- Additional selected tell tales are programmed to display on LCD screen

LCD Screen

- Up to four LCD screens
- Each LCD screen displays between 1 to 4 gauges
- 2010 EPA regulation requires that an urea level gauge always be present and in the "1" position

User Buttons

Odometer

Examples of LCD Screen Configuration



Accelerator & Brake Pedals

Both the accelerator and brake pedals are mounted to the driver's platform in the driver's area at a 45° angle. The brake valve is an E6 with a pressure transducer.

Dimmer & Turn Switch

The turn signals and dimmer switch have easy access for the driver. Both can be activated by floor mounted switches.

Overhead Recessed Panel

New Flyer has conveniently located a recessed panel on the upper left side of the driver to allow for various electronic features to be easily accessible by the driver. The cables will be concealed behind the panel and routed down the "B" post to the Secure Diagnostic Box behind the driver where the majority of the electronic equipment will be housed. The panel is hidden from the passengers' view.



Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4J – Wheelchair Ramp Overview

Solicitation Requirements:

N/A

New Flyer Response:

New Flyer's patented wheelchair ramp design is a flip-out, aluminum, non-slip platform located at the entrance door of the bus. While this ramp is based on our reliable New Flyer ramp that has been in revenue service since 1993, it has been improved to now be a self-contained modular system.

The SmartRider intelligent leveling system is an advanced smart leveling system using intelligent kneeling developed by New Flyer, providing unmatched accessibility for all passengers. This technology enables the bus to kneel to variable heights, minimizing the slope difference between a low-floor ramp and the bus floor.

Please see attached Sales Information Bulletins [SIB 580-001 Genuine New Flyer Wheelchair Ramp](#) and [SIB 203-006 SmartRider Intelligent Leveling System](#) for the proposed buses.

SmartRider™ Intelligent Leveling System

SmartRider™ is an advanced smart leveling system using intelligent kneeling developed by New Flyer, providing unmatched accessibility for all passengers. This technology enables the bus to kneel to variable heights, minimizing the slope difference between a low-floor ramp and the bus floor.

SmartRider now comes standard on all Xcelsior® models and includes intelligent levelling features on the front axle only. SmartRider Plus is an optional upgrade that applies smart levelling technology to all axle systems, adding additional features such as side kneeling, BRT platform loading (to custom heights), low-ride and shipping level capabilities.

The New Flyer all-electric SmartRider™ Ramp is an available option that integrates with the SmartRider leveling system for better control and accessibility. It provides a two-degree slope, higher load carrying capability, and an optimized undercarriage. SmartRider intelligent technology automatically kneels and adjusts the SmartRider Ramp to environmental surroundings, offering optimized boarding from curb to aisle.

Feature	SmartRider™ (front axle only)	SmartRider™ Plus (all axles)
Front Kneel	●	●
Curb-Side Kneel		●
Enhanced Roll Stiffness	●	●
Over-Raise	● Optional	●
High Ride/Low Ride		●
Diagnostics	●	●
Platform Level		●
Self-Leveling Auto Ramp Deploy	Available with SmartRider™ Ramp	

SmartRider™ Features

Front and Curb-side Kneeling

- Full front axle kneeling
 - Lowers front axle four inches (100 mm)
- Curb-side kneeling available with SmartRider Plus
 - After front kneeling, curb-side can be lowered four inches (100mm)

Enhanced Roll Stiffness

- Air springs are fully independent at all wheel positions, blocking air transfer between corners, which increases roll stability, improves sway control, and actively maintains normal ride height on uneven road surfaces

Over-Raise/High Ride

- Raises all axles two inches (50 mm) above normal ride height for clearing high curbs and steep inclines (optional on SmartRider™ standard system)

Low Ride

- Lowers all axles 2.5 inches (63.5 mm) below normal ride height for clearing low overhangs/shop doors

Shipping Level

- Shipping Level lowers the entire bus to bump stops to facilitate secure tiedown during trailer or container shipping

Diagnostics

- Faster diagnosis and pressure monitoring of the air system and air bags
- Detects faults so corrective action can be taken
 - Faults can be logged and/or displayed
 - Pressure sensors can be used at all channels for leak detection or load sensing
- Communicates with New Flyer Connect® or AVM systems
- Compensates for loss of single sensor through information available from remaining sensors

Suspension Calibration

- Calibrates height sensors following a service replacement
 - Automatically lowers entire bus to bump stops, calibrates all height sensors, then returns to normal ride height

BRT Platform Loading

- Raises/lowers curb-side or both sides to a customer specification to match platform boarding level (selectable between -2.4 to + 2.75 from ride height)
 - Interlocks applied to accommodate safe passenger boarding



Integrated Operation with SmartRider™ Ramp

- Integrates suspension kneeling operation with SmartRider ramp to facilitate single operation for wheelchair boarding to defined ramp angle
- Capable of ADA 1:6 slope with NFIL ramps

Benefits

Optimized boarding

- Unmatched accessibility for all passengers when paired with SmartRider™ Ramp

Independent monitoring and control of each wheel position

- Full air spring isolation across all axles

Minimizes air consumption

- During normal operation with air conservation algorithms in suspension software
- During ramp operation by eliminating driver decision on when/how far to kneel, as intelligent technology determines if a kneel is required

Fewer parts and maintenance

- Reduces air spring wear with intelligent kneeling
- Linear sensors incorporated into shock absorbers (can be replaced separately from shock absorbers)
- No external linkage to adjust or get damaged

Genuine New Flyer Wheelchair Ramp

Product Features

New Flyer's patented wheelchair ramp design is a flip-out, aluminum, non-slip platform located at the entrance door of the bus. While this ramp is based on our reliable New Flyer ramp that has been in revenue service since 1993, it has been improved to now be a self-contained modular system.

The ramp system consists primarily of four components:

- Stainless steel ramp box and aluminum cover
- Hydraulic pump, reservoir and integrated manifold block
- Ramp mechanism assembly (operates entirely within stainless ramp box)
- Aluminum light-weight non-slip ramp platform

All four components operate to articulate the ramp from the stowed position in the floor to the curb or street level.

Benefits

- Industry-leading 1:7 slope that significantly exceeds ADA regulations
- Designed with the manual operation feature to ensure that the bus will remain in revenue service during an electrical or hydraulic ramp failure

Operations

The ramp is hydraulically operated. It is completely installed within the vehicle floor and structure and is not subjected to road damage. Brake and accelerator interlocks are provided through the opening of any door. A flashing LED light and audible signal at the entrance door serve as a warning to passengers that the ramp is operating. The ramp can also be manually deployed or raised by a pull strap. The wheelchair ramp is powered by its own self-contained hydraulic power source.

Operating Procedures

Operator's control is located on the lower right side of the driver's instrument panel. A guarded three-position switch performs the following functions:



Ramp deployed at ride height street level



Ramp deployed kneeled (1:7) street level

1. Deploy

This position turns the pump on and sends a flow of oil through the manifold block to the ramp mechanism assembly. The ramp then moves from the stowed position and starts through its arc until fully deployed.

2. Float

This is the normal position of the switch and, in this position, the hydraulic pump is inoperative. The ramp will float to either the DEPLOY or STOW position. Manual operation is possible in the FLOAT position.

3. Stow

This position turns the pump on and sends a flow of oil through the manifold block to the ramp mechanism assembly to move the wheelchair ramp into the stowed position (flush with the floor).

Service and Repair

The self-contained, modular design of this ramp allows for quick removal and installation of the ramp via eight mounting bolts and one electrical connector. The harness removal can only be done at the front of the bus through the service panel (or defrost service panel). To remove the harness, two tie straps need to be cut off and then the two connectors need to be disconnected. The harness conduit retaining nut needs to be removed and each of the two connectors need to be pulled through the retaining nut separately. Two p-clips will need to be removed from under the bus structure to free the harness. This allows bench servicing if a ramp system requires repair.

The stainless steel box protects the inner components from the damaging effects of being exposed to the elements.

Testing

Durability testing: This new design has been cycled 50,000 times which equates to a 12 year life span.

Warranty

Genuine New Flyer wheelchair ramps have a warranty of one year or 50,000 miles (80,467 km).

Specifications

Width	32.00 inches (81.28 cm)
Length	47.50 inches (120.65 cm)
Length Beyond Bus Body	44.73 inches (113.61 cm)
Supporting Load	660 lbs. (299.40 kg)
Degree of Slope kneeling position	8° degrees to grade
Degree of Slope kneeling position (to a 6 inch curb)	2° degrees to curb
Operation Switch (3-Pole Toggle)	1. "Deploy" 2. "Float" 3. "Stow"
Type	Hydraulic (electrically powered)
Cycle Times 1. Deploy 2. Stow 3. Total	10 seconds 10 seconds 20 seconds
System Fluid Capacity	1 quart (946.35 ml)
Hydraulic System	Independent Hydraulic Power pack w/ Integrated Manifold
Hydraulic Fluid	ATF
Operating Hydraulic Pressure	1800 psi
Hydraulic Cylinder	One (deploy & stow)
Hydraulic Cylinder Size	1.5" (38.1 mm) dia. Bore x 3.5" (88.9 mm) Stroke 0.75" (19.05 mm) dia. Rod Double acting welded construction 2500 psi (working pressure rated)
Weight of Complete Lift Assembly	130 lbs (58.97 kg)

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4K – Structure and Corrosion Overview

Solicitation Requirements:

N/A

New Flyer Response:

New Flyer's proposal is based on providing our enhanced hybrid stainless steel structure. The structure is tested at Altoona & at Exova for Shaker Table test to ensure it performs in Greater Portland for the intended years of service & design life.

The recent design change to a partial stainless-steel structure is the latest enhancement to our Xcelsior® product and results in a more corrosion resistant and rugged chassis, providing Greater Portland Transit a much more resilient product. Stainless steel is employed as an extra line of defense against corrosion, meaning less downstream maintenance and corrosion repair, keeping your bus in active service longer.

The proposed structure is composed of a combination of carbon steel and ferritic stainless-steel, coated with Axalta's Ganicin™ Zinc-Rich Polyurethane primer. The Axalta primer inhibits corrosion by electrical means, employing a zinc-rich chemistry which preserves the underlying steel at the expense of the zinc. This coating system is superior to lesser epoxies which simply attempt to create an impermeable barrier between metal and atmospheric moisture. We understand the critical importance for Greater Portland to protect its' investment and to keep buses in active service and managing corrosion on its fleet is a big part of this strategy. This is why New Flyer has included the premium 3 mil zinc primer coating thickness offering to Greater Portland Transit 12-years of corrosion protection on the structure.

For the interior of our structural steel tubes, New Flyer employs Axalta Tufcote™ UC-7101™ on all members from the roofline down. As a final measure of protection, New Flyer coats the underside of our chassis with Tufcote™ UC-1006™ Chip-Resistant Undercoat by Axalta. This undercoating is a single-component waterborne material and provides sacrificial barrier before the primer.

Benefits:

- Dries quickly at room temperatures.
- Unlike inorganic zinc-rich coatings, this product can be used to touch up prepared welded joints and damaged areas.
- Moisture-rich zinc in the primer offers the sacrificial material, which in turn protects the steel substrate.
- All materials used are low VOC (Volatile Organic Compound).
- Axalta will supply field support in conjunction with New Flyer if any issues arise during the warranty period of your bus.

New Flyer has made significant structural improvements to prevent corrosion by reinforcing, with ferritic stainless steel, those critical areas of the structure that are most exposed to extreme salt, chemicals, and temperature gradients. These areas include the chassis and curbside and streetside structural walls. As part of the structural improvement and corrosion prevention, New Flyer also updated the wheel wells, which are now constructed from 18-gauge 201 stainless steel (ASTM A240) and supported by cross tubes constructed from 304 stainless steel. Lastly, tapping plates are constructed of steel and are welded to the structure to allow for the installation of fixtures and accessories without having to drill directly into the structure thereby eliminating any potential weakening of the structure and further preventing corrosion.

Please see attached Sales Information Bulletin [SIB 304-001 Corrosion Coating Axalta Stainless Steel](#), as well as the results of [Independent Corrosion Testing](#).

Corrosion System

Product Features

New Flyer utilizes the best protection coating and application process for Stainless Steel in the industry. Axalta's Ganicin™ Zinc-Rich Polyurethane primer is used as our primary corrosion protection. Unlike regular paints or epoxies which resist corrosion by forming an impermeable barrier between the metal and atmospheric moisture, zinc-rich primers provide corrosion protection by electrical means. The zinc and the steel form tiny electrical-cathodic cells that protect the steel at the expense of the zinc.

Prior to applying this zinc-rich primer, our steel frames are pressure washed and grit blasted to insure proper adherence of the primer to the steel. Axalta reviews our process weekly to insure we meet the application requirements of its products in order to offer this industry-leading corrosion protection.

Along with our primer on the exterior of our steel, we also coat all of our steel tubes internally from the roof line down with Tufcote™ UC-7101™ Cavity Coating by Axalta.

As a final measure of protection, we coat the underside of our chassis with Tufcote™ UC-1006™ Chip-Resistant Undercoat by Axalta. This undercoating is a single-component waterborne material and provides sacrificial barrier before the primer.



Benefits

- Dries quickly at room temperatures
- Unlike inorganic zinc-rich coatings, this product can be used to touch up prepared welded joints and damaged areas
- Moisture-rich zinc in the primer offers the sacrificial material, which in turn protects the steel substrate
- All materials used are low VOC (Volatile Organic Compound)
- Axalta will supply field support in conjunction with New Flyer if any issues arise during the warranty period of your bus

Coating Thickness (Dry Film)

Primer Coating (zinc primer to steel)	3 mils	12-year warranty
Primer Coating (zinc primer to steel)	6 mils	18-year warranty
Undercoating (sprayed over zinc primer on underbody)	8 mils	12-year warranty
Undercoating (sprayed over zinc primer on underbody)	8 mils	18-year warranty

New Flyer's corrosion protection package consists of a 4-step process:

1. Preparation Before Corrosion Protection Package

The frame is welded, including taping plates, brackets, and exterior compartments. Any sharp edges are deburred, and splatter spray minimized. All holes are sealed with plugs and areas of the frame not requiring blasting or priming are protected.

2. Power Wash

The purpose of the power wash operation is to remove mill oils, machine shop oils, and anti-splatter compounds applied to the structure (de-grease) during the fabrication of the frame. The entire coach is washed and rinsed to prevent oils and grease from being blasted into the steel. Drain holes are plugged to prevent water from entering the tubing and exposed threads are masked off to prevent damage from grit blast. The structure is then washed using a mild detergent and blown dry to prevent flash rusting. This stage does not apply an iron phosphate coating on the frame.

3. Grit Blast

The entire structure is then grit blasted to provide the primer a profile which it can anchor itself to. Using 50 grit material, this grit blast process provides the 1.5 - 2.5 mil profile needed for a uniform "rough" to touch matte surface. The surface is then cleaned to a SSPC-SP6 finish. Any residue grit is then blown off and the masking is removed from the protected areas except for the threaded holes and studs. To prevent distortion of the part, areas of the frame made of sheet metal are not over-blasted.

4. Moisture-Cure Urethane Zinc-Rich Primer

This is a two-part urethane primer from Axalta. This primer is a low VOC organic zinc-rich coating that provides cathodic protection when applied to prepared structural steel substrates. It is an excellent undercoat for the transportation industry, providing galvanic protection similar to galvanizing when applied to properly prepared, hot or cold rolled, sand-blasted steel. Ferrous parts requiring zinc-rich primer include bus frames, fuel tank cradles, suspension bunks and all structural steel components. The product is sprayed on to achieve approx. 3 to 6 mils of Dry Film Thickness (DFT).



Specifications

FILM PROPERTIES	TEST METHOD	VALUE
Color	N/A	Gray
Film Thickness	N/A	3-6 dry mils
VOC # Gallon	EPA #24	2.4 #Maximum Low VOC product
Gloss - 60°	ASTM 2457	60-70
Pencil Hardness	ASTM 3363	4H
Crosshatch Adhesion	ASTM 3359	5B Pass
Salt Spray	ASTM B117	7000 hours
Humidity	ASTM 1735	4000+ hours
Chemical Resistance	N/A	Excellent
Abrasion Resistance	N/A	Excellent
Potlife N/A	N/A	3-4 hours
Dry to touch Dry to handle Dry to re-coat	N/A	30 min 2-4 hours 4 hour minimum

Tubular Structure

Axalta Tufcote™ Cavity Coating, a solvent-free, low VOC, rust proofing compound, is a long-term treatment for protecting the interior of tubular structures and enclosed body sections. As a base option, it is fogged into all structural-steel tubes from the roof line down and its dense viscosity ensures adherence. Tufcote™ UC-7101™ consists of a mixture of alkyd resins and anti-corrosion additives dispersed in oil that are designed to cure in 168 hours to form a translucent amber, soft, wax-like film intended to repel water, resist sag, self-heal, and remain flexible to prevent chipping and cracking at low temperatures. ASTM based salt-spray tests have shown significant resistance passes at 500 hours of exposure.

Underbody Sacrificial Barrier

The Axalta Tufcote™ Chip Resistant Undercoat is a one-component, waterborne, zero VOC semi-firm coating designed to deliver premium performance to prevent chipping, cracking, or marring of painted or unpainted surfaces after exposure to high impact sand, gravel, and other abrasive materials. It is applied to the underside of the coach to supply a sacrificial barrier against road debris.

Preparation

All areas of the coach, excluding the underside of the lower chassis, susceptible to over spray are masked including all exposed fittings, hoses and Synflex lines.

Application

Tufcote™ is sprayed through the underside of the coach and inside wheel wells to a WFT (wet film thickness) of 15 mils. An acceptable application covers all areas requiring undercoating but does not exhibit cracking from excessive film buildup.

Features and Benefits

- One-Component product means no mixing or measuring to get correct ratios
- Water-borne: environmentally safer alternative. US DOT classification is non-hazardous, non-regulated (CFR Title 49). Also classified as non-hazardous, non-regulated under Federal RCRA Hazardous Waste Program (CFR 40)
- Air Dry: reapplication of surface does not require a dry bake cycle
- High thin film performance (10 mil dry)

Structural Sealing and Undercoating

Seal Lap Joints

Application is a single bead of Sikaflex-221 Polyurethane Sealant. Caulking sealant is applied between the following:

- Structural members and floor panels, wheel wells, etc.
- Fill gaps between stitch welds
- Over miscellaneous welds that have potential to collect water
- Special attention is given to the main structural members and rear A/C area

Specifications

Density	1.23 kg/L
Tack-free time*	1 to 2 hours
Cure Rate*	4mm per 24 hours
Elongation @ Break	600%
Tensile Strength	1.55 N/mm ²
Lap Shear Strength	1.13 N/mm ²
Peel Strength	5.2 N/mm on aluminum
Color	White
Application Temperature	5 to 40° C

* Temperature 21°C @ 65% R.H.

Properties of Sikaflex-221

Sikaflex-221 is a one-component, flexible, polyurethane-based elastomeric sealant. It is a moisture-cured, non-sag system. The chemical reaction is set in motion as soon as the adhesive is extruded. Sikaflex cures to form a high-grade elastomeric adhesive. This product will bond to materials which have dissimilar coefficients of expansion and exhibits tenacious adhesion to aluminum, FRP, steel, wood, SMC, RIM, pre-painted metals, oily GALVALUME, ZINCALUME, Zincgrip, and aluminized steel, without attacking the metal coating. It has excellent weather resistance and it exhibits high recovery, making it ideal for sealing dynamically moving joints, resistant to road salts.

Service/Repair

- Corrosion coating system is simple to maintain over the life of your bus, a simple inspection and “touch up” (if required) from erosion is required once every 3 years from years 1 through 12 and yearly after year 12 to 18
- If accident repairs are required to the frame, our service manual provides detailed instructions for applying the products required

Warranty

We have partnered with Axalta to offer a 12-year warranty (or 500,000 mile) with an optional 18-year warranty.



November 3, 2016

New Flyer Industries
711 Kernaghan Avenue
Winnipeg, Manitoba R2C 3T4
Attn: Jeff Yarecki

Re: Long term corrosion performance of Ganicin® 2.8 MC-U Moisture Cure Zinc Rich Primer

Our research facility located in Wilmington, DE prepared a series of 4" by 12" steel panels conforming to SSPC-SP 6 commercial blast in the summer of 2015. The Ganicin® 2.8 MC-U Moisture Cure Zinc Rich Primer was then applied to the panels at the recommended 3.0 mil dry film thickness. The panels were then placed in an accelerated salt fog environment where they have been continuously exposed over the past 15 months and evaluated at 1,000 hour intervals per the following specifications:

- Salt Spray (Fog) Corrosion Test ASTM B117-07A
- Modified Salt Spray (Fog) Test ASTM G85-11

The results to date have been excellent. As expected, there is clear evidence of corrosion in both test environments along the scribe line but no obvious physical damage to the metal substrate. This is due to the presence of the zinc metal in the primer coating which is functioning as a sacrificial pigment to protect the base metal. These results in such a harsh environment over an extended period of time clearly show the benefit of the zinc rich coating and its ability to protect steel structures like a bus frame for many years. Images of the exposed panels are available upon request.

Robert E. Pennock
Product Manager
Aviation, Commercial Bus, Power Sports and Truck Cap

New Flyer Corrosion Protection Package

Structure Primer Testing

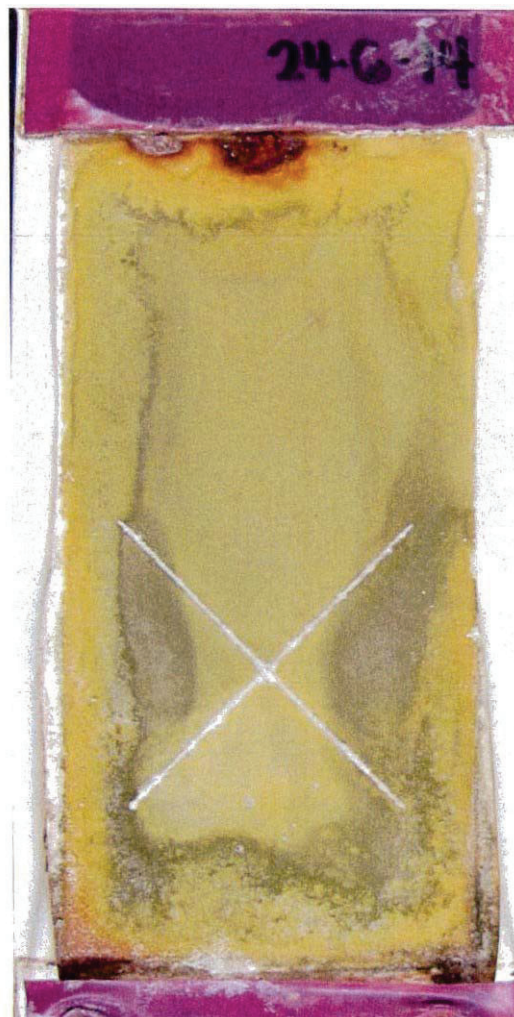
Salt spray results at **7000** hrs show excellent performance at 3 mils dryfilm thickness (12 year specification) with no creep at the scribe.

- The rust on the panel is bleeding from the scribe lines and uncoated edges of the panel.
- The Prohesion panel also shows excellent performance

Salt Spray



Prohesion



Interior Tube Coating

Flat panel testing. Coratube vs Tufcote UC-7101. Shown after 750hrs salt spray.

Coratube

3mil

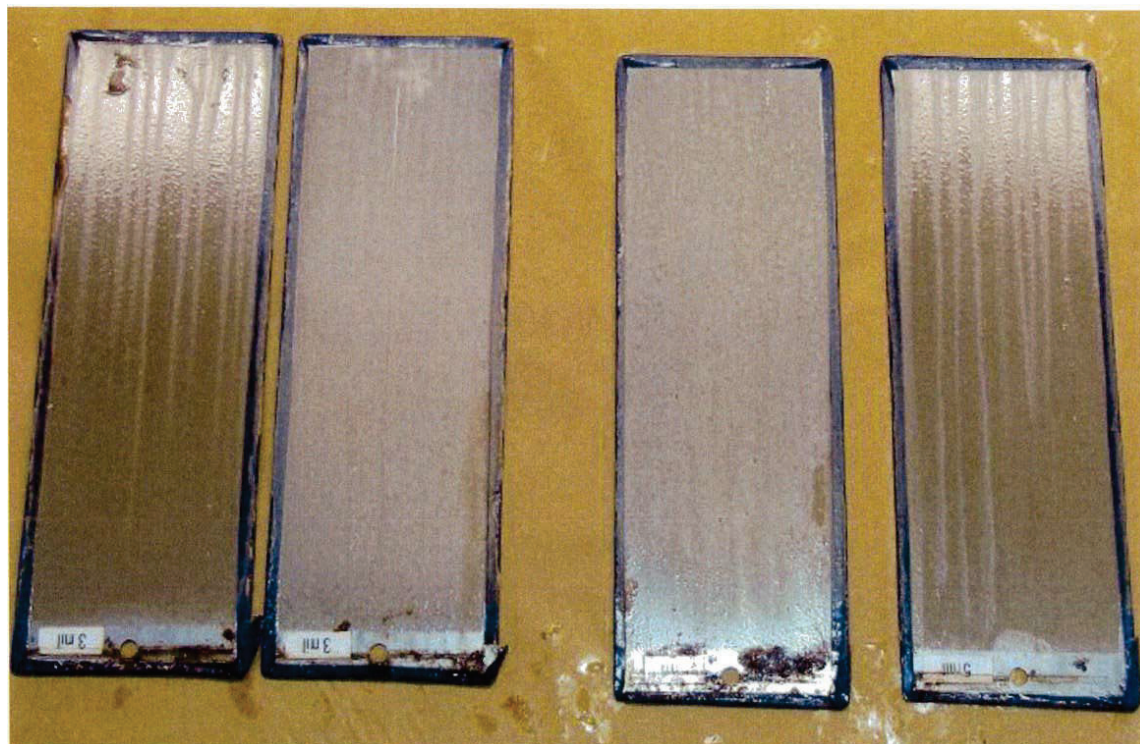
5mil



Tufcote UC-7101

3mil

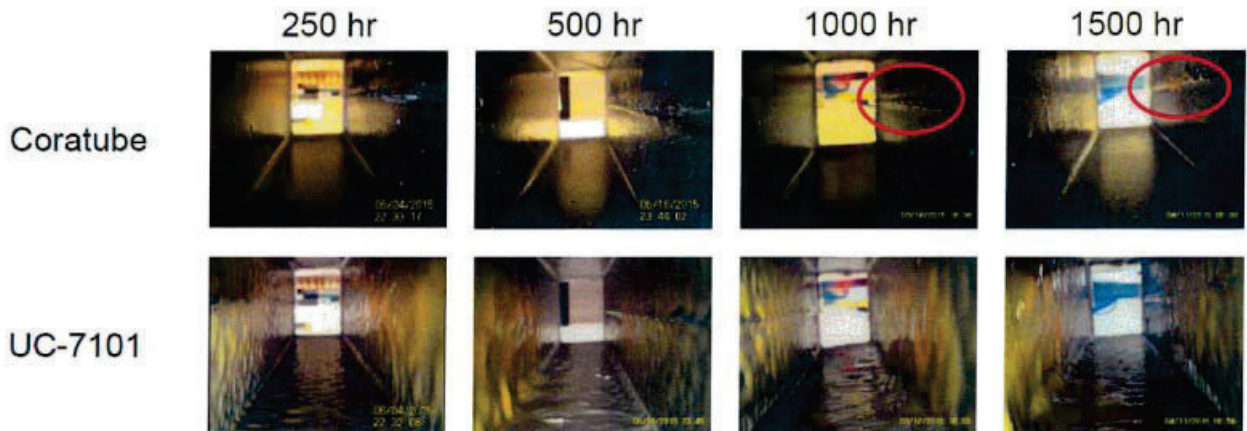
5mil



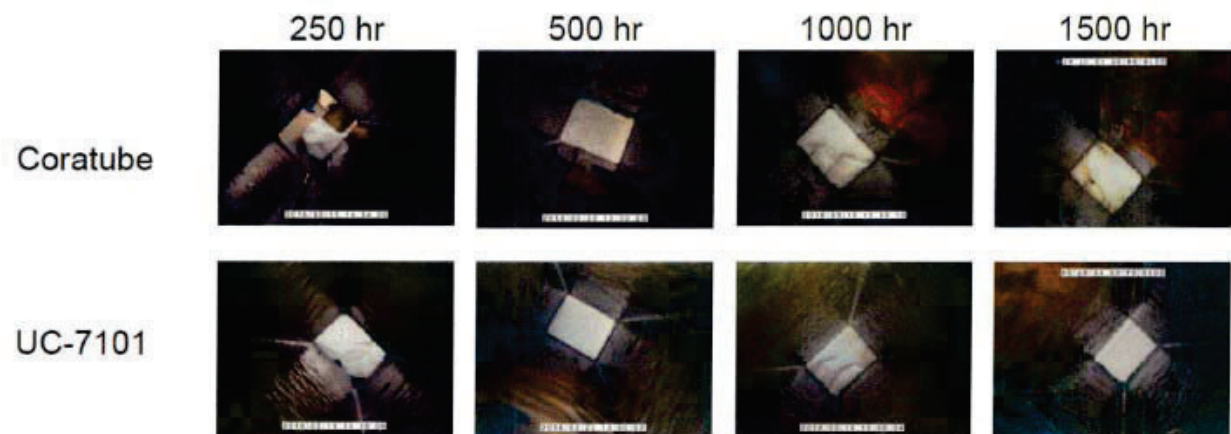
Interior Tube Coating

Flat panel testing of an internal cavity coating does not represent real world conditions. Two sets of tubes were sprayed and tested at two different labs.

Test sample 1:



Test sample 2:



Underbody Coating Testing - Adhesion

Steel test panels coated with Ganicin zinc rich primer and Tufcote undercoating

X- Cut, Pull-off adhesion, and Stone Chip Test


Reference:

- ASTM D3359 X Cut Adhesion
- ASTM D4541 Pull Off Adhesion
- ASTM D3170 Stone Chip



Full System Testing - Long Term

Note: Interior tube coating was not applied prior to this test

Humidity ASTM D-1735 Test	System	Substrate	Blistering			Adhesion				
			Density	Size	Rating	Initial-X cut	4000 hrs-X-cut	Recovery		
4000 hours	Ganidin™ MC Zinc / Tufcote™ UC.1006	Frame Parts	None	NA	10	3	4	4	Small chip at the center point (Top coat to Primer)	



Sample @ 10,000 hrs humidity:

- No blistering
- Next adhesion check: 12,000 hrs

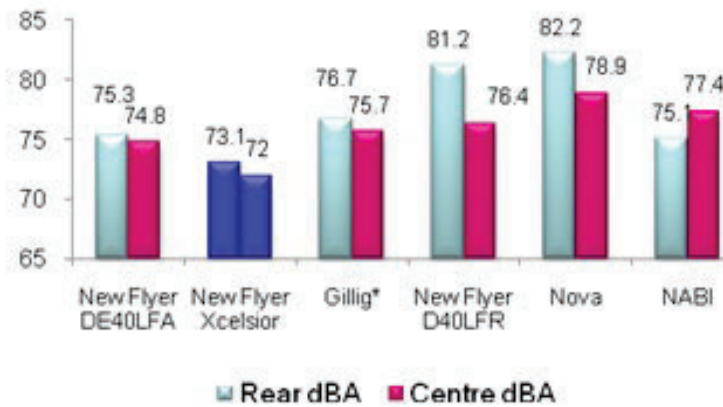
4L – Exterior and Interior Noise Levels Overview

Solicitation Requirements:

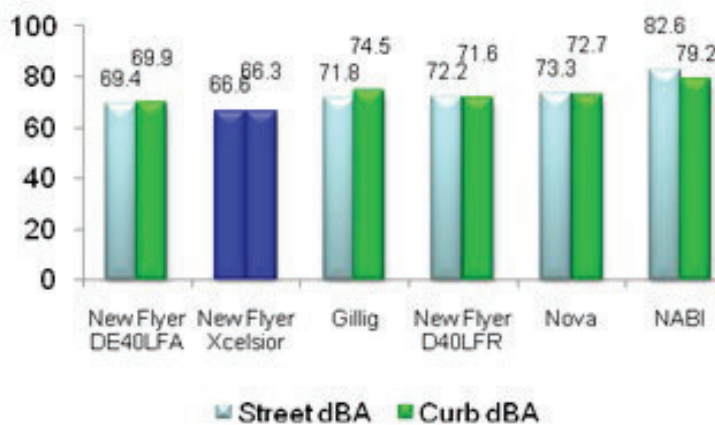
N/A

New Flyer Response:

A major design objective for Xcelsior® was to reduce interior and exterior noise levels, improving the experience for passengers, operators, and the community. In third-party testing at Altoona, Xcelsior’s reported noise levels set new industry standards.



Xcelsior’s interior noise levels were the best recorded among 2007 and 2010 engine 40-foot buses.



Xcelsior’s exterior noise levels were the best recorded among 2007 and 2010 engine 40-foot buses.

New Flyer achieved these industry-leading noise levels by making improvements in the following areas:

1. Engine and transmission (including conventional trans and hybrid drive unit).

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

- a. Engine is installed on rubber isolator engine mounts which are analyzed by the manufacturer considering the vibration characteristics of the engine.
 - b. Airborne noise in the engine compartment is minimized with a perforated aluminum sheet; the noise enters acoustic foam with a dense rubber barrier which dampens and minimizes noise transfer.
 - c. The use of dB plywood on the upper deck also minimizes transfer of engine noise (New Flyer has successfully used this approach for twenty years).
2. Axle
- a. Differential noise is minimized by use of a single reduction hypoid axle (no outboard planetary gear sets).
 - b. Since the noise from rotating components is exacerbated by offset alignment, New Flyer has designed the engine/transmission-to-axle input to be in-line. Additionally, U-joint driveshaft must be assembled in phase for proper operation and thus have specified phase marks on the driveshaft for proper assembly.
3. Compressor
- a. Ping tank dampens reciprocating compressor pulses to minimize noise, and vibration is minimized with a larger, stiff copper line between ping tank and the air dryer and rubber-covered p-clips.
 - b. The addition of a twin compressor means the compressor pumps half the time and at higher frequency pulses (2 times per revolution vs. 1), which creates approximately half the noise at a less obtrusive frequency.
4. HVAC System
- a. Relocating the A/C unit from the rear to the roof above the driver's barrier has dramatically improved the interior noise levels.
 - b. The HVAC unit has been redesigned, components have been relocated, baffles have been added and sound-absorbing materials have been added to the ductwork to reduce the overall noise levels of the unit.
 - c. On the Xcelsior®, the biggest change to reduce the noise at the back of the bus was due to the relocation of the A/C unit to the roof just behind the driver's barrier. This resulted in a much-improved rear noise level.
5. Electric wipers are much quieter, and New Flyer offers these as standard on Xcelsior®.
6. Pulsations in power steering pumps are a major contributor to noise. To address this, New Flyer provides a smooth-flowing vane pump and smooth-bend stainless steel tubing plumbing and minimized fittings to minimize the noise.
7. Tire noise is a factor of the tires selected and vehicle speed. To improve the noise levels through the wheel wells, New Flyer has made the following improvements:
- a. The wheel wells are a mix of curved and bent stainless panels which are welded into the structure and fully sealed. The stiffness of these panels aids in minimizing noise.
 - b. Undercoating is applied not only as a corrosion protection, but also has a noise dampening effect.
 - c. Rubber flooring provides additional noise-dampening benefits.
8. Depending on the air dryer selected, a diffuser can be employed to minimize the rush of air and dampen the sudden noise.
9. New Flyer uses a glass-reinforced smooth-flowing, high efficiency cooling system fan to minimize noise. Further noise improvements are generated by the larger diameter of the fan, which allows for a slower fan speed, and mounting the fan on rubber isolators.

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

4M – Technical Deviations

Solicitation Requirements:

N/A

New Flyer Response:

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 5, Warranty

Solicitation Requirements:

Attachment G, Section 7: Warranty Requirements

New Flyer Response:

Please find New Flyer's [Warranty Proposal](#), enclosed for your evaluation.



NEW FLYER OF AMERICA
CONTRACT DELIVERABLES LIST
Warranty
CUSTOMER NAME Commonwealth of Virginia
BID NUMBER 22-217
BUS MODEL XD35
QUANTITY 1

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY		COMMENTS	
	PROVIDER	YEARS		MILES
Base Bus Warranty	New Flyer of America	1	50,000	The warranty shall not apply to the following items: <ul style="list-style-type: none"> • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction, and are warranted against corrosion failure and/or fatigue failure sufficient to cause a Class 1 failure. The corrosion and structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road deicers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Foundation brake components, including advancing mechanisms, as supplied with the axles, excluding friction surfaces
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility. All destination sign equipment for the front, side and rear signs, power modules and operator control.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Cummins	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility.
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Low-Voltage and High-Voltage Electrical Wiring and Harnesses	New Flyer of America	5	250,000	
Handling Charges 15%	New Flyer of America	1	50,000	New Flyer shall reimburse the Agency for defective parts and for parts that must be replaced to correct the defect for the duration of the base bus warranty period. <ul style="list-style-type: none"> • Parts will be reimbursed at the current published price plus applicable taxes. • Handling costs will be reimbursed up to a maximum of \$100 per claim. New Flyer requests for this cap due to Contractor pre pays shipping for the customer to return the parts to the nearest Contractor parts distribution center.
Air Dryer	Haldex	2	200,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic Systems	New Flyer of America	2	100,000	Including radiator fan drive and power steering as applicable.
Engine Cooling System	EMIP	3	150,000	Radiator including core, tanks and related framework.
Alternator	EMIP	2	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Passenger Seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILES	COMMENTS
Surveillance System including Cameras and Video Recorders	Apollo		2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Towing	New Flyer of America		1	50,000	
Emission Control System	Cummins		5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America		5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
Charge Air Cooler	EMP		3	150,000	Charge air cooler including core, tanks and including related surrounding framework and fittings
Fuel Storage and Delivery System	New Flyer of America		2	100,000	
Starter	New Flyer of America		2	100,000	
Fire Suppression System	Amerex		3	Unlimited	Fire suppression system including tank and extinguishing agent dispensing system
Paint	Avalla		5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty	
CUSTOMER NAME	Commonwealth of Virginia		
BID NUMBER	22-217		
SR #			
CUSTOMER CONTRACT #			
CUSTOMER PO #			
LD DATE			
BUS MODEL	XE35 (430 kWh GEN IIB)		
QUANTITY	1		
SPARES DELIVERY DATE			
LINE ENTRY			
DELIVERY START DATE			
DELIVERY END DATE			
SALES SPECIALIST			
PDM CO-ORDINATOR			
ENGINE			
AXLE			
TRANSMISSION			
ABS			
AIR CONDITIONING			
AUXILIARY HEAT			
PLC			
DESTINATION SIGNS			
AVL SYSTEM			

MAJOR COMPONENT DESCRIPTION	PROVIDER	BASE AND EXTENDED WARRANTY			CURRENCY	COMMENTS
		YEARS	MILES			
Base Bus Warranty	New Flyer of America	1	50,000		USD	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000		USD	Body and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000		USD	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000		USD	Consists of all components that are welded together to form the main frame (skeleton) and body construction, and are warranted against corrosion failure and/or fatigue failure sufficient to cause a Class 1 failure. The corrosion and structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road deicers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Propulsion System (Traction System, Controllers/Inverters and Gear Box)	Siemens	6	300,000		USD	First 5 year warranty is covered by Siemens. Year 6 covered by New Flyer. All warranty claims to be submitted to New Flyer.
HV Batteries (Energy Storage System)	Xalt Energy / New Flyer of America	6	300,000		USD	Capacity fade is the relative reduction of the total amount of energy the battery system can store in a single charge for the purpose of powering the bus as compared to capacity at beginning of life (BOL). Capacity fade is warranted to 80% of BOL total energy capacity at year 6 or 300,000 miles when: 1) capacity measurements are taken from a balanced ESS, and 2) ESS is maintained in the manner described in the New Flyer Service Manual.* *The string Battery Management System (BMS), controllers and Power Distribution Unit (PDU) are warranted for proper operation up to year 6 or 300,000 miles when the ESS is maintained in the manner described in the New Flyer Service Manual.* All warranty claims to be submitted to New Flyer.
Axle (Front and Rear)	MAN	5	300,000		USD	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited		USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000		USD	Foundation brake components, including advancing mechanisms, as supplied with the axles, excluding friction surfaces
Destination Signs	Luminator	6	Unlimited		USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility. All destination sign equipment for the front, side and rear signs, power modules and operator control.
Door Systems	Vapor	3	150,000		USD	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	PowerEx	2	Unlimited		USD	
Wheelchair Ramp	New Flyer of America	2	100,000		USD	
Electrical System	Parker	3	150,000		USD	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6	Unlimited		USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY				COMMENTS
	PROVIDER	YEARS	MILES	CURRENCY	
Tires	New Flyer of America	2	24,000	USD	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
New Flyer Connect System	New Flyer of America	2	Unlimited	USD	Warranty covers parts & subscription for 2 years
Low-Voltage and High-Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	USD	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	USD	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Air Dwyer	Haldex	2	200,000	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic Systems	New Flyer of America	2	100,000	USD	Including radiator fan drive and power steering as applicable.
Propulsion System Cooling Systems	EMP	3	150,000	USD	Radiator including core, tanks and related framework.
DC to DC Converter	Vanner	3	150,000	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Passenger Seats	American Seating	5	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Towing	New Flyer of America	1	50,000	USD	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	USD	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	USD	
Paint	Axalta	5	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
For Warranty Use Only					



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
BUS MODEL	XDE35 (Allison)	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
Base Bus Warranty	New Flyer of America		1	50,000	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America		3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or gilded as part of the structure.
Chassis Structure (Integrity)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Hybrid Drive System	Allison		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN		5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King		2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America		2	100,000	Friction Material Excluded
Destination Signs	Luminator		6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor		3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	PowerEx		2	Unlimited	

COV Bid #22-217 Contract Deliverables XDE35 Allison (TC) 02.xlsx XDE35 (Allison)



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker	6	Unlimited	Excluding maintenance items & items that are not covered by the OEM's warranty
Paint	Axalta	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Air Dryer	Haldex	2	200,000	
Alternator	EMP	2	100,000	
Cooling System	EMP	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex	3	Unlimited	Fire suppression system including tank and extinguishing agent dispensing system.
Hydraulic System	New Flyer of America	2	100,000	
Towing	New Flyer of America	1	50,000	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Passenger Seats	New Flyer of America	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Low Voltage / High Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Surveillance System including cameras and video recorders	Apollo	2	Unlimited	
Fuel Storage & Delivery System	New Flyer of America	2	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop Idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
Charge Air Cooler	EMP	3	150,000	
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST	
Warranty	
CUSTOMER NAME	Commonwealth of Virginia
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
CUSTOMER PO #	
LD DATE	
BUS MODEL	XD40
QUANTITY	1

MAJOR COMPONENT DESCRIPTION	PROVIDER	BASE AND EXTENDED WARRANTY		COMMENTS
		YEARS	MILEAGE	
Base Bus Warranty	New Flyer of America	1	50,000	The warranty shall not apply to the following items: <ul style="list-style-type: none"> • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or gilded as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Friction Material Excluded
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Cummins	2	Unlimited	
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Avallia	5	Unlimited	
Air Dryer	Haldex	2	200,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Alternator	EMP	2	100,000	
Charge Air Cooler	EMP	3	150,000	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
Cooling System	EMP		3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins		5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex		3	Unlimited	
Hydraulic System	New Flyer of America		2	100,000	
Starter	New Flyer of America		2	100,000	
Towing	New Flyer of America		1	50,000	New Flyer shall reimburse the Agency for defective parts and for parts that must be replaced to correct the defect for the duration of the base bus warranty period.
Handling Charge 15%	New Flyer of America		1	50,000	<ul style="list-style-type: none"> Parts will be reimbursed at the current published price plus applicable taxes Handling costs will be reimbursed up to a maximum of \$100 per claim. New Flyer requests for this cap due to Contractor pre pays shipping for the customer to return the parts to the nearest Contractor parts distribution center.
Low Voltage / High Voltage Electric Wiring and Harnesses	New Flyer of America		5	250,000	
Passenger Seats	American Seating		5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Surveillance System (including Cameras and Video Recorders)	Apollo		2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Fuel Storage & Delivery System	New Flyer of America		2	100,000	
Tires	New Flyer of America		2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America		5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
BUS MODEL	XDE-40 (Allison)	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
Base Bus Warranty	New Flyer of America		1	50,000	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America		3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a permanent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Hybrid Drive System	Allison		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3, 4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN		5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King		2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America		2	100,000	Friction Material Excluded
Destination Signs	Luminator		6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor		3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	PowerEX		2	Unlimited	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Axalta	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Air Dryer	Haldex	2	200,000	
Alternator	EMP	2	100,000	
Cooling System	EMP	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex	3	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic System	New Flyer of America	2	100,000	
Towing	New Flyer of America	1	50,000	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Passenger Seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Low Voltage / High Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	
Fuel Storage & Delivery System	New Flyer of America	2	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
Charge Air Cooler	EMP	3	150,000	
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE	XE40 (430 kWh GEN IIB)	
BUS MODEL	XE40 (430 kWh GEN IIB)	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY			CURRENCY	COMMENTS
	PROVIDER	YEARS	MILES		
Base Bus Warranty	New Flyer of America	1	50,000	USD	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	USD	Body and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	USD	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	USD	Consists of all components that are welded together to form the main frame (skeleton) and body construction, and are warranted against corrosion failure and/or fatigue failure sufficient to cause a Class 1 failure. The corrosion and structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road deicers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Propulsion System (Traction System, Controllers/Inverters and Gear Box)	Siemens	6	300,000	USD	First 5 year warranty is covered by Siemens. Year 6 covered by New Flyer. All warranty claims to be submitted to New Flyer.
HV Batteries (Energy Storage System)	Xalt Energy / New Flyer of America	6	300,000	USD	Capacity fade is the relative reduction of the total amount of energy the battery system can store in a single charge for the purpose of powering the bus as compared to capacity at beginning of life (EOL). Capacity fade is warranted to 80% of BOL total energy capacity at year 6 or 300,000 miles when: 1) capacity measurements are taken from a balanced ESS, and 2) ESS is maintained in the manner described in the New Flyer Service Manual. The string Battery Management System (BMS), controllers and Power Distribution Unit (PDU) are warranted for proper operation up to year 6 or 300,000 miles when the ESS is maintained in the manner described in the New Flyer Service Manual. All warranty claims to be submitted to New Flyer.
Axle (Front and Rear)	MAN	5	300,000	USD	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	USD	Foundation brake components, including advancing mechanisms, as supplied with the axles, excluding friction surfaces
Destination Signs	Luminator	6	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility. All destination sign equipment for the front, side and rear signs, power modules and operator control.
Door Systems	Vapor	3	150,000	USD	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	PowerEx	2	Unlimited	USD	
Wheelchair Ramp	New Flyer of America	2	100,000	USD	
Electrical System	Parker	3	150,000	USD	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY				COMMENTS
	PROVIDER	YEARS	MILES	CURRENCY	
Tires	New Flyer of America	2	24,000	USD	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
New Flyer Connect System	New Flyer of America	2	Unlimited	USD	Warranty covers parts & subscription for 2 years
Low-Voltage and High-Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	USD	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	USD	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Air Dryer	Haldex	2	200,000	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic Systems	New Flyer of America	2	100,000	USD	Including radiator fan drive and power steering as applicable.
Propulsion System Cooling Systems	EMP	3	150,000	USD	Radiator including core, tanks and related framework.
DC to DC Converter	Vanner	3	150,000	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Passenger Seats	American Seating	5	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Towing	New Flyer of America	1	50,000	USD	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	USD	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	USD	
Paint	Axalta	5	Unlimited	USD	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
For Warranty Use Only					



NEW FLYER OF AMERICA	
CUSTOMER NAME	Commonwealth of Virginia
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
CUSTOMER PO #	
LD DATE	
BUS MODEL	XHE40
QUANTITY	1
SPARES DELIVERY DATE	
LINE ENTRY	
DELIVERY START DATE	
DELIVERY END DATE	
SALES SPECIALIST	
PDM CO-ORDINATOR	
ENGINE	
AXLE	
TRANSMISSION	
ABS	
AIR CONDITIONING	
AUXILIARY HEAT	
PLC	
DESTINATION SIGNS	
AVL SYSTEM	

Warranty
CONTRACT DELIVERABLES LIST

MAJOR COMPONENT DESCRIPTION	PROVIDER	BASE AND EXTENDED WARRANTY		COMMENTS
		YEARS	MILES	
Base Bus Warranty	New Flyer of America	1	50,000	The warranty shall not apply to the following items: <ul style="list-style-type: none"> scheduled maintenance items normal wear-out items items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantees covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction, and are warranted against corrosion failure and/or fatigue failure sufficient to cause a Class 1 failure. The corrosion and structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road deicers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Propulsion System (Traction System, Controllers/inverters and Gear Box)	Siemens	6	300,000	First 5 year warranty is covered by Siemens. Year 6 covered by New Flyer. All warranty claims to be submitted to New Flyer.
Hydrogen Fuel Cell	Ballard	6	250,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. The 6 year warranty is covered by Ballard. All warranty claims to be submitted to New Flyer.
Hydrogen Fuel Cell Batteries	Xalt Energy/New Flyer of America	6	Unlimited	Capacity fade is the relative reduction of the total amount of energy the battery system can store in a single charge for the purpose of powering the bus as compared to capacity at beginning of life (BOL). Capacity fade is warranted to 80% of BOL total energy capacity at year 6 or 300,000 miles when: 1) capacity measurements are taken from a balanced ESS, and 2) ESS is maintained in the manner described in the New Flyer Service Manual. -The string Battery Management System (BMS) controllers and Power Distribution Unit (PDU) are warranted for proper operation up to year 6 or 300,000 miles when the ESS is maintained in the manner described in the New Flyer Service Manual. All warranty claims to be submitted to New Flyer.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Foundation brake components, including advancing mechanisms, as supplied with the axles, excluding friction surfaces
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility. All destination sign equipment for the front, side and rear signs, power modules and operator control.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	PowerEx	2	Unlimited	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILES	COMMENTS
	PROVIDER	YEARS		
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles, whichever occurs first.
New Flyer Connect System	New Flyer of America	2	Unlimited	Warranty covers parts & subscription for 2 years
Low-Voltage and High-Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Air Dryer	Haldex	2	200,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic Systems	New Flyer of America	2	100,000	Including radiator fan drive and power steering as applicable.
Propulsion System Cooling Systems	EMP	3	150,000	Radiator including core, tanks and related framework.
DC to DC Converter	Vanner	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Passenger Seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Towing	New Flyer of America	1	50,000	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Paint	Axalta	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
BUS MODEL	XN40	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
Base Bus Warranty	New Flyer of America		1	50,000	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America		3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN		5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King		2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America		2	100,000	Friction Material Excluded
Destination Signs	Luminator		6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor		3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Cummins		2	Unlimited	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEI's warranty
LED Headlights	J.W.Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Axalta	5	Unlimited	
Air Dryer	Haldex	2	200,000	
Alternator	EMP	2	100,000	
Charge Air Cooler	EMP	3	150,000	
Cooling System	EMP	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amrexx	3	Unlimited	
Hydraulic System	New Flyer of America	2	100,000	
Starter	New Flyer of America	2	100,000	
Towing	New Flyer of America	1	50,000	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Passenger Seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Fuel Storage & Delivery System	New Flyer of America	2	100,000	
Low Voltage / High Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
BUS MODEL	XN35	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	YEARS			
Base Bus Warranty	New Flyer of America	1	50,000	The warranty shall not apply to the following items: <ul style="list-style-type: none"> scheduled maintenance items normal wear-out items items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Friction Material Excluded
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Cummins	2	Unlimited	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEI's warranty
LED Headlights	J.W.Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Axalta	5	Unlimited	
Air Dryer	Haldex	2	200,000	
Alternator	EMP	2	100,000	
Charge Air Cooler	EMP	3	150,000	
Cooling System	EMP	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amrexx	3	Unlimited	
Hydraulic System	New Flyer of America	2	100,000	
Starter	New Flyer of America	2	100,000	
Towing	New Flyer of America	1	50,000	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Passenger Seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Fuel Storage & Delivery System	New Flyer of America	2	100,000	
Low Voltage / High Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
BUS MODEL	XD80	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Basic Bus Warranty	New Flyer of America	1	50,000	Excluding scheduled maintenance items, acts of nature, or normal consumables
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road debris such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Friction Material Excluded
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	Cummins	2	Unlimited	
Wheelchair Ramp	New Flyer of America	2	100,000	



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W./Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Axalta	5	Unlimited	
Air Dryer	Haldex	2	200,000	
Alternator	EMP	2	100,000	
Articulated Joint	ATG	1	Unlimited	
Center Axle	ZF	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
Cooling System	EMP	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Ametex	3	Unlimited	Fire suppression system including tank and extinguishing agent dispensing system.
Hydraulic System	New Flyer of America	2	100,000	
Starter	New Flyer of America	2	100,000	
Towing	New Flyer of America	1	50,000	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Passenger Seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Low Voltage / High Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Surveillance System including Cameras and Video Records	Apollo	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document
Fuel Storage & Delivery System	New Flyer of America	2	100,000	
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
Charge Air Cooler	EMP	3	150,000	
For Warranty Use Only				



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
BUS MODEL	XDE60 (Allison)	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEM		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
Base Bus Warranty	New Flyer of America		1	50,000	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America		3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America		12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Hybrid Drive System	Allison		2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN		5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King		2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America		2	100,000	Friction Material Excluded
Destination Signs	Luminator		6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor		3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	PowerEx		2	Unlimited	

COV Bid #22-217 Contract Deliverables XDE60 Allison (TC) 02.xlsx XDE60 (Allison)



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		YEARS	MILEAGE	COMMENTS
	PROVIDER				
Wheelchair Ramp	New Flyer of America		2	100,000	
Electrical System	Parker		3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W.Speaker		6	Unlimited	Warranty covers parts only after first year
Paint	Axalta		5	Unlimited	
Air Dryer	Haldex		2	200,000	
Alternator	EMP		2	100,000	
Articulated Joint	ATG		1	Unlimited	
Center Axle	ZF		5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
Cooling System	EMP		3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins		5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex		3	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic System	New Flyer of America		2	100,000	
Towing	New Flyer of America		1	50,000	
Handling Charge 15%	New Flyer of America		Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Road Calls	New Flyer of America		Component Warranty Period	Unlimited	
Diagnostic & Troubleshooting Time	New Flyer of America		Component Warranty Period	Unlimited	
Passenger Seats	American Seating		5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Low Voltage /High Voltage Electrical Wiring and Harnesses	New Flyer of America		12	500,000	
Surveillance System including Cameras and Video Recorders	Apollo		2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document
Fuel Storage & Delivery System	New Flyer of America		2	100,000	
Tires	New Flyer of America		2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America		5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)
Charge Air Cooler	EMP		3	150,000	

For Warranty Use Only
 COV Bid #22-217 Contract Deliverables XDR - New Flyer of America (Allison)



NEW FLYER OF AMERICA	
CUSTOMER NAME	Commonwealth of Virginia
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
CUSTOMER PO #	
LD DATE	
BUS MODEL	XE60 (516 kWh GEN IIB)
QUANTITY	1
SPARES DELIVERY DATE	
LINE ENTRY	
DELIVERY START DATE	
DELIVERY END DATE	
SALES SPECIALIST	
PDM CO-ORDINATOR	
ENGINE	
AXLE	
TRANSMISSION	
ABS	
AIR CONDITIONING	
AUXILIARY HEAT	
PLC	
DESTINATION SIGNS	
AVL SYSTEM	

Warranty

MAJOR COMPONENT DESCRIPTION	PROVIDER	YEARS	MILES	COMMENTS
Base Bus Warranty	New Flyer of America	1	50,000	The warranty shall not apply to the following items: <ul style="list-style-type: none"> scheduled maintenance items normal wear-out items items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantees covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction, and are warranted against corrosion failure and/or fatigue failure sufficient to cause a Class 1 failure. The corrosion and structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road deicers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Propulsion System (Traction System, Controllers/inverters and Gear Box)	Siemens	6	300,000	First 5 year warranty is covered by Siemens. Year 6 covered by New Flyer. All warranty claims to be submitted to New Flyer.
HV Batteries (Energy Storage System)	Xalt Energy / New Flyer of America	6	300,000	Capacity fade is the relative reduction of the total amount of energy the battery system can store in a single charge for the purpose of powering the bus as compared to capacity at beginning of life (BOL). Capacity fade is warranted to 80% of BOL total energy capacity at year 6 or 300,000 miles when: 1) capacity measurements are taken from a balanced ESS, and 2) ESS is maintained in the manner described in the New Flyer Service Manual. The string Battery Management System (BMS) controllers and Power Distribution Unit (PDU) are warranted for proper operation up to year 6 or 300,000 miles when the ESS is maintained in the manner described in the New Flyer Service Manual. All warranty claims to be submitted to New Flyer.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
Center Axle	ZF	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
AC	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Foundation brake components, including advancing mechanisms, as supplied with the axles, excluding friction surfaces
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility. All destination sign equipment for the front, side and rear signs, power modules and operator control.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
Air Compressor	PowerEx	2	Unlimited	
Wheelchair Ramp	New Flyer of America	2	100,000	
COV Bid #22-217 Contract Deliverables XE60 516 kWh GEN IIB (TC) 02.xls XE60 (516 kWh GEN IIB)				



NEW FLYER OF AMERICA
MAJOR COMPONENT DESCRIPTION

	BASE AND EXTENDED WARRANTY PROVIDER		MILES	COMMENTS
	PROVIDER	YEARS		
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles, whichever occurs first.
New Flyer Connect System	New Flyer of America	2	Unlimited	Warranty covers parts & subscription for 2 years
Low-Voltage and High-Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Air Dryer	Haldex	2	200,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic Systems	New Flyer of America	2	100,000	Including radiator fan drive and power steering as applicable.
Propulsion System Cooling System	EMP	3	150,000	Radiator including core, tanks and related framework.
DC to DC Converter	Vanner	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Passenger Seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Articulated Joint	ATG	1	Unlimited	
Towing	New Flyer of America	1	50,000	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Paint	Axalta	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
For Warranty Use Only				



NEW FLYER OF AMERICA	
CUSTOMER NAME	Commonwealth of Virginia
BID NUMBER	22-217
SR #	
CUSTOMER CONTRACT #	
CUSTOMER PO #	
LD DATE	
BUS MODEL	XHE60
QUANTITY	1
SPARES DELIVERY DATE	
LINE ENTRY	
DELIVERY START DATE	
DELIVERY END DATE	
SALES SPECIALIST	
PDM CO-ORDINATOR	
ENGINE	
AXLE	
TRANSMISSION	
ABS	
AIR CONDITIONING	
AUXILIARY HEAT	
PLC	
DESTINATION SIGNS	
AVL SYSTEM	

Warranty

MAJOR COMPONENT DESCRIPTION	PROVIDER	YEARS	MILES	COMMENTS
Base Bus Warranty	New Flyer of America	1	50,000	The warranty shall not apply to the following items: <ul style="list-style-type: none"> scheduled maintenance items normal wear-out items items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantees covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction, and are warranted against corrosion failure and/or fatigue failure sufficient to cause a Class 1 failure. The corrosion and structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road deicers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventive maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Propulsion System (Traction System, Controllers/inverters and Gear Box)	Siemens	6	300,000	First 5 year warranty is covered by Siemens. Year 6 covered by New Flyer. All warranty claims to be submitted to New Flyer.
Hydrogen Fuel Cell	Ballard	6	250,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. The 6 year warranty is covered by Ballard. All warranty claims to be submitted to New Flyer.
Hydrogen Fuel Cell Batteries	Xalt Energy/New Flyer of America	6	Unlimited	-Capacity fade is the relative reduction of the total amount of energy the battery system can store in a single charge for the purpose of powering the bus as compared to capacity at beginning of life (BOL). Capacity fade is warranted to 80% of BOL total energy capacity at year 6 or 300,000 miles when: 1) capacity measurements are taken from a balanced ESS, and 2) ESS is maintained in the manner described in the New Flyer Service Manual." -The string Battery Management System (BMS) controllers and Power Distribution Unit (PDU) are warranted for proper operation up to year 6 or 300,000 miles when the ESS is maintained in the manner described in the New Flyer Service Manual." All warranty claims to be submitted to New Flyer.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
Center Axle	ZF	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Foundation brake components, including advancing mechanisms, as supplied with the axles, excluding friction surfaces
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility. All destination sign equipment for the front, side and rear signs, power modules and operator control.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY		COMMENTS
	PROVIDER	YEARS / MILES	
Air Compressor	PowerEx	2 / Unlimited	
Wheelchair Ramp	New Flyer of America	2 / 100,000	
Electrical System	Parker	3 / 150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6 / Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document
Tires	New Flyer of America	2 / 24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
New Flyer Connect System	New Flyer of America	2 / Unlimited	Warranty covers parts & subscription for 2 years
Low-Voltage and High-Voltage Electrical Wiring and Harnesses	New Flyer of America	12 / 500,000	
Handling Charge 15%	New Flyer of America	Component Warranty Period	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Air Dryer	Haldex	2 / 200,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Hydraulic Systems	New Flyer of America	2 / 100,000	Including radiator fan drive and power steering as applicable.
Propulsion System Cooling Systems	EMP	3 / 150,000	Radiator including core, tanks and related framework.
DC to DC Converter	Vanner	3 / 150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Passenger Seats	American Seating	5 / Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Surveillance System including Cameras and Video Recorders	Apollo	2 / Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Towing	New Flyer of America	1 / 50,000	
Road Calls	New Flyer of America	Component Warranty Period	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	
Articulated Joint	ATG	1 / Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Axalta	5 / Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
For Warranty Use Only			



NEW FLYER OF AMERICA

CONTRACT DELIVERABLES LIST		Warranty
CUSTOMER NAME	Commonwealth of Virginia	
BID NUMBER	22-217	
SR #		
CUSTOMER CONTRACT #		
CUSTOMER PO #		
LD DATE		
BUS MODEL	XN60	
QUANTITY	1	
SPARES DELIVERY DATE		
LINE ENTRY		
DELIVERY START DATE		
DELIVERY END DATE		
SALES SPECIALIST		
PDM CO-ORDINATOR		
ENGINE		
AXLE		
TRANSMISSION		
ABS		
AIR CONDITIONING		
AUXILIARY HEAT		
PLC		
DESTINATION SIGNS		
AVL SYSTEMS		

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Base Bus Warranty	New Flyer of America	1	50,000	The warranty shall not apply to the following items: • scheduled maintenance items • normal wear-out items • items furnished by the Agency
Basic Bus Structure	New Flyer of America	3	150,000	Body, and body structure shall consist of the components that are mechanically fastened or adhesively bonded or glued as part of the structure.
Chassis Structure (Integrity)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance due to non corrosion related failures.
Chassis Structure (Corrosion)	New Flyer of America	12	500,000	Consists of all components that are welded together to form the main frame (skeleton) and body construction. The corrosion guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless New Flyer approved preventative measures are taken. The warranty shall be void if the Agency fails to conduct corrosion inspections and scheduled preventative maintenance procedures as specified in the Contractor's maintenance manuals. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.
Engine	Cummins	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Transmission	Allison	2	Unlimited	All repairs/warranty claims need to be handled through the local authorized repair facility. When the 3 year extended warranty is purchased (5 years total) the following applies: Two Year Base (Full Coverage), years 3,4 & 5 covers components only as per manufacturer's warranty document.
Axle (Front and Rear)	MAN	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
Center Axle	ZF	5	300,000	Excluding maintenance items & items that are not covered by the OEM's warranty. All friction materials are excluded from this limited warranty. Wear and third party items supplied with the axle (e.g. slack adjuster, seals and bearings, shocks, air bellows, radius rods, brake chambers) are not included in the 5 year warranty. Please see manufacturer's warranty document.
A/C	Thermo King	2	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Brake System	New Flyer of America	2	100,000	Friction Material Excluded
Destination Signs	Luminator	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility.
Door Systems	Vapor	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION	BASE AND EXTENDED WARRANTY PROVIDER		MILEAGE	COMMENTS
	PROVIDER	YEARS		
Air Compressor	Cummins	2	Unlimited	
Wheelchair Ramp	New Flyer of America	2	100,000	
Electrical System	Parker	3	150,000	Excluding maintenance items & items that are not covered by the OEM's warranty
LED Headlights	J.W. Speaker	6	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Paint	Axalta	5	Unlimited	
Air Dryer	Haldex	2	200,000	
Alternator	EMP	2	100,000	
Charge Air Cooler	EMP	3	150,000	
Cooling System	EMP	3	150,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Emission Control System	Cummins	5	100,000	Some limitations and exclusions may apply - Please see manufacturer's warranty document. All repairs/warranty claims need to be handled through the local authorized repair facility for Cummins components. Warranty includes Particulate Filter, DEF Components and Aftertreatment devices which should be submitted direct to New Flyer.
Fire Suppression System	Amerex	3	Unlimited	
Hydraulic System	New Flyer of America	2	100,000	
Slater	New Flyer of America	2	100,000	
Towing	New Flyer of America	1	50,000	
Diagnostic & Troubleshooting Time	New Flyer of America	Component Warranty Period	Unlimited	
Road Calls	New Flyer of America	Component Warranty Period	Unlimited	
Handling Charge 15%	New Flyer of America	Component Warranty Period	Unlimited	The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus 15 percent handling costs. Handling costs shall not be paid if parts are supplied by the Contractor and shipped to the Agency.
Passenger seats	American Seating	5	Unlimited	Some limitations and exclusions may apply - Please see manufacturer's warranty document.
Fuel Storage & Delivery System	New Flyer of America	2	100,000	
Low Voltage / High Voltage Electrical Wiring and Harnesses	New Flyer of America	12	500,000	
Surveillance System including Cameras and Video Recorders	Apollo	2	Unlimited	
Tires	New Flyer of America	2	24,000	New Flyer Industries Limited warrants the tires installed as original equipment on this vehicle only against defects in materials and workmanship which cause the vehicle to fail to comply with applicable U.S. and Canadian greenhouse gas emission limits ("Warrantable Emissions Failures"). This vehicle emissions limited express warranty relating to original equipment tires is valid for two (2) years or 24,000 miles whichever occurs first.
Articulated Joint	ATG	1	Unlimited	
Greenhouse Gas Emissions-Related Warranty (Idle Reduction Systems)	New Flyer of America	5	100,000	Aluminum Wheels, Emissions-related warranty on Neutral-Idle or Start/Stop Idle reduction systems, as defined by the U.S. EPA (not including Allison Standard FuelSense 2.0, Restricted Neutral-at-Stop (NAS), and "Auto-Neutral" functions)



NEW FLYER OF AMERICA

MAJOR COMPONENT DESCRIPTION

PROVIDER	BASE AND EXTENDED WARRANTY	
	YEARS	MILEAGE
For Warranty Use Only		

COMMENTS

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 6, Training

Solicitation Requirements:

N/A

New Flyer Response:

Please find New Flyer's [Training Proposal](#), enclosed for your evaluation.

CONTRACT DELIVERABLES LIST		CUSTOMER TRAINING	
CUSTOMER NAME	Commonwealth of Virginia		
BID/OPTION/SR NUMBER	22-217		
TECHNICAL SUMMARY	Rev Draft 1		
BUS MODEL	35/40/60		
QUANTITY			
ENGINE	Cummins L9 2021 280hp		
VOLTAGE REGULATOR	Transtech		
ALTERNATOR	EMP		
TRANSMISSION	Allison B400R		
COOLING SYSTEM	EMP MH4		
AXLES	MAN VOK07 Front, HY1350 Rear		
LEVELING/KNEELING	Smartrider Lite		
ABS	Wabco		
AIR CONDITIONING	Thermo King, Intelligaire III, RLF, R134a		
AUXILIARY HEATER	Valeo Thermo		
PLC	Vansco		
DESTINATION SIGNS	Luminator		
DOORS	Vapor		
WHEELCHAIR RAMP	NF Standard		
FIRE SUPPRESSION	Amerex Modular		

CURRENCY:
USD

New Flyer Supplied Training

DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID	REQUIREMENT	BILLABLE: Y/N
Operator Orientation		4	\$986.85	Recommended	Y
Maintenance Orientation		4	\$986.85	Recommended	Y
Multiplex System		24	\$5,921.10	Recommended	Y
Entrance & Exit Doors		4	\$986.85	Recommended	Y
Wheelchair Ramp		4	\$986.85	Recommended	Y
Brake Systems and Axles		16	\$3,947.40	Recommended	Y
Air System and ABS		8	\$1,973.70	Recommended	Y
Suspension and Steering		8	\$1,973.70	Recommended	Y
Electric Fan Drive		4	\$986.85	Recommended	Y
Coolant Loop Fill Procedure		4	\$986.85	Recommended	Y
Towing		4	\$986.85	Recommended	Y
Body and Structure		4	\$986.85	Recommended	Y

Sub Total - New Flyer Training					Y
OEM/Subcontractor Supplied Training					
DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID		
Engine Maintenance		16	\$7,020.00	Recommended	Y
Transmission Maintenance		16	\$7,020.00	Recommended	Y
HVAC Maintenance		8	\$4,050.00	Recommended	Y
Fire Suppression		8	\$2,700.00	Recommended	Y
Destination Sign		8	\$2,700.00	Recommended	Y
Sub Total - OEM/Subcontractor Training					
Training Total (priced separate from the bus price)					

Sales Specialist
New Flyer

CONTRACT DELIVERABLES LIST		CUSTOMER TRAINING	
CUSTOMER NAME	Commonwealth of Virginia		
BID/OPTION/SR NUMBER	22-217		
TECHNICAL SUMMARY	Rev Draft 1		
BUS MODEL	XN35/40		
QUANTITY			
ENGINE	Cummins L9N 2021 280hp		
VOLTAGE REGULATOR	Transtech		
ALTERNATOR	EMP		
TRANSMISSION	Allison B400R		
COOLING SYSTEM	EMP MH4		
AXLES	MAN VOK07 Front, HY1350 Rear		
LEVELING/KNEELING	Smarterider Lite		
ABS	Wabco		
AIR CONDITIONING	Thermo King, Intelligaire III, T15, R134a		
AUXILIARY HEATER	Valeo Thermo		
PLC	Vansco		
DESTINATION SIGNS	Luminator		
DOORS	Vapor		
WHEELCHAIR RAMP	NF Standard		
FIRE SUPPRESSION/GAS DETECTION	Amerex SafetyNet		

CURRENCY:
USD

New Flyer Supplied Training

DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID	REQUIREMENT	BILLABLE: Y/N
Operator Orientation		4	\$986.85	Recommended	Y
Maintenance Orientation		4	\$986.85	Recommended	Y
Multiplex System		24	\$5,921.10	Recommended	Y
Entrance & Exit Doors		4	\$986.85	Recommended	Y
Wheelchair Ramp		4	\$986.85	Recommended	Y
Brake Systems and Axles		16	\$3,947.40	Recommended	Y
Air System and ABS		8	\$1,973.70	Recommended	Y
Suspension and Steering		8	\$1,973.70	Recommended	Y
Electric Fan Drive		4	\$986.85	Recommended	Y
Coolant Loop Fill Procedure		4	\$986.85	Recommended	Y
Towing		4	\$986.85	Recommended	Y
Body and Structure		4	\$986.85	Recommended	Y
CNG Fuel System		8	\$1,973.70	Recommended	Y

Sub Total - New Flyer Training									
OEM/Subcontractor Supplied Training									
DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID						
Engine Maintenance		16	\$7,020.00	Recommended					Y
Transmission Maintenance		16	\$7,020.00	Recommended					Y
HVAC Maintenance		8	\$4,050.00	Recommended					Y
Fire Suppression/Gas Detection		8	\$2,700.00	Recommended					Y
Destination Sign		8	\$2,700.00	Recommended					Y
Sub Total - OEM/Subcontractor Training									
Training Total (priced separate from the bus price)									

Sales Specialist
New Flyer

CONTRACT DELIVERABLES LIST		CUSTOMER TRAINING			
CUSTOMER NAME	Commonwealth of Virginia				
BID/OPTION/SR NUMBER	22-217				
TECHNICAL SUMMARY	Rev Draft 1				
BUS MODEL	XE35/40/60				
QUANTITY					
PROPULSION SYSTEM	Siemens ELFA 3				
VOLTAGE REGULATOR	Transtech				
ENERGY STORAGE SYSTEM	XALT High Energy Gen 3B				
COOLING SYSTEM	EMP/Modine BTMS				
STEERING	Berendsen Electric				
AXLES	MAN VOK07 Front, HY1350 Rear				
LEVELING/KNEELING	Smartrider Lite				
ABS	Wabco				
AIR CONDITIONING	Thermo King, Intelligaire III, TE15, R407c				
CABIN HEATER	Valeo Thermo Electric				
PLC	Vansco				
DESTINATION SIGNS	Luminator				
DOORS	Vapor Electric				
WHEELCHAIR RAMP	NF Standard				
New Flyer Supplied Training					
DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID	REQUIREMENT	BILLABLE: Y/N
Operator Orientation		4	\$986.85	Recommended	Y
Maintenance Orientation		4	\$986.85	Recommended	Y
Multiplex System		32	\$7,894.80	Recommended	Y
Entrance & Exit Doors		4	\$986.85	Recommended	Y
Wheelchair Ramp		4	\$986.85	Recommended	Y
Brake Systems and Axles		16	\$3,947.40	Recommended	Y
Air System and ABS		8	\$1,973.70	Recommended	Y
Suspension and Steering		8	\$1,973.70	Recommended	Y
Coolant Loop Fill Procedure		4	\$986.85	Recommended	Y
Towing		4	\$986.85	Recommended	Y
Body and Structure		4	\$986.85	Recommended	Y
Propulsion & ESS Familiarization/HV Safety		32	\$7,894.80	Recommended	Y
Propulsion & ESS System Troubleshooting		16	\$3,947.40	Recommended	Y

CURRENCY:
USD

DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID		
Sub Total - New Flyer Training					
OEM/Subcontractor Supplied Training					
HVAC Maintenance		8	\$4,050.00	Recommended	Y
Destination Sign		8	\$2,700.00	Recommended	Y
Siemens Propulsion Troubleshooting		24	\$13,770.00	Recommended	Y
XALT ESS Troubleshooting		16	\$9,112.50	Recommended	Y
Sub Total - OEM/Subcontractor Training					
Training Total (priced separate from the bus price)					

Sales Specialist
New Flyer

CONTRACT DELIVERABLES LIST		CUSTOMER TRAINING	
CUSTOMER NAME	Commonwealth of Virginia		
BID/OPTION/SR NUMBER	22-217		
TECHNICAL SUMMARY	Rev Draft 1		
BUS MODEL	XHE40/60		
QUANTITY			
PROPULSION SYSTEM/FUEL CELL	Siemens ELFA 2/Ballard HD85		
VOLTAGE REGULATOR	Transtech		
ALTERNATOR	Dual Vanner EBA		
ENERGY STORAGE SYSTEM	A123		
COOLING SYSTEM	EMP/Modine		
STEERING	Berendsen Electric		
AXLES	MAN VOK07 Front, HY1350 Rear		
LEVELING/KNEELING	Smarrtrider Lite		
ABS	Wabco		
AIR CONDITIONING	Thermo King, Intelligaire III, TE15, R407c		
CABIN HEATER	Valeo Thermo Electric		
PLC	Vansco		
DESTINATION SIGNS	Luminator		
DOORS	Vapor Electric		
WHEELCHAIR RAMP	NF Standard		
FIRE SUPPRESSION/GAS DETECTION	Amerex SafetyNet		

CURRENCY:
USD

New Flyer Supplied Training

DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID	REQUIREMENT	BILLABLE: Y/N
Operator Orientation		4	\$986.85	Recommended	Y
Maintenance Orientation		4	\$986.85	Recommended	Y
Multiplex System		32	\$7,894.80	Recommended	Y
Entrance & Exit Doors		4	\$986.85	Recommended	Y
WheelChair Ramp		4	\$986.85	Recommended	Y
Brake Systems and Axles		16	\$3,947.40	Recommended	Y
Air System and ABS		8	\$1,973.70	Recommended	Y
Suspension and Steering		8	\$1,973.70	Recommended	Y
Coolant Loop Fill Procedure		4	\$986.85	Recommended	Y
Towing		4	\$986.85	Recommended	Y
Body and Structure		4	\$986.85	Recommended	Y
Propulsion/Fuel Cell/ESS Familiarization/HV Safety		32	\$7,894.80	Recommended	Y

Propulsion/Fuel Cell/ESS Troubleshooting		16		\$3,947.40	Recommended	Y
Sub Total - New Flyer Training						Y
OEM/Subcontractor Supplied Training						
DESCRIPTION	COMMENTS	QTY HRS.	TOTAL SELLING PRICE AT BID			
HVAC Maintenance		8	\$4,050.00	Recommended	Y	
Fire Suppression/Gas Detection		8	\$2,700.00	Recommended	Y	
Destination Sign		8	\$2,700.00	Recommended	Y	
Siemens Propulsion Troubleshooting		24	\$13,770.00	Recommended	Y	
Ballard Fuel Cell Level 1 & 2		24	\$20,250.00	Recommended	Y	
Ballard Fuel Cell Level 3		16	\$13,500.00	Recommended	Y	
Sub Total - OEM/Subcontractor Training						
Training Total (priced separate from the bus price)						
						Y

Sales Specialist
New Flyer

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 7, Tooling and Diagnostics

Solicitation Requirements:

N/A

New Flyer Response:

Please find New Flyer's [Tooling and Diagnostics Proposal](#), enclosed for your evaluation.

CONTRACT DELIVERABLES LIST		DIAGNOSTICS & TOOLS					
CUSTOMER NAME	Commonwealth of Virginia						
BID/OPTION/GR NUMBER	22-217						
TECHNICAL SUMMARY	Rev Draft 1						
PUG MODEL	XD35/40						
QUANTITY							
ENGINE	Cummins L9 2021 280hp						
VOLTAGE REGULATOR	Transtech						
ALTERNATOR	ELMP						
TRANSMISSION	Allison B400R						
COOLING SYSTEM	EMP M14						
AXLES	MAN VOK07 Front, HY1350 Rear						
LEVELING/KNEELING	Smarttrider Lite						
ABS	Wabco						
AIR CONDITIONING	Thermo King, Intelligaire III, RLF, R134a						
AUXILIARY HEATER	Valco Thermo						
PLC	Vansco						
DESTINATION SIGNS	Luminator						
DOORS	Vapor						
WHEELCHAIR RAMP	NE Standard						
FIRE SUPPRESSION	Ametex Modular						
PAGE REFERENCE	COMMENTS	DESCRIPTION	QUOTED PART #	BID QTY	EXTENDED SELLING PRICE	REQUIREMENT	BILLABLE: Y/N
	for use with all diagnostic software	Diagnostic Equipment					
		Panasonic FZ55 Toughbook Laptop	108658	1	\$3,215.38	Recommended	Y
		Nexiq USB Link 2	6353474	1	\$1,052.42	Recommended	Y
		Cummins Insite Lite (1-year subscription)	6339520	1	\$1,086.28	Recommended	Y
		Cummins Insite Pro (1-year subscription)	6339521	1	\$1,138.41	Recommended	Y
		Allison DOC Premium - 1st Yr subscription download	6469849	1	\$1,536.98	Recommended	Y
		Allison DOC Premium - 1-yr Renewal	6474918	1	\$754.52	Recommended	Y
		Intelligaire II Diagnostic Software & Cables	6383934	1	\$1,984.53	Recommended	Y
	free download from EMP website	EMP Software	NPN	1	\$0.00	Recommended	Y
		Wabco ABS Software (1-year subscription)	6342596	1	\$395.01	Recommended	Y
		Valco Diagnostic Software & Cables	6362448	1	\$472.84	Recommended	Y
		Adapter - Diagnostic	6492163	1	\$91.93	Recommended	Y
	provided by Luminator at n/c	Luminator M1E Software	NPN	1	\$0.00	Recommended	Y
	free download from Parker-Vansco website	Vansco Software	NPN	1	\$0.00	Recommended	Y
	free download from Parker-Vansco website	Smarttrider Software	NPN	1	\$0.00	Recommended	Y
		Special Tools					
		Kit - LH Tow Universal	6965655	1	\$234.59	Recommended	Y
		Kit - LH Tow Receivers	6965657	1	\$1,613.02	Recommended	Y
		Xcelstar Flat Tow adapter (2 pcs. Per set)	6950997	1	\$3,034.73	Recommended	Y
		Asy - Frame Flat Towing	902990	1	\$5,360.85	Recommended	Y
		Jacking Adapters	434434	1	\$1,013.03	Recommended	Y
		Tool - Sway Bar Bushing Removal	566804	1	\$408.58	Recommended	Y
		Repair Kit - Disc Brakes & Callipers	6408310	1	\$3,735.56	Recommended	Y
		Torque Multiplier	6314711	1	\$2,395.74	Recommended	Y
		Hub Repair Kit - MAN VOK-07 Ft Axle	6408311	1	\$7,549.89	Recommended	Y
		Optional Hub Removal Hydraulic Tool Kit - MAN VOK-07	6458834	1	\$4,843.44	Recommended	Y
		King Pin Press Kit - MAN VOK-07 Ft Axle	6408312	1	\$12,794.07	Recommended	Y
		Hub Repair Kit - MAN HY1350 RR Axle	6408306	1	\$4,953.34	Recommended	Y
		Hub Repair R&R Kit - MAN HY1350 RR Axle	6408307	1	\$897.76	Recommended	Y
		Pinion Seal Repair Kit - MAN HY1350 RR Axle	6444302	1	\$2,387.11	Recommended	Y
		Differential Repair Kit - MAN HY1350 RR Axle	6444303	1	\$7,766.75	Recommended	Y
		Optional Tool Kit - MAN HY1350 RR Axle	6444304	1	\$32,859.57	Recommended	Y
		Rebuild Kit - EMP Alternator	6405510	1	\$3,984.73	Recommended	Y
		Coolant System Pressure Tester	660817	1	\$868.62	Recommended	Y
		Kit - Coolant Pressure Fill	6484741	1	\$2,731.21	Recommended	Y
		Adj Tool - Strg Gear Box Press Relief	6465265	1	\$196.26	Recommended	Y
		Depth Pundi - Strg Gear Box Press Relief	6465266	1	\$177.25	Recommended	Y
		Flow Meter Tester - Strg Gear Box	140695	1	\$395.80	Recommended	Y
		Puller Tool - Pitman Arm	6394270	1	\$335.83	Recommended	Y
		Refractometer - DEF	6392284	1	\$447.58	Recommended	Y
		Alignment Tool - Flex Connector	6609381	1	\$775.99	Recommended	Y
		Eng/Trans Dolly - Universal	086444	1	\$2,730.44	Recommended	Y
		Cummins L9 Service Tool Kit	6484110	1	\$26,081.55	Recommended	Y
		Kit - Allison Service Tools	6360446	1	\$8,527.40	Recommended	Y
		TK R134a A/C Tool Kit	6350866	1	\$22,255.87	Recommended	Y
		Ametex Discharge Hose Blowout Adapter	052132	1	\$121.26	Recommended	Y
		Ametex Fire Alarm/Simulator Module	6484731	1	\$355.17	Recommended	Y
				1	\$0.00		

NOTE: TOOL KITS MAY BE SUBJECT TO CHANGE

** All claims for concealed shortages must be reported within 20 days of shipment date. Shipping damages and / or loss must be noted on the delivering carrier waybill at the time of receipt of shipment. A copy of the carrier waybill and / or carrier inspection report must be submitted with your claim within 5 days of receipt of shipment to New Flyer Customer Service.

CURRENCY: USD

Sales Specialist
New Flyer

Darryl Desjarlais - Training Manager
Training
New Flyer

CONTRACT DELIVERABLES LIST		DIAGNOSTICS & TOOLS
CUSTOMER NAME	Commonwealth of Virginia	
BID/OPTION/SR NUMBER	22-217	
TECHNICAL SUMMARY	Rev Draft 1	
BUS MODEL	XN35/40/60	
QUANTITY		
ENGINE	Cummins L9N 2021 280hp	
VOLTAGE REGULATOR	Transtech	
ALTERNATOR	EMP	
TRANSMISSION	Allison B400R	
COOLING SYSTEM	EMP WH4	
AXLES	MAN VOK07 Front, HY1350 Rear	
LEVELING/KNEELING	Smart rider Lite	
ABS	Wabco	
AIR CONDITIONING	Thermo King, Intelligaire III, T15, R13-4a	
AUXILIARY HEATER	Valeo Thermo	
PLC	Vansco	
DESTINATION SIGNS	Luminator	
DOORS	Vapor	
WHEELCHAIR RAMP	NF Standard	
FIRE SUPPRESSION/GAS DETECTION	Amerex SafetyNet	

PAGE REFERENCE	COMMENTS
	for use with all diagnostic software
	free download from EMP website
	provided by Luminator at n/c
	free download from Parker-Vansco website
	free download from Parker-Vansco website

NOTE: TOOL KITS MAY BE SUBJECT TO CHANGE

**** All claims for concealed shortages must be reported within 20 days of shipment date. Shipping damages and / or loss must be noted on the delivering carrier waybill at the time of receipt of shipment. A copy of the carrier waybill and / or carrier inspection report must be submitted with your claim within 5 days of receipt of shipment to New Flyer Customer Service.**

CURRENCY:
USD

DESCRIPTION	QUOTED PART #	BID QTY	EXTENDED SELLING PRICE	REQUIREMENT	BILLABLE: Y/N
Diagnostic Equipment					
Panasonic FZ55 Toughbook Laptop	108658	1	\$3,215.38	Recommended	Y
Nexiq USB Link 2	6353474	1	\$1,052.42	Recommended	Y
Cummins Insite Lite (1-year subscription)	6339520	1	\$1,086.28	Recommended	Y
Cummins Insite Pro (1-year subscription)	6339521	1	\$1,138.41	Recommended	Y
Allison DOC Premium - 1st Yr subscription download	6469849	1	\$1,536.98	Recommended	Y
Allison DOC Premium - 1-yr Renewal	6474918	1	\$754.52	Recommended	Y
Intelligaire III Diagnostic Software & Cables	6393934	1	\$1,994.53	Recommended	Y
EMP Software	NPN	1	\$0.00	Recommended	Y
Wabco ABS Software (1-year subscription)	6334596	1	\$395.01	Recommended	Y
Valeo Diagnostic Software & Cables	6396448	1	\$472.84	Recommended	Y
Adapter - Diagnostic	6492163	1	\$51.93	Recommended	Y
Luminator MIE Software	NPN	1	\$0.00	Recommended	Y
Vansco Software	NPN	1	\$0.00	Recommended	Y
Smart rider Software	NPN	1	\$0.00	Recommended	Y
Amerex SafetyNet Software & Interface	6355551	1	\$651.87	Recommended	Y
Special Tools					
Kit - Lift Tow Universal	6396565	1	\$234.59	Recommended	Y
Kit - Lift Tow Receivers	6396567	1	\$1,613.02	Recommended	Y
Xcelstor Flat Tow adapter (2 pcs. Per set)	6395097	1	\$3,034.73	Recommended	Y
Assy - Frame Flat Towing	902990	1	\$5,360.85	Recommended	Y
Jacking Adapters	434434	1	\$1,013.03	Recommended	Y
Tool - Sway Bar Bushing Removal	566804	1	\$408.58	Recommended	Y
Repair Kit - Disc Brakes & Calipers	6408310	1	\$3,735.56	Recommended	Y
Torque Multiplier	6314711	1	\$2,395.74	Recommended	Y
Hub Repair Kit - MAN VOK-07 Ft. Axle	6408311	1	\$7,549.89	Recommended	Y
Optional Hub Removal Hydraulic Tool Kit - MAN VOK-07	6458834	1	\$4,843.44	Recommended	Y
King Pin Press Kit - MAN VOK-07 Ft. Axle	6408312	1	\$12,794.07	Recommended	Y
Hub Repair Kit - MAN HY1350 RR Axle	6408306	1	\$4,953.34	Recommended	Y
ABS Sensor R&R Kit - MAN HY1350 RR Axle	6408307	1	\$897.76	Recommended	Y
Pinion Seal Repair Kit - MAN HY1350 RR Axle	6444302	1	\$2,387.11	Recommended	Y
Differential Repair Kit - MAN HY1350 RR Axle	6444303	1	\$7,766.75	Recommended	Y
Optional Tool Kit - MAN HY1350 RR Axle	6444304	1	\$32,859.57	Recommended	Y
Rebuild Kit - EMP Alternator	6405510	1	\$3,984.73	Recommended	Y
Coolant System Pressure Tester	660817	1	\$868.62	Recommended	Y
Kit - Coolant Pressure Fill	6484741	1	\$2,731.21	Recommended	Y
Adj Tool - Strg Gear Box Press Relief	6465265	1	\$296.26	Recommended	Y
Depth Punch - Strg Gear Box Press Relief	6465266	1	\$177.75	Recommended	Y

		Flow Meter Tester - Strg Gear Box	140809	1	\$595.80	Recommended	Y
		Puller Tool - Pitman Arm	6394270	1	\$335.83	Recommended	Y
		Alignment Tool - Flex Connector	6360381	1	\$775.99	Recommended	Y
		Eng/Trans Dolly - Universal	086444	1	\$2,730.44	Recommended	Y
		Cummins L9N Service Tool Kit	6483729	1	\$24,683.59	Recommended	Y
		Kit - Allison Service Tools	6360446	1	\$8,527.40	Recommended	Y
		TK R134a A/C Tool Kit	6350866	1	\$22,255.87	Recommended	Y
		Amerex Discharge Hose Blowout Adapter	052132	1	\$121.26	Recommended	Y
		Amerex Fire Alarm/Simulator Module	6484731	1	\$355.17	Recommended	Y
		Amerex Calibration Kit - AMGADS III	6459321	1	\$1,398.07	Recommended	Y
		CNG Tank Valve Installation Tool	6467614	1	\$1,900.99	Recommended	Y
					\$0.00		

Sales Specialist
New Flyer

Darryl Desjarlais - Training Manager
Training
New Flyer

CONTRACT DELIVERABLES LIST		DIAGNOSTICS & TOOLS					
CUSTOMER NAME	Commonwealth of Virginia						
BID/OPTION/SR NUMBER	22-217						
TECHNICAL SUMMARY	Rev Draft 1						
BUS MODEL	XE35/40/60						
QUANTITY							
PROPULSION SYSTEM	Siemens ELFA 3						
VOLTAGE REGULATOR	Transtech						
ENERGY STORAGE SYSTEM	XALT High Energy Gen 3B						
COOLING SYSTEM	EMP/Modine BTMS						
STEERING	Berendsen Electric						
AXLES	MAN VOK07 Front, HY1350 Rear						
LEVELING/KNEELING	Smarttrider Lite						
ABS	Wabco						
AIR CONDITIONING	Thermo King, Intelligaire Ill, TEL5, R407c						
CABIN HEATER	Valeo Thermo Electric						
PLC	Vansco						
DESTINATION SIGNS	Luminator						
DOORS	Vapor Electric						
WHEELCHAIR RAMP	NF Standard						
PAGE REFERENCE	COMMENTS	DESCRIPTION	QUOTED PART #	BID QTY	EXTENDED SELLING PRICE	REQUIREMENT	BILLABLE: Y/N
		Diagnostic Equipment					
	for use with all diagnostic software	Panasonic FZ55 Toughbook Laptop	108658	1	\$3,215.38	Recommended	Y
	free download from EMP website	Intelligaire Ill Diagnostic Software & Cables EMP Software	6393934	1	\$1,994.53	Recommended	Y
		Wabco ABS Software (1-year subscription)	6334596	1	\$395.01	Recommended	Y
		Valeo Diagnostic Software & Cables Adapter - Diagnostic	6396448	1	\$472.84	Recommended	Y
	provided by Luminator at n/c	Luminator MIE Software	6492163	1	\$51.93	Recommended	Y
	free download from Parker-Vansco website	Vansco Software	NPN	1	\$0.00	Recommended	Y
	free download from Parker-Vansco website	PVSG Software	NPN	1	\$0.00	Recommended	Y
	free download from Parker-Vansco website	Cable - PVSG Interface	6487019	1	\$49.67	Recommended	Y
	provided by Vapor at n/c	Smarttrider Software Vapor VETC2 Software	NPN	1	\$0.00	Recommended	Y
		Siemens PCAN Interface Harness	711447	1	\$97.35	Recommended	Y
		USB CAN Adapter - Siemens Interface	6402046	1	\$380.90	Recommended	Y
	for ELFA 3	UDS Software - Vector Indigo	6487897	1	\$3,260.25	Recommended	Y
	for ELFA 3	Annual Maintenance - Vector Indigo	6487898	1	\$586.87	Recommended	Y
	for ELFA 3	Vector Keyman USB Dongle	6487899	2	\$288.08	Recommended	Y
	for ELFA 3 (qty of 2 per 1 VN1630)	Indigo Interface - Vector VN1630 Log	6491163	1	\$3,144.57	Recommended	Y
	for ELFA 3 (qty of 2 per 1 VN1650)	CANpiggy_1057GCap - Vector	6491232	2	\$538.06	Recommended	Y
	provided by XALT at n/c	CANCable ZY - Vector Indigo XALT Service Tool Software	6412000	2	\$105.89	Recommended	Y
		XALT Interface Cable - Batteries	704950	1	\$0.00	Recommended	Y
	free download from Modine website	Kit - XALT SPI Tool Universal Modine BTMS Software	6482554	1	\$197.51	Recommended	Y
		Plug - MSD Blank	869751	6	\$2,361.18	Recommended	Y
		Cap - 12 PK Bus Bar Protective Cvr Key, Cam Latch #4 (ESS Triangle Key)	6483658	1	\$0.00	Recommended	Y
		Nexiq USB Link 2 - WIFI Edition	6476226	1	\$156.57	Recommended	Y
	provided by Berendsen at n/c	Danfoss Software - Berendsen Pwr Strg Cables Kit - Berendsen Pwr Strg	6465863	1	\$4.12	Recommended	Y
			NPN	1	\$1,149.77	Recommended	Y
			6490120	1	\$0.00	Recommended	Y
		Special Tools & PPE					
		Kit - Lift Tow Universal	6396565	1	\$337.14	Recommended	Y
		Kit - Lift Tow Receivers	6396567	1	\$234.59	Recommended	Y
		Xcelision Flat Tow adapter (2 pcs. Per set)	6395097	1	\$1,613.02	Recommended	Y
		Assy - Frame Flat Towing	902990	1	\$3,034.73	Recommended	Y
		Jacking Adapters	434434	1	\$5,360.85	Recommended	Y
		Tool - Sway Bar Bushing Removal	566804	1	\$1,013.03	Recommended	Y
		Repair Kit - Disc Brakes & Callipers	6408310	1	\$408.58	Recommended	Y
				1	\$3,735.56	Recommended	Y

CURRENCY:
USD

NOTE: TOOL KITS MAY BE SUBJECT TO CHANGE

** All claims for concealed shortages must be reported within 20 days of shipment date. Shipping damages and / or loss must be noted on the delivering carrier waybill at the time of receipt of shipment. A copy of the carrier waybill and / or carrier inspection report must be submitted with your claim within 5 days of receipt of shipment to New Flyer Customer Service.

PPE	ARC Flash Protection Clothing Kit - 1PC Large	6473416	1	\$633.23	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC XL	6473417	1	\$633.23	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC 2XL	6473418	1	\$841.91	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC 3XL	6471971	1	\$841.91	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC 4XL	6471972	1	\$841.91	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC 5XL	6471973	1	\$841.91	Recommended	Y
PPE	Balaclava Head Cover one size fits all	6473440	1	\$40.78	Recommended	Y
PPE	Hard Hat and Face Shield one size fits all	6368561	1	\$361.95	Recommended	Y
PPE	Fall Safety Harness 425LBS	6473270	1	\$246.77	Recommended	Y
PPE	Black electrical glove kit, Size 7	6471976	1	\$129.53	Recommended	Y
PPE	Black electrical glove kit, Size 8	6473420	1	\$144.90	Recommended	Y
PPE	Black electrical glove kit, Size 8.5	6471978	1	\$144.90	Recommended	Y
PPE	Black electrical glove kit, size 9	6471979	1	\$144.90	Recommended	Y
PPE	Black electrical glove kit, Size 9.5	6473421	1	\$144.90	Recommended	Y
PPE	Black electrical glove kit, size 10	6473422	1	\$140.64	Recommended	Y
PPE	Black electrical glove kit, Size 10.5	6473423	1	\$168.24	Recommended	Y
PPE	Black electrical glove kit, size 11	6473424	1	\$133.29	Recommended	Y
PPE	Black electrical glove kit, size 12	6473425	1	\$133.29	Recommended	Y
PPE	HV Blanket 3' x 3'	6473431	1	\$465.22	Recommended	Y
PPE	Blanket Clamp 9-1/2" L, 5" Opening	6473432	1	\$34.06	Recommended	Y
PPE	Glove Dust 0.5oz	6473433	1	\$13.82	Recommended	Y
PPE	Rescue Hook 6FT	6400745	1	\$486.54	Recommended	Y
PPE	Defibrillator Adult	6473177	1	\$2,328.09	Recommended	Y
PPE	Brady Personal Lockout Pouch Kit	6473441	1	\$122.00	Recommended	Y
PPE	Steel Lock Hasp with Tab	6473442	1	\$14.77	Recommended	Y
PPE	American lock A1106RED	6473443	1	\$21.48	Recommended	Y
PPE	Lock Out Tag	6473444	1	\$27.01	Recommended	Y
PPE	Hv Warning sign	6473436	1	\$16.38	Recommended	Y
PPE	Arc Flash Warning sign	6473437	1	\$13.50	Recommended	Y
PPE	steering wheel covers	6473439	1	\$61.78	Recommended	Y
PPE	Cart - Safety Barricade System (up to 75ft)	6491772	1	\$1,698.54	Recommended	Y
				\$0.00		

Sales Specialist
New Flyer

Darryl Desjarlais - Training Manager
Training
New Flyer

CONTRACT DELIVERABLES LIST		DIAGNOSTICS & TOOLS
CUSTOMER NAME	Commonwealth of Virginia	
BID/OPTION/SR NUMBER	22-217	
TECHNICAL SUMMARY	Rev Draft 1	
BUS MODEL	XHE40/60	
QUANTITY		
PROPULSION SYSTEM/FUEL CELL	Siemens ELFA 2/Ballard HD85	
VOLTAGE REGULATOR	Transtech	
ALTERNATOR	Dual Vanner EBA	
ENERGY STORAGE SYSTEM	AL23	
COOLING SYSTEM	EMP/Modine	
STEERING	Berendsen Electric	
AXLES	MAN VOK07 Front, HY1350 Rear	
LEVELING/KNEELING	Smart rider Lite	
ABS	Wabco	
AIR CONDITIONING	Thermo King, Intelligaire III, TE15, R407c	
CABIN HEATER	Valeo Thermo Electric	
PLC	Vansco	
DESTINATION SIGNS	Luminator	
DOORS	Vapor Electric	
WHEELCHAIR RAMP	NF Standard	
FIRE SUPPRESSION/GAS DETECTION	Amerex SafetyNet	

NOTE: TOOL KITS MAY BE SUBJECT TO CHANGE

**** All claims for concealed shortages must be reported within 20 days of shipment date. Shipping damages and / or loss must be noted on the delivering carrier waybill at the time of receipt of shipment. A copy of the carrier waybill and / or carrier inspection report must be submitted with your claim within 5 days of receipt of shipment to New Flyer Customer Service.**

CURRENCY:
USD

PAGE REFERENCE	COMMENTS	DESCRIPTION	QUOTED PART #	BID QTY	EXTENDED SELLING PRICE	REQUIREMENT	BILLABLE: Y/N
		Diagnostic Equipment					
	for use with all diagnostic software	Panasonic FZ55 Toughbook Laptop	108658	1	\$3,215.38	Recommended	Y
	free download from EMP website	Intelligaire III Diagnostic Software & Cables	6393934	1	\$1,994.53	Recommended	Y
	free download from Modine website	EMP Software	NPN	1	\$0.00	Recommended	Y
		Modine Software	NPN	1	\$0.00	Recommended	Y
		Wabco ABS Software (1-year subscription)	6334596	1	\$395.01	Recommended	Y
		Valeo Diagnostic Software & Cables	6396448	1	\$472.84	Recommended	Y
		Adapter - Diagnostic	6492163	1	\$51.93	Recommended	Y
	provided by Luminator at n/c	Luminator MIE Software	NPN	1	\$0.00	Recommended	Y
	free download from Parker-Vansco website	Vansco Software	NPN	1	\$0.00	Recommended	Y
	free download from Parker-Vansco website	PVSG Software	NPN	1	\$0.00	Recommended	Y
		Cable - PVSG Interface	6487019	1	\$49.67	Recommended	Y
		Smart rider Software	NPN	1	\$0.00	Recommended	Y
	free download from Parker-Vansco website	Vapor VETC2 Software	NPN	1	\$0.00	Recommended	Y
	provided by Vapor at n/c	Diagnostic Kit - Vanner HBA/EBA	6406922	1	\$1,144.30	Recommended	Y
		Siemens Siadis Software	NPN	1	\$0.00	Recommended	Y
	provided by Siemens at n/c	Siemens PCAN Interface Harness	711447	1	\$97.35	Recommended	Y
		USB CAN Adapter - Siemens Interface	6402046	1	\$380.90	Recommended	Y
		Key, Cam Latch #4 (ESS Triangle Key)	6476226	1	\$4.12	Recommended	Y
		Nexiq USB Link 2 - WIFI Edition	6465863	1	\$1,149.77	Recommended	Y
	provided by Berendsen at n/c	Danfoss Software - Berendsen Pwr Strg	NPN	1	\$0.00	Recommended	Y
	provided by Ballard at n/c	Cables Kit - Berendsen Pwr Strg	6490120	1	\$337.14	Recommended	Y
		Ballard Software	NPN	1	\$0.00	Recommended	Y
		Diag Cable - Ballard RDU	6473813	1	\$334.35	Recommended	Y
		Amerex SafetyNet Software & Interface	6355551	1	\$651.87	Recommended	Y
		Special Tools & PPE					
		Kit - Lift Tow Universal	6396565	1	\$234.59	Recommended	Y
		Kit - Lift Tow Receivers	6396567	1	\$1,613.02	Recommended	Y
		Xcelstor Flat Tow adapter (2 pcs. Per set)	6395097	1	\$3,034.73	Recommended	Y
		Assy - Frame Flat Towing	902990	1	\$5,360.85	Recommended	Y
		Jacking Adapters	434434	1	\$1,013.03	Recommended	Y
		Tool - Sway Bar Bushing Removal	566804	1	\$408.58	Recommended	Y
		Repair Kit - Disc Brakes & Callipers	6408310	1	\$3,735.56	Recommended	Y
		Torque Multiplier	6314711	1	\$2,395.74	Recommended	Y
		Hub Repair Kit - MAN VOK-07 Ftr Axle	6408311	1	\$7,549.89	Recommended	Y
		Optional Hub Removal Hydraulic Tool Kit - MAN VOK-07	6458834	1	\$4,843.44	Recommended	Y
		King Pin Press Kit - IMAN VOK-07 Ftr Axle	6408312	1	\$12,794.07	Recommended	Y

PPE	ARC Flash Protection Clothing Kit - 1PC 2XL	6473418	1	\$841.91	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC 3XL	6471971	1	\$841.91	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC 4XL	6471972	1	\$841.91	Recommended	Y
PPE	ARC Flash Protection Clothing Kit - 1PC 5XL	6471973	1	\$841.91	Recommended	Y
PPE	Balaclava Head Cover one size fits all	6473440	1	\$40.78	Recommended	Y
PPE	Hard Hat and Face Shield one size fits all	6368561	1	\$361.95	Recommended	Y
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PPE	Black electrical glove kit, Size 7	6471976	1	\$129.53	Recommended	Y
PPE	Black electrical glove kit, Size 8	6473420	1	\$144.90	Recommended	Y
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PPE	Black electrical glove kit, Size 10.5	6473423	1	\$168.24	Recommended	Y
PPE	Black electrical glove kit, size 11	6473424	1	\$133.29	Recommended	Y
PPE	Black electrical glove kit, size 12	6473425	1	\$133.29	Recommended	Y
PPE	HV Blanket 3' x 3'	6473431	1	\$465.22	Recommended	Y
PPE	Blanket Clamp 9-1/2" L, 5" Opening	6473432	1	\$34.06	Recommended	Y
PPE	Glove Dust 0.5oz	6473433	1	\$13.82	Recommended	Y
PPE	Rescue Hook GFT	6400745	1	\$486.54	Recommended	Y
PPE	Defibrillator Adult	6473177	1	\$2,328.09	Recommended	Y
PPE	Brady Personal Lockout Pouch Kit	6473441	1	\$122.00	Recommended	Y
PPE	Steel Lock Hasp with Tab	6473442	1	\$14.77	Recommended	Y
PPE	American lock A1106RED	6473443	1	\$21.48	Recommended	Y
PPE	Lock Out Tag	6473444	1	\$27.01	Recommended	Y
PPE	Hv Warning sign	6473436	1	\$16.38	Recommended	Y
PPE	Arc Flash Warning sign	6473437	1	\$13.50	Recommended	Y
PPE	steering wheel covers	6473439	1	\$61.78	Recommended	Y
PPE	Cart - Safety Barricade System (up to 75ft)	6491772	1	\$1,698.54	Recommended	Y
				\$0.00		

Sales Specialist
New Flyer

Darryl Desjarlais - Training Manager
Training
New Flyer

Virginia Department of Rail and Public Transportation

IFB 6447

Vehicle: Low Floor Transit Buses, Commuter Coach Buses, and Trolleys Heavy Duty,
12 Year (29 ft. – 60 ft. sizes)

Tab 8, Publications

Solicitation Requirements:

N/A

New Flyer Response:

Please find New Flyer's [Publications Proposal](#), enclosed for your evaluation.

CONTRACT DELIVERABLES PROPOSAL		PUBLICATIONS rev a. September 8, 2022	
PRIMARY CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
PUBLICATIONS CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
BID NUMBER		22-217	
SR #			
BUS MODEL		XD35/40/60	
QUANTITY		1	

0 Virginia Dept of Rail and Public Transportation

New Flyer Standard Bus Publications				This is for one XD40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Emergency Responder Guide (8.5x11 laminated paper)	1	With First Bus Delivery	6	Emergency information to be on board each bus	
Operator's Guide (8.5x11 3-hole)	1	With First Bus Delivery	6		
Parts Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Service Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Bus System Drawings Manual (11x17 3-hole regular paper includes air, electr, hydraulic, cooling, PLC HVAC layouts and schematics)	1	Within 30 Business Days After Last Bus Delivery	6		
TIV USB	1	Within 30 Business Days After Last Bus Delivery	6	USB Includes only NF Manuals plus OEM items below with ""	

Sub Total

OEM Supplier Publications				This is for one XD40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Cummins L9 (CM2350) 2021EPA Engine OEM Vendor Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier		2021EPA Manual cost and availability unknown. Will need to re-quote.	
Fault Code Troubleshooting Manual (Vol 1 - 6)	1	"	N/A		
Service Manual (Vol 1 - 2)	1	"	N/A		
Operation & Maintenance Manual	1	"	N/A		
Owners Manual	1	"	N/A		
ALLISON TRANSMISSION B300/400/3400xFE OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier		Gen6 Manual cost and availability unknown. Will need to re-quote	
Service Manual	1	"	N/A	*	
Parts Manual	1	"	N/A	*	
Quick Tech Troubleshooting Guide	1	"	N/A	*	
Troubleshooting Manual	1	"	N/A	*	
Principle of Operations	1	"	N/A	*	
Mechanics Tips	1	"	N/A	*	
Operator's Manuals	1	"	N/A	*	
Thermo King HVAC OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Unit Operation & Maintenance Manual	1	"	N/A	*	
Intelligaire III Diagnostic Manual	1	"	N/A	*	
EMP Cooling System OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
MH4 Cooling System Service Manual	1	"	N/A	*	
MH4 Cooling System Troubleshooting Manual	1	"	N/A	*	
WABCO ABS System OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
ABS Maintenance Manual	1	"	N/A	*	
Auxiliary Coolant Heater OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Valeo Thermo Plus 230 Workshop Manual	1	"	N/A	*	
Destination Sign OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Luminator Operation & Maintenance Manual	1	"	N/A	*	
Amerex FSS OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
V25ABC System Operation and Maintenance Manual	1	"	N/A	*	
Modular Controller Operation and Maintenance Manual	1	"	N/A	*	
Vansco Multiplexing System OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Hardware User Guides	1	"	N/A	*	
Software User Guides	1	"	N/A	*	

Sub Total

Other New Flyer Costs				This is for one XD40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (Years)	COMMENTS	
Standard Labour Hours required for NF Bus Manual Set Publishing	425	N/A		Not charged to the customer	

Sub Total

Grand Total

Sales Specialist
New Flyer

Director of Publications
New Flyer

CONTRACT DELIVERABLES PROPOSAL		PUBLICATIONS rev a. September 8, 2022	
PRIMARY CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
PUBLICATIONS CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
BID NUMBER		22-217	
SR #			
BUS MODEL		XDE35/40/60	
QUANTITY		1	

0 Virginia Dept of Rail and Public Transportation

New Flyer Standard Bus Publications				This is for one XDE40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Emergency Responder Guide (8.5x11 laminated paper)	1	With First Bus Delivery	6	Emergency information to be on board each bus	
Operator's Guide (8.5x11 3-hole)	1	With First Bus Delivery	6		
Parts Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Service Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Bus System Drawings Manual (11x17 3-hole regular paper includes air, electr, hydraulic, cooling, PLC HVAC layouts and schematics)	1	Within 30 Business Days After Last Bus Delivery	6		
TIV USB	1	Within 30 Business Days After Last Bus Delivery	6	USB Includes only NF Manuals plus OEM items below with ""	

Sub Total

OEM Supplier Publications				This is for one XDE40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Cummins B6.7 (CM2350) 2021EPA Engine OEM Vendor Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier		2021EPA Manual cost and availability unknown. Will need to re-quote.	
Fault Code Troubleshooting Manual (Vol 1 - 6)	1	"	N/A		
Service Manual (Vol 1 - 2)	1	"	N/A		
Operation & Maintenance Manual	1	"	N/A		
Owners Manual	1	"	N/A		
ALLISON TRANSMISSION eGen Flex 40 OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier		Gen6 Manual cost and availability unknown. Will need to re-quote	
	1	"	N/A	*	
Parts Manual	1	"	N/A	*	
Troubleshooting Manual	1	"	N/A	*	
Principle of Operations	1	"	N/A	*	
Mechanics Tips	1	"	N/A	*	
Operator's Manuals	1	"	N/A	*	
Thermo King HVAC OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Unit Operation & Maintenance Manual	1	"	N/A	*	
Intelligaire III Diagnostic Manual	1	"	N/A	*	
EMP Cooling System OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
MH4 Cooling System Service Manual	1	"	N/A	*	
MH4 Cooling System Troubleshooting Manual	1	"	N/A	*	
Hybrid Oil Cooler System Manual	1	"	N/A	*	
WABCO ABS System OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
ABS Maintenance Manual	1	"	N/A	*	
Auxiliary Coolant Heater OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Valeo Thermo Plus 230 Workshop Manual	1	"	N/A	*	
Destination Sign OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Luminator Operation & Maintenance Manual	1	"	N/A	*	
Amerex FSS OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
V25ABC System Operation and Maintenance Manual	1	"	N/A	*	
Modular Controller Operation and Maintenance Manual	1	"	N/A	*	
Vansco Multiplexing System OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Hardware User Guides	1	"	N/A	*	
Software User Guides	1	"	N/A	*	

Sub Total

Other New Flyer Costs				This is for one XDE40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (Years)	COMMENTS	
Standard Labour Hours required for NF Bus Manual Set Publishing	450	N/A		Not charged to the customer	

Sub Total

Grand Total

Sales Specialist

Director of Publications

CONTRACT DELIVERABLES PROPOSAL		PUBLICATIONS rev a. September 8, 2022	
PRIMARY CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
PUBLICATIONS CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
BID NUMBER		22-217	
SR #			
BUS MODEL		XN35/40/60	
QUANTITY		1	

0 Virginia Dept of Rail and Public Transportation

New Flyer Standard Bus Publications				This is for one XN40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Emergency Responder Guide (8.5x11 laminated paper)	1	With First Bus Delivery	6	Emergency information to be on board each bus	
Operator's Guide (8.5x11 3-hole)	1	With First Bus Delivery	6		
Parts Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Service Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Bus System Drawings Manual (11x17 3-hole regular paper includes air, electr, hydraulic, cooling, PLC HVAC layouts and schematics)	1	Within 30 Business Days After Last Bus Delivery	6		
TIV USB	1	Within 30 Business Days After Last Bus Delivery	6	USB Includes only NF Manuals plus OEM items below with ""	

Sub Total

OEM Supplier Publications				This is for one XN40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Cummins L9N (CM2380) 2021EPA Engine OEM Vendor Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier		2021EPA Manual cost and availability unknown. Will need to re-quote.	
Fault Code Troubleshooting Manual (Vol 1 - 3)	1	"	N/A		
Service Manual (Vol 1 - 2)	1	"	N/A		
Operation & Maintenance Manual	1	"	N/A		
Owners Manual	1	"	N/A		
ALLISON TRANSMISSION B400 OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier		Gen6 Manual cost and availability unknown. Will need to re-quote	
Service Manual	1	"	N/A	*	
Parts Manual	1	"	N/A	*	
Quick Tech Troubleshooting Guide	1	"	N/A	*	
Troubleshooting Manual	1	"	N/A	*	
Principle of Operations	1	"	N/A	*	
Mechanics Tips	1	"	N/A	*	
Operator's Manuals	1	"	N/A	*	
Thermo King HVAC OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Unit Operation & Maintenance Manual	1	"	N/A	*	
Intelligaire III Diagnostic Manual	1	"	N/A	*	
EMP Cooling System OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
MH4 Cooling System Service Manual	1	"	N/A	*	
MH4 Cooling System Troubleshooting Manual	1	"	N/A	*	
WABCO ABS System OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
ABS Maintenance Manual	1	"	N/A	*	
Auxiliary Coolant Heater OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Valeo Thermo G 300 Workshop Manual	1	"	N/A	*	
Destination Sign OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Luminator Operation & Maintenance Manual	1	"	N/A	*	
Amerex FSS OEM Manual Set (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
V25ABC System Operation and Maintenance Manual	1	"	N/A	*	
SafetyNet Controller Operation and Maintenance Manual	1	"	N/A	*	
Vansco Multiplexing System OEM Manual (includes only the following)		Within 30 Business Days After Last Bus Delivery or Soon After Receiving From OEM Supplier			
Hardware User Guides	1	"	N/A	*	
Software User Guides	1	"	N/A	*	

Sub Total

Other New Flyer Costs				This is for one XN40 Build of approx 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (Years)	COMMENTS	
Standard Labour Hours required for NF Bus Manual Set Publishing	450	N/A		Not charged to the customer	

Sub Total

Grand Total

Sales Specialist
New Flyer

Director of Publications
New Flyer

CONTRACT DELIVERABLES PROPOSAL		PUBLICATIONS rev a. September 8, 2022	
PRIMARY CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
PUBLICATIONS CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
BID NUMBER		22-217	
SR #			
BUS MODEL		XE35/40/60	
QUANTITY		1	

0 Virginia Dept of Rail and Public Transportation

New Flyer Standard Bus Publications				This is for one XE40 Build of 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Emergency Responder Guide (8.5x11 laminated paper)	1	With First Bus Delivery	6	Emergency information to be on board each bus	
Operator's Guide (8.5x11 3-hole)	1	With First Bus Delivery	6		
Parts Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Service Manual	1	Within 30 Business Days After Last Bus Delivery	6		
Bus System Drawings Manual (11x17 3-hole regular paper includes air, electr, hydraulic, cooling, PLC HVAC layouts and schematics)	1	Within 30 Business Days After Last Bus Delivery	6		
TIV USB	1	Within 30 Business Days After Last Bus Delivery	6	USB Includes only NF Manuals plus OEM items below with ""	

Sub Total

OEM Supplier Publications				This is for one XE40 Build of 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS	
Siemens E-Drive Propulsion System OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		*	
Siemens E-Drive Propulsion System Maintenance, Service, Parts, Operation, Troubleshooting and associated Schematics	1	"	N/A	includes PEM Traction Drive Motors, Inverters, E-drive Controls, and related components	
XALT Energy ESS OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
XALT Energy Storage System User Guide	1	"	N/A	*	
Modine BTMS OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
BTMS Service Manual	1	"	N/A	*	
Thermo King HVAC OEM Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
Unit Operation & Maintenance Manual	1	"	N/A	*	
Intelligaire III Diagnostic Manual	1	"	N/A	*	
Valeo Cabin Heater System OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
Thermo DC200 Workshop Manual	1	"	N/A	*	
EMP Cooling System OEM Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
EMP Traction Motor and Inverter Cooler Service Manual	1	"	N/A	*	
EMP Traction Motor and Inverter Cooler Troubleshooting Manual	1	"	N/A	*	
WABCO ABS System OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
ABS Maintenance Manual	1	"	N/A	*	
Destination Sign OEM Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
Luminator Operation & Maintenance Manual	1	"	N/A	*	
Vansco Multiplexing System OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier			
Hardware User Guides	1	"	N/A	*	
Software User Guides	1	"	N/A	*	

Sub Total

Other New Flyer Costs				This is for one XE40 Build of 1 Bus Only	
DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (Years)	COMMENTS	
Standard Labour Hours required for NF Bus Manual Set Publishing	450	N/A		Not charged to the customer	

Sub Total

Grand Total

Sales Specialist
New Flyer

Director of Publications
New Flyer

CONTRACT DELIVERABLES PROPOSAL		PUBLICATIONS rev a. September 8, 2022	
PRIMARY CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
PUBLICATIONS CUSTOMER NAME		Virginia Dept of Rail and Public Transportation	
BID NUMBER		22-217	
SR #			
BUS MODEL		XHE40/60	
QUANTITY		1	

0 Virginia Dept of Rail and Public Transportation

New Flyer Standard Bus Publications				This is for one XHE35 Build of 1 Bus Only	
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DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS
Emergency Responder Guide (8.5x11 laminated paper)	1	With First Bus Delivery	6	Emergency information to be on board each bus
Operator's Guide (8.5x11 3-hole)	1	With First Bus Delivery	6	
Parts Manual	1	Within 30 Business Days After Last Bus Delivery	6	
Service Manual	1	Within 30 Business Days After Last Bus Delivery	6	
Bus System Drawings Manual (11x17 3-hole regular paper includes air, electr, hydraulic, cooling, PLC HVAC layouts and schematics)	1	Within 30 Business Days After Last Bus Delivery	6	
TIV USB	1	Within 30 Business Days After Last Bus Delivery	6	USB Includes only NF Manuals plus OEM items below with ""

Sub Total				
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OEM Supplier Publications				This is for one XHE35 Build of 1 Bus Only	
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DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (years)	COMMENTS
Siemens E-Drive Propulsion System OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		*
Siemens E-Drive Propulsion System Maintenance, Service, Parts, Operation, Troubleshooting and associated Schematics	1	"	N/A	includes PEM Traction Drive Motors, Inverters, E-drive Controls, and related components
Ballard Fuel Cell OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
System User Guide	1	"	N/A	*
A123 HV ESS OEM Vendor Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
System User Guide	1	"	N/A	*
Vanner EBA500 OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
EBA500 High Voltage DC-DC converter Owners Guide	1	"	N/A	*
Thermo King HVAC OEM Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
Unit Operation & Maintenance Manual	1	"	N/A	*
Intelligaire III Diagnostic Manual	1	"	N/A	*
Cooling System OEM Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
Modine eFan Oil Cooler Service and Diagnostic Manual	1	"	N/A	*
EMP Traction Motor and Inverter Cooler Service Manual	1	"	N/A	*
EMP Traction Motor and Inverter Cooler Troubleshooting Manual	1	"	N/A	*
Valeo Cabin Heater System OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
Thermo DC200 Workshop Manual	1	"	N/A	*
WABCO ABS System OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
ABS Maintenance Manual	1	"	N/A	*
Destination Sign OEM Manual Set (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
Luminator Operation & Maintenance Manual	1	"	N/A	*
Vansco Multiplexing System OEM Manual (includes only the following)		With First Bus Delivery or Soon After Receiving From OEM Supplier		
Hardware User Guides	1	"	N/A	*
Software User Guides	1	"	N/A	*

Sub Total				
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Other New Flyer Costs				This is for one XHE35 Build of 1 Bus Only	
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DESCRIPTION	QTY	CUSTOMER DELIVERY	UPDATES (Years)	COMMENTS
Standard Labour Hours required for NF Bus Manual Set Publishing	500	N/A		Not charged to the customer

Sub Total				
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Grand Total				
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Sales Specialist
New Flyer

Director of Publications
New Flyer

**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft. - 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XD35
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$476,990.00	\$475,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$476,990.00	\$475,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$480,690.00	\$479,190.00
			\$477,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 24500 Lb	
Wheelbase	State Vehicle Wheelbase: 226.75inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 36 ft	
Overall Exterior Width	State Vehicle Width: 11 ft	
Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Axle/Springs/Frame	As required for vehicle GVWR	Y
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y
Interior width at Seat Level	Minimum 91"	Y
Interior Height	Minimum 75" at center aisle	Y
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Suspension	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Drive Shaft	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____305/70R22.5_____Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XD40
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$481,990.00	\$480,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$481,990.00	\$480,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$485,690.00	\$484,190.00
			\$482,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 43660 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Interior Height	Minimum 91"	Y
Shock Absorbers	Minimum 75" at center aisle	Y
Suspension	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Drive Shaft	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Exhaust System	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft. - 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XD60
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity	Volume Discount	11 + / each
Base Price		\$779,990.00	\$778,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$779,990.00	\$778,490.00
Delivery Price (flat fee)		\$3,806.25	\$3,806.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$783,796.25	\$782,296.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVWR	State Vehicle GVWR: 72320 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Interior Height	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Exhaust System	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XDE35

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity	Volume Discount	
Base Price	\$708,990.00	0.00%	\$707,490.00
Less Discount from List Price	0.00%	0.00%	\$705,990.00
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C, Requirements, #11)	\$708,990.00		\$707,490.00
Delivery Price (flat fee)	\$3,700.00		\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only	\$712,690.00		\$711,190.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year 2023	
GVWR	State Vehicle GVWR: 27000 Lb	
Wheelbase	State Vehicle Wheelbase: 226.75 inch	
Engine	State Engine (Minimum 6.7 liters): 6.7L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 36.3 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Interior Height	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Exhaust System	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be include in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XDE40
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$713,990.00	\$712,490.00
Less Discount from List Price	0.00%	0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$713,990.00	\$712,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$717,690.00	\$714,690.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year: 2023	
GVWR	State Vehicle GVWR: 43660 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 6.7L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Overall Exterior Width	State Vehicle Width: 11 ft	
Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Axle/Springs/Frame	As required for vehicle GVWR	Y
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y
Interior width at Seat Level	Minimum 91"	Y
Interior Height	Minimum 75" at center aisle	Y
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Suspension	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Drive Shaft	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be include in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XDE60
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$1,065,990.00	\$1,064,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$1,065,990.00	\$1,064,490.00
Delivery Price (flat fee)		\$10,000.00	\$10,000.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,075,990.00	\$1,074,490.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year: 2022	
GVWR	State Vehicle GVWR: 42100 Lb	
Wheelbase	State Vehicle Wheelbase: 293 Rear inch	
Engine	State Engine (Minimum 6.7 liters): 6.7L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 61 ft	
Overall Exterior Width	State Vehicle Width: 11 ft	
Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Axle/Springs/Frame	As required for vehicle GVWR	Y
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y
Interior width at Seat Level	Minimum 91"	Y
Interior Height	Minimum 75" at center aisle	Y
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Drive Shaft	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
Exhaust System	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be include in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)

Manufacturer and/or Dealer Name:		New Flyer of America / XE35 (440Kwh)	
<p>This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>			

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Discount for volume level:			
Base Price		\$909,990.00	\$906,990.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C. Requirements, #11)		\$909,990.00	\$906,990.00
Delivery Price (flat fee)		\$10,081.25	\$10,081.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$920,071.25	\$917,071.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023 _____	
GVWR	State Vehicle GVWR: _____ 27600 lb _____	
Wheelbase	State Vehicle Wheelbase: _____ 283.7 _____	
Battery Access Door/Disconnect Switch	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y
Battery	State Vehicle Length: _____ 36 ft _____	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Width: _____ 11 ft _____	
Overall Exterior Width	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in _____	
Exterior Height	As required for vehicle GVWR	Y
Axle/Springs/Frame	Maximum 14.0" x 4.5"	Y
Ground to Step Threshold	Minimum 91"	Y
Interior width at Seat Level		

Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor. White/Yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____, 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger. 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	
Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door. Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	Our standard is NF ramp which is 1:7 slope that significantly exceeds ADA regulations. Please attach SIB 580-001

				\$	-	\$
				\$	-	\$
				\$	-	\$

	% Off MRSP/Catalog/List					
For unlisted options (not listed above), please provide a percentage off MSRP/Catalog price						
Battery Charging Infrastructure (Equipment Only - No infrastructure/installation prices) <small>Please refer to attached Charger pricing</small>	Model Number/Order Code		Please provide options. (Equipment only - no installation)	MSRP/LIST PRICE		CONTRACT PRICE
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
Extended Warranty and Price (include coverage description, number of years, and price) (e.g. bus, batteries, electric motor, or other major systems)	Coverage			MSRP/LIST PRICE		Contract Price
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$
				\$	-	\$

Post-Warranty Maintenance	Contract Amount
Labor (hourly rate)	\$ / per hour \$360.00
Parts (Discount Percentage)	% discount off of list/MRSP 0

Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:

- Manufacturer Serial Number
- Chassis VIN
- Sold date
- Body warranty expiration date
- Service / Operations manual
- Body warranty information
- Post Award Buy America Certificate
- Bus body parts listing (with photos when available)
- Bus body electrical schematics
- List of items shipped with bus

Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. **Proof of completed test to accompany bid.** Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.

Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months or 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.

All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.

The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.

Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.

**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XE40 (440KwH)
<p>This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Discount for volume level:			
Base Price		\$919,990.00	\$918,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C. Requirements, #11)		\$919,990.00	\$918,490.00
Delivery Price (flat fee)		\$10,081.25	\$10,081.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$930,071.25	\$928,571.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023 _____	
GVWR	State Vehicle GVWR: _____ 44533 lb _____	
Wheelbase	State Vehicle Wheelbase: _____ 283.7 _____	
Battery Access Door/Disconnect Switch	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y
Battery	State Vehicle Length: _____ 41 ft _____	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Width: _____ 11 ft _____	
Overall Exterior Width	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in _____	
Exterior Height	As required for vehicle GVWR	Y
Axle/Springs/Frame	Maximum 14.0" x 4.5"	Y
Ground to Step Threshold	Minimum 91"	Y
Interior width at Seat Level		

Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, side and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor. White/Yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____, 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger. 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	
Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	Our standard is NF ramp which is 1:7 slope that significantly exceeds ADA regulations. Please attach SIB 580-001

Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months or 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.

All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.

The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.

Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.

**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XE60 (520Kwh)

This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in **Attachment A**. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$1,399,990.00	\$1,398,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV. Specification, Section C. Requirements, #11)		\$1,399,990.00	\$1,398,490.00
Delivery Price (flat fee)		\$21,163.75	\$21,163.75
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,421,153.75	\$1,419,653.75
			11+ / each
			\$1,396,990.00
			0.00%
			\$1,396,990.00
			\$21,163.75
			\$1,418,153.75

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!

Feature	Description	Meets Specs? Y/N	Comments
Year Model 2022 or current production model year	Model Year _____ 2023 _____		
GVWR	State Vehicle GVWR: _____ 72320 lb _____		
Wheelbase	State Vehicle Wheelbase: _____ 293 and 229 in. _____		
Battery Access Door/Disconnect Switch		Y	
Battery	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: _____ 60 ft. _____ 10 in _____		
Overall Exterior Width	State Vehicle Width: _____ 11 ft _____		

Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in. _____		
Axle/Springs/Frame	As required for vehicle GVWR	Y	
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y	
Interior width at Seat Level	Minimum 91"	Y	
Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs; (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 Interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross-bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand held web cutter.	Y
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N
Rear Heater	Minimum of 40,000 BTU / hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y
Steering	Power steering with tilt steering wheel	Y
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to the recipient via electronic customer specific data portal.	Y
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y
Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier laminated to lower surface and moisture sealed edges.	N
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.	Y
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.	Y
Air Condition	State AC System: _____ The smoking _____	
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper	

<p>Body Manufacturer's Electronic Customer-Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) • Bus body electrical schematics • List of items shipped with bus 	<p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category <u>Proof of completed test to accompany bid</u>. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p> <p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America /XHE40
<p>This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Discount for volume level:			
Base Price		\$1,235,990.00	\$1,232,990.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C. Requirements, #11)		\$1,235,990.00	\$1,234,490.00
Delivery Price (flat fee)		\$10,081.25	\$10,081.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$1,246,071.25	\$1,244,571.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023 _____	
GVWR	State Vehicle GVWR: _____ 28850 lb _____	
Wheelbase	State Vehicle Wheelbase: _____ 283.7 _____	
Battery Access Door/Disconnect Switch	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y
Battery	State Vehicle Length: _____ 41ft _____	Y
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Width: _____ 11 ft _____	
Overall Exterior Width	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in. _____	
Exterior Height	As required for vehicle GVWR	Y
Axle/Springs/Frame	Maximum 14.0" x 4.5"	Y
Ground to Step Threshold	Minimum 91"	Y
Interior width at Seat Level		

Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor. White/Yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____, 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger. 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	
Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.		
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	Our standard is NF ramp which is 1:7 slope that significantly exceeds ADA regulations. Please attach SIB 580-001

Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months or 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.

All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.

The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.

Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.

IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)

Manufacturer and/or Dealer Name: New Flyer of America / XHE60

This specification is for a 2022, or most current production model year, Battery Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in **Attachment A**. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Battery Electric Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)		Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each	11 + / each
Discount for volume level:					
Base Price			\$1,692,990.00	\$1,691,490.00	\$1,689,990.00
Less Discount from List Price			0.00%	0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV. Specification, Section C. Requirements, #11)			\$1,692,990.00	\$1,691,490.00	\$1,689,990.00
Delivery Price (flat fee)			\$21,163.75	\$21,163.75	\$21,163.75
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only			\$1,714,153.75	\$1,712,653.75	\$1,711,153.75

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!

Feature	Description	Meets Specs? Y/N	Comments
Year Model 2022 or current production model year	Model Year _____ 2023 _____		
GVWR	State Vehicle GVWR: _____ 72320 lb _____		
Wheelbase	State Vehicle Wheelbase: _____ 293 and 229 in. _____		
Battery Access Door/Disconnect Switch		Y	
Battery	Lithium nickel manganese cobalt. Energy to be a minimum of 225 kWh	Y	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: _____ 60 ft. _____ 10 in _____		
Overall Exterior Width	State Vehicle Width: _____ 11 ft _____		

Exterior Height	State Vehicle Height (Not including Roof Hatch or AC): _____ 10ft 6 in. _____		
Axle/Springs/Frame	As required for vehicle GVWR	Y	
Ground to Step Threshold	Maximum 14.0" +/- .5"	Y	
Interior width at Seat Level	Minimum 91"	Y	
Interior Height	Minimum 75" at center aisle	Y	
Shock Absorbers	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y	
Suspension	Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	All products made of Polyisocyanurate foam insulation with 7R.
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	Our standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs; (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit	N	Our standard doesn't have first aid kit. It is an available option.
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 Interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance. Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross-bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	Our standard is NFI ramp which is 1:7 slope that significantly exceeds ADA regulations. Please attach SIB 580-001
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment; operated from driver's seat	N	the coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU / hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	We don't have rear heater. We have cabin heating, floor heating and
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to the recipient via electronic customer specific data portal.	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	
Floor Structure	Steel sub floor isolated from chassis with OEM rubber isolation mounts, bolted to the chassis frame rails. Floor decking 5/8" engineered wood w/ moisture barrier laminated to lower surface and moisture sealed edges.	N	Our standard is plywood. SIB 450-001
Combination Roof Ventilator/ Emergency Exit	24"x24" installed in roof (front and rear). Ventilator able to allow fresh air inside when raised.	Y	
Bumpers	Shall be provided at both front and rear of the vehicle. They shall wrap around the body sufficiently to give protection against impact at the body corners. The front and rear bumpers shall be supplied by the chassis OEM. The bumper brackets are to be bolted to the chassis frame.	Y	
Air Condition	State AC System: _____ Thermoking _____		
Standard Warranty - Minimum	Bus: Twelve (12) month, 50,000 miles (which ever comes first) Bumper-to-Bumper		

<p>Body Manufacturer's Electronic Customer-Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) • Bus body electrical schematics • List of items shipped with bus 	<p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category <u>Proof of completed test to accompany bid</u>. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p> <p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 12,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XN35

This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.

The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.

If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.

Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.

These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$530,990.00	\$529,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$530,990.00	\$529,490.00
Delivery Price (flat fee)		\$3,375.00	\$3,375.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$534,365.00	\$532,865.00
			\$531,365.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year: 2023	
GVWR	State Vehicle GVWR: 27000 Lb	
Wheelbase	State Vehicle Wheelbase: 226.75inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 36 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Interior width at center aisle	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Exhaust System	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	New Flyer Standard is NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	New Flyer standard is Allison B400R with 6 speed Performance
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft.- 60 ft. sizes)**

Manufacturer and/or Dealer Name:	New Flyer of America / XN40
<p>This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT). However, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.</p> <p>The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.</p> <p>If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.</p> <p>Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.</p> <p>These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56, No. 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:</p>	

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$535,990.00	\$534,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref. Attachment A, Section IV, Specification, Section C, Requirements, #11)		\$535,990.00	\$534,490.00
Delivery Price (flat fee)		\$3,700.00	\$3,700.00
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$539,690.00	\$538,190.00

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year: 2023	
GVWR	State Vehicle GVWR: 43660 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Minimum 91"	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the Standard unmodified Suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
Exhaust System	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required. Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.	Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting	Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.	Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.	Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	N	air products made of Polyisocyanurate foam
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.	Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment	Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.	Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.		
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard	N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions	Y	
Instrumentation	Factory installed gauges and dome light.	Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.	Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets	Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit		
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.	Y	
Seat Covering	Please include pricing options.		
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.	Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	New Flyer Standard is NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be included in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	New Flyer standard is Allison B400R with 6 speed Performance
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	
Wiring	Shall be manufacturer's standard for circuits involved. All wiring shall be run inside the body in a protected area. Any wiring shall be run inside the body in a protected area. Any wiring that is exposed to the elements shall be in loom and securely clipped for maximum protection. Rubber or plastic coated clips. Color-coded and labeled, programmable electrical system. 12V multiplex system with standard bus bar including two six-way fuse blocks for added accessories / systems. Schematics made available to	Y	
Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

<p>Body Manufacturer's Electronic Customer Specific Portal and Fleet Database: The manufacturer of the body must make a bus and customer specific electronic data portal available for each bus built that includes (at a minimum) the following information:</p> <ul style="list-style-type: none"> • Manufacturer Serial Number • Chassis VIN • Sold date • Body warranty expiration date • Service / Operations manual • Body warranty information • Post Award Buy America Certificate • Bus body parts listing (with photos when available) <p>Bus Testing: The bus offered must have completed testing at The Federal Bus Testing Facility in Altoona, PA in the 5 year / 150,000-mile category. <u>Proof of completed test to accompany bid.</u> Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive.</p>	<p>Maintenance Provisions: A description of how and by whom warranty service can be provided is to be included with bid. Failure on the part of the Bidder to provide all requested documentation may be cause to deem the bid non-responsive. The vendor shall act as the first source for performing warranty work. This must cover both mechanical and body work. The manufacturer's warranty covering parts, materials and workmanship shall apply for a minimum period of twelve (12) months of 50,000 miles, whichever occurs first, and this warranty shall include repair and replacement of defective parts and labor. The structural body warranty to be a minimum of three (3) years or 150,000 miles, whichever occurs first. The successful vendor shall be required to offer a toll-free number to all recipients for warranty inquiries, parts orders and service related questions. The vendor shall have personnel available to answer warranty, parts, and service inquiries Monday Through Friday, 8 A.M. to 5 P.M., except during holidays recognized by the Commonwealth of Virginia. The vendor shall respond to warranty, parts, and service inquiries and offer a reasonable initial plan to address such inquiries within 24 hours of call receipt or the next business day, whichever is later, via phone or email.</p> <p>All bidders must offer proof of both chassis and body warranty (including bus body, air conditioning and wheelchair ramp) service points within the Commonwealth of Virginia. All bidders shall be required to submit documentation providing the names of the vendors. Successful vendor shall be required to maintain service facilities in Central / Southwest Virginia, Richmond, Tidewater and Northern Virginia.</p> <p>The vehicle to be furnished shall conform to all applicable Federal and Motor Vehicle Safety Standards and all equipment shall conform to Title 46.1, Chapter 4, and Article 9 of the Code of Virginia. Chassis to be a standard proven model of manufacturer's latest current production and include all standard equipment as advertised with additional optional equipment as outlined above. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer including any additional warranties.</p> <p>Prior to delivery the vendor must perform new vehicle service preparation. The vehicle shall be in acceptable condition upon delivery and will be accepted only by an authorized person designated by the agency. Delivery shall be during normal business hours, i.e. 8 AM - 5 PM, Monday through Friday. Payment will not be initiated until the agency is assured that the vehicle has been delivered in an acceptable condition and everything is working properly.</p>
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**IFB 6447 - Attachment H - Pricing Schedule (ADDENDUM #2)
Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty, 12 Year (29 ft. - 60 ft. sizes)**

Manufacturer and/or Dealer Name: New Flyer of America / XN60
This specification is for a 2022, or most current production model year, Low-Floor Transit Buses, and Commuter Coach Buses. The specifications are written to meet the needs of the Commonwealth of Virginia and the Department of Rail and Public Transportation (DRPT); however, the contract resulting from this bid will be made available for use by all state agencies, institutions of higher education, public bodies and other entities authorized to use the contract by the Code of Virginia or any other entities as mutually agree to by all parties.
The requirements below are for the base vehicle. All components, unless otherwise required by these specifications, shall be the standard or optional equipment specifically advertised and installed by the manufacturer for the vehicle which the bidder proposes to furnish. The only source of information in determining whether or not the equipment is specifically advertised for the vehicle being offered shall be the manufacturer's published vehicle literature. If, prior to the IFB due date and time, the Manufacturer revises its standard or optional features that result in a conflict with any Base Vehicle Specification Description contained herein, the Bidder must submit their bid based on the manufacturer's most current standard feature. Bidders must document equivalence to the specification to clearly explain the changes made by the manufacturer, include any Order/Option Code updates, and provide supporting documentation. In no other case shall changes to the Base Vehicle specifications be made by the bidder.
If, prior to the IFB due date and time, any Options (Add-on/Deletes) specified in the pricing schedule (factory or dealer installed) are modified or discontinued by the Manufacturer, the bidder may submit their bid notating the Manufacturer's changes, additions or deletions. In no other case shall changes to the Options specified be made by the bidder. Bidders may include other Options (Add-ons and Deletes) and Local Government Additional Options as instructed in the Solicitation and Attachments.
Vehicles and equipment must conform to the BASE VEHICLE requirements set forth in the pricing schedule and as required in Attachment A. Minimum requirements are stated for certain equipment and may be exceeded, subject to buyer approval.
These specifications incorporate where appropriate all provisions of the Americans with Disabilities Act Final Rule as stated in the Federal Register Vol. 56. No 173 of September 6, 1991, Subpart B-Buses, Vans and Systems, pages 45756 through 45761. The minimum specifications for a Low-Floor Transit Buses, and Commuter Coach Buses Heavy Duty 12-Year type are as follows:

BASE STANDARD BUS - List Quantity Discount Prices (All prices are to be in United States dollars)/(Enter data in highlighted areas only)			
Discount for volume level:	Order Volume / Quantity / Volume Discount	1 to 5 / each	6 to 10 / each
Base Price		\$928,990.00	\$927,490.00
Less Discount from List Price		0.00%	0.00%
Single Unit/Net Price (Ref: Attachment A, Section IV, Specification, Section C. Requirements, #11)		\$928,990.00	\$927,490.00
Delivery Price (flat fee)		\$3,806.25	\$3,806.25
Total Bid Price (add net price + delivery price) - Virginia Authorized Users Only		\$932,796.25	\$931,296.25
			\$925,990.00
			0.00%
			\$925,990.00
			\$3,806.25
			\$925,796.25

ADDITIONAL SPECIFICATIONS: Bidders shall fill out the below section. Failure to fill out this section shall result in your bid being non-responsive!		
Feature	Description	Meets Specs? Y/N
Year Model 2022 or current production model year	Model Year _____ 2023	
GVMR	State Vehicle GVWR: 72320 Lb	
Wheelbase	State Vehicle Wheelbase: 283.7 inch	
Engine	State Engine (Minimum 6.7 liters): 8.9L	
Overall Vehicle Length (Bumper to Bumper)	State Vehicle Length: 41 ft	
Exterior Height	State Vehicle Width: 11 ft	
Axle/Springs/Frame	State Vehicle Height (Not including Roof Hatch or AC): 10ft 6 in	Y
Ground to Step Threshold	As required for vehicle GVWR	Y
Interior width at Seat Level	Maximum 14.0" +/- .5"	Y
Shock Absorbers	Interior Height	Y
Suspension	Minimum 75" at center aisle	Y
Drive Shaft	Heavy-duty type to give maximum trouble free life in transit operations. Shall be load rated and the heaviest duty available	Y
Exhaust System	Standard unmodified suspension and be load rated and of the heaviest duty available for the GVW of the vehicle.	Y
	Rated capable of transmitting the torque multiplication of the power units to the drive wheels. Safety guard required.	Y
	Equipped with corrosion resistant muffler. No Flex tubing shall be used between the engine and the muffler	Y

Fuel Sending Unit	Included as standard feature		Y	
Parts List	Ability to provide complete AS BUILT parts list for all items, including body panels, added by the body manufacturer.		Y	
Lighting	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.31 Lighting		Y	
Directional Signals	Shall be in compliance with FMVSS and state statutes.		Y	
Controls and Switches	Included on control panel mounted to the engine cover or on a molded housing above the windshield trim within reach.		Y	
Insulation	Roof, sides and rear doors including front and rear cab area must be insulated with polystyrene with minimum R factor of 6.	air products made of Polyisocyanurate foam	N	
Interior	Panels, materials and treatments shall be flame retardant meeting requirements of FMVSS 302. The headliner, sidewalls and cab liner shall be antimicrobial fiberglass reinforced plastic.		Y	
Floor Covering	Sealant applied in body to all floor corners, OEM insulated in cab floor, White/yellow standee line at forward are of passenger compartment		Y	
Floor Plan	All bidder shall submit a floor plan drawn specifically for this procurement, drawn to scale and indicate hip to knee dimensions.		Y	
Tires and Wheels	State Tire Size: _____ 305/70R22.5 _____ Tubeless radials. Balanced and with even weight distribution of vehicle with maximum load. White paint rims standard.			
Mirrors	Heated, remotely operated exterior rear view mirrors. One interior rear view mirror shall be included factory standard		N	New Flyer standard is non heated and manual
Windshield wipers	Electric, four position switch have Off, Intermittent, Low and High positions		Y	
Instrumentation	Factory installed gauges and dome light.		Y	
Sun Visor	Vent share (string-pull-type), fully adjustable, to provide sun glare protection either at the windshield and the driver's side window. Friction device, or equivalent mounting, shall hold it securely in either location and in any position during travel over rough road surfaces.		Y	
License Plate Bracket	Vehicle shall be preconfigured for front and rear license plates or equipped with front and rear license plate brackets		Y	
Safety Equipment	Shall be mounted in a location within the vehicle approved by DRPT so as to not interfere with the driver or passenger: 16 unit Virginia Bus First Aid Kit to include the following: (2) Band Aids, (3) 4" Bandage compress, (2) 2" Bandage compress, (2) Triangle Bandage, (2) 4" Gauze compress, (1) Bee Sting swabs, (2) Zeph chloride swabs; Fire extinguisher, 5# ABC type; Warning triangles, reflective type (3) units; webcutter; OSHA approved Body Fluid Clean Up Kit			
Seating	Minimum seating capacity of 28 adults including driver, 2 wheelchair passengers. Hip to knee spacing 27 inches. Padded vandal resistant seat back grab handles, compliance with FMVSS standards: 207, 208, 209, 210, 225, and 302 as applicable.		Y	
Seat Covering	Please include pricing options.			
Priority Seating Signs	Shall conform to the specifications as outlines in the ADA regulations Subpart B-Buses, Vans and Systems, 38.27 Priority seating signs.		Y	

Interior Circulation, Handrails and Stanchions	<p>Shall conform to the specifications as outlined in the ADA regulations Subpart B-Buses, Vans, and Systems 38.29 interior circulation, handrails and stanchions. Stanchions to be comprised of corrosion resistant stainless steel 1-1/4" in diameter and padded permanently bonded, to be located at side entrance door, Anti-Vandal grab handles at top of each forward facing aisle seat, passenger assist stainless steel grab bar on both sides of entrance door running parallel to entryway for ADA compliance, Floor to ceiling stanchion on left side of aisle at entry to passenger compartment and include cross bar that attaches to sidewall. Modesty panel installed on curbside stanchion to separate first seats from from stepwell.</p>	Y	
Front End Alignment	Final front-end alignment at dealer location before delivery. Printed before and after readings to be included.	Y	
Wheelchair Ramp/Lift (Coach Buses)	To be installed and conform to all requirements as outlined in the ADA regulations. Manual over-ride feature allowing ramp to be deployed or stowed manually. Operating instructions, schematics, and trouble-shooting guide, rated at 1,000 pounds, 62 inches, 1:6 angle when deployed to the ground. Maximum of 48 inches of portion of the ramp extending outside of the bus.	N	New Flyer standard is our NFI ramp which is 1:7 slope that significantly exceeds ADA regulations.
Towing Devices	There shall be attachment points (2) at the front. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.	Y	
Securement Devices	Floor-mounted attachments flush mounted and comply with ADA regulations Subpart B-Buses, Vans and Systems, 28.23 Mobility aid accessibility (d) Securement devices, and ANSI/RESNA WC-18, self-tensioning and self-locking retractors, storage container or bag, hand-held web cutter.	Y	
Windows	Solid Pane with black anodized frames. Passenger windows minimum of 18 1/2", 36", or 45" wide and 36" high. Hinge-out emergency escape windows labeled with operation instruction. Compliance with FMVSS-217. Manual handle re-lock. Complies with F.A.C. 14-90.	Y	
Exterior Finish	Manufacturer's Standard fleet white paint, with accent striping to match recipients existing fleet designs. The Transit systems name shall be reproduced with direct contact 3M seven-year vinyl on each side of the vehicle and approved by the recipient. Some recipients will require logo reproduction on the exterior of the vehicle. The price for this graphic work is to be include in the price. If end user paint schemes are changes or modified during the lift of this contract, vendor will be allowed to re-negotiate the cost to paint an individual agency's equipment.	Y	
Heating	Fresh air type front hot water heater with defroster, located in front of passenger compartment, operated from driver's seat	N	The coolant used for defroster is water ethylene glycol not hot water.
Rear Heater	Minimum of 40,000 BTU/hour controlled from driver's position, located to not adversely affect wheelchair tie down area.	N	New Flyer offers cabin heating, floor heating and defroster Only.
Parking Brake	Manually operated to rear when brakes/driveshaft. Ability to hold "fully loaded vehicle" on 15% incline.	Y	
Steering	Power steering with tilt steering wheel	Y	
Brakes	Four wheel antilock, compliance with FMVSS-121 or FMVSS-105	Y	
Automatic Transmission	Minimum 4 speed electronic w/overdrive, Auxiliary transmission cooler. Audible back-up alarm integrated into reverse gear back lights.	N	New Flyer standard is Allison B400R with 6 speed Performance
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Fuel Tank	75 gallons or greater	Y	
Battery Access Door/Disconnect Switch	Exterior battery disconnect switch with access door panel.	Y	
Fast Idle/ Interlock	Voltage monitor/ engine idler. Engages when vehicle is in discharge situation, transmission in park and parking brake applied. Deactivates when parking brake is released and vehicle is put in gear.	Y	

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