



Via Mobility Services

Request for Proposals

Number 2022-003

Battery-Electric Cutaway Bus

March 18, 2022



Battery-Electric Cutaway Buses

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SECTION 1. REQUEST FOR PROPOSALS

SCOPE AND QUANTITIES

Via Mobility Services in Boulder, CO (Via), will accept proposals for the manufacture and delivery of up to sixty (60) new zero emission, battery-electric powered cutaway buses from vendors with requisite experience and service offerings in accordance with the terms and conditions set forth in this Request for Proposal (RFP) and an agreement with the Colorado Department of Transportation (CDOT) for use of state and Volkswagen settlement funds for the purchase of the first vehicle (known as the pilot). Future Federal Transit Administration (FTA) funding is foreseen to be used to for additional purchases, for up to 59 additional vehicles over the course of five years. The contract shall be a five-year, firm-fixed price contract.

The quantity of 60 total vehicles over five years reflects the immediate and foreseeable needs of Via and was determined by using Via's most recent federal and state funding awards and vehicle replacement schedule. That being said, there is no guarantee of federal or state funding past the first pilot vehicle purchase. Therefore, the minimum quantity commitment of this procurement is for one unit. If Via receives anticipated federal and state funding over the five-year purchasing term, the maximum quantity of vehicles to be purchased is not to exceed 60 vehicles.

In the event that Via is unable to purchase the maximum of 60 vehicles over the five-year purchasing term, unit quantities may be assigned to another public transit service provider (city, county, non-profit, or RTA) in Colorado. Assignment of unused quantities must be documented and approved by Via in advance, and the assignment must also be approved by CDOT.

SOLICITATION SCHEDULE

The following is the solicitation schedule for offerors:

Date and Time	Action
March 18, 2022	Publish/Release RFP
April 1, 2022	Questions/Clarifications Due, 3:00 pm MDT



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April 12, 2022	Answers Published
May 2, 2022	Proposals Due, 5:00 pm MDT
May 3 – June 3, 2022	Responsiveness, Responsibility, Evaluation Review; Competitive Range Offerors Interviews/Vehicle Viewings
June 6, 2022	Notice of Intent to Award (Anticipated)
June 6 – June 17, 2022	Contract Negotiation/Execution – Via/CDOT Approval

PROPOSAL DOCUMENTS

Proposal documents can be obtained by contacting Ann Beauvais at ann@raeconsultants.com or on the Via website: <https://viacolorado.org/work-with-us/request-for-proposals/>.

PRE-PROPOSAL CONFERENCE

A pre-proposal conference will **not** be held. Prospective offerors are requested to submit written questions by email to the Procurement Project Manager no later than April 1, 2022, 3:00 pm MDT. Offerors are reminded that any changes to the RFP will be by written addenda only and nothing stated verbally shall change or qualify in any way any of the provisions in the RFP and shall not be binding on Via.

OFFEROR COMMUNICATIONS AND REQUESTS

All communication in regard to any aspect of this solicitation or offers shall be with the Via consultant representative identified below.

Ann Beauvais
Procurement Project Manager
RAE Consultants, Inc.
2212 West Platte Avenue
Colorado Springs, CO 80904
Email: ann@raeconsultants.com



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Offerors and their representatives shall not make any contact or communicate with any members of Via, or its consultants/agents, other than with Ms. Beauvais, in regard to any aspect of this solicitation or offers.

At any time during this procurement up to the time specified in "Solicitation Schedule" offerors may submit a request for a clarification or interpretation of any aspect or requirement of the RFP. All questions and subsequent answers will be included in addendum documentation.

Requests for substitutes for specified items and for any brand names, commonly known as "approved equals," are **not** to be submitted during the question and answer time frame of the "Solicitation Schedule." Instead, approved equals should be noted as deviations from the original specification, submitted with the offeror's proposal, and will be evaluated during the technical specifications evaluation phase of the procurement.

ADDENDA TO RFP

Via reserves the right to amend the RFP at any time. Any amendments to, or interpretations of, the RFP shall be described in written addenda. Via shall post addenda for prospective offerors to access through email and Via's website. It is the responsibility of prospective offerors to access all addenda. All addenda issued shall become part of the RFP.

Offerors shall acknowledge the receipt of each individual addendum in their proposals. Failure to acknowledge in their proposals receipt of addenda may at Via's sole option disqualify the proposal.

If Via determines that the addenda may require significant changes in the preparation of proposals, the deadline for submitting the proposals may be postponed by the number of days that Via determines will allow offerors sufficient time to revise their proposals. Any new due date shall be included in an addendum.

CONDITIONS, EXCEPTIONS, RESERVATIONS OR UNDERSTANDINGS

Proposals stating conditions, exceptions, reservations or understandings (hereinafter known as "deviations") relating to the RFP may be submitted.



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Any and all deviations must be explicitly, fully, and separately stated in the proposal by completing the form(s) provided as “Form for Proposal Deviation,” which will identify, at a minimum, the specific reasons for each deviation so that it can be fully considered and evaluated by Via. All deviations found by Via to be acceptable shall be evaluated in accordance with the appropriate evaluation criteria and procedures.

Any deviation request must be fully supported with technical data, test results, or other pertinent information evidencing that the exception will result in a condition equal to or better than that required by the RFP, without substantial increase in cost or time requirements.

INSTRUCTIONS TO OFFERORS

DUE DATE AND DOCUMENT SUBMISSION REQUIREMENTS

One complete electronic version of the proposal must be emailed to the Procurement Project Manager by **May 2, 2022 by 5:00 pm MDT**. Proposals and subsequent offers shall be valid for a period of 90 days.

Two electronic file folders are to be submitted by email, one for the Technical Proposal documents and one for Price Proposal documents. Documents in each file folder are to be single files, named per the proposal requirement listing in the below sections, and provided in either Microsoft Word or native Adobe PDF. PDF scanned files are acceptable **only** for files that require physical signature. PDF file scans that combine several document requirements are not permitted.

If the file transmission cannot be accomplished by email, offerors may either provide a link to a shared file system that allows the Procurement Project Manager to access and download the proposal submission documents by the due date, or mail a single flash drive to the Procurement Project Manager, to the address listed in the Offeror Communications and Requests section of this RFP, by the due date that includes the entire proposal document submission.



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TECHNICAL PROPOSAL REQUIREMENTS

The following documents and required forms are to be submitted with the proposal.

1. A **Letter of Transmittal** addressed to the Procurement Project Manager and must, at a minimum, contain the following information.
 - a. Identification of the offeror's company name, Colorado office location(s) address(es), and primary sales point of contact (POC) name, phone, and email address.
 - b. Identification of the bus body manufacturer and model the offeror is representing for the purposes of this proposal.
 - c. Identification of the electric propulsion system manufacturer the offeror and bus body manufacturer are partnering with for this proposal.
2. **"Acknowledgement of Addenda" Form** confirming receipt of RFP addenda, as applicable.
3. **"Offer" Form** providing signature of a person authorized to bind the offeror to the terms of the proposal.
4. **Offeror Qualifications Documentation.** This section of the proposal should establish the ability of the offeror to satisfactorily provide the required equipment and services requested through this solicitation.
 - a. **Offeror Company and Sales POC Profile**, to include company type, Colorado service location(s) and capacity, sales POC resume, and description of the company's financial situation to include any conditions (e.g. bankruptcy, pending litigation, planned office or plant closures, impending merger, etc.) that may impede the offeror's ability to complete the project.
 - b. **Letter of Authorization**, to include confirmation from the bus body manufacturer that the offeror is an authorized dealer in the State of Colorado for the vehicle type proposed.
 - c. **Bus Body Manufacturer and Electric Propulsion System Manufacturer** relationship, history, and experience in providing *like equipment* to that solicited in this RFP. Please include the number of similar units currently in transit service reflecting this partnership, to include location and service type.
 - d. The offeror shall state on the **Form** provided as **"Service and Parts Support Data"** the representatives responsible for assisting Via, as well as the location of the nearest distribution center, which shall furnish a complete supply of parts and components for the repair and maintenance of the vehicle(s) to be supplied.



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The offeror shall also state its policy on transportation charges for parts other than those covered by warranty.

- e. **Insurance Certificate** showing the offeror can be insured for General Liability requirements of \$1,000,000 per occurrence; \$3,000,000 aggregate, and an umbrella liability \$5,000,000. Via and CDOT should be listed as additional insured.
5. **Vehicle Specification.** The offeror shall complete the “**Component Checklist**” Form addressing the Technical Vehicle Specifications contained in Section 5 of this RFP that exhibits the offeror’s understanding of Via’s needs and requirements. This form should fully explain the offeror’s proposed vehicle compared to Via’s specifications.

Please also include with your vehicle specification submission:

- a. Proposed vehicle build sheet;
- b. Proposed vehicle detailed floorplan and weight calculation;
- c. Chassis specification sheet;
- d. STURAA (Altoona) Test Report or explanation of when the proposed model’s test and report will be completed;
- e. Warranty coverage policies and requirements for the offeror and all related vehicle components, including chassis, body, and electric powertrain;
- f. Comprehensive warranty statement and degradation provisions for high voltage battery;
- g. Optional high voltage battery extended warranty coverage terms and requirements;
- h. Proposed after sales technical support plan, including a description of technical support and service offerings related to the Propulsion and Battery Management System, as further defined on page 33 (11. Service Documentation) of this solicitation;
- i. Comprehensive Training Plan as specified in Section 5 of this solicitation, pages 69-70;
- j. Proposed delivery schedule;
- k. References specific to the bus body manufacturer and electric propulsion system proposed for organizations that are currently using the vehicle type in transit service. It is preferable that the references also include the offeror as the dealer involved in the sale and after sales support, as applicable. The reference list is to include the name, title, address, and telephone number of the person(s) at the customer reference organization who is/are most knowledgeable about the vehicle being proposed. Offeror must provide, at a minimum, one reference.



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- l. Description of the electric powertrain conversion, including specific details of the Propulsion, Energy Storage, Controller, and Telematics/Analytics Systems;
 - m. Diagrams of battery pack configuration;
 - n. Description of Battery Thermal Management System, including fire detection and suppression systems, if so equipped;
 - o. Image and details of Driver Instrument Panel configuration;
 - p. List of equipment included with the Diagnostic Toolset;
 - q. Description of body construction materials and assembly methods;
 - r. Details of Heating, Ventilation, and Air Conditioning (HVAC) systems;
 - s. Component list of equipment included with the Security, Surveillance, and Telematics system; and
 - t. Electric battery test reports supporting reported life cycle, range, safety and warrantable end of life replacement requirements.
6. The offeror may also propose enhancements to the Technical Vehicle Specifications which do not materially deviate from the objectives or required content of the vehicle. As stated previously, this will be allowed using the “**Form for Proposal Deviation**,” to include all required support documentation.
7. **FTA Required Certifications and Support Documentation.** The offeror shall complete and provide the required certifications and support documents provided in Appendix A and described on page 28 of this RFP.

PRICE PROPOSAL REQUIREMENTS

The offeror is required to complete the “**Pricing Schedule**” **Form**. Price for optional equipment enhancements or deviations from the specification are requested and can be provided on this form.

The offeror shall be liable for payment of all local taxes applicable to the complete vehicle as delivered and should add these amounts to the offer price as Via is exempt from tax purchase requirements.

MODIFICATION OR WITHDRAWAL OF PROPOSALS

A modification of a proposal already received will be accepted only if the modification is received prior to the Proposal Due Date. All modifications shall be made in writing and executed and submitted in the same form and manner as the original proposal.



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An offeror may withdraw a proposal already received prior to the Proposal Due Date by submitting to the Procurement Project Manager, in the same manner as the original proposal, a written request for withdrawal executed by the offeror's authorized representative.

The withdrawal of a proposal does not prejudice the right of an offeror to submit another proposal within the time set for receipt of proposals.

This provision for modification and withdrawal of proposals may not be utilized by an offeror as a means to submit a late proposal and, as such, will not alter Via's right to reject a proposal.

PROPOSAL EVALUATION AND SELECTION

Proposals will be evaluated, negotiated, and awarded in accordance with the criteria and procedures described below. The approach and procedures are those which are applicable to a competitive negotiated procurement whereby proposals are evaluated to determine which proposals are within a competitive range. Discussions and negotiations may then be carried out with offerors within the competitive range, after which Best and Final Offers (BAFOs) normally would be requested. **However, Via may select a proposal for award without any discussions, negotiations, or request for any BAFO(s).**

An award will be made to a qualified and responsible offeror for a proposal which is found to be in Via's best interest, with price and other evaluation criteria considered.

OPENING OF PROPOSALS

Proposals will not be publicly opened. All proposals and evaluations will be kept strictly confidential throughout the evaluation, negotiation, and selection process. Only the members of the Evaluation Committee and other Via officials, employees, and agents having a legitimate interest will be provided access to the proposals and evaluation results during this time period.



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EVALUATION COMMITTEE

An Evaluation Committee will be established. The Committee will make all decisions regarding the evaluations, determination of responsible offerors, the competitive range, negotiations – if any, and recommend the selection of an offeror to the Via Executive Director and CDOT. The Committee will include officers, employees, and agents of Via.

PROPOSAL SELECTION PROCESS

The following describes the process by which proposals will be evaluated and a selection made for a potential award. Any such selection of a proposal shall be made by consideration of only the criteria in the “Qualification Requirements” and “Proposal Evaluation Criteria” as described below.

1. QUALIFICATION REQUIREMENTS

The following are the requirements for qualifying responsible offerors. All of these requirements must be met; therefore, they are not listed by any particular order of importance.

The offeror of any proposal that does not meet these requirements, and cannot be made to meet these requirements, may be determined as non-responsible and the proposal rejected.

The requirements are as follows:

1. Sufficient financial strength, resources, and capacity to finance and deliver the vehicle(s) and complete the contract in a satisfactory manner.
After initial review, if questions or concerns remain about financial strength, audited financial statements for the previous year will be requested to review for both the offeror (dealer) and bus body and electric propulsion system manufacturers.
2. Ability for offeror to obtain and hold the required insurance with coverage values that meet minimum requirements for a contract with Via.
3. Evidence that the human and physical resources proposed by the offeror are sufficient to perform the contract requirements as specified and assure timely delivery and service of the vehicle(s).



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4. Signed FTA certifications and accurate/complete support documentation related to Buy America, FMVSS, Bus Testing, TVM, and Debarment and Suspension requirements provided at the time of proposal.

2. PROPOSAL EVALUATION CRITERIA

This section contains the complete proposal evaluation criteria, listed by their relative degree of importance, by which proposals from responsible offerors will be evaluated and ranked for the purposes of determining a competitive range and to select a proposal for award.

2A. EVALUATION CRITERIA (RESPONSIVE: PASS/FAIL)

Minimum Technical Requirements (pass or fail). Technical proposals shall meet the following minimum requirements for any consideration for selection and award. A proposal not meeting these baseline requirements may be rejected.

1. Propulsion System Performance (Minimum Operating Range) Requirements
2. Submission of detailed plans for warranty, training, and technical support in relation to electric propulsion system proposed.

Unacceptable Exceptions, Conditions, Reservations and Understandings (pass or fail). Exceptions, conditions, reservations, or understandings that are explicitly, fully, and separately stated on the required "Form for Proposal Deviation" will be evaluated for their acceptability. Each of any exceptions and/or conditions made in a proposal will be evaluated and Via will determine their individual acceptability.

An unacceptable exception, condition, reservation, or understanding, if not withdrawn by the offeror upon the request by Via, would be cause for the proposal to be rejected.

2B. EVALUATION CRITERIA

Technical Proposal Scoring Criteria. The battery-electric cutaway bus type offered in the technical proposal will be evaluated for the following factors which are listed in their relative order of importance:



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1. Battery-Electric Platform and Proposed Range
2. Proposed Bus Body Specifications
3. Warranty, Training, and Support Programs
4. Delivery Timeframe

Price Proposal Scoring Criteria. The proposal price will be compared to the independent cost estimate. The price that comes closest to the independent cost estimate will receive the highest score.

Application of Evaluation Criteria

Proposals will be evaluated against the pass/fail criteria. Any proposal which passes the criteria or fails one or more of these criteria but is susceptible of being made to meet such failed criteria, will be considered within the competitive range.

Proposals in the competitive range will then be evaluated against a point system for the evaluation criteria listed. Proposals will be scored based on the reviewer's determination of the degree of compliance with contract requirements, potential risks and benefits, and strengths and weaknesses. The score is reduced in proportion to the extent of non-conformance, discrepancies, errors, omissions, and risks to Via.

EVALUATION PROCEDURES

Via will carry out and document its evaluations in accordance with the criteria and procedures of the "Proposal Selection Process." Any extreme proposal deficiencies which may render a proposal unacceptable will be documented.

Via will make specific note of questions, issues, concerns, and areas requiring clarification by offerors and to be addressed with offerors which Via finds to be within the competitive range.

Proposals not within the Competitive Range. Offerors of any proposals that have been determined by Via as not in the competitive range, and cannot be reasonably made to be within the competitive range, will be notified in writing via email from Via's Procurement Project Manager, including the shortcomings of their proposals.



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Discussions with Offerors in the Competitive Range. The offerors whose proposals are found by Via to be within the competitive range, or may be reasonably made to be within the competitive range, will be notified via email and any questions and/or requests for clarifications provided to them in writing. In addition, offerors in the competitive range will be invited to come on-site to Via's offices in Boulder, CO and provide the vehicle model specified for Via Evaluation Committee members to drive and view for specification compliance.

No information, financial or otherwise, will be provided to any offeror about any of the proposals from other offerors.

Offerors will not be given a specific price or specific financial requirements they must meet to gain further consideration, except that proposed prices may be considered to be too high with respect to the market place or unacceptable. Offerors will not be told of their rankings among the other offerors.

Best and Final Offers (BAFO). Via reserves the right to make an award to an offeror whose proposal it judges to be most advantageous to Via based upon the evaluation criteria, *without conducting any written or oral discussions or solicitation of any BAFOs.* **Therefore, offerors are encouraged to provide their best price and offer at the time of original proposal submission.**

CONFIDENTIALITY OF PROPOSALS

Access to government records is governed by the State of Colorado. Except as otherwise required by the State of Colorado, Via will exempt from disclosure proprietary information, trade secrets, and confidential commercial and financial information submitted in the proposal. Any such proprietary information, trade secrets, or confidential commercial and financial information which an offeror believes should be exempted from disclosure shall be specifically identified and marked as such.

Blanket-type identification by designating whole pages or sections as containing proprietary information, trade secrets, or confidential commercial and financial information will not assure confidentiality. The specific proprietary information, trade secrets, or confidential commercial and financial information must be clearly identified as such.



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RESPONSE TO PROPOSALS

SINGLE PROPOSAL RESPONSE

If only one proposal is received in response to this RFP and it is found by Via to be acceptable, a detailed price/cost proposal may be requested of the single offeror. A price or cost analysis, or both, possibly including an audit, may be performed by or for Via of the detailed price/cost proposal in order to determine if the price is fair and reasonable. The offeror has agreed to such analysis by submitting a proposal in response to this RFP.

A price analysis is an evaluation of a proposed price that does not involve an in-depth evaluation of all the separate cost elements and the profit factors that comprise an offeror's price/cost proposal. It should be recognized that a price analysis through comparison to other similar procurements must be based on an established or competitive price of the elements used in the comparison. The comparison must be made to a purchase of similar quantity, involving similar specifications and in a similar time frame.

Where a difference exists, a detailed analysis must be made of this difference and costs attached thereto. Where it is impossible to obtain a valid price analysis, it may be necessary to conduct a cost analysis of the proposed price. A cost analysis is a more detailed evaluation of the cost elements in the offeror's proposal. It is conducted to form an opinion as to the degree to which the proposed costs represent what the offeror's performance should cost.

A cost analysis is generally conducted to determine whether the offeror is applying sound management in proposing the application of resources to the contracted effort and whether costs are allowable, allocable, and reasonable. Any such analyses and the results therefrom shall not obligate Via to accept such a single proposal and Via may reject such proposal at its sole discretion.

CANCELLATION OF PROCUREMENT

Via reserves the right to cancel the procurement, for any reason whatsoever, at any time, before the contract is fully executed and approved on behalf of Via.



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AVAILABILITY OF FUNDS

This procurement is subject to the availability of state and federal funding in the form of grants from the State and Colorado and (planned) from the FTA. Via's obligation hereunder is contingent upon the availability of appropriated funds from which payment for the contract purposes can be made. No legal liability on the part of Via for any payment shall arise until funds are made available to Via for this contract and until the contractor receives notice of such availability, to be confirmed in writing by Via.

PROTESTS

Any protest by an interested party regarding this procurement shall be made in accordance with the Protest Procedures contained herein.

Failure to comply with the protest procedures will render a protest untimely and/or inadequate and shall result in its rejection.

PROTEST PROCEDURES

Via's review of any protest will be limited to violations of state or local laws or/regulations, violations of Via's purchasing procedures, violations of Via's protest procedures, or failure to review a complaint or protest.

Protests based on restrictive or severely defective specifications or improprieties in the solicitation that are apparent prior to the Proposal Due Date must be received no later than five (5) calendar days before the Proposal Due Date.

Protests based upon the Notice of Intent to Award must be received within five (5) business days from the date that the Notice is available to all offerors.

All protests must be in writing by email, stating the name and address of the protestor, a contact person, and a contact phone number/email, and shall specify in detail the grounds of the protest and the facts supporting the protest.

All protests must be addressed and sent to:



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Via Mobility Services
Mr. Bill Patterson
Chief Financial Officer
Email: bpatterson@viacolorado.org

NOTIFICATION OF AWARD AND DEBRIEFING

Offerors who submit a proposal in response to this RFP shall be notified via email by the Procurement Project Manager regarding the offeror awarded the contract. Offerors not awarded the contract may obtain a prompt explanation concerning the strengths and weaknesses of their proposal. Unsuccessful offerors who wish to be debriefed must request the debriefing in writing by email and it must be received by the Procurement Project Manager within three (3) business days of the Notice of Intent to Award release.



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REQUIRED FORMS

ACKNOWLEDGMENT OF ADDENDA

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The following form shall be completed and included in the proposal.

Failure to acknowledge receipt of all addenda may cause the proposal to be considered non-responsive to the solicitation. Acknowledged receipt of each addendum must be clearly established and included with the proposal.

The undersigned acknowledges receipt of the following addenda to the documents:

Addendum No.	_____	Dated:
Addendum No.	_____	Dated:
Addendum No.	_____	Dated:
Addendum No.	_____	Dated:

Offeror Name:

Signature of Authorized Signer:

Title:

Date:



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OFFEROR SERVICE AND PARTS SUPPORT DATA

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Location of Technical Service Representative(s) in Colorado

Name:

Address:

Telephone:

Describe technical services readily available from said representative:

Name:

Address:

Telephone:

Describe technical services readily available from said representative:

Location of Parts Distribution Center in/nearest to Colorado

Name:

Address:

Telephone:

Describe the extent of parts available at said center:

Policy for delivery of parts and components to be purchased for service and maintenance:

Regular method of shipment:

Cost to Via:



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FORM FOR PROPOSAL DEVIATION

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The following form shall be completed for each condition, exception, reservations or understanding (i.e.: deviation) in the proposal according to “Conditions, Exceptions, Reservations and Understandings.”

Deviation No.:	Proposer Name:	RFP Section:	Page:
Exceed _	Do Not Meet _	Provide Alternative _	
Complete description of Deviation:			
Rationale (pros and cons):			
Price data (as applicable):			



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PRICING SCHEDULE

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The vehicles shall be delivered to Boulder, Colorado.

*Please provide increased cost adjustments or credits for the four named options below and also, as applicable, list any other option per the deviation form, or potential upgrade of an item if determined needed by the offeror, along with the cost (adjustment) or credit for the option.

OPTION NAME	PRICE ADJUSTMENT
Optional Diesel Fueled Auxiliary Heater	_____
High Voltage Battery Extended Warranty	_____
_____	_____
_____	_____
_____	_____

OPTION NAME	PRICE CREDIT
Bike Rack	_____
Ski Rack	_____

BASE VEHICLE	TOTAL PRICE
Complete Vehicle as Proposed (no options)	_____
Delivery Charge to Via in Boulder, CO	_____



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COMPONENT CHECKLIST

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Specification Type		Proposed
Body	Manufacturer and Model:	
	Useful Service Life (Altoona):	
	Exterior Height:	
	Exterior Width:	
	Overall Vehicle Length:	
	Ground to Top of Lowest Entry Step Height:	
	Entry Door Clear Opening Height and Width:	
	Minimum Interior Height:	
	Minimum Interior Width:	
	Minimum Aisle Width:	
	Minimum Hip-to-Knee Spacing:	
	Insulation, Material Type:	
	Insulation, Thermal Barrier "R" Value:	
	Sub-Floor Material and Thickness:	
	Floor Covering Material, Thickness, and Color:	
	Permanent Application Method for Entry Step "WATCH YOUR STEP" Signage:	
	Roof Hatch Manufacturer and Model:	
	Driver Area, Defroster/Heater Unit Type:	
	Driver Area, Defroster/Heater BTU Output:	
	Driver Area, Air Conditioning (A/C) Unit Type:	
	Driver Area, A/C BTU Output:	
	Auxiliary Heater, Manufacturer and Model:	
	Auxiliary Heater, BTU Output:	
	Optional Diesel Heater, Mfr. and Model:	
	Optional Diesel Heater, BTU Output:	



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	Optional Diesel Heater, Fuel Tank Capacity:	
	Auxiliary A/C, Manufacturer and Model:	
	Auxiliary A/C, BTU Output:	
	Auxiliary A/C, Condenser Fan Location:	
	Undercoating Type:	
Chassis	Year, Make, and Model:	
	Wheelbase (WB):	
	Gross Vehicle Weight Rating (GVWR):	
	Gross Axle Weight Rating (GAWR) – Front:	
	Gross Axle Weight Rating (GAWR) – Rear:	
	Rear Differential Gear Ratio:	
	Parking Brake Type:	
	Tires, Manufacturer and Model:	
	Tires, Size:	
	Tires, Load Rating:	
	Low Voltage 12 Volt Batteries, Type:	
	Low Voltage 12 Volt Batteries, Reserve Capacity:	
	Low Voltage 12 Volt Batteries, Amp-hour:	
	Low Voltage 12 Volt Batteries, CCA:	
	Driver Seat, Manufacturer and Model:	
	Power Seat Base, Manufacturer and Model:	
Electric Powertrain	Manufacturer/Converter:	
Energy Storage System (ESS)	Battery Manufacturer and Chemistry:	
	Battery Pack Size/Capacity (kWh)	
	Nominal System Voltage (VDC):	
	Charge Cycle Life (Cycles@%DOD):	
	Operating Temperature Range (F°/C°):	
	Estimated Driving Range on Full Charge (miles):	
Charging System	Charge Rate/Limit (kW) and Time to Full Charge, J1772 AC Level 2:	



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	Charge Rate/Limit (kW) and Time to Full Charge, CCS-1 DC Fast Charge:	
Traction Motor	Manufacturer and Model:	
	Gradeability@GVWR (%):	
	Peak and Continuous Torque (Nm/lbs-ft):	
	Peak and Continuous Power (HP/kW):	
	Voltage Range (VDC):	
	Maximum Speed (Mph):	
Transmission/Gearbox	Type, Model, and Gear Ratio:	



Battery-Electric Cutaway Buses

OFFER

RFP# 2022-003

Offeror shall complete the following form.

<p>OFFER</p> <p>By execution below, the offeror hereby offers to furnish equipment and services as specified in Via's Request for Proposals No. 2022-003 including the Contractual Provisions (Section 2), Quality Assurance Requirements (Section 3), Warranty Provisions (Section 4) and Technical Specifications (Section 5), therein.</p>
--

Offeror Company Name: _____

Street Address

City, State, Zip

Signature of Authorized Signer

Title

Phone





Battery-Electric Cutaway Buses

SECTION 2. CONTRACTUAL PROVISIONS

CONTRACT AWARD AND EXECUTION

The acceptance of an offer for award, if made, shall be evidenced by a Notice of Intent to Award in writing delivered by email to the offeror whose offer is accepted. No other act by Via shall evidence acceptance of an offer. After the protest time period has passed, Via will request the offeror to sign the contract by June 17, 2022.

CONTRACT TERMS AND ANNUAL PRICE INCREASES

Via will issue an executed contract and a notice to proceed once the contract has been reviewed by the Via Executive Director and CDOT. The executed contract will include the applicable provisions for a purchase of this type as well as reference and include all portions of this RFP along with the contractor's winning proposal documents.

The procurement and contract shall be in effect for up to five (5) years from the date of contract execution. Current model year vehicles shall be available to procure for the duration of the five-year term.

Following award and contract of the initial model production year and pilot vehicle, Via will have an option to renew/extend the contract annually for four additional years, to equal a five-year purchasing agreement (June 2022 through June 2027). Each additional year contract shall be subject to the same pricing, terms and conditions as the original contract, however, a chassis model price increase will be considered when a model year change is specific to the automotive or bus industry. The Contractor shall provide certified documentation from the manufacturer to justify the chassis model price increase at the time of contract renewal. The price may be adjusted only in the same amount as the price increase to the Contractor. Also, at the time of contract renewal, the Contractor may request an annual increase in second stage production costs. The Contractor will compute second stage costs utilizing current, applicable, Producer Price Index (PPI) staged pricing allowable for the month of the proposed increase, along with supporting documentation for any additional increases being imposed on the dealer by second stage manufacturers (such as for bus body, seating, and HVAC production costs). The Contractor must submit all necessary documentation to Via for review and approval and new pricing will then be negotiated.



Battery-Electric Cutaway Buses

FEDERAL TERMS AND CONDITIONS

The funding for this purchase is based on an agreement through CDOT for use of State funding. Because it is planned that FTA funding will be used for future purchases of bus quantities up to 60 over five years, **the FTA has terms, conditions, and certifications required to be adhered to by the offeror and subsequent contractor as provided in Appendix A.** All offerors are to agree to the federal terms and conditions by signing and submitting the Offer form in response to this RFP. FTA required certifications in response to various federal clauses are provided at the end of Appendix A. The offeror is to submit signed certifications with their proposals, as well as provide the following support documentation listed below. Please note, for the Lobbying and Debarment and Suspension certifications, if a dealer is proposing on behalf of the bus body manufacturer, these two certifications are to be signed and submitted by **both** the appropriate dealer and bus body manufacturer representatives.

1. Government-Wide Debarment and Suspension Certification
 - a. Include a copy of the offeror's current status for www.sam.gov for both the dealer and bus body manufacturer.
2. Bus Testing Certification
 - a. Include a full copy of the Surface Transportation and Uniform Relocation Assistance Act (STURAA) - Altoona Test Report for the vehicle model proposed or a letter explaining when the proposed bus model's test and report will be completed. Proposed vehicles are required to be tested to a minimum 5 year/150,000 mile useful service life in accordance with CFR 49 part 665.
3. Pre-Award Certification for Procurement of Rolling Stock
 - a. Pre-Award component and subcomponent listing of rolling stock parts to comply with, at minimum, 70% domestic content.
 - b. Documentation of location of the final assembly to demonstrate activity occurs in the United States (49 CFR 661.11), to include a description of the activities that will take place at the final assembly point and the cost of final assembly.
 - c. Self-certification support documentation listing compliance with all applicable FMVSS requirements.
4. Transit Vehicle Manufacturer (TVM) Certification
 - a. Copy of current letter from FTA providing for manufacturer's TVM-DBE goal and methodology fiscal year concurrence.



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CONTRACT SPECIAL CONDITIONS

1. SPECIFICATION AND OFFER OMISSIONS

Notwithstanding the provision of drawings, technical specifications, or other data by Via, the contractor shall have the responsibility of supplying all parts and details required to make the vehicle complete and ready for service even though such details may not be specifically mentioned in the drawings and specifications.

Any request, condition, exception, reservation, understanding, or other deviation by the offeror not separately stated in the proposal offer by completing the specified form(s) shall be invalid and shall not be binding on Via.

2. VEHICLE DELIVERY PROCEDURE

Delivery of the vehicle shall be determined by signed receipt of Via's designated agent(s) at the following delivery address: 2855 63rd Street, Boulder CO 80301. Delivery shall be completed within agreed upon timelines of the executed contract documents. Hours of delivery shall be Monday through Friday between 8:00 a.m. and 5:00 p.m.

3. PRE-DELIVERY TESTS AND INSPECTIONS

The contractor shall ensure all quality control inspections are in-place and sufficient to ensure completion and delivery of the vehicle specified in Section 5 (Technical Specifications). The contractor shall ensure the vehicle is visually inspected and road tested prior to delivery.

4. ASSUMPTION OF RISK OF LOSS

Via shall assume risk of loss of the vehicle on delivery to the Boulder location. Prior to this delivery or release, the contractor shall have risk of loss of the vehicle, including any damages sustained during the common carrier or drive away operation, regardless of the status of title or any payments related to the vehicle.

5. ACCEPTANCE OF VEHICLE

Within 10 (ten) business days after arrival at the designated point of delivery, the vehicle shall undergo Via tests.



Battery-Electric Cutaway Buses

These tests are defined in Part 3: Quality Assurance Requirements and the FTA required Post-Delivery Audit review. If the vehicle passes these tests or if Via does not notify the contractor of non-acceptance within 10 (ten) business days after delivery, acceptance of the vehicle by Via occurs on the eleventh business day after delivery.

Acceptance may occur earlier if Via notifies the contractor of early acceptance or places the vehicle in revenue service.

If the vehicle fails acceptance tests, it shall not be accepted, and title shall not be transferred until the repair procedures defined in "Repairs After Non-Acceptance" have been carried out and the vehicle retested until it passes.

5A. REPAIRS AFTER NON-ACCEPTANCE

The contractor or its designated representative shall perform the repairs after non-acceptance. If the contractor fails or refuses to make the repairs within five (5) business days, then the work may be done by Via's designated representative with reimbursement by the contractor.

5B. REPAIRS BY CONTRACTOR

After non-acceptance of the vehicle, the contractor must begin work within five (5) business days after receiving notification from Via of failure of acceptance tests. Via shall make the vehicle available to complete repairs timely within the contractor repair schedule.

The contractor shall provide, at its own expense, all spare parts, tools, and space required to complete the repairs. At Via's option, the contractor may be required to remove the vehicle from Via's property while repairs are being affected. If the vehicle is removed from Via's property, repair procedures must be diligently pursued by the contractor's representatives, and the contractor shall assume risk of loss while the vehicle is under its control.

6. CONTRACTOR'S DELAY

If the contractor is delayed at any time during the project by the neglect or failure of Via or by a cause described below, then the time for completion and/or affected delivery date(s) shall be extended by Via subject to the following conditions:



Battery-Electric Cutaway Buses

1. The cause of the delay arises after the notice of award and neither was, nor could have been, anticipated by the contractor by reasonable investigation before such award;
2. The contractor demonstrates that the completion of the work and/or affected delivery will be actually and necessarily delayed;
3. The effect of such cause cannot be avoided or mitigated by the exercise of all reasonable precautions, efforts, and measures whether before or after the occurrence of the cause of delay; and
4. The contractor makes written request and provides other information to Via as described in "Notification of Contractor Delay."

A delay meeting all the conditions of this section shall be deemed an excusable delay.

6A. NOTIFICATION OF CONTRACTOR DELAY

Notwithstanding "Contractor's Delay," no extension or adjustment of time shall be granted unless written notice of the delay is filed with Via within 14 calendar days after the commencement of the delay. Via shall make its determination within 14 calendar days after receipt of the notification.

7. LIQUIDATED DAMAGES

It is mutually understood and agreed by and between the parties to the contract that time is of the essence with respect to the completion of the project and that in case of any failure on the part of the contractor to complete the project within the time specified in the contract, except for any excusable delays as provided in "Contractor's Delay," or any extension thereof, Via will be damaged thereby. The amount of said damages, being difficult if not impossible to ascertain, is hereby agreed to be fixed at \$100.00 per calendar day for every calendar day the vehicle is not delivered in substantially good condition.

The contractor hereby agrees to pay the amount as a fixed, agreed and liquidated damage, and not by way of penalty to Via, and further authorizes Via to deduct the amount of the damages from money due the contractor under the contract. If the monies due the contractor are insufficient or no monies are due the contractor, the contractor shall pay Via the difference or the entire amount, whichever may be the case, within 30 calendar days after receipt of a written demand by Via's Chief Financial Officer.



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The payment of aforesaid fixed, agreed, and liquidated damage shall be in lieu of any damages for any loss of profit, loss of revenue, loss of use, or for any other direct, indirect, special or consequential loss or damage of any kind whatsoever that may be suffered by Via arising at any time from the failure of the contractor to fulfill the obligations referenced in this clause in a timely manner.

8. TITLE

Adequate documents for registering the vehicle shall be provided to Via within five (5) business days after the vehicle is accepted. Upon acceptance of the vehicle, the contractor warrants that the title shall pass to Via free and clear of all encumbrances.

To accompany all related title documents, the contractor is to also supply a weight certificate from a state certified scale showing the unladen weight of the vehicle.

60-Day temporary Colorado registration tags shall be affixed to each vehicle at the time of delivery.

9. PAYMENT

Via shall pay, and the contractor shall accept, the amounts set forth in the Pricing Schedule as full compensation for all costs and expenses of completing the project in accordance with the contract, including but not limited to all labor and material required, overhead, expenses, storage and shipping, risks and obligations, taxes (as applicable), fees and profit, and any unforeseen costs.

Via shall pay the contractor for the vehicle at the unit price(s) itemized in the Pricing Schedule within 45 calendar days after acceptance of the vehicle, and receipt of a proper invoice and the following documentation.

1. Delivery and acceptance of all contract deliverables, including manuals and other documentation required by the contract, excluding training.
2. Rectification of any deficiencies found during the acceptance of the vehicle.
3. Contractor provision of any certifications as required by law and/or regulations.
4. Completion of FTA post-delivery audits for Buy America and FMVSS required under this contract.



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10. SERVICE – CONTRACTOR SERVICE REPRESENTATIVES

The contractor shall, at its own expense, have a competent engineering service representative(s) available on request to assist Via's staff in the solution of engineering, design, or operational problems within the scope of the specifications that may arise during the warranty period. This does not relieve the Contractor of responsibilities under Part 4: Warranty Provisions.

11. SERVICE - DOCUMENTATION

Each offeror shall provide a description of the technical support and service offerings, including the location(s) of technical service representatives near the Via service area with expertise related to the Propulsion System and Battery Management System of the proposed vehicle. The availability of technical service representatives able to provide on-site support as well as a complete detail of the offeror's warranty procedures and requirements shall be included in the proposal.

The contractor shall provide current OEM chassis service manual(s), As Built parts manual(s), and OEM chassis / bus body / subcomponent standard operator's manuals as part of this contract. The contractor shall keep maintenance manuals available for a period of three (3) years after the date of acceptance of the vehicle procured under this contract. The contractor shall also exert its best efforts to keep maintenance manuals, operator manuals, and parts books up-to-date for a period of 7 (seven) years. The supplied maintenance and operator's manuals shall incorporate all equipment ordered on the vehicle covered by this procurement. The referenced manuals shall be supplied as indicated in sets, such that a set consists of a hard copy and electronic companion document, as applicable.

An electric powertrain systems manual shall be provided. The manual shall include detail of installed components, high voltage system specifications and wiring schematic, ESS diagrams and safety information, operating and troubleshooting information, required maintenance procedures, and diagnostics interface instructions for accessing on-board systems.



Battery-Electric Cutaway Buses

As Built bus body wiring diagrams and schematics shall be provided in manual form with each vehicle order. Diagrams shall detail wire colors and identification codes, and shall include electrical compartment legend, interlock system diagram, lighting circuit schematic, battery power circuit schematic, and bus body and component circuit diagrams identifying fuse, breaker, and relay positions/functions and OEM chassis harness connections. Diagrams shall specifically match the constructed vehicle and all installed components.

The vehicle manufacturer will supply Via with a detailed and inclusive routine preventive maintenance procedure. This procedure will contain the following:

1. Change interval for all fluids and filters.
2. Lubrication points identified by location, interval, and lubricant type required.
3. Items requiring periodic inspection and adjustment.

The Parts Manual shall contain each part used during the assembly of the vehicle on a production line ticket and also each part will be referenced in a manual by specific vehicle sub-system. The manual will be one produced specifically for the vehicle referenced (as-built parts).

Each and every time a change or modification is made to the vehicle described within this specification, the manufacturer will announce and initiate this action by issuing a bulletin.

12. PARTS – AVAILABILITY GUARANTEE

The contractor hereby guarantees to provide, within reasonable periods of time, the spare parts, software, and all equipment necessary to maintain and repair the vehicle supplied under this contract for a period of at least seven (7) years after the date of acceptance. Parts shall be interchangeable with the original equipment and be manufactured in accordance with the quality assurance provisions of this RFP. Prices shall not exceed the contractor's then current published catalog prices.

13. ADDITIONAL VEHICLE SERVICE AND DOCUMENTATION REQUIRED AT DELIVERY

A full 4-wheel alignment of each completed vehicle shall be performed and documented according to chassis OEM guidelines prior to vehicle delivery. Any modifications or repairs required to bring toe, camber, or caster settings within the adjustable range shall be completed prior to delivery, and documentation showing chassis VIN, before and after alignment settings, and contact information for the alignment facility shall be provided.



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Offeror shall be responsible for arranging and paying for vehicle to be aligned locally in Boulder, CO if valid alignment settings documentation is not provided at delivery.

A first annual Department of Transportation (DOT) / Federal Motor Carrier Safety Administration (FMSCA) inspection of each completed vehicle shall be performed prior to delivery. Inspection report paperwork and decal certifying that each vehicle has passed all inspection items in accordance with 49 CFR Part 396 shall be provided at time of delivery.

A high pressure water test shall be performed upon completion of vehicle construction to ensure there are no water leaks of exterior seams, doors, windows, roof, or overall structure. A certification of the final water test result shall be provided with each vehicle at delivery.



Battery-Electric Cutaway Buses

SECTION 3. QUALITY ASSURANCE REQUIREMENTS

INSPECTIONS

While Via is not mandated to send a resident inspector to the manufacturing site per FTA requirements it may choose to do so at its own discretion. To demonstrate compliance with the FTA's post-delivery purchaser's requirements and certification, Via will visually inspect and road test the vehicle prior to acceptance.

ACCEPTANCE TESTS

RESPONSIBILITY

Fully-documented tests shall be conducted on the vehicle following manufacture to determine its acceptance to Via. These acceptance tests shall include pre-delivery inspections and testing by the contractor and inspections and testing by Via after the vehicle has been delivered.

PRE-DELIVERY TESTS

The contractor shall conduct acceptance tests at its plant following completion of manufacture and before delivery to Via. These pre-delivery tests shall include visual and measured inspections, as well as testing the total vehicle operation. Documentation of these tests are to be included with the delivery paperwork.

TOTAL VEHICLE OPERATION

Total vehicle operation shall be evaluated during road tests. The purpose of the road tests is to observe and verify the operation of the vehicle as a system and to verify the functional operation of the subsystems that can be operated only while the vehicle is in motion.

POST-DELIVERY TESTS

Via will conduct acceptance tests on the delivered vehicle. These tests shall be completed within 10 (ten) business days after vehicle delivery and shall be conducted in accordance with written inspection documents.



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The purpose of these tests is to identify defects that have become apparent between the time of vehicle release and delivery to Via. The post-delivery tests shall include visual inspection and vehicle operations.

VISUAL INSPECTION

The post-delivery inspection is similar to the inspection at the contractor's plant and shall be conducted with the vehicle in a static condition. Any visual delivery damage shall be identified and recorded during the visual inspection of the vehicle.

VEHICLE OPERATION

Road tests will be used for total vehicle operation similar to those conducted at the contractor's plant. Operational deficiencies of the vehicle shall be identified and recorded.



Battery-Electric Cutaway Buses

SECTION 4. WARRANTY PROVISIONS

WARRANTY REQUIREMENTS

COMPLETE VEHICLE

The complete vehicle, including all components and systems, shall be warranted to be free from defects for a minimum three (3) years or 36,000 miles, whichever comes first, beginning on the date of vehicle acceptance. Proposals shall include a comprehensive statement of the warranty terms relating to the complete vehicle, including explanation of all disclaimers within the warranty. The warranty is based on regular operation of the vehicle under the operating conditions prevailing in Via's locale.

BODY AND CHASSIS STRUCTURE

Body, body structure, and structural elements shall be warranted to be free from defects and to maintain structural integrity for a minimum five (5) years or 100,000 miles, whichever comes first, beginning on the date of vehicle acceptance. Proposals shall include a comprehensive statement of the warranty terms relating to the complete vehicle, including explanation of all disclaimers within the warranty. The warranty is based on regular operation of the vehicle under the operating conditions prevailing in Via's locale.

PROPULSION SYSTEM

Propulsion system and related components shall be warranted to be free from defects for a minimum five (5) years or 60,000 miles, whichever comes first, beginning on the date of vehicle acceptance. Proposals shall include a comprehensive statement of the warranty terms relating to the propulsion system and related components, including explanation of all disclaimers within the warranty. The warranty is based on regular operation of the vehicle under the operating conditions prevailing in Via's locale.



Battery-Electric Cutaway Buses

HIGH VOLTAGE BATTERY

Proposals shall include a comprehensive statement of the warranty terms relating to the battery, including explanation of all disclaimers within the warranty. A detailed description shall specify the warranty coverage period, the guaranteed usable capacity (kWh) of the battery during the warranty coverage period, all battery maintenance requirements, and all actions and conditions that would void the battery warranty.

The coverage period shall be specified, at minimum, in months and total designed charging cycles from battery beginning of life (BOL) to end of life (EOL) usable capacity (kWh). The battery must retain sufficient energy storage to meet the requirements of the intended duty cycle up until battery degradation has reached warrantable end of life (WEOL), as shall be defined within the warranty terms by percent remaining usable capacity (kWh). As an example, if the capacity when new is 300 kWh and the WEOL is at 80 percent, then the useable capacity range shall be from 300 to 240 kWh.

The offeror shall provide a plan for replacing or reconditioning the battery if it has been determined that the battery has degraded beyond its Warrantable End of Life (WEOL). The offeror must clearly define WEOL and the method by which battery capacity is measured to determine WEOL. The offeror must define the capacity to which the entire battery shall be restored such that it will remain above the WEOL for the remainder of the warranty. The offeror shall provide a plan for reuse or recycling of replaced battery cells and/or battery packs both during and after the warranty period.

HIGH VOLTAGE BATTERY EXTENDED WARRANTY

Proposals shall include option pricing for providing extended warranty coverage for the high voltage battery. Terms and exclusions of extended coverage shall be clearly defined, including length of coverage, guaranteed charge capacity over the warranty period, and provisions for battery degradation.

EXTENSION OF WARRANTY

If, during the warranty period, repairs or modifications on the vehicle, made necessary by defective design, materials, or workmanship, are not completed due to lack of material or inability to provide the proper repair for 30 calendar days, the applicable warranty period shall be extended by the number of days equal to the delay period.



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VOIDING OF WARRANTY

The warranties shall not apply to the failure of any part or component of the vehicle that directly results from misuse, negligence, accident, or repairs not conducted in accordance with the contractor provided maintenance manuals and with workmanship performed by adequately trained personnel in accordance with recognized standards of the industry. The warranty shall also be void if Via fails to conduct normal inspections and scheduled preventive maintenance procedures as recommended in the contractor's maintenance manuals and that omission caused the part or component failure. Via shall maintain documentation, auditable by the contractor, verifying service activities in conformance with the contractor's maintenance manuals.

REPAIR PERFORMANCE

The contractor is responsible for all warranty-covered repair work. To the extent practicable, Via will allow the contractor or its designated representative to perform such work.

REPAIRS BY CONTRACTOR

The contractor or its designated representative shall begin work on warranty covered repairs within five (5) calendar days after receiving notification of a defect from Via. Via shall make the vehicle available to complete repairs timely with the contractor repair schedule.

The contractor shall provide at its own expense all spare parts, tools, and space required to complete repairs. At Via's option, the contractor may be required to remove the vehicle from Via's property while repairs are being affected. If the vehicle is removed from Via's property, repair procedures must be diligently pursued by the contractor's representative.

WARRANTY AFTER REPLACEMENT/REPAIRS

If any component, unit, or subsystem is repaired, rebuilt, or replaced by the contractor, the component, unit, or subsystem shall have the unexpired warranty period of the original.



Battery-Electric Cutaway Buses

SECTION 5. TECHNICAL SPECIFICATIONS

SCOPE AND SERVICE REQUIREMENTS

These specifications describe Via Mobility Services minimum acceptable requirements for a zero emission, battery-electric powered cutaway bus intended to provide ADA-compliant public transportation service throughout Boulder County and the Boulder-Denver Metro Area in the State of Colorado. Vehicles proposed to meet these requirements will be expected to accommodate the widest possible spectrum of passengers and will operate daily on all types of roads and in all types of climate conditions. Vehicles shall be designed to be as light in weight as possible without degradation of safety or performance. Components must be the heaviest-duty available from the chassis Original Equipment Manufacturer (OEM) and the highest quality available from the intermediate and final stage manufacturers in order to provide maximum durability and reliability. Acceptable vehicles will provide safe, comfortable, and dependable operation, and must be constructed with materials designed to last throughout the proposed useful service life.

The vehicle awarded under this specification is intended for transit service in the City and County of Boulder, Colorado. Boulder County is located in northern Colorado along the Front Range of the Rocky Mountains and encompasses both mountains and plains environments. The County has an average elevation of 7,717 feet above sea level, while the City sits at an altitude of 5,430 feet. The climate is temperate with low humidity, with seasonal temperature extremes ranging from 0° to 100° Fahrenheit (F). As a result, this vehicle's service area requires year-round operation at elevations of 5,000 to 6,000 feet above sea level.

CDOT has already awarded Via funding to purchase one battery-electric powered cutaway bus to go into service in the Boulder area, which will be used to fund the first purchase off this contract, known as the "pilot" vehicle for this project. This battery-electric powered cutaway bus is part of Via's effort to increase electric vehicle infrastructure, moving towards sustainable energy and positively affecting air quality in the region.

As a result, the goal is to move away from gasoline and diesel-powered transit buses and secure funding to support procurement of both battery-electric powered cutaway buses and heavy-duty transit coaches in the next five years. In 2022, Via will begin applying for funds through both CDOT and FTA to support these types of purchases.



Battery-Electric Cutaway Buses

Because this procurement is presented as a best value request for proposals, Via is looking for offerors to propose a unique and adequate solution to meet Via's intent to go electric. Cost is not the most significant factor in determining a winning offeror; vehicle operating capacity is the strongest determinant. As a result, Via encourage offerors to provide a vehicle that can be used as an example of successful battery-electric powered transit vehicle use in high elevation climates.

LEGAL REQUIREMENTS

The offeror and completed vehicle shall comply with and meet all applicable federal, state, and local regulations. These shall include, but not be limited to, the Americans with Disabilities Act (ADA), as well as state and local accessibility, safety, and security requirements.

The vehicle shall meet all applicable FTA Regulations, Federal Motor Vehicle Safety Standards (FMVSS), Federal Motor Carrier Safety Regulations (FMCSR), and Environmental Protection Agency (EPA) regulations in effect at the date of manufacture.

The offeror, by submitting a proposal, certifies that the vehicle offered has been designed, manufactured, assembled, and tested for its intended use and will be fully functional at the time of delivery. In the event of any conflict between the requirements of this specification and any applicable legal requirement, the legal requirement shall prevail.

OVERALL REQUIREMENTS

The contractor shall provide a zero emission cutaway bus that is battery-electric powered. The vehicle shall be capable of extended daily use and be manufactured and tested for public transit use.

The base model chassis must be the latest model year in standard production for which published literature and detailed specifications are available. Unless otherwise specified, all items listed as chassis OEM parts or equipment shall be provided and installed by the chassis OEM.

The proposed body manufacturer shall be an FTA certified Transit Vehicle Manufacturer (TVM) and certified Ford Qualified Vehicle Modifier (QVM). All body component and subcomponent parts, equipment, and accessories shall be new and completely installed, assembled, and/or adjusted according to each manufacturers' requirements. All exposed edges and surfaces shall be smooth, free from burrs and other projections, and neatly finished.



Battery-Electric Cutaway Buses

The proposed electric powertrain manufacturer and installer shall be a Ford QVM participating in the eQVM program. Proposed electric powertrain shall be certified to produce zero emissions by California Air Resources Board (CARB).

Whenever a specific trade or product name is used within this specification, the following statements apply: "... or equivalent with the same standards of quality, design, and performance", and "...if available". Whenever a specified component or feature is noted "... as applicable", it is understood that different battery electric platforms may use different methods of electrification, and that some features common to one conversion may not apply to another. If the proposed vehicle deviates from the specified requirements in any way, the offeror shall note this as a deviation and submit it for evaluation with the proposal.

BASIC REQUIREMENTS

Base Model Vehicle shall be a light-duty cutaway, body on chassis type transit bus outfitted with a curbside, front-mounted mobility aid lift, capable of safely transporting 12 ambulatory and two (2) mobility aid passengers (with two foldaway seats up), or 14 ambulatory and zero (0) mobility aid passengers (with two foldaway seats down).

Wheelbase (WB) shall be minimum 158". Offeror shall specify the shortest wheelbase capable of accommodating the seating configuration, accessories, and maximum range battery packs specified.

Gross Vehicle Weight Rating (GVWR) shall be **14,500 lbs.**

Body Dimensions:

Maximum Exterior Width = 96 inches.

Maximum Height (including rooftop hatch in open, venting position) = **117.5 inches.**

Maximum Step Height (from level ground to top surface of first entry step) = **12 inches.**

Minimum Interior Width (measured 12 inches above the floor) = **90 inches.**

Minimum Interior Height (floor to ceiling, passenger compartment center) = **74 inches.**

Minimum Aisle Width (between edges of streetside and curbside aisle seats) = **16 inches.**

Minimum Hip to Knee Spacing (between seat backs at ambulatory position) = **27 inches.**



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Vehicle Overall Length shall be the minimum necessary to accommodate a front lift, the specified number of fixed ambulatory seats (12), foldaway ambulatory seats (2), mobility aid securement positions (2), and required spacing.

Floorplan diagram detailing locations and dimensions (as applicable) of windows, doors, steps, seats, mobility aid securement floor track, stanchions, modesty panels, mobility aid lift, auxiliary heater, camera positions, WB, overall length, and interior body dimensions shall be submitted with each proposal.

Weight Distribution Analysis and loading calculation estimate for a fully loaded vehicle shall be submitted with the floorplan diagram with each proposal. A fully loaded vehicle equals the weight of a vehicle equipped to meet these specifications, and the estimated weight of maximum passenger occupancy (minimum 150 pounds for each ambulatory seat placement, minimum 200 pounds for each wheelchair placement). The weight of a fully loaded vehicle shall in no case exceed the chassis OEM GVWR.

SYSTEM & COMPONENT ACCESSIBILITY

All systems or components subject to periodic maintenance shall be readily accessible for service and inspection. To the extent practicable, removal or physical movement of components unrelated to the specific maintenance and/or repair task(s) involved should be unnecessary.

FIRE SAFETY

The vehicle shall be designed and manufactured in accordance with all applicable fire safety and smoke emission regulations. These provisions shall include the use of fire-retardant/low-smoke materials, fire detection and suppression systems (as applicable), firewalls, and facilitation of passenger evacuation.

ELDERLY AND DISABLED PASSENGERS

The contractor shall comply with all applicable Federal requirements defined by the ADA and all state and local regulations regarding mobility-impaired persons.



Battery-Electric Cutaway Buses

VEHICLE PERFORMANCE

OPERATING RANGE

The operating range of the vehicle shall be measured by hours due to the nature of Via's service (as defined in the above scope) with, at minimum, 120 miles of single overnight charge capacity, using the heat or air conditioning unit for eight to 10 hours, at an elevation of 6,000 feet, top speed of 65 MPH, and an average daytime temperature of 30-95 degrees F at full passenger capacity, which is 14 riders and a driver. The service area is relatively level, with small to moderate hills of 3 - 4% grades on route.

Transit service operations involve stops every 5-7 miles, and require the proposed vehicle to operate continuously for 10 to 12 hours per day while covering distances of 120 to 150 miles, depending on the season. Maximum passenger loads are to be anticipated, with regular use of heaters in winter and air conditioning in summer. Depot charging of vehicle will be available each night.

The vehicle shall be designed to operate in transit service for at least five (5) years or 150,000 miles, whichever comes first, without major structural failure.

PROPULSION

The propulsion system shall operate smoothly and quietly, with minimal vibration and noise transmission to the passenger seating areas. The system shall be designed and configured to minimize driveline power losses and maximize vehicle range.

The energy storage and drivetrain shall recover power returned through propulsion motor regenerative braking with minimal losses due to system design.

The propulsion system and drivetrain shall provide power to enable the vehicle to meet the defined acceleration, top speed, and gradeability requirements, and operate all propulsion driven accessories, as further defined in the "Operating Range" section.

Electric Powertrain shall be designed to provide the proposed vehicle with sufficient power and range to meet or exceed, on a single full charge, the demands of the Via Mobility Services operating profile when performing under maximum passenger and accessory loads.



Battery-Electric Cutaway Buses

Proposals shall describe in detail all aspects of the electric powertrain proposed, such as installed components and associated equipment, management and cooling systems, safety interlocks and trigger events or conditions, operating temperature ranges, and any OEM chassis modifications performed during the electrification process.

Proposals shall detail all operations, maintenance, and safety procedures applicable to the electric powertrain and associated components. Any changes or adaptations that may be required based on variable conditions such as weather, temperature, altitude, passenger load, accessory load, hours of operation, and/or road grade shall be noted.

Powertrain Control System (PCS) shall regulate energy flow throughout powertrain components to provide motive performance and accessory power while maintaining critical system parameters within specified operating ranges. PCS shall automatically de-rate power and/or speed and initiate motor shutdown as needed to protect the drive system from progressive damage, and shall trigger a visual and audible alarm to alert the driver when a malfunction is detected.

Automatic Shutdown Override control shall be provided, as applicable, to allow a momentary delay of the drive system shutdown. Override shall not disable shutdown activation system or alarm.

ELECTRIC TRACTION SYSTEM

Transmission/Gearbox type, model, and gear ratio shall be specified by offeror, as applicable.

Traction Motor shall be capable of providing acceptable performance over moderate inclines while operating under maximum passenger load. Offeror shall specify manufacturer, model, gradeability @GVWR (%), peak and continuous torque (Nm/lbs-ft), peak and continuous power (HP/kW), voltage range (vdc), and maximum speed (mph).

Creep feature shall be provided to allow vehicle to move slowly forward or backward when engaged in DRIVE or REVERSE with brake pedal released.

Hill Hold feature shall be provided to prevent vehicle from rolling backward when engaged in DRIVE whenever brake pedal is released after an inclined stop.

Automatic Traction Control (ATC) feature shall be provided to limit tire spin and maintain traction in slippery conditions.



Battery-Electric Cutaway Buses

Top Speed shall be not less than 65 miles per hour under full passenger and accessory loads.

REGENERATIVE BRAKING

Regenerative Braking System shall use the traction motor to slow the vehicle and generate power to recharge the batteries, reducing brake wear and improving maximum vehicle range. Regenerative braking shall engage as accelerator pedal is released, and increase as brake pedal is applied.

Regenerative Braking Manual Override Switch shall be installed within easy reach of the driver to enable deactivation of the Regenerative Braking System, as applicable. Deactivation of Regenerative Braking System shall trigger a warning indicator within view of the driver.

Regenerative Braking Automatic Override shall deactivate the Regenerative Braking System whenever Anti-lock Braking System (ABS) or ATC is activated, as applicable.

BATTERIES

Energy Storage System (ESS) shall be designed to provide optimum vehicle performance and maximum range, and shall be capable of withstanding the high current and voltage profiles necessary during daily recharging events without reducing the life of the high voltage batteries. ESS battery packs shall be located outside of the passenger compartment in positions away from direct impact zones, and battery weight shall be distributed throughout the chassis so as to not adversely affect vehicle handling. Configuration shall ensure occupants will not be exposed to electrical current during normal operation or in the event of an accident. Batteries shall be easily accessible for service or replacement, with a vent path to the exterior of the bus to prevent gassing or fumes from entering the interior. Offeror shall provide diagrams of battery pack configuration and locations in relation to vehicle layout. Offeror shall specify battery manufacturer, chemistry, size/capacity (kWh), nominal voltage (vdc), life cycle (ex >4000 @90%DOD), operating temperature range (F°/C°), and estimated driving range on a full charge (miles). Proposals shall include complete descriptions and documented results of all life-cycle testing procedures used to validate the life of High Voltage Batteries at the proposed charging rates, charge durations, and expected ambient temperatures and operating profiles.

Manual Service Disconnect feature shall be provided as a means of isolating high voltage system batteries during maintenance operations.



Battery-Electric Cutaway Buses

Battery Management System (BMS) shall monitor and control battery State of Charge (SoC), voltage, current, and temperature on a cell-to-cell level. BMS shall detect and identify faults, and engage safety interlocks to mitigate battery damage. BMS shall communicate data to on-board vehicle systems and provide diagnostic output for fault correction and maintenance.

Thermal Management System (TMS) shall maintain battery and component temperatures within manufacturer's specified optimum range without requiring driver or maintenance intervention. Active TMS shall be capable of cooling below or heating above ambient temperature during all periods of charge and discharge with appropriate safety interlocks installed to react to adverse conditions or events. Proposals shall include a complete description of the TMS, including provisions for fire prevention, detection, and suppression in the event of thermal runaway.

On-Board Charging System shall be compatible with Proterra 60kW and 120kW Electric Vehicle Service Equipment (EVSE) chargers currently employed by Via. Charge port shall be capable of coupling with an SAE J1772 Combined Charging System Type 1 Combo (CCS-1) 7-pin plug incorporating Level 1 (120V) and Level 2 (240V) Alternating Current (AC), as well as Level 3 Direct Current Fast Charge (DCFC) outputs. Vehicle shall be configured so that it may not be moved while connected to EVSE charger. Offeror shall specify charging rates/limits (kW), and estimated charge times (hours) for each level.

Driver Instrument Panel shall display status and operational information such as SoC, power usage, remaining range, speed, odometer, trip meter, energy consumption, temperature, and fault indicators. Offeror shall submit image of instrument panel configuration with proposal.

On-Board Diagnostic System shall monitor vital powertrain functions and performance, detect faults, and store time-stamped fault codes and out of parameter conditions in memory. Diagnostic data and fault codes shall be accessible to maintenance personnel via on-board interface and/or Diagnostic Toolset, as applicable. System shall inform driver with visual and/or audible alarms when faults or out of parameter conditions occur during operation.

Diagnostic Toolset and any associated software and/or interface equipment, as applicable, shall be provided to enable maintenance personnel to access on-board systems in order to troubleshoot and service components of electric powertrain. List of required specialty tools and service equipment shall be submitted with proposal, and complete Diagnostic Toolset and instruction manual shall be provided at time of delivery.



Battery-Electric Cutaway Buses

Telematics System shall provide accessible real-time vehicle operational data and performance analytics. Proposed Telematics System and data access rights shall be described in detail.

VEHICLE STRUCTURE

CHASSIS

Base Model Chassis shall be a heavy-duty Class 4 commercial cutaway with dual rear wheels, such as Ford E-450, modified with a plug-in battery electric powertrain.

Driveshaft shall be installed with minimum two (2) protective metal guards, as applicable. Guards shall prevent any section of the driveshaft from striking the ground, damaging underbody components, and/or penetrating the body of the vehicle in the event of failure.

Rear Differential shall include limited slip or non-slip feature, as applicable. Offeror shall specify gear ratio.

Steering shall be power-assist and incorporate tilt-wheel feature.

Service Brakes shall be power, four (4)-wheel ABS.

Parking Brake shall illuminate a warning light in instrument cluster when activated. Offeror shall specify mechanical or electrical actuation.

Daytime Running Lights (DRL) shall be chassis OEM.

Driver Door shall be chassis OEM with roll-up window.

Windshield Wipers shall be chassis OEM adjustable speed intermittent wipers.

Horn shall be chassis OEM.

Cruise Control feature shall be provided.

Power Points in driver area shall be chassis OEM.

Three (3) Complete Sets of Keys shall be provided. Each complete set shall include at least one (1) key (or fob) for each type of lock installed on vehicle. OEM chassis driver door lock and ignition switch shall be keyed alike.



Battery-Electric Cutaway Buses

FRONT/REAR AXLES

Front and Rear Axles shall be chassis OEM. Offeror shall specify front and rear Gross Axle Weight Ratings (GAWR).

WHEELS

Wheels shall be OEM steel, rated to meet or exceed GVWR. All 7 (6 + 1 mounted spare) wheels shall match white bus finish and be interchangeable.

Air Valve Extensions shall be installed on dual rear wheels, and fixed in position with brackets or stabilizer clips. Extensions shall allow for inflation of inner tires without requiring removal of outer duals.

TIRES

Tires shall be matching All Season radials of equal size and rating with an M+S (mud and snow) designation. All 7 (6 + 1 mounted spare) shall be chassis OEM recommended size for OEM wheels and specified GVWR. Combined load rating of 6 mounted tires shall equal or exceed GVWR. Matching full size spare tire shall be mounted to spare wheel and provided with completed vehicle at time of delivery. All mounted tires shall be electronically spin balanced. Offeror shall specify brand, model, load rating, and size of tires.

SUSPENSION

Rear Suspension shall be heavy-duty chassis OEM with a road shock compensating upgrade such as MORryde RS rubber shear spring/shackle suspension system. Upgrade shall be installed according to component manufacturer's exact requirements. Suspension system shall maintain a level position once loaded to full capacity without affecting ride quality, and frame height shall be equal on both sides of vehicle.

Shock Absorbers suitable for vehicle application shall be installed front and rear.

BODY AND CRASHWORTHINESS

Body Construction shall meet or exceed the rollover protection requirements of FMVSS 220, and joints and corners where stress concentration may occur shall be adequately reinforced to fully withstand the heavy loads and road shock to which a vehicle of this type is exposed.



Battery-Electric Cutaway Buses

Body shall be securely fastened to cutaway chassis frame according to chassis OEM body builder's requirements. Body shall be free of cracks, dents, damage, and physical defects at time of delivery. Offeror shall provide detailed description of body construction materials and assembly methods.

Undercoating shall be a non-flammable, rust-proofing sealant applied to exposed metal surfaces on the underside of the bus body. All openings in body sub-floor and firewall shall be sealed. Offeror shall specify type.

TOWING

Two (2) Rear Tow Hooks shall be installed to the frame and shall permit towing of vehicle without distortion or failure.

VEHICLE SYSTEMS

ELECTRICAL SYSTEM

Low Voltage Electrical System shall be a 12-volt, negative ground system. High voltage system shall maintain charge of low voltage system via DC-DC power converter. All OEM chassis functions energized through the ignition switch shall continue to function as installed. All accessible terminal connections shall be inspected for proper securement prior to delivery.

Dual 12 Volt Batteries shall be matching heavy duty chassis OEM. Battery terminals shall be coated with anti-corrosion protectant. Offeror shall specify type, reserve capacity, Amp-hour rating, and individual Cold Cranking Amperage ratings of batteries.

Battery Cables shall be color-coded red for positive polarity and black for negative. Low voltage battery cables installed in place of chassis OEM battery cables must be a continuous run and sized to exceed maximum draw.

Battery Compartment shall contain both batteries, the high-amperage mobility aid lift circuit breaker, and all other high-amp body power circuit breakers, in a curbside, weather protected compartment.

Lowest exterior edge of compartment shall extend no lower than lowest edge of entry steps. Battery box shall include a slide-out tray with drain holes in both tray and box. Alternative locations for low voltage batteries shall be proposed if curbside compartment interferes with high voltage battery placement.



Battery-Electric Cutaway Buses

Battery cables shall be of sufficient length and routed to allow for full travel of slide out tray, and shall be protected and flexible enough to fold away when stowed without shorting or damaging the cables. Tray and slides shall be heavy-duty stainless steel and box and battery hold-downs shall be constructed of corrosion resistant materials.

Battery compartment access door shall be hinged and secured with thumb latches. If top-hinged, a spring latch shall be installed to hold door in an open position for service. A laminated diagram showing battery power circuit configuration shall be installed to inside of access door.

Master Low Voltage Battery Disconnect Switch shall be provided to energize all bus body electrical power other than exterior lights. Ignition hot (Key ON) and battery hot (Key OFF) low voltage body power shall be routed through the master battery disconnect switch. Body electrical components and accessories supplied with Key OFF power shall not operate when master switch is in OFF position. Body components supplied with Key ON power shall not operate unless both master switch and ignition switch are in ON position. Master switch shall be installed in driver stepwell.

Electrical Compartment shall be located above driver seat and be easily accessible through a latching access door. Compartment shall contain all low voltage bus body power fuse boxes, circuit boards, solenoids, breakers, and relays. Compartment shall be sized large enough to allow for ease of maintenance. Additionally, two (2) fused Key ON ignition hot power and two (2) fused Key OFF battery hot power circuits of minimum 15 amps each shall be provided in fuse box to accommodate end user installation of additional low voltage electrical components. An "As Built" wiring legend identifying circuit functions and fuse and/or breaker positions shall be laminated and secured to inside of access door.

Wiring shall be properly sized, insulated, and protected according to current SAE standards and shall incorporate maximum radio frequency interference (RFI) and electromagnetic interference (EMI) suppression. Wiring shall be color-coded and permanently heat or ink stamped, at regular intervals of six (6) inches or less, with circuit function identification. Each wire color, gauge, and function identification shall be referenced on electrical diagrams encompassing all installed electrical systems and connections to chassis OEM electrical systems.

Wiring shall be continuously enclosed in non-metallic loom, efficiently routed and supported, and shall be of sufficient length to permit proper positioning without creating excessive tension. Shielding and protective grommets shall be installed at any point wiring harnesses pass through or rub against sharp or abrasive materials.



Battery-Electric Cutaway Buses

There shall be no exposed or loose wiring in driver or passenger areas. Wiring specifications shall apply equally to circuits connecting batteries, HVAC systems, mobility aid lift, speakers, and all other electrical components.

Interior Body Harnesses shall be joined using pin and socket plug connectors.

Exterior Wiring Harnesses shall be routed in corrosion and moisture resistant loom and joined using plug connectors sealed against the elements. Insulated “P” clamps shall be installed at regular intervals of 24 inches or less.

Wires Larger than 10 Gauge shall be properly crimped, soldered, and sealed with heat shrink tubing. Connections made by hydraulic or connector fusing crimp tools shall be acceptable in lieu of (ILO) soldering. The use of butt connectors will not be acceptable.

Two (2) Added Grounds of minimum 1/0 (0 gauge) cable shall be installed between: (1) OEM chassis frame and body cage structure, and (2) mobility aid lift pump housing and negative battery terminal. Ground cables shall be continuous between specified connection points.

Lift Interlock device with “DOOR AJAR” type LED display, such as Intermotive Gateway, shall be installed. Interlock shall only provide power to lift when master battery disconnect switch, ignition switch, and lift power switch are ON, vehicle is in PARK (or NEUTRAL, as applicable), parking brake is applied, and lift doors are open. “DOOR AJAR” LED display panel shall illuminate whenever master disconnect switch and ignition switch are both ON and lift doors are open, and an audible alarm shall also sound if these criteria are met but parking brake is not applied, or vehicle is not in PARK (or NEUTRAL), or both. Interlock shall prohibit movement of vehicle while lift doors are open.

Driver Control Console incorporating body electrical component and accessory switches and warning lights shall be installed within easy reach of driver. Console shall be attached with nut and bolt fasteners (no self-tapping screws) with a removable access panel. Console wiring harnesses shall be equipped with detachable plug connectors for ease of removal and service. All control switches shall be labeled for easy function identification. Rocker switches shall be backlit for visibility and illuminated whenever vehicle running lights are activated.

Voltmeter wired to low voltage body power shall be installed in driver area.

Stereo with AM/FM tuner, Bluetooth, and auxiliary USB input shall be provided. Stereo may be chassis OEM or aftermarket, with two (2) front speakers installed in driver area and minimum four (4) additional speakers installed and evenly spaced in passenger seating area.



Battery-Electric Cutaway Buses

HEATING, DEFROSTING, VENTILATION, AND AIR CONDITIONING SYSTEM

Heating, Ventilation, and Air Conditioning (HVAC) shall include independently controlled systems for both the driver area and passenger compartment. Offeror shall describe configuration of complete vehicle HVAC system in detail.

Offeror shall specify any special preconditioning provisions for allowing the HVAC system to operate while the vehicle is still charging prior to roll-out, the intent being to bring the temperature of the passenger compartment to an acceptable level for service without depleting the initial charge of storage battery.

Driver HVAC system in driver area shall include heater/defroster, air conditioner, airflow/vent door selector with fresh air mode, and temperature control. Driver HVAC system controls shall operate independently of auxiliary heating and air conditioning system controls. Offeror shall specify type, manufacturer, model, and rated heating and cooling BTU outputs of Driver HVAC system.

Auxiliary Heater(s) in passenger compartment shall be controlled by a minimum three (3) position, (OFF/LOW/HIGH) fan speed selector switch located within easy reach of driver. Selector switch shall operate independently of driver HVAC system controls. Heater must be capable of warming passenger compartment from an average ambient temperature of 0°F to 70°F (+/-2°F) within 70 minutes of system engagement, and must be capable of maintaining temperature in the passenger compartment within a range of 65°F to 70°F, measured 12 inches above floor level, with an ambient outside temperature of 0°F. Offeror shall note location of heater unit on floor plan, and shall specify type, manufacturer, model, and rated output in BTUs.

Optional Diesel Fueled Auxiliary Heater pricing shall be provided for one or more diesel fuel fired heat exchangers to be installed in the passenger compartment *in addition* to the standard electric auxiliary heater(s). Diesel heater(s) may be used in place of electric heater(s) in order to extend maximum vehicle range. Diesel heater(s) must be capable of warming passenger compartment from an average ambient temperature of 0°F to 70°F (+/-2°F) within 70 minutes of system engagement, and must be capable of maintaining temperature in the passenger compartment within a range of 65°F to 70°F, measured 12 inches above floor level, with an ambient outside temperature of 0°F. Fuel tank capacity must be sufficient to allow for 12 hours of continuous operation at the system's rated BTU output. Offeror shall specify type, manufacturer, model, tank capacity, and rated output in BTUs.



Battery-Electric Cutaway Buses

Auxiliary Air Conditioning shall be a climate control unit capable of reducing passenger compartment temperature from a minimum ambient temperature of 100°F to 70°F (+/-3°) within 30 minutes of system engagement. System shall be capable of maintaining a range of 65°F to 70°F, measured 12 inches above floor level, with an ambient outside temperature of 90°F. Fan speed and temperature controls shall be located within easy reach of driver and shall be separate from and operate independently of driver HVAC system control. Evaporator and condenser shall be matched to compressor per system manufacturer's requirements. Offeror shall note roof or skirt mounting location for condenser and shall specify manufacturer, model, and rated BTU output of complete auxiliary HVAC system.

Evaporator shall be mounted in rear of passenger compartment. Condensation drain lines shall run downhill from evaporator housing to discharge below floor level. Any exposed drain lines, refrigerant hoses, or gaps between evaporator cover and rear wall shall be effectively covered with smooth-trimmed close-out panels matching bus interior.

Refrigerant Hoses and wire harnesses shall be equipped with shielding and protective grommets at any point harnesses or refrigerant lines pass through or rub against sharp or abrasive materials. Insulated "P" clamps shall be installed at regular intervals of 24 inches or less.

A/C System Information Label shall be located in the engine compartment. Label shall provide detail of installation date, system manufacturer, refrigerant type and quantity, compressor oil type and quantity, and serial numbers of installed compressor, condenser, and evaporator subcomponents.

VEHICLE FLOOR

FLOOR CONSTRUCTION

Floor Construction materials and assembly methods shall be specified by offeror.

Sub-Floor Base shall include minimum 5/8 inch thick marine grade plywood or waterproof composite equivalent. All edges and joints shall be moisture sealed. Sub-flooring shall be filled and sanded smooth before covering. Material and thickness shall be specified by offeror.



Battery-Electric Cutaway Buses

FLOOR COVERING

Floor Covering Material shall be durable, slip resistant, non-skid, transit-type such as Gerflor Tarabus Sirius. Floor covering shall be securely bonded to sub-floor base in accordance with manufacturer's requirements and shall not shrink during useful life of vehicle. All mating edges of flooring, step tread, and step nosing materials shall be weather sealed to prevent water penetration, and must shed water for ease of washing and cleaning. Floor color shall be light gray, such as Gerflor 6768 Griffon.

Cove Molding shall be radiused up from floor level to meet interior sidewalls in a smooth transition. Molding shall be continuous along each wall except where interrupted by interior corner covers or door openings.

Standee Line shall be a yellow, two (2) inch wide band in floor between driver/entry area and passenger seating area.

STEP WELLS

Entry Steps shall have yellow vinyl step edge nosing. Vinyl step edges shall be heat welded to flooring material.

Entry Step Risers shall be maximum nine and a half (9 1/2) inches high. Step tread shall be minimum eight and a half (8 1/2) inches deep. Tread depth on all steps shall be equal.

Raised/Flat Floor shall provide a level surface from top of entry steps to rear wall of vehicle, with no wheel wells protruding.

VEHICLE EXTERIOR

EXTERIOR PANELS AND FINISHES

Exterior Panels shall have lap joints and exterior seams shall shed water. Sealing of panels shall not depend on caulking alone. Flexible sealant shall be applied wherever sealer is required.

Fasteners such as nuts, bolts, clips, washers, and clamps, including those that shall be exposed to the elements, shall be zinc or cadmium plated, phosphate coated, or stainless steel to prevent corrosion.



Battery-Electric Cutaway Buses

Roof shall be of sufficient strength to prevent vibration, drumming, and flexing. Installation shall be smooth and free of waves, ripples, or wrinkles, and contour design shall prevent pooling of water.

Roof Hatch shall be a dual-purpose safety vent installed to provide a rooftop emergency exit and multi-position fresh air ventilation. Offeror shall specify manufacturer and model.

Drip Rails shall be installed over all windows and doors.

Driver Door Grab Handle shall be steel-reinforced molded plastic. Handle shall be mounted to exterior of streetside "B" pillar.

Heavy-Duty Driver Running Board shall be weatherproof, slip resistant, and designed to support minimum 300 lbs. without warping. Running board shall be minimum 10 inches deep and extend the full length of driver door opening.

License Plate Holders/brackets shall be installed front and rear. All plate mounting hardware shall be provided.

Exterior Side Mirrors with dual mirror heads, such as Rosco Accustyle, shall be installed. Mirrors shall be heated and remote-operated (motorized), with flat glass upper panes, lower convex lenses, and integrated LED turn indicator arrows. Support arms and mounting hardware shall have a corrosion resistant finish.

Front and Rear Mud Flaps shall be installed clear of suspension and exhaust components. Clearance between rear tires and flaps shall be sufficient to allow for installation of snow chains.

Bike Rack installation of a two (2) position deployable steel transit-type bike rack with spring loaded arms, such as Sportworks DL2. Bike rack shall include a quick disconnect feature to allow swift removal of rack without the use of tools. Offeror should also provide the cost for a credit if this optional feature is to be removed for future purchases.

Ski and Snowboard Rack. Lightweight, universal ski/snowboard rack to be installed to exterior of bus. Proposed racks shall hold as many skis/snowboards as possible. Offeror shall specify capacity and dimensions. Pricing for multiple models and styles may be proposed. Offeror should also provide the cost for a credit if this optional feature is to be removed for future purchases.



Battery-Electric Cutaway Buses

BUMPERS

Front Bumper shall be chassis OEM chrome.

Rear Safety Bumper such as Romeo RIM, HELP energy absorbing bumper shall be installed to the frame using heavy duty brackets and minimum Grade 5 hardware.

FINISH AND COLOR

Exterior Finish shall be impervious to diesel fuel, gasoline, and commercial cleaning agents. Body finish shall match “white” color finish of OEM chassis cab, whether applied by body manufacturer or by a supplier of “pre-finished” parts to body manufacturer. Exterior seams shall be caulked or sealed with a matching color flexible sealant to avoid cracking and flaking at seams.

Full Body Paint will be part of the proposal to finish vehicle in one solid color to be selected by Via at time of order. Paint sample and code matching selected color shall be provided by contractor and approved by Via at time of order.

Custom Graphics to match existing Via graphics design will be a part of the proposal. Examples of current graphics colors, lettering, logos, and designs are provided in **Appendix B**. Elevation diagram and design proof specific to the awarded vehicle shall be provided by the contractor and approved by Via at time of order. Pricing and final proofs shall include update of applicable fleet numbers for each vehicle to be ordered.

EXTERIOR LIGHTING

Exterior Lighting shall be light-emitting diode (LED) type. Exterior lights shall operate regardless of master battery disconnect switch position.

Exterior Lights shall be low profile or flush mount. Configuration shall include, at minimum, front amber marker lights, midship amber marker/turn signal/hazard lights, rear amber turn signal/hazard lights, rear red clearance lights, rear red brake/taillights, rear red center high mount stop lamp over emergency exit door, rear white/clear back-up lights, and rear license plate lamp. Operation of marker, clearance, tail, and license plate lights shall be controlled by OEM chassis headlight switch. Offeror shall provide diagram of exterior rear light configuration.

Exterior Reflectors shall be installed in accordance with all state and federal requirements.



Battery-Electric Cutaway Buses

VEHICLE INTERIOR

INTERIOR PANELS AND FINISHES

Interior finish in driver area shall be a non-reflective material and/or flat grey color. All sharp corners, edges, and protruding hazardous surfaces shall be eliminated. There shall be no open seams between trim panels. All panels shall be the same color and match the rest of the interior. All interior panels, finish materials, and treatments shall be flame retardant in conformance with FMVSS 302, scuff and scratch resistant, and shall shed water for ease of cleaning.

INTERIOR PANELS

Padded, Vinyl Wrapped Headers shall be installed to interior above entry doors, mobility aid lift doors, and rear emergency exit door.

Driver Coat Hook and retaining strap shall be installed to interior wall above and behind driver seat.

Interior Passenger View Mirror with minimum dimensions of six (6) x 16 inches shall be installed above the windshield. Mirror angle shall be adjustable to provide driver with full view of passenger compartment.

INSULATION

Insulation shall be provided between exterior skin and interior wall and ceiling panels. Insulation shall have minimum R7 thermal barrier rating with sound-deadening and vibration reducing qualities, be moisture proof and prevent wicking, and comply with FMVSS 302. Offeror shall specify insulation material type and actual "R" value.

WINDOWS

Windows and windshield shall meet all applicable FMVSS requirements. Windshield shall be minimum (AS-1) grade and driver door window shall be OEM chassis safety glass. Side windows shall either be black, egress transit type or fixed with top T- slider vent. A full window shall be provided in the transition panel between curbside "A" pillar and entry doors to eliminate blind spots and enable driver to fully view curb and pedestrians from driver seat. Body windows shall be minimum (AS-3) grade safety glass and factory tinted with a 31% light reduction.



Battery-Electric Cutaway Buses

Emergency Exit/Egress Windows shall be installed on both sides of the vehicle, with a minimum of two (2) streetside and two (2) curbside. Egress windows shall be top-hinged and have unobstructed openings. A red LED light shall be installed above each egress window. A warning light shall illuminate in driver area and an audible alarm shall sound to alert driver whenever a window is not completely closed.

PASSENGER / DRIVER INTERIOR LIGHTING

Interior Lighting shall be light-emitting diode (LED) type. Driver door light shall operate regardless of master battery disconnect switch position. Loading, courtesy, entry, and lift door lights shall operate only when master battery disconnect switch and ignition switch are both in ON position.

Courtesy Lights shall be mounted overhead in passenger compartment interior and spaced evenly to illuminate entire seating area whenever entry doors are open. Minimum four (4) lights shall be installed in passenger compartment, with two (2) streetside and two (2) curbside. An ON/OFF switch shall be provided in driver console to also allow activation of courtesy lights whenever entry doors are closed.

Lift Door Lights shall be mounted to interior above mobility aid lift and to exterior below lift. Lights shall illuminate the interior mobility aid securement area as well as the lift platform and exterior lift loading area at ground level whenever ignition switch is ON and lift doors are open.

ENTRY/EXIT AREA

Entry/Exit Area Lights shall include one (1) interior light mounted above entry area and two (2) interior lights mounted in stepwell to illuminate entry steps, as well as minimum one (1) exterior light to illuminate exterior entry area at ground level. Interior and exterior entry area lights shall be installed in addition to, and operate independently of, interior courtesy lights, and shall activate whenever entry doors are open.

DRIVER'S AREA

Driver Door Light installed above driver seat shall activate whenever driver door is open.



Battery-Electric Cutaway Buses

AMBULATORY PASSENGER SEATING ACCOMMODATIONS

Passenger Seats shall be a lightweight mid-back design with removable covers, such as Freedman Feather Weight Mid-Hi. Six (6) two-position double seats shall be evenly spaced between front mobility aid securement positions and rear wall, with three (3) rows on curbside of the aisle and three (3) rows streetside, to accommodate a total of 12 ambulatory passengers. Two (2) one-position, single passenger, mid-back foldaway seats, such as Freedman BV Foldaway, shall be installed, one between each mobility aid securement position and streetside wall. Foldaway seats shall be installed so that seat fabric does not rub or chafe against interior wall when stowing or deploying, and seat base does not overlap or limit useable area of mobility aid securement floor track.

Seat Coverings shall be an anti-microbial, anti-bacterial, flat woven, water-repellent gray fabric such as Freedman Level 4 Repel Rock Gray.

ABS Plastic Seatbacks shall be installed on all seats except those located against rear wall.

Grab Handles shall be installed on all aisle-side seat tops except those located against rear wall. Grab handles shall be molded black.

Seat Belts shall be retractable and bolted to seat frame assembly, such as Freedman USR.

Two (2) 12-inch Seatbelt Extensions shall be provided with each vehicle at delivery.

SEAT CONSTRUCTION

Seat Frames shall be constructed of steel and bolted to floor and wall mounted positioning tracks. Foldaway seats may be bolted through floor to structural steel. Seat and track mounting shall meet all applicable FMVSS requirements. Close-out trim covers shall be installed in all open wall track and between seat anchorages in floor track. Floor track trim covers shall lay flush with floor covering to prevent tripping hazards.

PASSENGER ASSISTS

Stanchions and Railings shall be one and a quarter (1 ¼) inch diameter stainless steel with structural anchorage points.

Overhead Handrails (Pair) shall be continuous throughout the length of the passenger compartment, except for at entryway and curbside mobility aid lift access areas.



Battery-Electric Cutaway Buses

Dual Angled Parallel Grab Rails shall be installed on both sides of entry stepwell. Grab rails shall be minimum 30 inches long, and shall not limit a minimum clear entry opening of 30 inches.

Vertical Stanchions, Barriers, and Modesty Panels shall be installed: (1) between stepwell and front row of curbside seats (2) between lift and rear row of curbside seats, and (3) between driver seat and front row of streetside seats. Each barrier and modesty panel shall be “through-bolted” to a vertical floor-to-ceiling stanchion and horizontal stanchion-to-wall cross rail. Upper barriers shall be smoked, shatterproof Lexan, “shock-mounted” to prevent rattle, and shall extend from cross rail to within three (3) inches of ceiling panels. Lower modesty panels shall be padded and vinyl wrapped for ease of cleaning. Modesty panels shall harmonize with interior trim in color and design, and shall not provide a hazard to passengers. Stanchion and panels behind driver seat shall be mounted far enough back that cross rail and panels do not limit full recline or rearward travel of seat.

PASSENGER DOORS

Entry Doors shall be electric, dual leaf, outward opening transit-type with an overlapping safety seal. A thick rubber threshold seal or brush comb shall cover any gap between the lowest part of the door and the step mating surface greater than 3/8 inch. Door leaves shall be equipped with full length, tinted, tempered safety glass panes and provide an opening width of 36 inches. Doors shall be operated by a rocker switch located in driver area. Entry doors shall not be operable unless vehicle is stationary, and vehicle must be immobilized whenever doors are open.

Entry doors shall be equipped with an interior safety release mechanism, permitting the doors to be mechanically opened in case of emergency. Instructions for emergency release shall be posted adjacent to release handle. Offeror shall specify entry door clear opening height and width.

Entry Door Grab Handles shall be installed to the interior of each door leaf. Horizontal grab handles shall be one and a quarter (1 ¼) inch diameter and powder coated yellow. Grab handles shall not limit minimum clear entry opening of 30 inches.

Exterior Entry Door Toggle Switch shall be installed adjacent to entry doors. Switch shall be wired to low voltage battery hot body power. Toggle switch shall operate only with master battery disconnect in ON position, and exterior switch operation shall be disabled with master battery disconnect in OFF position.



Battery-Electric Cutaway Buses

Rear Emergency Exit Door shall have minimum dimensions of 32 x 54 inches and be configured with upper and lower glazed window panes. Exit door shall have a red, easily accessible interior release handle as well as exterior release handle. Exit door shall be equipped with gas strut to hold door in open position and limit strap to prevent door from swinging past full extension of strut. Exit door shall be tied into shift interlock system, and shall illuminate “DOOR AJAR” LED display and sound an audible alarm to alert driver when ignition is ON and door is not securely closed. Exit door shall also have an interior locking mechanism that shall trigger interlock system and alarm when ignition is ON with lock still in place.

MOBILITY AID LIFT DOORS

Mobility Aid Lift Doors shall be located in front curbside wall of vehicle. Lift doors shall be double leaf and provide a minimum 45 x 68 inch opening.

Glazed Windows shall be installed in each leaf and match height and tint of fixed and egress body windows.

Lockable Exterior Handles shall be installed on each door leaf.

Gas Struts shall be installed at the top of each door leaf to hold doors in an open position whenever lift is in use.

Limit Straps shall be installed to prevent lift doors from opening past 100 degrees.

Door Ajar signal shall be sent to interlock system whenever ignition key is ON and lift doors are open, triggering the “DOOR AJAR” visual warning light in driver area. An audible alarm shall also sound whenever ignition key is ON and lift doors are open, unless vehicle is in PARK (or NEUTRAL, as applicable), and parking brake is applied.

ACCESSIBILITY PROVISIONS

Mobility Aid and Occupant Securement positions shall be located in the front of the passenger compartment, along the streetside wall between the driver modesty panel and front row of streetside seats. Securement positions shall meet all FMVSS and ADA requirements, and provide a clear floor area of minimum 48 inches long by 30 inches wide for each position.

Mobility Aid Securement system shall include two (2) sets of automatic, self-tensioning tie-down restraints such as Q'Straint QRT Max retractors. A set of five (5) retractors with L-Track fittings shall be provided for each mobility aid securement position.



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Five (5) continuous lengths of L-Track/Omni floor track shall run the full length of both mobility aid securement positions parallel to the streetside wall. Four (4) outside tracks shall be provided for front and rear mobility aid securement and one (1) center track for additional securement of tri-wheel mobility scooters. Track shall be recess-mounted and flush with floor to prevent tripping hazards. Recessed area shall be sealed prior to anchorage installation to prevent water intrusion. Four (4) six (6) inch webbing loops shall also be provided for tri-wheel scooter securement.

Occupant Restraints including retractable lap and shoulder belts with moveable L-Track fittings top and bottom, shall be installed at each mobility aid securement position. Two (2) additional continuous lengths of L-Track/Omni track shall be installed to provide flexible positioning of moveable lap and shoulder belt retractors. One (1) track shall be installed above the streetside windows, and one (1) track shall be installed in floor between streetside wall and foldaway seats, parallel to wall. Both tracks shall run the full length of both mobility aid securement positions. Floor track shall be recess-mounted and flush with floor to prevent tripping hazards. Recessed area shall be sealed prior to anchorage installation to prevent water intrusion.

Two (2) Vinyl Storage Pouches shall be provided for storage of securement devices when not in use. One pouch shall be mounted next to each mobility aid securement area on streetside wall, at floor level.

Mobility Aid Lift shall be a Dual Parallel Arm (DPA), 1,000 lb. capacity lift with 34 x 54 inch platform, rear pump, and handrail belt, such as Braun Century 2 series. Lift shall be installed according to manufacturer's exact specifications. Lift shall be located at the front of the vehicle, just aft of curbside entry doors. Lift shall be mounted so that inner barrier plate does not rattle against vehicle floor or any trim or closeout pieces when stowed.

When deployed, there shall be a smooth transition between lift baseplate and passenger area flooring. Any gap in this area can create a tripping hazard, catch canes and walkers, or even tip a wheelchair.

Lift installation shall meet all ADA and FMVSS requirements, and shall not operate unless vehicle is in PARK (or NEUTRAL, as applicable), parking brake is applied, master battery disconnect switch is ON, ignition switch is ON, lift power switch is ON, and lift doors are open.

Handheld Lift Pendant Control box shall be provided with a minimum five (5) foot attached cord to enable lift operation from inside or outside of vehicle.

Additional Lift Safety Belt such as Access-AriZe Rear/Inner Belt shall be installed to DPAs at rear of lift platform to prevent passengers from tipping over backward or rolling into bus.



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Lift Operation shall be tested and properly adjusted between shipment and delivery, and shall be ready for immediate use upon acceptance by purchaser.

OPERATOR PROVISIONS

The operator's work area shall be designed to minimize glare to the extent possible. Objects within and adjacent to this area shall be gray in color wherever possible to reduce the reflection onto the windshield. The use of polished metal and light-colored surfaces within and adjacent to the operator's area shall be avoided.

OPERATOR'S SEAT

Driver Seat with reclining high back, right side armrest, and lumbar support, shall be installed to power seat base. Seat type and color shall match passenger seating with upholstery such as Freedman Level 4 Repel Rock Gray covering. Offeror shall specify chassis OEM driver seat or aftermarket.

Driver Seat Heating Element shall be installed with driver seat.

Power Seat Base with minimum 6-way adjustable settings shall be installed with driver seat.

VISORS

Driver Side Sun Visor shall be chassis OEM and shall match interior.

ACCESS PANELS AND DOORS

Overhead Compartment above windshield shall have an access door as large as space allows to accommodate installation and maintenance of camera system equipment. A spring latch or strut shall be installed to hold access door in open position when needed. Access door shall be secured with thumb latches only (non-locking).

Driver Storage area with dedicated latching access door shall be provided with adequate space to store personal belongings and/or cleaning supplies such as spray bottles, towels, and whisk broom. Driver storage may be a partitioned area in overhead compartment or a separate standalone compartment installed in driver area.



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OPERATOR’S CONTROLS

All switches and controls necessary for the operation of the vehicle shall be conveniently located in the operator’s area and shall provide for ease of operation. Controls shall be located so that boarding passengers may not easily tamper with control settings.

Doors shall be operated by a single control, conveniently located and operable by the operator. The setting of this control shall be easily determined by position and touch.

All panel-mounted switches and controls shall be marked with easily read identifiers and shall be replaceable. Switches, controls, and instruments shall be dust and water-resistant.

ON-BOARD SURVEILLANCE AND SECURITY SYSTEM

Security, Surveillance, and Telematics System such as combined Samsara and Pro-Vision/Zone Defense monitoring system, shall be installed. System shall include installation of any and all additional equipment, accessories, cabling, and/or mounting hardware required to provide complete system functionality. Subscription fees for the use of Samsara equipment shall be the responsibility of Via Mobility Services.

At minimum, complete system shall include installation of the following components:

QTY	Samsara Part/Model #	Description
1	HW-VG54-NA	Vehicle IoT Gateway, Model VG54
1	CBL-VG-CPC	Enhanced VG Series Direct-Wire Non-Diagnostic Power Cable
1	HW-CM32	Dual-Facing AI Dash Camera, Series 3
1	ACC-CM-ANLG	Camera Connector

QTY	Pro-Vision/Zone Defense Part/Model #	Description
3	CAM.313DM	Interior Dome Cameras
3	PX-1943	10m AV Cables
1	MUL604	4-Channel Multiplexor
1	PM-1970S	7” LCD Display
1	KIT8	Mounting Brackets and Hardware
1	PX-1942	5m AV Cable



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Vehicle Gateway, Camera Connector, and accessories shall be installed in front overhead compartment and be easily accessible for service. Camera units shall be installed and adjusted to provide the following five (5) views (Dual-Facing Dash Cam is one unit with both front and rear cameras):

- A. & B. Interior Dual-Facing Dash Camera - viewing to the front through windshield and to the rear on driver.
- C. Interior Dome Camera - viewing mobility aid lift and securement area from streetside.
- D. Interior Dome Camera – viewing passenger compartment from front to rear.
- E. Interior Dome Camera – viewing passenger compartment from rear to front.

Offeror shall provide specification list of system components included with complete installation, including updated part and model numbers if specified equipment is obsolete or no longer available at time of proposal. Offeror shall detail camera mounting locations on vehicle floorplan diagram.

TWO-WAY RADIO

5.19 Two Way Radio Antenna Prep and Prewire shall be provided. Installation shall include a roof-mounted ground plane and antenna cable pull tube/conduit with an interior access panel mounted directly below. Ground plane shall be securely fixed and grounded to the metal substructure of the bus body. Cable pull tube/conduit shall be routed from beside the ground plane to below the curbside dash in driver area, near the engine cover. One (1) 12V ignition hot (Key ON) lead, one (1) 12V battery hot (Key OFF) lead, and one (1) ground lead shall also be provided in curbside driver area, with three (3) feet of excess wire for end-user radio installation. Power leads shall originate from fuse-protected terminals in electrical compartment.

SAFETY EQUIPMENT

Safety Equipment shall be provided with every vehicle. Removeable equipment shall be mounted in accessible locations in driver area. Mounting locations shall not obstruct clear entry into vehicle, driver seat adjustment, or engine cover removal. Safety equipment package shall include:

Web Cutter shall be capable of cutting seatbelts and mobility aid securement straps without exposing cutting edge. Shall not be useable as a weapon.

Bloodborne Pathogen/Body Fluid Spill Kit shall be provided.



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Fire Extinguisher shall be minimum five (5) pound ABC rechargeable, with gauge and mounting bracket.

First Aid Kit shall be DOT compliant, minimum 16-unit kit.

Three (3) Reflective Warning Triangles shall be provided in red storage container. Sides of each triangle shall measure 17 to 22 inches long and two (2) to three (3) inches wide.

Exterior Backup Alarm shall sound an audible warning whenever REVERSE is engaged. Alarm shall be 97dB minimum, and mounted so as to be heard clearly over ambient background noise in heavy traffic.

Backup Camera System with integral color display in rear view mirror shall activate and provide a live feed of the area to the rear of the vehicle whenever REVERSE is engaged.

SAFETY PROVISIONS AND NOTIFICATION

Placards, Decals, and Signage required by State and Federal law shall be provided and installed to vehicle interior and exterior. Any decals shall be premium grade vinyl. Installed signage shall include, but not be limited to:

FMVSS Compliance decal shall be posted in driver's compartment stating that completed vehicle meets all FMVSS regulations.

Designed to Transport manufacturer's certification label shall state original seating capacity, including driver, and GVWR of vehicle.

Exterior Vehicle Height shall be posted in easily visible location in driver area. Posted roof clearance shall include height of vehicle with roof hatch in open, venting position.

Emergency Exits shall all be labeled, and instructions for operation and use posted at each exit.

Standee Sign shall be installed to interior in front bulkhead area to notify passengers not to stand forward of yellow standee line while vehicle is in motion.

Watch Your Step warning shall be displayed in permanent yellow lettering on the vertical riser face of top entry step. Offeror shall specify type of permanent application proposed.

Interior ADA signage shall be installed as required, such as to designate front row of seats as priority seating and identify mobility aid securement positions.



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Additional ADA Signage shall be provided, to include two (2) blue, minimum six (6) x six (6) inch, International Symbol of Accessibility (ISA) decals. ISA decals shall be provided loose at time of delivery, for application by end-user.

High Voltage System components and wiring shall be clearly marked and labeled.

TRAINING

TRAINING PLAN

Each proposal must include a detailed plan to provide Via staff with extensive electric vehicle training directly from the electric powertrain manufacturer. Plan highlights must address the main points to be covered in two separate training courses: Operator Training and Maintenance Training. Operator Training shall provide instruction to Via operator training staff and selected drivers in the safe and most efficient operation of the vehicle. Maintenance Training shall provide instruction to selected technicians and supervisory staff from the Via maintenance department in all service and preventative maintenance tasks necessary to support trouble free operation of the proposed vehicle. All training to be provided on-site at Via by the electric powertrain manufacturer's qualified instructors.

OPERATOR TRAINING

Operator Training shall be tailored specifically to the day-to-day operation of the proposed vehicle. Training shall be sufficient to bring Via Operator Trainers to a level of proficiency that will enable them to instruct other operators on the proper operation of the proposed vehicle without repeated contractor support.

Operator Training must provide a general orientation to all components specific to the electric vehicle, such as batteries, charging equipment, instrument panel and controls, and other variations of design and operation that differ from a gasoline or diesel vehicle. Training shall also cover, at minimum, all electric vehicle operational characteristics, including regenerative braking, battery state of charge monitoring, use of on-board accessories, routine and emergency operating procedures, moving a bus with a fault, driving habits to maximize vehicle range, and pre- and post-trip inspection procedures.



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MAINTENANCE TRAINING

Maintenance Training shall be tailored specifically to develop the knowledge, skills, and abilities of Via service and maintenance personnel to a level of proficiency that will enable them to regularly service and maintain all equipment on the proposed vehicle without repeated contractor support. Maintenance Training shall build on all topics covered in the Operator Training course and provide further instruction for identifying and servicing all components of the complete vehicle. Extensive classroom and hands-on instruction must be provided to enable personnel to perform all required preventative maintenance and service tasks, troubleshooting procedures, and comprehensive diagnostics and repair of high and low voltage systems, propulsion equipment, energy storage and charging systems, and all other elemental functions of the proposed vehicle. Training shall also cover, at minimum, safe practices essential to servicing the high voltage systems, function and diagnostics of safety shutdown system and warning indicators, proper use of specialty tools and diagnostic toolset, and any battery maintenance procedures recommended to prolong battery life.

PLAN REQUIREMENTS

- An outline of the proposed training program based on Via's course requirements as detailed in this specification. Offerors who fail to submit a detailed, comprehensive plan for evaluation may be considered non-responsive.
- A summary of qualifications for each proposed instructor that demonstrates each is an experienced trainer with a thorough knowledge of the proposed vehicle and equipment.
- Overall estimate of time to present each course and lesson(s) of instruction. Plan shall detail proposed number of hours for both in-person classroom and hands-on instruction, as well as a list of presentations, handouts, manuals, or other teaching aids that will be provided. Optimum class sizes shall be recommended, as well as any facility and equipment requirements.
- Proposed method to provide follow up training with updated materials when changes or modifications are made that affect the operation, maintenance, repair procedures, or parts replacement of vehicles delivered during the scope of the contract.