

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

**Florida Transit Research Inspection Procurement Services
Program (TRIPS)**

Medium Duty Type Transit Vehicles

Request for Proposal (Final)

#TRIPS-MD-17-RFP

PART 1

SOLICITATION, GENERAL REQUIREMENTS & CONDITIONS, CONTRACTUAL PROVISIONS



Contract # TRIPS-MD-17-RFP

MEDIUM DUTY CHASSIS TYPE TRANSIT VEHICLES

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

PROPOSAL# TRIPS-MD-17-RFP

SOLICITATION, GENERAL REQUIREMENTS & CONDITIONS, CONTRACTUAL PROVISIONS

SOLICITATION

1.1 SCOPE

Notice is hereby given that the Transit Research Inspection Procurement Services Program (TRIPS) will receive sealed proposals on behalf of agencies within the state of Florida, herein referred to as the "Purchasers" to establish a statewide Purchasing Agreement for the manufacture and delivery of 2017 model year:

MEDIUM DUTY TYPE TRANSIT VEHICLES

In accordance with the terms and conditions set forth below, sealed proposals (an original, eight (8) copies and an electronic copy), shall be submitted to:

William Mayer
TRIPS Program Manager
University of South Florida
Center for Urban Transportation Research
4202 East Fowler Avenue, CUT100
Tampa, Florida 33620-5375

1.2 PROPOSAL REQUIREMENTS

Proposals will be received until 3:30 PM EST, Tuesday, November 1, 2017. Any proposal received after that time will not be considered and will be returned to the proposer unopened. All labor, equipment, and materials shall be furnished in strict accordance with the conditions of the Purchasing Agreement documents. The vehicles shall fulfill all of the requirements defined in **Part 2: Technical Specifications**, including addenda thereto. Compliance with these requirements shall be in accordance with the procedures defined in **Part 4: Quality Assurance Provisions**. The Contractor herein referred to as "dealer" as well, shall accept the warranty provisions covering the vehicles as defined in **Part 5: Warranty Provisions**.

Minimum and maximum quantities are established as follows:

	<u>MIN</u>	<u>MAX</u>
MEDIUM DUTY TYPE TRANSIT VEHICLES	<u>0</u>	<u>500</u>

These numbers reflect the immediate and foreseeable needs of agencies within Florida and

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were determined by using the most recent state of Florida Program of Projects, historical data from previous TRIPS Purchasing Agreements, and Agency(s) vehicle replacement schedules. All or part of the quantity of vehicles stated herein may be assigned to other public transit agencies desiring to purchase the same equipment specified in **Part 2: Technical Specifications** of this solicitation.

The Purchasers will be allowed to purchase this vehicle as long as current production year chassis' are still available from the manufacturer or suppliers, under the same terms and conditions stated in this initial Purchasing Agreement.

Following award of the initial model production year, the TRIPS will have an option to extend the Purchasing Agreement for four succeeding model production years. Any optional Purchasing Agreements shall be subject to the same pricing, terms and conditions of the original Purchasing Agreement. 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 a certification from the manufacturer to justify the chassis model price increase. The price may be adjusted only in the same amount as the price increase to the Contractor. The Contractor must submit the request and all necessary documentation to the TRIPS Program Manager. The Contractor may request an increase in the second stage production costs after, or in conjunction with, the chassis increase request being received by the TRIPS Program Manager. The TRIPS will compute the second stage costs utilizing the formula explained in **Exhibit 5: FORMULA FOR COMPUTATION OF SECOND STAGE PRICE ESCALATION**. A final annual adjustment will then be authorized after combining the chassis increase with the second stage increase, if any. The date found on the Manufacturer's letter, stating the new chassis cost, shall be the month used as the future Recomputation month as described in **Exhibit 5**.

Each proposal shall be submitted with the understanding that acceptance in writing by any Purchaser of the offer to furnish any or all of the units therein, shall constitute a contract between the Proposer and that Purchaser only, and implies no duties or responsibilities on the part of the TRIPS or the Florida Department of Transportation (FDOT). The terms and conditions of said contract are to be administered and enforced by and between the Purchaser and the Proposer. The Purchaser is responsible for: providing the dealer with the properly completed forms and order information; resolution of issues relating to liquidated damages, late payment penalties, etc.; and adhering to the terms and conditions regarding Final Acceptance and Terms of Payment as stated in the Purchasing Agreement. The FDOT and the TRIPS are responsible, and have an obligation to, oversee the proper use of Federal and State grant monies; to ensure that all Federal, State and Purchasing Agreement requirements and certifications are met; monitor warranty and dealer services; conduct on-line and/or dealer inspections and intercede on behalf of the Purchasers. Any contract resulting from this solicitation shall include the following that are incorporated herein:

Part 1 - Solicitation, General Requirements & Conditions, Contractual Provisions

Part 2 - Technical Specifications

Part 3 - Options

Part 4 - Quality Assurance Provisions

Part 5 - Warranty Provisions

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Part 6 - Paint Schemes

1.3 BASIS FOR AWARD

The TRIPS shall be using a Request for Proposal format for this procurement. The Purchasing Agreement shall be awarded to the proposer(s) who is in compliance with the conditions and requirements of this proposal and whose weighted criteria points designate the best value relative to the evaluation criteria discussed in **Section 1.6** of the RFP document.

The TRIPS may award to more than one Proposer whose proposal is in compliance with all State and Federal regulations. Awards based on Best Value represent an assessment of the evaluation criteria and scoring, consisting of technical specifications, price, after sales service, warranty and quality control program. Evaluation will include considerations of previous vendor performance with the TRIPS and references from current Florida customers.

Each proposal shall consist of **three (3)** separate envelopes. **Envelope number 1, Technical Proposal**, shall contain the technical specifications of the proposed vehicle. This envelope will also include the items identified in **Exhibit 1: TECHNICAL PROPOSAL SUBMISSION REQUIREMENTS & DOCUMENTS** of this solicitation. Envelope number 1 shall be plainly marked with the company name and the words "Technical Proposal" and "Envelope Number 1."

Envelope number 2, Price Proposal, shall contain proposal forms A, B, C D, E, and F, identified in **Exhibit 2: PRICE PROPOSAL FORMS**. Envelope number 2 shall be plainly marked with the company name and the words "Price Proposal" and "Envelope Number 2."

Envelope number 1, technical proposal, and Envelope number 2, price proposal, shall be placed inside **Envelope (or box) number 3**. Envelope (or box) number 3 shall be plainly marked with the company name and the words "Envelope (or box) Number 3."

1.4 EVALUATION PROCESS FOR PROPOSALS

The TRIPS shall employ evaluation criteria in determining the award of this Purchasing Agreement. These criteria are outlined below under **Paragraph 1.6: EVALUATION CRITERIA**, and are listed in order of importance and value. Although we are requesting that pricing and technical specifications be separated when submitted, these documents will be reviewed and evaluated concurrently with all other aspects/documents of the proposal. The Purchasing Agreement awarded will be dependent upon the successful Proposer being able to comply with the provisions and requirements of the solicitation in a timely manner. All information to be submitted in the proposal must be correct, complete and verifiable. The proposer may be required to submit supporting documentation on the technical aspects and cost. The TRIPS may select a proposal for award without any discussions, negotiations, or requests for any Best and Final Offers (BAFO's). The TRIPS Program Manager expects all proposers to fully cooperate with the evaluation process.

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1.5 PRELIMINARY EVALUATION

The evaluation of Envelope number 1, Technical Proposal, and Envelope number 2, Price Proposal, shall be conducted together, and will be an internally consistent evaluation of price and technical factors.

A price evaluation shall be conducted by the TRIPS evaluation committee to establish that the proposal is within the competitive range. The technical evaluation will identify those proposals that meet the minimum technical requirements. It will also determine compliance to technical specifications and evaluate features of the proposed vehicle using established criteria.

Offerors of any proposals that have been determined to not be in the competitive range, and cannot reasonably be made to fall within the competitive range, will be notified in writing, including the shortcomings of their proposals, and these proposals will not be subject to the point tabulation method of evaluation described in Paragraph 1.7.

The evaluation process will use a pre-established ranking system.

1.6 EVALUATION CRITERIA

The specifications, as amended through the request for approval or exception process, and any addenda thereto, set forth the minimum requirements of the vehicle, components, warranty, service, support, and other deliverables required through this procurement.

The award of this Purchasing Agreement shall be made to the offeror whose proposal, in the opinion of the TRIPS Proposal Evaluation Committee, best meets the established criteria listed herein. Consideration shall be given to such matters as Contractor integrity, record of past performance and financial and technical resources. Price shall be a factor in the award decision, although the award may not be made to the proposal with the lowest price. The award will be made to the Proposer who is "most advantageous" with "price and other factors" considered. Technical superiority, warranty, delivery time, service support and training as well as price and technical aspects in order of priority are as follows:

a. TECHNICAL SPECIFICATIONS

Technical specifications are the most important determinant for award. The main design intents of the vehicle specifications are: safety and crashworthiness, environmental tolerability, good ride and springing comfort, long life performance of mechanical and component function and high maintenance of value. Therefore, the TRIPS will consider the type of construction used in the bus body, how the cage and sub-floor is designed, and how subcomponent electrical systems are integrated into the OEM wiring system.

b. PRICE

Price is of utmost importance to the TRIPS, but not the sole consideration. Price

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shall be evaluated on its overall relationship to being most advantageous and favorable for the Purchasers. All respondents should be aware that the Purchasers are seeking to purchase as many new vehicles as possible with local, state and federal funding available.

c. AFTER SALE SERVICE

All parties should be aware that the TRIPS places value on after-sale field service support and quick replacement parts availability. Included with parts availability is whether the Contractor keeps price catalogs current and whether the Contractor pays for the cost of freight. The TRIPS will also consider the availability, location, and qualification of the field service support staff and engineering staff.

d. WARRANTY

The TRIPS expects all parties responding to this RFP to meet the warranty criteria outlined in **Part five (5)**. In addition to the specified warranty criteria, the TRIPS will review additional warranties that are offered. Warranties shall be evaluated in terms of longevity, cost, and overall relationship to being most advantageous and favorable for the Purchasers.

e. QUALITY CONTROL PROGRAM

A Quality Control Program is of utmost importance to the TRIPS. The TRIPS has found that the lack of an effective Quality Control Program always negatively impacts our goal of a defect free product. All Proposers should understand that failure to demonstrate an effective Quality Control Program will have a negative impact on their evaluation for this criterion. Proposals shall include a description of manufacturer's Quality Control Program.

f. TRAINING:

Driver Orientation/Certification	8 hours @ 5 locations annually
Air Conditioning/Certification	4 hours @ 5 locations annually
Securement Device/Certification	4 hours @ 5 locations annually
Maintenance Familiarization	8 hours @ 5 locations annually
Electrical & Electronics Familiarization	8 hours @ 5 locations annually
Multiplex System(s)	8 hours @ 5 locations annually
Wheelchair Lift/Ramp Training	2 hours @ 3 locations annually

"Certificates of Training" will be provided for all component training classes.

Dealer Orientation Upon Delivery: The dealer shall provide a vehicle orientation with each vehicle delivered to an agency. If an agency orders more than one (1) unit of identical specifications; the orientation shall be provided on the first unit delivered. The orientation shall be conducted by the dealer for the maintenance and operations supervisory and training personnel. The orientation shall include, but not be limited to:

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- Engine type and proper type of fuel
- How to check coolant level and type of coolant required
- Function of all controls on the OEM
- Function of all controls on the second stage driver control panel
- Identify location of and function of controls of all add-on equipment such as A/C, wheelchair ramp, restraint systems, etc.
- Locate and identify all alarms
- Locate and identify tire pressure ID plate
- Location of battery and how to service
- Location of Multiplexing components and their use
- Location of Event Data Recorder and demonstrate data download
- Location and inspection of Fire Suppression system

1.7 GUIDELINES FOR EVALUATION CRITERIA

Prior to the opening of proposals, a determination is made as to the proportional weight assigned to Envelope Number 1, Technical Proposal, and Envelope Number 2, Price Proposal. At the same time, a decision is made as to the criteria used under Envelope Number 1, Technical Proposal, and its respective value. The proportional weight assignments are not made public. However, the criteria factors are listed in the Request for Proposal under **1.6 Evaluation Criteria**.

In the Evaluation Criteria review of Envelope Number 1, Technical Proposal, a point tabulation method will be established for each criteria with the lowest points designated the worst and the highest points designating the best relative to the criteria. The other proposers in the competitive range will be allotted corresponding points based on the variance from the proposal best meeting the technical specifications. The Evaluation Committee will submit the achieved scores in its recommendation.

The Pricing Review of Envelope Number 2 follows a similar procedure. Using a point tabulation method, the lowest points designate the worst and the highest points designate the best relative to the criteria. The vehicle with the lowest price shall receive the maximum number of points for this factor. The other proposers in the competitive range will be allocated corresponding points based on the variance from the lowest cost submitted. The number of points achieved is then proportionally allotted to the pre-established weight for Envelope Number 2, Price Proposal.

The weighted scores for Envelope 1, Technical Proposal, and Envelope 2, Price Proposal, are combined to determine the total score for each proposal.

Unless all proposals are rejected, award shall be made to that proposer whose proposal, conforming to the solicitation, will be most advantageous to the Purchasers, price/cost or other factors considered.

A full description of the procurement process is provided herein with the major steps being identified as follows:

1. The TRIPS Program Manager prepares a Request for Proposal (RFP), which

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includes the technical specifications defining the actual minimum needs and identifies all significant evaluating factors listed in their respective order of importance. For internal reference only, a memorandum to the file is prepared documenting the established criteria.

2. Proposal Evaluation Committee membership is determined by the TRIPS Program Manager. The Proposal Evaluation Committee may be comprised of representatives from the Transit Maintenance Analysis and Resource Center and Transit Research Inspection Procurement Services Program Advisory Committees, the FDOT, or others determined by the TRIPS Program Manager to be appropriate for involvement in the specific RFP evaluation process.
3. The RFP is issued to known potential proposers and advertised to ensure a high degree of competition.
4. By an established date, the proposer submits proposals in three sealed envelopes, in accordance with **Paragraph 1.3** of this solicitation. Envelope Number 1 includes the technical and contractual proposal, while Envelope Number 2 includes the quoted price and cost data and other relevant information. Envelopes 1 & 2 will be sealed inside Envelope (Box) Number 3.
5. Proposals will not be publicly opened. All proposals will be kept strictly confidential throughout the evaluation, negotiation, and selection process. Only the Evaluation Committee, and the TRIPS Program Manager and Administrator will be provided access to the proposals and evaluation results during this period.
6. Proposals are evaluated by the Proposal Evaluation Committee in reference to the prioritized criteria published in the RFP.

NOTE: Only the criteria are published.

7. This solicitation is a negotiated bid. Evaluations and/or price comparisons are allowed between proposals. Discussion will disclose the strengths and weaknesses of competing proposals.
8. Recommendation is made to the TRIPS Advisory Committee for approval.
9. Award of Purchasing Agreement will be dependent upon the required Pre- Award and Buy-America Certification.
10. FDOT approval is obtained, if required.
11. All proposers will be advised in writing of the final decision.

1.8 PROPOSER REVIEW PROCEDURES

- a. A pre-proposal meeting will be held September 20, 2017 at 10:00 a.m. at Big Bend Transit, 2201 Eisenhower Street, Tallahassee, FL 32305. Although optional, it is

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highly recommended prospective proposers attend, due to the known complexities of this solicitation. The meeting will be held in the conference room. A conference line will be available for those unable to attend; (800)832-0736 Participant Code/PIN# 8915826

- b. Any person adversely affected by this solicitation shall file with William Mayer TRIPS Program Manager, University of South Florida, Center for Urban Transportation Research, 4202 E. Fowler Avenue, CUT100, Tampa, Florida, 33620-5375, a notice of Protest, in writing, at least 15 calendar days prior to the date on which proposals are to be received.
- c. Any person adversely affected by a decision in connection with this solicitation shall file a Notice of Protest, in writing, within 72 hours of receipt of the decision. All Notices of Protest shall be accompanied by a "Protest Bond" in the amount of five thousand dollars (\$5,000). The Protest Bond shall be a Surety Bond issued by an insurer with an agent or resident office in the state of Florida. Erin Schepers, TRIPS Manager for the Florida Department of Transportation, or her designee, shall be the custodian of the Protest Bond. The Protest Bond shall reference this proposal and shall be payable to the State of Florida, Department of Transportation, 605 Suwannee Street, Mail Station 26, Tallahassee, FL 32399-0450. If the Notice of Protest is withdrawn or a Formal Written Protest is not filed in accordance with this agreement, the Protest Bond will be forfeited.
- d. All protestors shall file a Formal Written Protest with the TRIPS Program Manager within 10 calendar days after the date of filing the Notice of Protest. The formal written protest shall state with particularity the facts and law upon which the protest is based.
- e. Upon receipt of a formal written protest which has been timely filed, the TRIPS Program Manager shall stop the proposal solicitation process or the Purchasing Agreement award process until the subject of the protest is resolved by mutual agreement or by final action of the Florida Department of Administration.
- f. The TRIPS Program Manager shall provide an opportunity to resolve the protest by mutual agreement between the parties within 7 working days of receipt of a formal written protest. If the protest is not resolved by mutual agreement within 7 days the TRIPS Program Manager and/or the protestor shall refer the protest to: Erin Schepers, TRIPS Manager for the Florida Department of Transportation, Public Transit Office, 605 Suwannee Street, Mail Station 26, Tallahassee, FL 32399-0450.
- g. The Florida Department of Transportation will review the protest, and the TRIPS Program Manager's decision and either concur or reverse the decision in writing within seven (7) working days.
- h. Any appeal of the decisions of the Florida Department of Transportation shall be filed and administered by the "Administrative Procedures Act," Chapter 120, Florida Statutes.

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- i. Failure to file a protest within the time prescribed in Section 120.53 (5), Florida Statutes, shall constitute a waiver of proceedings under Chapter 120, Florida Statutes. It is the responsibility of the protestor to obtain complete information and legal counsel as appropriate.

1.9 PREPARATION OF PROPOSALS

Each proposal shall be made only on the forms provided and in accordance with procedures delineated in **Paragraph 1.3. Basis for Award**. Each complete proposal shall be enclosed in a sealed envelope or box capable of holding Envelope 1, Technical Proposal, and Envelope 2, Price Proposal, with the name and address of the proposer marked on the outside. All blank spaces in the proposal attachments must be filled in and no changes shall be made to the wording.

1.10 PROPOSAL POSTPONEMENT AND AMENDMENT (ADDENDUM)

The TRIPS Program Manager reserves the right to revise or amend the specifications up to the time set for the opening of the proposals. Such revisions and amendments, if any, shall be announced by amendments to this solicitation. Copies of such amendments shall be furnished to all prospective proposers. If the revisions and amendments require changes in quantities or price offered, or both, the date set for opening the proposals may be postponed by such number of days as in the opinion of the TRIPS Program Manager shall enable proposers to revise their proposals. In any case, the proposal opening shall be at least five (5) working days after the last amendment, and the amendments shall include an announcement of the new date, if applicable, for opening proposals.

1.11 PROPOSAL REJECTION

The TRIPS Program Manager reserves the right to waive any minor proposal informalities or irregularities received which do not go to the heart of the proposal or prejudice other proposers, or to reject, for good and compelling reasons, any and all proposals submitted.

1.12 SUBMISSION OF SINGLE PROPOSAL

If only one proposal is submitted in response to this Request for Proposals, a detailed cost proposal may be requested of the single proposer. A cost/price analysis and evaluation and/or audit may be performed on the cost proposal in order to determine if the price is fair and reasonable.

1.13 WITHDRAWAL OF PROPOSAL

After the proposals are opened, the proposals may not be withdrawn for ninety (90) calendar days. Prior to the date/time set for the proposal submission; however, proposals may be modified or withdrawn by the proposer's authorized representative in person or by written notice. If the proposals are modified or withdrawn in person, the authorized representative shall make his identity known and shall sign a receipt for the proposal. Written or telegraphic notices shall be received in the office designated in **Paragraph 1.1** no later than the exact

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date/time for the proposal opening. A telegraphic modification or withdrawal received in the designated office by telephone from the receiving telegraph office no later than the date/time set for the proposal opening shall be considered if such a message is confirmed by a copy of the telegram.

1.14 AWARD PROCEDURE

Within thirty (30) calendar days after completing successful negotiations, the TRIPS Program Manager shall sign the Solicitation Offer and Award Form submitted by the successful proposer and shall deliver the executed Purchasing Agreement documents specified within fifteen (15) calendar days after the signing. Delivery of the Purchasing Agreement documents shall be determined by the Contractor's signature on the return receipt request.

1.15 PROPOSER QUALIFICATION

The proposer must be a person, firm, or corporation that:

- a. Has in operation, or has the capability to have in operation, a manufacturing plant adequate to assure delivery of all equipment within the time specified under this Purchasing Agreement.
- b. Has adequate engineering and service personnel, or has the capability to have such personnel, to satisfy any engineering or service problems that may arise during the warranty period.
- c. Has adequate working capital or the ability to obtain working capital to finance the manufacturer of the vehicle.
- d. Has the ability to comply with all federal, state, and local regulations including, but not limited to, Buy America (49 CFR 661), New Bus Testing, Chapter 287 of the Florida Statutes, and the Americans with Disabilities Act.
- e. Has the ability to certify by completing Certification of Compliance with Disadvantaged Business Regulations Form that acknowledges that this procurement is subject to the provisions of 49 CFR Section 23 .67.
- f. Has a current in-plant Quality Assurance Program and "fully meets" the OEM body-builders program requirements.

GENERAL REQUIREMENTS AND CONDITIONS

1.16 DELIVERY AND ACCEPTANCE

- a. *Please fill in the two blanks that follow:* Completed units, for orders of 0 to 10 units, are to be delivered to purchaser within _____ months from receipt of purchase order. Orders of 11 or more units are to be delivered to purchaser

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within _____ months from receipt of purchase order. *Add any comments and/or explanations here!*

- b. Upon completion of a Pre-Delivery Inspection (PDI) by the licensed Florida dealer who is awarded this Purchasing Agreement, that dealer will be required to deliver the vehicles to the Purchaser. The dealer shall notify both the purchaser and the FDOT District Office a minimum of 48 hours in advance to arrange a delivery time. The name, address, telephone number, and contact person for each FDOT District Office is listed in **Exhibit 3: FDOT District Offices**.
- c. Failure to coordinate delivery may result in delay of vehicle being “signed for” as delivered. The vehicles shall be delivered clean and in first class condition, complete and ready for service. Workmanship throughout shall conform to the highest standard of commercially accepted practice for the class of work and shall result in a complete, neat, and finished appearance.
- d. The Contractor shall assume all costs and responsibility relative to said delivery to purchaser.
- e. The vehicle shall be delivered with all Contractor/manufacturer’s quality control checklists including road test and final inspection (properly completed and signed by an authorized plant representative). Other documents/items required at delivery include:
 - A copy of the Manufacturer’s Certificate of Origin
 - Application for Certificate of Title
 - Bill of Sale
 - Warranty Papers (forms, policy, procedures)
 - Maintenance Schedule
 - Operators’ manual
 - Invoice (To include contract number, P.O. number, VIN#, and agency name)
- f. If any of the items listed above are missing, defective, altered, incorrect, and incomplete, etc., the vehicle will be automatically rejected. **Exhibit 4: Vehicle Delivery Checklist** contains a list of the minimum required items at delivery.
- g. Delivery to Purchaser is to be completed within ten (10) calendar days of receipt of vehicle at Contractor’s site. Delivery shall be determined by signed receipt of the contact person or their designee, at the point of delivery. Further, since a common carrier is an independent concern, any delay in delivery resulting from the common carrier’s operations, accident, or mechanical failures on route will be considered a cause beyond the control of the Contractor, provided vehicles were delivered to said carrier in ample time for delivery within normal operating conditions. Odometer readings cannot exceed 3,000 miles at time of final delivery of completed buses to agency(s). There will be one dollar (\$1.00) per mile charge for each vehicle with an odometer reading in excess of 3000 miles. Under NO circumstances are tow

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vehicles to be attached to any buses.

- h. In case delivery of completed units under this Purchasing Agreement shall be necessarily delayed because of weather, strike, injunctions, government controls, or by reason of any cause or circumstances beyond control of the Contractor, the time for completion of delivery shall be extended by the number of days to be determined in each instance in writing and by mutual agreement between the parties.
- i. All units shall consist of new parts and materials and in no case will used components or reconditioned or obsolete parts be accepted. Any one part or component shall be an exact duplicate in manufacture and design as well as construction as all others proposed for each unit. Manufacturers must incorporate, in the units proposed, the newest technological advancement in order to achieve maximum service life and an attractive modern appearance.
- j. All vehicle data must be entered into the TRIPS DATAcenter prior to its delivery to the Springhill Bus Testing and Inspection Facility (SBTIF) located in Tallahassee, Florida. VIN#'s shall also be entered into the TRIPS DATAcenter within 10 days after issuance of the Purchase Order. Any vehicles arriving at the SBTIF without the VIN# entered in the DATAcenter will not be inspected until this information is entered.

To schedule an inspection, the dealer shall send an email to the TRIPS Assistant Program Manager, Carlton Allen at callen@ctr.usf.edu to set up an inspection appointment. Information in the email should include the following:

- o Anticipated delivery date
- o Number of vehicles
- o Whether inspection is a drop off or a to be inspected while you wait

The TRIPS Assistant Program Manager will schedule the inspection and provide a confirmation to the Dealer via email. A copy of the sales order and build order should be sent to the TRIPS Assistant Program Manager once an inspection date has been established.

Each vehicle delivered to the SBTIF shall have a complete set of "as built" wiring diagrams. The Dealer should see that all noted write-ups are corrected prior to the final delivery to the procuring agency. This inspection by TRIPS is not represented as being "all inclusive" and in no way relieves the Dealer from the required PDI.

- k. Any vehicle delivered by the Contractor that does not comply with specifications, conditions, and requirements shall be considered not accepted.
- l. If a vehicle is delivered incomplete or contains any defective or damaged parts, said parts shall be removed and new parts furnished and installed by the Contractor at no cost to the Purchaser. In the event work is involved, whether warranty or otherwise, in repairing or placing the vehicle(s) in proper condition, then such repairs shall be made by an approved firm.

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- m. Delivery of vehicle(s) by the Contractor does not constitute acceptance by the Purchaser. Vehicle(s) shall be considered "accepted" upon the inspection by the Purchaser and the issuance of a "Letter of Acceptance" to the Contractor. Purchaser will perform a post-delivery inspection and issue either a "Letter of Acceptance" or a "Letter of Rejection" to Contractor, stating areas found to be in non-compliance with the proposal specifications, within ten (10) calendar days from receipt of vehicle(s). Placing any new vehicle into revenue service will automatically constitute acceptance of vehicle by Purchaser. However, a Letter of Acceptance should still be sent to the Contractor prior to placing vehicle into revenue service.
- n. Acceptance of the vehicles shall not release the Contractor from liability for faulty workmanship or materials.

1.17 FEDERAL AND STATE TAX

The Purchasers are exempt from payment of Federal Excise Tax and Florida State Tax. Said taxes must not be included in the proposal price. Any other sales tax, use tax, imports, revenues, excise or other taxes which may now or hereafter be imposed by Congress, by the State, or any political subdivision thereof and applicable to the sale and delivery of the product as a result of this proposal, and which by terms of the tax law, may be passed directly to a Purchaser, will be paid by the Purchaser. Such taxes, as may be included, must be identified as to amount(s) and type of tax.

1.18 ON-LINE INSPECTIONS

The TRIPS reserves the right to perform an on-line inspection of any vehicles procured as a result of this proposal. If any defective or non-compliance items are found during the on-line inspection, the TRIPS may choose to perform subsequent on-line inspections at a date agreeable to both parties.

1.19 INDEMNIFICATION

Proposer must agree to save, keep, and bear harmless and fully indemnify any Purchaser and any of its officers, or TRIPS personnel from all damages, costs, or expenses in law or equity, that may at any time arise or to be set up, for any infringement of the patent rights of any person or persons in consequence of the use by a Purchaser or by any of its officers or proposal coordinators, of articles supplied under contract, arising from proposals submitted and which a Purchaser gives the Contractor notice in writing of any such claims or suit and provides necessary cooperation for the defense of said claim or suit.

1.20 MOTOR VEHICLE SAFETY STANDARDS

All vehicles covered by these specifications shall be in compliance with applicable Federal Motor Vehicle Safety Standards established by the National Highway Traffic Safety Administration. The manufacturer must include in their proposal package, either a letter stating the information that will be provided on the FMVSS sticker or a letter stating that the vehicles are not subject to FMVSS. Vehicles must be in compliance with all the

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requirements of the laws of the State of Florida as to lighting equipment, and all warning and safety devices. In the event there are changes in the Federal Motor Vehicles Safety Standards between date of proposal and date of manufacture, any new requirements applicable at time of manufacture will be considered separately and the price for same determined by mutual agreement. In granting this, the Contractor is not relieved of the responsibility of providing the Purchaser with all available information relative to the engineering structure, and design change so affected and the impact (if any) these changes may have on the durable-useful life and attractive appearance of the vehicle to be provided per these specifications.

1.21 LIQUIDATED DAMAGES

In the event of delay in completion of the delivery of vehicles beyond the date specified, in addition to any granted extensions agreed to in writing by the Purchaser, any affected Purchaser shall assess as liquidated damages, twenty five dollars (\$25.00) per calendar day per vehicle.

1.22 PARTS AND MANUALS

A supply of replacement parts for the vehicles specified must be guaranteed by the Contractor for a ten-year period from date of purchase. The Contractor shall provide Purchaser with complete “**as built**” wiring diagrams for the entire vehicle, a current service manual and a current parts manual (*“as-built” drawings, service manual and parts manual may be on a CD, as determined by the Purchaser*). These should be provided for each vehicle with a maximum of two (2) sets per Purchaser if they are purchasing more than two (2) vehicles. One (1) Operator's Manual shall be provided for each vehicle, regardless of the number of vehicles ordered by a given Purchaser. A list of any special tools or equipment will also be provided. The supplied operator's and maintenance manuals and wiring diagrams shall incorporate the options ordered on purchaser's vehicles.

1.23 ALTOONA TEST

Either a final report from the Altoona Bus Testing Center or documentation from the Federal Transit Administration stating that the vehicles are not required to undergo Altoona testing must be submitted with each proposal.

1.24 TITLING VEHICLES

Unless specified otherwise, Vehicles shall be titled to the Purchaser with the Florida Department Transportation, 605 Suwannee Street, Mail Station 26, Tallahassee, Florida 32399-0450 listed as the only lien holder.

The Contractor shall be responsible for applying for Title and purchasing a license tag on behalf of the Purchaser.

CONTRACTUAL PROVISIONS

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1.25 FEDERAL TRANSIT ADMINISTRATION FUNDING

Any contract resulting from proposal submitted is subject to financial reimbursement by the Federal Transit Administration. Accordingly, federal requirements may apply to that contract and if those requirements change then the changed requirements shall apply as required.

1.26 INCLUSION OF PROVISIONS

All provisions stated in this Invitation to Proposal and Vehicle Specifications, including any addenda, shall be considered to be included in the contract between the Purchaser(s) and the successful proposer.

1.27 REQUIREMENTS OF PROPOSERS

a. **Compliance With Regulations**

The successful proposer, hereinafter called the Contractor, shall comply with regulations relative to nondiscrimination in Federally-assisted programs of the United States Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), as incorporated by reference and made a part of this Purchasing Agreement.

b. **Nondiscrimination**

The Contractor, with regard to the work performed by it during the Purchasing Agreement, shall not discriminate on the grounds of race, religion, color, sex, national origin or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by the regulations, including employment practices.

c. **Equal Employment Opportunity**

In connection with the execution of this Purchasing Agreement, the Contractor shall not discriminate against any employee or applicant for employment because of disability, race, religion, color, sex, or national origin. The Contractor shall take affirmative action to insure that applicants are employed and that employees are treated during their employment without regard to their disability, race, religion color, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay, or other forms of compensation; and selection for training, including apprenticeship.

d. **Solicitations From Subcontracts, Including Procurement of Materials And Equipment**

In all solicitations either by competitive proposals or negotiation made by the Contractor for work to be performed under this proposed Purchasing Agreement,

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including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the obligations relative to nondiscrimination on the grounds of disability, race, color, sex, religion, or national origin.

e. Information and Reports

The Contractor shall provide all information and reports required by the regulations or directives issued pursuant thereto, and shall permit reasonable access to all its books, records, accounts, other sources of information, and its facilities as may be determined by the Proposal Administrator to be pertinent to ascertain compliance with said regulations, orders, and instructions. Included in this information shall be the manufacturer's certification of compliance with Federal Motor Vehicle Safety Standards, or if inapplicable, a written statement documenting that these standards do not apply. Where any information is required or a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the Proposal Administrator, as appropriate, and shall set forth that efforts have been made to obtain the information.

f. Sanctions For Noncompliance

In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Purchasing Agreement, the Purchaser shall impose such contract sanctions as it may determine to be appropriate, including but not limited to:

- (1) Withholding of payments to the Contractor until compliance; and/or
- (2) Cancellation, termination, or suspension of the Purchasing Agreement, in whole or in part.

1.28 BUY AMERICA

The Contractor agrees to comply with 49 U.S.C. 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7, and include microcomputer equipment, software, and small purchases (currently less than \$100,000) made with capital, operating, or planning funds. Separate requirements for rolling stock are set out at 5323(j)(2)(C) and 49 CFR 661.11. Rolling stock not subject to a general waiver must be manufactured in the United States and have a percentage of domestic content as follows: For purchase orders placed on or after October 1, 2015, for rolling stock that will be delivered in FY 2017 and 2017, the domestic content requirement must exceed 60%. For purchase orders placed for rolling stock that will be delivered in FY 2018 and 2019, the domestic content must exceed 65%, and for purchase orders placed for rolling stock that will be delivered in FY 2020 and beyond, the domestic content must exceed 70%.

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1.29 CARGO PREFERENCE-USE OF UNITED STATES-FLAG VESSELS

The Contractor agrees: a. to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b. to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the Contractor in the case of a subcontractor's bill-of-lading.) c. to include these requirements in all subcontracts issued pursuant to this Purchasing Agreement when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

1.30 ENERGY CONSERVATION

The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency that is contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

1.31 CLEAN WATER

- a. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.
- b. The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

1.32 BUS TESTING

The Contractor [Manufacturer] agrees to comply with 49 U.S.C. A 5323© and FTA's implementing regulation at 49 CFR Part 665 and shall perform the following:

- a. A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient which will be prior to the recipient's final acceptance of the first vehicle.
- b. A manufacturer who releases a report under paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.

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- c. If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.
- d. If the manufacturer represents that the vehicle is "grand fathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

1.33 PRE-AWARD AND POST-DELIVERY AUDIT REQUIREMENTS

The Contractor agrees to comply with 49 U.S.C. § 5323(l) and FTA's implementing regulation at 49 C.F.R. Part 663 and to submit the following certifications:

- a. Buy America Requirements: The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the Proposer/Offeror certifies compliance with Buy America, it shall submit documentation which lists 1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and 2) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.
- b. Solicitation Specification Requirements: The Contractor shall submit evidence that it will be capable of meeting the proposal specifications.
- c. Federal Motor Vehicle Safety Standards (FMVSS): The Contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations.

1.34 BYRD ANTI-LOBBYING AMENDMENT, 31 U.S.C. 1352, AS AMENDED BY THE LOBBYING DISCLOSURE ACT OF 1995, P.L. 104-65 [TO BE CODIFIED AT 2 U.S.C. § 1601, ET SEQ.]

Contractors who apply or propose for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any

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person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

1.35 ACCESS TO RECORDS AND REPORTS

The following access to records and reports requirements applies to this Purchasing Agreement:

- a. Where the Purchaser is not a State but a local government and is the FTA Recipient or a sub-grantee of the FTA Recipient in accordance with 49 C. F. R. 18.36(l), the Contractor agrees to provide the Purchaser, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this Purchasing Agreement for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C. F. R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5303(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.
- b. Where the Purchaser is a State and is the FTA Recipient or a sub-grantee of the FTA Recipient in accordance with 49 C.F.R. 633.17, Contractor agrees to provide the Purchaser, the FTA Administrator or his authorized representatives, including any PMO Contractor, access to the Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5303(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311. By definition, a major capital project excludes contracts of less than the simplified acquisition threshold currently set at \$100,000.
- c. Where the Purchaser enters into a negotiated contract for other than a small purchase or under the simplified acquisition threshold and is an institution of higher education, a hospital or other non-profit organization and is the FTA Recipient or a sub-grantee of the FTA Recipient in accordance with 49 C.F.R. 19.48, Contractor agrees to provide the Purchaser, FTA Administrator, the Comptroller General of the United States or any of their duly authorized representatives with access to any books, documents, papers and records of the Contractor which are directly pertinent to this Purchasing Agreement for the purposes of making audits, examinations, excerpts and transcriptions.
- d. Where any Purchaser which is the FTA Recipient or a sub-grantee of the FTA Recipient in accordance with 49 U.S.C. 5325(a) enters into a contract for a capital

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project or improvement (defined at 49 U.S.C. 5303(a)1) through other than competitive proposing, the Contractor shall make available records related to the contract to the Purchaser, the Secretary of Transportation and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.

- e. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- f. The Contractor agrees to maintain all books, records, accounts and reports required under this Purchasing Agreement for a period of not less than three years after the date of termination or expiration of this Purchasing Agreement, except in the event of litigation or settlement of claims arising from the performance of this Purchasing Agreement, in which case Contractor agrees to maintain same until the Purchaser, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(l) (11).

1.36 FEDERAL CHANGES

Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Agreement (Form FTA MA (2) dated October, 1995) between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this Purchasing Agreement. Contractor's failure to so comply shall constitute a material breach of this Purchasing Agreement.

1.37 CLEAN AIR

The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 *et seq.* The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

1.38 RECYCLED PRODUCTS

The Contractor agrees to comply with all the requirements of Section 6003 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

1.39 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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- a. **Overtime requirements** - No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- b. **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$ 10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- c. **Withholding for unpaid wages and liquidated damages** - The purchaser(s) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- d. **Subcontracts** - The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.
- e. **Payrolls and basic records** - Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the

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Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

1.40 NO OBLIGATION BY THE FEDERAL GOVERNMENT

The Purchaser and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Purchasing Agreement and shall not be subject to any obligations or liabilities to the Purchaser, Contractor, or any other party (whether or not a party to that Purchasing Agreement) pertaining to any matter resulting from the underlying Purchasing Agreement. The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

1.41 PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS

- a. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying Purchasing Agreement, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying Purchasing Agreement or the FTA assisted project for which this Purchasing Agreement work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.
- b. The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49

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U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

- c. The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

1.42 TERMINATION

- a. If the Contractor does not deliver supplies in accordance with the contract delivery schedule or the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the TRIPS may terminate this Purchasing Agreement for default. Termination shall be effected by serving a notice of termination on the Contractor, setting forth the manner in which the Contractor is in default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.
- b. If it is later determined by the TRIPS that the Contractor had an excusable reason for not performing, such as a strike, fire or flood, events which are not the fault of or are beyond the control of the Contractor, the TRIPS, after setting up a new delivery of performance schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

1.43 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - Lower Tier Covered Transactions (Third Party Contracts over \$100,000).

- a. By signing and submitting this proposal or proposal, the prospective lower tier participant is providing the signed certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the TRIPS may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the TRIPS if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "persons," "lower tier covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the

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meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549 [49 CFR Part 29]. You may contact the TRIPS for assistance in obtaining a copy of those regulations.

- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized in writing by the TRIPS.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction", without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non-procurement List issued by U.S. General Service Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under Paragraph (e) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to all remedies available to the Federal Government, the TRIPS may pursue available remedies including suspension and/or debarment.

1.44 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION - Lower Tier Covered Transaction

- a. The prospective lower tier participant certifies, by submission of this proposal or proposal, that neither it nor its "principals" [as defined at 49 C.F.R. § 29.105(p)] is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- b. When the prospective lower tier participant is unable to certify to the statements in

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this certification, such prospective participant shall attach an explanation to this proposal.

1.45 CIVIL RIGHTS

The following requirements apply to the underlying contract:

- a. Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6103, section 203 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
- b. Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying contract:
 - (1) Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq. , (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
 - (2) Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

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(3) Disabilities - In accordance with section 103 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

c. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

1.46 BREACHES AND DISPUTE RESOLUTION

Disputes arising in the performance of this Purchasing Agreement which are not resolved by agreement of the parties shall be decided by the Florida Department of Transportation. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the Florida Department of Transportation. Any appeal of decisions of the Florida Department of Transportation shall be filed and administered by the "Administrative Procedures Act," Chapter 120, Florida Statutes.

Should either party to the contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

Unless this Purchasing Agreement provides otherwise, all claims, counterclaims, disputes and other matters in question between the TRIPS and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State of Florida.

The duties and obligations imposed by the contract documents and the rights and remedies available hereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the TRIPS or the Contractor shall constitute a waiver of any right or duty afforded any of them under the contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach there under, except as may be specifically agreed in writing.

1.47 DISADVANTAGED BUSINESS ENTERPRISE (DBE)

It is the policy of the TRIPS that Disadvantaged Business enterprises as defined in 49 CFR 26.49 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently the DBE requirements of 49 CFR 26.49 applies to this agreement.

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The TRIPS Program Manager on behalf of the Purchasers, or their Contractor, agree to ensure Disadvantaged Business Enterprises as defined in 49 CFR 26.49 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, the Purchasers, or their Contractors, shall take all necessary and reasonable steps in accordance with 49 CFR 26.49 to ensure that Disadvantaged Business Enterprises have the maximum opportunity to compete for and perform contracts. The TRIPS Program Manager on behalf of the Purchasers and their Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of DOT assisted contracts.

1.48 STATE AND LOCAL LAW DISCLAIMER

The use of many suggested clauses are not governed by Federal law, but are significantly affected by State law. The language of the suggested clauses may need to be modified depending on state law. Before the suggested clauses are used in the grantees procurement documents, the grantees should consult their local attorney.

1.49 INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, dated March 18, 2013, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any grantees' requests that would cause the grantee to be in violation of the FTA terms and conditions.

EXHIBITS

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

LIST OF EXHIBITS

1. Required Forms / Certifications
2. Price Proposal Forms / Payment terms
3. FDOT District Offices
4. Vehicle Delivery Checklist
5. Formula for Price Escalation

EXHIBIT 1

TECHNICAL PROPOSAL SUBMISSION REQUIREMENTS & DOCUMENTS

THE ITEMS LISTED BELOW SHALL BE INCLUDED IN ENVELOPE NUMBER 1, TECHNICAL PROPOSAL:

1. PROPOSAL ACKNOWLEDGMENT
2. PROPOSERS RESPONSE TO TECHNICAL SPECIFICATIONS
3. DESCRIPTION OF PROPOSED VEHICLE (INCLUDING PICTURES)
4. TECHNICAL DRAWINGS OF BUS BODY DESIGN

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

5. DESCRIPTION OF AFTER SALE SERVICE SUPPORT
6. MANUFACTURER'S PROPOSED TRAINING PROGRAM
7. DESCRIPTION OF WARRANTY PROGRAM
8. DESCRIPTION OF HOW MANUFACTURER ENSURES QUALITY
9. STANDARD ASSURANCES
10. CERTIFICATION REQUIREMENT FOR PROCUREMENT OF STEEL, IRON, OR MANUFACTURED PRODUCTS
11. CERTIFICATION REQUIREMENT FOR PROCUREMENT OF BUSES, OTHER ROLLING STOCK AND ASSOCIATED EQUIPMENT
12. BUY AMERICA CERTIFICATE
13. FTA BUS TESTING CERTIFICATION
14. LOBBYING CERTIFICATION
15. DISADVANTAGED BUSINESS ENTERPRISE TVM CERTIFICATION
16. MOTOR VEHICLE SAFETY STANDARDS CERTIFICATION
17. TITLE VI CIVIL RIGHTS CONTRACTOR AGREEMENT
18. CERTIFICATION OF COMPLIANCE WITH THE ADA
19. DEBARRED PROPOSER / INTEGRITY CERTIFICATION
20. E-VERIFY CERTIFICATION
21. LIST OF TRANSIT SYSTEM REFERENCES WITH CONTACT INFORMATION

NOTE: PROPOSERS MUST USE THE FORMS PROVIDED. FAILURE TO DO SO WILL RESULT IN A NON-RESPONSIVE PROPOSAL.

1. PROPOSAL ACKNOWLEDGMENT

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

Gentlemen:

The undersigned, as proposer, hereby declares that the only person interested in this Proposal as principal are named herein and that no person other than herein mentioned has any interest in this Proposal or in the Purchasing Agreement to be entered into; that this Proposal is made without connection with any other person, company or parties making a Proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The proposer further declares that they have examined the Proposal documents and informed themselves of all conditions pertaining to this requirement and have also examined other contract documents relative thereto and has read all of the addenda furnished before the opening of the Proposal, as acknowledged below; and that they have satisfied themselves about the work to be performed.

The proposer agrees, if this Proposal is accepted, to contract with the Purchasers, to furnish all necessary materials, equipment, apparatus, means of transportation and labor necessary to provide the units covered by this Proposal and other contract documents of this project entitled:

Transit Research Inspection Procurement Services Program

TRIPS CONTRACT PROPOSAL #TRIPS-17-MD-RFP

It is understood that the prices stated by the undersigned in the Price Proposal are one of the considerations in determining award of the Purchasing Agreement.

Acknowledgment is hereby made of the following addenda (identified by number) received since issuance of Specifications:

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

9. STANDARD ASSURANCES

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

Federal Requirements for Invitation for Proposal

I, _____, representing the Proposer, certify that I have read and understand all terms and conditions of the Federal Requirements for Invitation for Proposal and, if awarded this proposal, will comply with all terms and conditions contained therein.

Comptroller General's Proposer's Certification

_____ hereby certifies that they are NOT on the Comptroller General's list of ineligible Contractors. Manufacturers appearing on said list will be considered ineligible.

Other Assurances

I, _____, representing the Proposer, assure that the Proposer is licensed to sell vehicles in the State of Florida, under license # _____.

_____ assures that equipment proposal will meet or exceed all specifications, and that all equipment and items specified in the vehicle specifications arrive with the vehicle at time of delivery to the Purchaser.

_____ assures that local representation of the manufacturer has been secured and will be liable for warranty work on the vehicle(s).

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

**10. CERTIFICATION REQUIREMENT FOR PROCUREMENT OF STEEL, IRON, OR
MANUFACTURED PRODUCTS**

Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The proposer or Offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 CFR Part 661.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)

The proposer or Offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1), but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(B) or (j)(2)(D) and the regulations in 49 CFR 661.7.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

11. CERTIFICATION REQUIREMENT FOR PROCUREMENT OF BUSES, OTHER ROLLING STOCK AND ASSOCIATED EQUIPMENT
(Applicable to purchases over \$100,000.00)

Certificate of Compliance with 49 U.S.C. 5323(j)(2)(C).

The proposer or Offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and the regulations at 49 CFR Part 661.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(2)(C)

The proposer or Offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(2)(C), but may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(B) or (j)(2)(D) and the regulations in 49 CFR 661.7.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

**12. BUY AMERICA CERTIFICATE OF COMPLIANCE WITH FTA
REQUIREMENTS FOR BUSES, OTHER ROLLING STOCK, OR ASSOCIATED EQUIPMENT**

(To be submitted with a proposal or offer exceeding the small purchase threshold for Federal assistance programs, currently set at \$100,000.)

Certificate of Compliance

The proposer hereby certifies that it will comply with the requirements of 49 U.S.C. Section 5323(j)(2)(C), Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended, and the regulations of 49 C.F.R. 661.11:

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

13. CERTIFICATION OF COMPLIANCE WITH FTA'S BUS TESTING REQUIREMENTS

The undersigned [Contractor/Manufacturer] certifies that the vehicle offered in this procurement complies with 49 U.S.C. A 5323© and FTA's implementing regulation at 49 CFR Part 665.

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

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

14. CERTIFICATION REGARDING LOBBYING

(To be submitted with each proposal or offer exceeding \$100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

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

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

DEALER

MANUFACTURER

Signature of Contractor's Authorized Official:

Signature of Contractor's Authorized Official:

Name and Title of Contractor's Authorized Official:

Name and Title of Contractor's Authorized Official:

Date _____

Date _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

15. DISADVANTAGED BUSINESS ENTERPRISE TVM CERTIFICATION

The proposer, if a transit vehicle manufacturer (TVM), hereby certifies that it has complied with the requirements of 49 CFR, Section 26.49 by submitting an annual DBE / WBE goal to the Federal Transit Administration (FTA). The goal has either been approved or not approved by FTA.

The proposer, if a Dealer or non-manufacturer supplier, hereby certifies that the manufacturer of the transit vehicle to be supplied has complied with the above-referenced requirement of 49 CFR~ Section. 26.49.

DEALER

MANUFACTURER

Date _____

Date _____

Signature_____

Signature_____

Company Name_____

Company Name_____

Title_____

Title_____

NOTE: An approved annual FTA certification must be received before a contract extension can be considered for each year.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

16. MOTOR VEHICLE SAFETY STANDARDS CERTIFICATION

Certification of Compliance with all safety related items contained in **Part 2: Technical Specifications.**

The Proposer hereby certifies that it shall comply with the safety related requirements contained in **Part 2: Technical Specifications** (reference Federal Register Vol. 47, No. 195, Oct. 7, 1982 FTA Docket Nov. 81-3).

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

17. TITLE VI CIVIL RIGHTS ACT OF 1964

CONTRACTOR AGREEMENT

During the performance of this Purchasing Agreement, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

(1) Compliance with Regulations: The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 2 I, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Purchasing Agreement.

(2) Nondiscrimination: The Contractor, with regard to the work performed by it during the Purchasing Agreement, shall not discriminate on the grounds of race, religion, color, sex, age, national origin, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.

(3) Solicitations for Subcontracts, including procurement of materials and equipment: In all solicitations either by competitive Proposal or negotiation made by the Contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this Purchasing Agreement and the Regulations relative to nondiscrimination on the grounds of race, religion, color, sex, age, national origin, or disability.

(4) Information and Reports: The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FTA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information is required or a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the TRIPS, or the FTA, as appropriate, and shall set forth what efforts it has made to obtain the information.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

17. TITLE VI CIVIL RIGHTS ACT OF 1964

CONTRACTOR AGREEMENT

(5) Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Purchasing Agreement, the TRIPS shall impose such Contract sanctions as it or the FTA may determine to be appropriate, including but not limited to:

- (a) Withholding of payments to the Contractor under the Contract until the Contractor complies, and/or
- (b) Cancellation, termination or suspension of the Purchasing Agreement, in whole or in part.

(6) Incorporation of Provisions: The Contractor shall include the provisions of paragraph (1) through (6) of this section in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the TRIPS or the FTA may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the TRIPS to enter into such litigation to protect the interests of the TRIPS, and in addition, the Contractor may request the services of the Attorney General in such litigation to protect the interests of the United States.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

**18. CERTIFICATION OF COMPLIANCE WITH
THE AMERICANS WITH DISABILITIES ACT OF 1990**

The Proposer hereby certifies that it shall comply with all requirements contained in **Part 2: Technical Specifications** relating to bus design or special equipment required by the Americans with Disabilities Act of 1990.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

19. DEBARRED BIDDERS / INTEGRITY CERTIFICATION

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion

1. Lower tier participant certifies, by submission of this bid proposal, that neither it nor its "principals" (as defined at 49 CFR Part 29) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in this transaction by any Federal department or agency.
2. When the prospective lower tier participant is unable to certify to the statements in this certification, such prospective participant shall attach an explanation to this proposal.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

20. E-VERIFY CERTIFICATION

Vendor/Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of;

1. All persons employed by the Vendor/Contractor during the term of the Contract to perform employment duties within Florida; and

2. All persons, including subcontractors, assigned by the Vendor/Contractor to perform work pursuant to the contract with the Department.

DEALER

MANUFACTURER

Date _____

Date _____

Signature _____

Signature _____

Company Name _____

Company Name _____

Title _____

Title _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

21. LIST OF TRANSIT SYSTEM REFERENCES AND CONTACT INFORMATION

DEALER

1.

2.

3.

4.

5.

MANUFACTURER

1.

2.

3.

4.

5.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

EXHIBIT 2

PRICE PROPOSAL FORMS

INSTRUCTIONS FOR COMPLETING PRICE PROPOSAL FORMS:

The following proposal forms must be completed by proposer and submitted in

ENVELOPE 2, PRICE PROPOSAL:

1. Price Proposal Form A - Base Vehicle Specifications and Price
2. Price Proposal Form B - Seating Prices
3. Price Proposal Form C - Paint Scheme Prices
4. Price Proposal Form D - Individual Prices of Options
5. Price Proposal Form E - Summary of Proposed Totals from Forms A, B, C, and D
6. Terms of Payment Form F - Terms of Payment

Proposers must enter a dollar amount in the appropriate spaces on ALL proposal forms. Entries such as “not applicable” or “not available” are not acceptable and will cause your proposal to be non-responsive. If there is no charge for a particular option, a zero (0) should be entered in the appropriate space. An option’s availability / applicability to this proposal will be determined by the FDOT.

Price Proposal Form A

Proposal Form A shows the pricing of the base vehicle. The proposal price of the base vehicle will be entered in the “Price per Item” column. This figure will be carried to Proposal Form E for the Total Proposal Price.

Price Proposal Form B

Because various Purchasers have different needs and preferences, seating will be ordered per person. The prices for the individual seating types are inserted in the “Price per Item” column. Figures in the price per item column will then be used to determine the total cost of the seating configuration provided. This total will be entered in “Box A” and carried to Proposal Form E. Purchasers may select gray, blue, or tan for seating colors and black, gray, blue, or tan for flooring colors.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

UPHOLSTERY INFORMATION-VINYL COLORS AVAILABLE

BLUE CMI VINYL - Center insert of seat to be MEDALLION KEOPS AZUL BLUE INSERT, style VP-MEDLI-KEAZU; outside wrap and back of seat to be solid MEDALLION MORRENO TROPICAN AZUL, style VP-MEDMO-TRAZU.

BEIGE CMI VINYL - Center insert of seat to be MEDALLION KEOPS VERDE TAN INSERT, style VP-MEDLI-KEVER; outside wrap and back of seat to be solid, MEDALLION DOCCA SAND BEIGE, style VP-MEDLI-DOSNB.

GREY CMI VINYL - Center insert of seat to be MEDALLION KEOPS VERDE TAN INSERT, style VP-MEDLI-KEVER; outside wrap and back of seat to be solid, MEDALLION MORRENO TROPICAN GREY, style VP-MEDMO-TRGRY.

Price Proposal Form C

Proposal prices for the individual paint schemes are inserted in the “Price per Item” column. All amounts in the “Price per Item” column will be summed and entered at the bottom of the form in the “Total” line. If an agency requires paint and lettering schemes that are not generally covered by one of those listed in this proposal, they may make separate arrangements either with the manufacturer or a local vendor to provide these services.

Price Proposal Form D

Proposal Form D is a list of all of the available options as explained in Part 3. The proposer will simply provide the amount that each option will cost (per item) in the “Price per Option” column. All amounts in the “Price per Option” column will be summed and entered at the bottom of the form in the “Total” line. This total will be carried to Proposal Form E for the Total Proposal Price.

Price Proposal Form E

Proposal Form E is a summary of the total proposal prices from Proposal Forms A, B, C and D. The information is inserted on the designated line and summed to produce the “Total Proposal Price.”

Price Proposal Form F

Proposal Form F is the Terms of Payment and must be completed by the Proposer.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

Price Proposal Packet

(Instructions)

1. Separate and complete **pricing packets** need to be submitted per vehicle proposed.
2. **Pricing packet** consists of pages 50 through 58 in its entirety.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

PRICE PROPOSAL FORM A

(Vehicle Specifications)

PP1	Proposed Chassis GVWR (in pounds)	_____
PP2	Overall length (excluding help bumpers)	_____
PP3	Overall width (dual rear wheel)	_____
PP4	Overall width (less DRW fenders)	_____
PP5	Headroom, minimum 74"	_____
PP6	Door Width, minimum (clear) 30"	_____
PP7	Door Height, minimum 80"	_____
PP8	Overall Height, maximum 120"	_____
PP9	PASSENGER SEATS:	
	Seating Capacity of floor plans – minimum / maximum	____/____
	Seated Adult Capacity minimum / maximum	____/____
	Wheelchair positions minimum / maximum	____/____
	Seated Knee Room forward, minimum 26"	_____
	Seated Width per seat, minimum 17"	_____
	Cushion Height above finished floor, minimum 17.5"	_____
	maximum 18.5"	_____
PP10	STEPS:Ground to floor maximum 12"	_____
PP11	Mirror, Inside Rearview Day/Night (Yes or No)	_____
PP12	Capacity of fuel tank in OEM Location – largest gallon capacity	_____
PP13	Tires and Wheels shall be standard OEM size and load range for the GVWR of the proposed chassis. Tire size: _____ Wheel size: _____	

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

PRICE PROPOSAL FORM A (continued)

BUS	PRICE
Chassis Manufacturer _____ Chassis GVWR (pounds) _____ Vehicle length (inches) _____	\$ _____
<p align="right">TOTAL PRICE</p>	\$ _____

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

PRICE PROPOSAL FORM B

SEATING

ITEM	PRICE PER PERSON
Standard Seat	
Fold-away Seat	
Flip-Seats	

Multiply the prices indicated above for the configuration listed below. Enter the total price in Box A and on Proposal Form E enter the number of seats for tabulation purposes.

NO.	TYPE	PRICE
	Standard Seat	\$
	Fold-away Seat	\$
	Flip-Seat	\$

TOTAL PRICE

Box A

NOTE:

This seating configuration is for Proposal Tabulation purposes only. Agencies will select floor plans from TRIPS approved floor plans when placing orders. Each proposer shall submit the floor plans which will be made available to the TRIPS. This (these) floor plans are to be the detailed drawings and shall be accompanied by a sample of the proposer's standard four wheel weight analysis as a pre-build projection. The finished vehicle cannot exceed GVWR, GAWR or four wheel weight limitations as established by the chassis manufacturer. Proposer, if successful, will be limited to offering TRIPS agencies only those floor plans submitted with their proposal.

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

PRICE PROPOSAL FORM C

PAINT SCHEME PRICES

ITEM	PRICE PER ITEM
Paint Scheme 1	\$
Paint Scheme 2	\$
Paint Scheme 3	\$
TOTAL	\$
<p><u>NOTE:</u> If an agency requires paint and lettering schemes that are NOT GENERALLY covered by one of those listed above, they may make separate arrangements either with the manufacturer or a local vendor to provide these services. Agencies will select colors (2) for background and stripes when orders are placed. All paint scheme pricing shall reflect white base coat.</p>	
<p>Proposer shall submit detailed drawings of its optional paint schemes</p>	

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

PRICE PROPOSAL FORM D

ITEM	DESCRIPTION	PRICE
3.1.1	Diesel engine meeting current EPA requirements	
3.1.2	Compressed Natural Gas (CNG) or Alternative Fuel Engine meeting current EPA requirements Size:_____ Make:_____ Manufacturer:_____	
3.1.3	Hybrid-electric propulsion system meeting current EPA requirements	
3.1.4	Full stainless steel exhaust system.	
3.2.1	Specify the type and manufacturer of any alternative transmissions.	
3.3.1	Provide Aluminum wheels in place of standard steel wheels.	
3.3.2	Additional matching mounted and balanced spare tire and wheel assemblies.	
3.3.3	Hub O Meter See 2.15.5.	
3.4.1	American Seating – 6468-VR 50 Inserts:	
	Standard	
	Flip Type	
	Foldaway	
3.4.2	Freedman Seating City-Seats, AV Inserts:	
	Standard	
	Flip Type	
	Foldaway	
3.4.3	Seat Covers (Passenger)	
FORM D CONTINUED NEXT PAGE		

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

INDIVIDUAL PRICES OF OPTIONS

FORM D (continued)

ITEM	DESCRIPTION	PRICE
3.5.1	USSC Evolution G2A with pedestal	
3.5.2	USSC Q90	
3.5.3	USSC LX Series	
3.5.4	USSC 9000 Series	
3.5.5	Freedman G2ELPQR	
3.5.6	Recaro Ergo M with pedestal	
3.6.0	Adjustable three speed driver's fan.	
3.7.1	Altro Transflor slip resistant sheet vinyl flooring	
3.7.2	Gerflor slip resistant sheet vinyl flooring with smooth	
3.8.1	Floor mounted luggage Rack(s).	
3.9.1	Yellow powder-coated hand rails and stanchions.	
3.9.2	Stainless steel hand rails and stanchions.	
3.10.1	Specify type and manufacturer of alternative mirrors meeting MD-17 specifications 2.19.1.	
3.11.1	Reverse assist system.	
3.11.2	Reverse camera and monitor backing system.	
3.12.1	Air Purification System	
3.13.1	Ricon Ramp	
3.13.2	Lift-U Ramp	
3.13.3	Braun Ramp	
FORM D CONTINUED NEXT PAGE		

Florida Department of Transportation
Office of Freight, Logistics and Passenger Operations

FORM D (continued)

ITEM	DESCRIPTION	PRICE
3.14.1	SURE-LOK Titan restraint system.	
3.14.2	Q-Straint QRT Max restraint system.	
3.14.3	WC-18 Compliant restraint system.	
3.14.4	Q-Pod Securement Station.	
3.14.5	Q-Straint Quantum Securement Station.	
3.14.6	W/C lap/shoulder restraint belt extensions.	
3.15.1	Fogmaker Fire Suppression System	
3.15.2	Kidde Fire Suppression System	
3.15.3	DAFO fire suppression system	
3.15.4	Camera systems priced by camera quantity	
3.15.5	ROSCO Dual Vision video event recorder	
3.15.6	LYTX drive cam	
3.15.7	Event Data Recorder	
3.15.8	Camera system replacement parts	
3.15.9	An in-vehicle computer	
3.15.10	Avail MDT	
3.15.11	Pre-Trip inspection module	
3.16.1	Radio Engineering Industries (REI) public address system	
3.17.1	Transign LLC, single roller curtain type	
3.17.2	Twin Vision Elyse software Electronic Destination system full front and side signs	
3.17.3	Twin Vision Mobi-Lite electronic destination sign, or approved equal	

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PRICE PROPOSAL FORM E
SUMMARY OF PROPOSED TOTALS FROM
PRICE PROPOSAL FORMS A, B, C, AND D

The undersigned Proposer agrees to furnish the equipment in accordance with the specifications and proposal requirements contained in this package.

All seating and securement, paint schemes, options and vehicle specifications have been carefully examined and the costs shown in Proposal Forms A, B, C, D and E of this proposal. These combined costs, as shown below, constitute the Total Proposal Price for this package.

DESCRIPTION OF THE TOTAL PRICE

TOTAL FROM PRICE PROPOSAL FORM A	_____
TOTAL FROM PRICE PROPOSAL FORM B, BOX A	_____
TOTAL FROM PRICE PROPOSAL FORM C	_____
TOTAL FROM PRICE PROPOSAL FORM D	_____
TOTAL PROPOSAL PRICE	_____

Date _____

Signature _____

Company Name _____

Title _____

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TERMS OF PAYMENT

FORM F

The following terms of payment are proposed:

The agencies will submit their portion of the purchase price (local match) to the 5310 administrator at CUTR when the vehicle order is placed.

1. A 2% (24% per annum) service charge will be added to all past due accounts.

2. Total proposal price is based on payment terms of net sixty (60) days after acceptance of each vehicle. If Contractor has not received payment in full within the 60 day period following acceptance of vehicle, agencies will incur the 2% monthly service charge beginning on day 61.

The undersigned understands that any condition stated above, clarification made to the above or information submitted on or with this form, other than that requested, will render the proposal unresponsive.

Date _____

Signature_____

Company Name_____

Title_____

Florida Department of Transportation
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EXHIBIT 3

FDOT DISTRICT OFFICES

Debbie Stephens
FDOT District One
PO Box 1030
Fort Myers, FL 33902-10
(239) 225-1982

Janell Damato
FDOT District Two
2198 Edison Avenue, MS 2813
Jacksonville, FL 32204
(904) 360-5687

Kathy Rudd
FDOT District Three
1074 Hwy 90
Chipley, FL 32428-0607
(850) 330-1549

Jayne Pietrowski
FDOT District Four
3400 W. Commercial Blvd.
Ft. Lauderdale, FL 33309
(954) 777-4661

Sophia Villavicencio
FDOT District Five
133 S. Semoran Blvd.
Orlando, FL 32807
(407) 482-7887

Raymond Freeman
FDOT District Six
1000 N. W. 111th Ave., Rm 6105
Miami, FL 33172
(305) 470-5255

Elba Lopez
FDOT District Seven
11201 N. McKinley Dr.
Tampa, FL 33612-6403
(813) 975-6402

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EXHIBIT 4
VEHICLE DELIVERY CHECKLIST

The below items must be presented at time of delivery of vehicle to agency or vehicle will be considered non-acceptable.

- Vehicle properly serviced, clean and in first class operating condition. Includes front end alignment, wheels balanced, unnecessary stickers removed
- Proper "Application for Registration"
- GVWR - either on Certificate of Origin or Registration
- Four Wheel Weight Analysis Certification
- Odometer Certification
- "As Built" Wiring diagrams and chassis electrical manuals
- Service, chassis service and "As Built" Parts manuals
- Operator's manual
- Dealer Invoice
- Spare key(s)
- Bill of sale
- Warranty papers (forms, policy, procedures)
- Finalized Part 5 Warranty Provisions; TRIPS-MD-17-Contract
- Maintenance schedule
- Post-Delivery Audit documents-
 - Buy America Certificate and documentation annotating percentage breakdown and percentages, location and items present during final assembly (post-delivery breakdown document)
 - FMVSS
 - Specifications
- Blank Acceptance / Rejection Notification
- FDOT AMP Draw Analysis Worksheet

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EXHIBIT 5

FORMULA FOR COMPUTATION OF SECOND STAGE PRICE ESCALATION

Escalation will be calculated based on the following formula which utilizes the U.S. Department of Labor/Bureau of Labor Statistics Producer Price Index (PPI) (Industry) Category PCU3362113362117 “Buses and Firefighting vehicles, complete, produced on purchased chassis:” **, not seasonally adjusted. In no event will the prices for any purchase release exceed, by more than 5%, the price(s) that would have been in effect twelve (12) months prior to the date of the release or the base price of the purchase order release if less than twelve (12) months after the initial contract award.

<u>Index Point Change</u>	<u>Examples</u>
PPI Index: Future Recompilation Month	141.1
Less PPI Index: Base Award Month	137.5
Equals Index Point Change	3.5

<u>Index Percent Change</u>	<u>Examples</u>
Index Point Change	3.5
Divided by PPI Index: Base Award Month	137.5
Equals	0.0254
Results multiplied by 100 equals Percent Change	2.54%

Total price of standard bus = \$142,850.00

In this example, 2.54% times \$142,850.00 equals \$3,628.39. This could be added to the total cost of the bus. Once recompilation is completed, the last recompilation month becomes the new award month.

** = *If discontinued, Category PCU3362113362119 “Other Trucks/Vehicles, complete, produced on purchased chassis:” will be used.*

NOTE: These figures provided for illustrative purposes only.

PART 2

TECHNICAL SPECIFICATIONS



Contract # TRIPS-MD-17-RFP

MEDIUM DUTY CHASSIS TYPE TRANSIT VEHICLES

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TECHNICAL SPECIFICATIONS

MEDIUM DUTY PUBLIC TRANSIT BUS

2.0.0 SCOPE AND PURPOSE

The Transit Research Inspection and Procurement Services (TRIPS) seeks to purchase the most modern medium duty transit buses available that will provide maximum passenger appeal in appearance, comfort and safety, combined with excellence in reliability, operating characteristics and economy of operation. This Request for Proposal (RFP) is for the procurement of a purpose-built medium duty bus up to 31' in length. This proposed-built bus must have a minimum Altoona Test Certification of 7 years and 250,000 miles to 10 years and 350,000 miles. This proposal will describe general technical specifications desired for the manufacture of a vehicle to provide public transportation in fixed route and paratransit service by public transit systems in the State of Florida. The standard proposed seating capacity of this vehicle shall be maximum allowed and should include a minimum of two wheel chair securement stations. The vehicle proposed shall be designed for standees in excess of seated capacity.

Proposal shall include a summary of crashworthiness testing performed. Additionally, proposal shall include test reports verifying that the vehicle offered complies with all applicable regulations described in this RFP.

In submitting a proposal, an original, eight (8) hard copies and an electronic copy must be submitted. Please note after each numbered section whether your proposal Exceeds, Meets or Does Not Meet and all related comments, as per the following format:

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.1.0 GENERAL DIMENSIONS

2.1.1	Overall body length - Max.	31'
2.1.2	Overall body width – Max.	102"
2.1.3	Wheelbase	_____"
2.1.4	Seated Knee Room- Min.	26"
2.1.5	Cushion Depth - Min.	16"
2.1.6	Seat Width per Person - Min.	17"
2.1.7	Cushion Height Above Floor-Min. (Max.)	17.5" (18")

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- | | | |
|--------|--|---------------------|
| 2.1.8 | Aisle Width - Min. (In 102" wide body) | 20" |
| 2.1.9 | Headroom - Min. | 80" |
| 2.1.10 | Door Width - Min. (clear) | 34" |
| 2.1.11 | Door Height - Min | 77" |
| 2.1.12 | Overall Height @ highest point - Max | 128" |
| 2.1.13 | Floor Height @ level | 13.5" |
| 2.1.14 | Floor Height Kneeling | 10.5" |
| 2.1.15 | GVWR | _____ pounds |
| 2.1.16 | Turning Radius Curb-to-curb | _____ feet & inches |
| 2.1.17 | <p>The proposed bus shall conform in all respects, to State of Florida Motor Vehicle Laws (including, but not limited to, Chapter 316, Florida Statutes, Safety rules of the Department of Transportation, Chapter 14-90, promulgated under the Requirements of Chapter 341, Florida Statutes), the American with Disabilities Act, Title 49 Code of Federal Regulations (CFR), part 38, and Accessibility Specifications for Transportation Vehicles, Subpart B-Buses, Vans and Systems. This vehicle shall also comply with 40 CFR Parts 85 & 86, Air Pollution and Emission Standards for New Vehicles. Compliance with all Applicable Federal Motor Vehicle Safety Standards shall also be required. Proposal shall include all results of testing accomplished under the final rules issued by the Federal Transit Administration, 49 CFR Part 655, Bus Testing Program. Buses that have not met the minimum performance standards (passing score) established by the final rule effective October 31, 2016, will not be eligible for sale from this contract. The tests include the evaluation of structural integrity and durability, safety, maintainability, reliability, fuel economy, emissions, noise and performance (including brakes). Altoona Test shall be based on 7 year / 250,000 to 10 years and 350,000 miles.</p> | |
| 2.1.18 | <p>Upon award, the first bus produced shall be considered the "prototype" bus. After inspection of this vehicle, TRIPS reserves the right to clarify production build methods that are not specifically addressed in the technical specifications. Contract language will be revised to reflect these changes and subsequent manufactured vehicles shall include all changes as standard in production.</p> | |

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

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2.2.0 MATERIALS GENERAL SPECIFICATIONS

- 2.2.1 Workmanship throughout the vehicles shall conform to the highest standards of accepted commercial practice and shall result in a neat and finished appearance. The complete vehicles furnished must be of substantial and durable construction in all respects.
- 2.2.2 Welding procedures and materials shall be in accordance with standards of the American Society of Testing Materials and the American Welding Society. Welds not meeting these standards will be rejected and result in the total replacement of affected assemblies. All exterior skin side welded surfaces shall be ground smooth and free of unfriendly surfaces as a standard production process. All welding shall be performed using MIG wire welding machines utilizing shielding gas. All steel body/floor structure shall be coated with primer to prevent rust. **Proposal shall include manufacturer and description of primer.**
- 2.2.3 All parts, components and accessories shall be new. All exposed surfaces and edges shall be smooth, free from burrs and other projections and shall be neatly finished. All bare metal shall be primed. The exhaust system, drive line and subcomponents that incorporate corrosion protection shall be free from primer. The proposal shall include certification that it has the equipment necessary to accomplish this task.
- 2.2.4 Any subcomponent installed such as but not limited to wheelchair ramps, restraint systems, event data recorders, alternators and any other subcomponent installed by the bus manufacturer shall be installed per the subcomponent manufacturer's instructions. Manufacturer must certify that said components, have been installed, per the instructions provided and a copy of all installation instructions shall be provided to TRIPS. Any changes and/or updates to installation instructions shall be provided immediately to the TRIPS manager. Additionally, requests for updates will occur on a quarterly basis.
- 2.2.5 All fasteners used in the vehicles shall be backed by a Certificate of Quality by the manufacturer and adhere to all SAE and ANSI specifications. All steel bolts, nuts, screws and washers shall be zinc, cadmium or phosphate coated. The thickness and method of cadmium coating shall conform to ASTM specifications #A165, latest revision for Type TS coating.
- 2.2.6 All cap screws, nuts and bolts shall be of SAE grade 5 material unless the application requires a higher grade material.
- 2.2.7 All sheet metal screws shall comply with ASTM and SAE recommendations relative to quality and installation.
- 2.2.8 All copper tubing and fittings shall be industry standard. Fitting types, sizes, locations and tubing routing must remain uniform on all buses through the life on the contract. Long tubing nuts shall be applied where space conditions permit.

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- 2.2.9 All piping, tubing, cables and wiring shall be properly secured and bracketed. Types, sizes, locations and routing must remain uniform on all buses through the life on the contract. Air lines shall be color-coded according to industry standards. Deviation of routing due to minor manufacturing changes and/or reported defects must be approved in writing by both parties.
- 2.2.10 All assemblies and components shall be protected from vibration where applicable. The power plant and accessories shall be mechanically isolated to minimize the transmission of vibration to the frame and body structure.
- 2.2.11 All pipe fittings shall be heavy-duty and shall be designed to withstand the maximum pressure that could be generated under overload conditions within the applicable air or fluid systems.
- 2.2.12 All burrs and sharp edges shall be dressed so as to prevent injury to passengers, operators and maintenance personnel.
- 2.2.13 All clevises shall be removable and not welded to the rods. Exceptions require approval from the TRIPS.
- 2.2.14 Drain and filler plugs on rear axle, transmission and engine shall be magnetic with hexagon heads.
- 2.2.15 Air conditioning hosing shall not be spliced.
- 2.2.16 All plastics and synthetic material shall meet the requirements of FMVSS 302.
- 2.2.17 All grease and oil fittings shall be readily accessible for lubrication.
- 2.2.18 Bosses with threaded sections in which fittings or pipes are connected shall have hexagon or square shoulders which can be held with a wrench so as to eliminate damage to the unit.
- 2.2.19 Left blank intentionally
- 2.2.20 Installation of major assemblies including engine (including hybrid drive system if proposed), transmission, axles, power steering and suspension components shall be such that removal shall be easily carried out by conventional and standard shop methods.
- 2.2.21 Tee fittings shall be installed in each individual air system for testing purposes.
- 2.2.22 All components, assemblies, and sub-assemblies shall be readily accessible for service, repair, removal and replacement. Components and systems shall have the maximum access available.

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- 2.2.23 Bus maintenance and comprehensive service manuals (including R&I of major components), parts manuals, “as built” wiring schematics, “as built” ladder charts (for multiplex equipped buses), “as built” air system schematics and bus operations manuals shall be provided to the purchaser via paper, CD or web application upon delivery.
Proposal shall include a complete set of all required manuals.
- 2.2.24 All vehicles shall be weighed “as built” before release and manufacturer’s engineering department shall perform a four corner weight analysis on each vehicle that indicates the weight of the vehicle and any attachments, the maximum weight of the occupants and the weight of a full tank of fuel for GAWR and GVWR evaluation. A copy of the “as built” weight certification four corner weight analysis and an “as built” floor plan shall be with each vehicle shipped to Florida.. The “as built” weight certification shall provide the following information:
- Bus VIN
 - Manufacturer Identification
 - Body Serial Number
 - A description (type) of the bus
 - Date of manufacture
 - Maximum number of ambulatory passengers including driver
 - Maximum number of wheelchairs and remaining capacity for ambulatory seating
 - Four wheel weight distribution including ambulatory passengers and driver
 - Four wheel weight distribution of the weight of the wheelchairs
 - Four wheel weight distribution of the weight of the fuel
 - Four wheel weight distribution of the total weight of the vehicle.
 - Weight analysis must have signature and title of person submitting it.
- 2.2.25 In addition to the manufacturer’s weight calculations and documents the TRIPS will require that the manufacturer’s complete and submit weight calculations on TRIPS Form #TRIPS-17-MD. TRIPS will perform four wheel weight analysis at the Springhill Inspection, Testing & Research Facility in Tallahassee.
- 2.2.26 The total loaded weight at each wheel must not exceed 50% of the GAWR for that axle and GVWR must not be exceeded. Any bus that exceeds either condition will be rejected.
- 2.2.27 Manufacturer shall supply a copy of their detailed quality control program. The program shall address how quality assurance is provided through each phase of construction. Manufacturer will be required to submit weekly reports tracking the progress of vehicles through the procurement/production process from receipt of order through delivery and acceptance of the vehicle. This report shall be coordinated with the local dealer’s report and must be submitted on a timely basis.

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2.2.28 The Dealer shall submit weekly reports which track the progress of vehicles through the procurement/production process from receipt of order through delivery and acceptance of the vehicle by TRIPS.

2.2.29 Dealer shall be responsible for delivering vehicles that are properly serviced, clean and in first class operating condition. Pre-delivery service, at a minimum, shall include the following:

1. Complete lubrication of chassis, engine and operating mechanisms with manufacturer's recommended grades of lubricants.
2. All fluid levels filled to proper capacities.
3. Adjustment of drive-train for expected operating condition.
4. Inflate tires to proper pressure.
5. Check to insure proper operation of all accessories, gauges, lights and mechanical and hydraulic features.
6. Cleaning of vehicle and removal of all unnecessary stickers.
7. Full front-end alignment conducted by a professional with the appropriate equipment and experience to perform proper alignment. All wheels including spare tire shall be balanced. This alignment is to be performed only after vehicle is built complete and is at full curb weight. Vehicle shall be delivered with fully adjustable front end components installed to allow alignment in the field without replacing any components.
8. Focusing of headlights utilizing a machine certified and designed for this purpose.
9. Correct and repair all deficiencies noted in the Post-Delivery Inspection of each vehicle.

2.2.30 Manufacturer certifies that it:

1. Has in operation or has the capacity to have in operation a manufacturing plant.
2. Has adequate engineering personnel, or has the capability to have such personnel to satisfy any engineering or service problem that may arise during the warranty period. Bidder must supply in proposal the number of engineers along with their designated areas of responsibilities.
3. Has the necessary facilities and financial resources, or has the capability to obtain such facilities and resources, to complete the contract in a satisfactory manner within the required time.

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On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.3.0 ENGINE

- 2.3.1 All engines proposed must be in compliance with current EPA emission standards.
- 2.3.2 The rear engine and transmission shall be cradle mounted to facilitate maintenance service to power train. Proposal shall include a detailed description of engine and transmission mount design and time required to replace major components by skilled mechanic. Each proposer's design will be evaluated by the Proposal Committee.
- 2.3.3 Engine shall be manufacturer's standard diesel engine for this size bus considering components and accessories proposed. The specified engine must give satisfactory performance over terrain encountered in Florida with maximum passenger load. Manufacturer shall propose engine horsepower and torque.
- 2.3.4 An optional alternative fueled engine, including a hybrid-electric propulsion system shall be offered for this size bus considering components and accessories proposed. The specified engine must give satisfactory performance over terrain encountered in Florida with maximum passenger load. Manufacturer shall propose engine horsepower and torque. TRIPS reserves the right to accept any other alternative fuel engines when offered by the manufacturer during the term of this contract.
- 2.3.4.a Proposals for an all-electric propulsion system (including supporting equipment such as: chargers, tools, etc.) will be considered. The specified all-electric system must give satisfactory performance over terrain encountered in Florida with maximum passenger load and must meet applicable industry standards.
- 2.3.5 A liquid tight control/junction box containing an engine start/kill switch, SAE J1587 and J1939 ports and an hour meter shall be located in the rear engine compartment within easy view and reach of maintenance staff.
- 2.3.6 All fluid fill locations shall be properly labeled and easily accessible for funnels, pour spouts, automated equipment and feature spring loaded caps and function labeling.
- 2.3.7 All metal lines shall be pre-formed to the extent practical prior to installation, using a fixture that prevents local strain or tube flattening and shall not be bent more than once at the same point. Rigid lines shall be supported at no more than 5-foot intervals, and shall make contact with only their support bracket. Nylon lines may be grouped and supported at 2-foot intervals or less. The air compressor discharge line shall be designed to eliminate stress between the compressor and stationary terminal point and shall meet compressor manufacturer and system requirements. Such lines shall be individually supported and as short as practical and shall not touch one another or any other part of the vehicle except their supporting clamps and/or grommets. All Teflon

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hoses with braided stainless steel jackets shall be further protected by flex guard loom. Insulated clamps or grommets shall protect all lines where they pass through structural members. All compressed air lines shall slope downward toward a reservoir and routed to prevent water traps.

- 2.3.8 The fuel filtration system shall meet OEM engine manufacturer's guidelines. The flexible fuel lines within the engine compartment shall be high temperature Teflon core with a stainless steel braided jacket and sleeved with flex guard loom. The supply and return fuel lines outside the engine compartment may be color-coded nylon approved for diesel fuel usage.
- 2.3.9 Engine-driven accessories shall be unit mounted for quick removal and repair. Accessory drive systems shall operate without adjustment for not less than 50,000 miles. These accessories shall be driven at speeds sufficient to assure adequate system performance during extended periods of idle operation and at low route speeds. In order to keep drive belts to a minimum number the air compressor and the hydraulic pump shall be gear driven. The alternator and water pump shall be driven with a single serpentine belt. The air conditioning compressor shall be driven by a separate belt drive. All belts shall be equipped with an automatic belt tension device. Serpentine belts will be considered for all applications.
- 2.3.10 Left blank intentionally.
- 2.3.11 The engine control system shall protect the engine against progressive damage. The system shall monitor conditions critical for safe operation and automatically de-rate power and/or speed and initiate engine shutdown as needed. The on-board diagnostic system as described shall trigger a visual and audible alarm to the operator when the engine control unit detects a malfunction and the engine protection system is activated. Automatic shutdown shall only occur when parameters established for the functions below are exceeded:
- > Engine Coolant Temperature
 - > Engine Oil Pressure
- 2.3.12 A control shall be available to the operator, to allow temporary override (30-45 seconds) of the engine protection/shutdown system if engine power is required to move the bus in emergency conditions.
- 2.3.13 An electronic throttle control system shall be used for accelerator control. The accelerator system shall also be interlocked with doors opened by means of the engine electronics holding the accelerator control to the idle position.
Proposal shall include information on system offered.
- 2.3.14 The engine shall be equipped with an operator-controlled fast idle device. The fast idle control shall be mounted on the dash or side console and shall activate only with the transmission in neutral and the parking brake applied. If the operator shifts to a forward or reverse gear without returning the fast idle to the off position the system shall

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automatically return the throttle to the idle position and shall automatically return it to fast idle when the next time the operator selects the neutral position.

On above specifications, this Proposal (circle one below)

EXCEEDS

MEETS

DOES NOT MEET

COMMENT:

2.4.0 COOLING SYSTEM

- 2.4.1 The cooling system shall be of sufficient size to maintain all engine and transmission fluids, including retarder and engine intake air at safe, continuous operating temperatures during the most severe operations possible for Florida's environment and in accordance with engine and transmission manufacturers' cooling system requirements. Proposer may provide an electric fan option.
- 2.4.2 A sight glass to determine satisfactory engine coolant level shall be provided and shall be accessible by opening one of the engine compartment's access doors. A valve to safely release pressure or vacuum in the cooling system shall be provided with both it and the water filler no more than 60 inches above the ground and both shall be accessible through the same access door.
- 2.4.3 Coolant provided shall meet OEM engine requirements.
- 2.4.4 All coolant hoses shall be Silicone hose with constant torque clamps. All heater hose shall be routed below floor level to ensure passenger safety. Auxiliary heater coolant fluid shut-off valves shall be included as standard equipment.
- 2.4.5 The charge air cooling system also referred to as after-coolers or inter-coolers shall provide maximum air intake temperature reduction with minimal pressure loss. The charge air radiator shall be sized and positioned to meet engine manufacturer's requirements.
- 2.4.6 The transmission shall be cooled by a separate heat exchanger sized to maintain operating fluid within the transmission manufacturer's recommended parameters of flow, pressure and temperature.

On above specifications, this Proposal (circle one below)

EXCEEDS

MEETS

DOES NOT MEET

COMMENT:

2.5.0 ENGINE AIR CLEANER

- 2.5.1 Engine air filter shall be dry filter type. The air cleaner element shall be capable of being changed without the use of tools. The system will utilize a self-aligning and self-sealing technology to insure proper installation and shall have a restriction gauge located in an

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easily visible location. The location of the air intake system shall be designed to minimize the entry of dust and debris and maximize the life of the air filter. The engine air duct shall be designed to minimize the entry of water into the air intake system. Drainage provisions shall be included to allow any water/moisture to drain prior to entry into air filter.

2.6.0 ENGINE OIL SYSTEM

2.6.1 Engine oil system shall meet or exceed all OEM engine manufacturer's requirements.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.7.0 EXHAUST SYSTEM

2.7.1 The exhaust system from the turbo charger through the muffler/diesel oxidation catalyst and a catalyzed soot filter shall be stainless steel. From the muffler to the roof exhaust tip, the exhaust pipe shall be aluminized steel. The exhaust tip shall be chrome and curved to the rear of the bus roof and designed to prevent rain, snow or water generated from high-pressure washing systems from entering into the exhaust pipe and causing damage to the system. Exhaust gases and waste heat shall be discharged from the roadside rear corner of the roof. The exhaust pipe shall be of sufficient height to prevent exhaust gases and waste heat from discoloring or causing heat deformation to the bus roof. The entire exhaust system shall be adequately shielded to prevent heat damage to any bus component. The exhaust pipe and muffler/diesel oxidation catalyst and a catalyzed soot filter will be encapsulated with an exhaust blanket.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.8.0 TRANSMISSION

2.8.1 The transmission shall be multiple speed, automatic shift with torque converter, retarder and electronic controls and must give satisfactory performance with maximum passenger load on terrain encountered in Florida. Gross input power, gross input torque and rated input speed shall be compatible with the engine. A skilled mechanic, with optional assistance, shall be able to remove and replace the transmission assembly for service in less than 20 total combined man-hours. The transmission shall be designed to operate for not less than 300,000 miles on the design operating profile without replacement or major service.

Proposal shall include information on transmission offered.

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On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.9.0 RETARDER

2.9.1 An electronic retarder shall be provided that meets the requirements of a fully loaded coach.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.10.0 DRIVE SHAFT

2.10.1 The drive shaft rated capacity shall be capable of transmitting the torque multiplication of the power units to the drive wheels.

2.10.2 Protective metal guards (as needed) for the shaft shall be provided within 3" of the shaft to prevent a broken shaft from touching the ground, contacting any brake line, or whipping through the floor. The drive shaft guards shall conform to 49 CFR.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.11.0 FRONT AXLE

2.11.1 Front Axle shall be manufacturer's standard. Axle must be load rated for the GVWR of the size bus involved. This axle shall provide maximum maneuverability.

Proposal shall include manufacturer and GAWR for bus type submitted.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.12.0 REAR AXLE

2.12.1 Rear Axle shall be manufacturer's standard. Axle must be load rated for the GVWR of the size bus involved. Transfer of gear noise to the bus interior shall be minimized. The rear axle shall be designed to operate for not less than 300,000 miles on the design operating profile without major failure.

Proposal shall include manufacturer and GAWR for bus type submitted.

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On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.13.0 BRAKES

- 2.13.1 Braking systems shall comply with all Federal Motor Vehicle Safety Standards 121 or 105 as applicable.
- 2.13.2 Brakes should be capable of stopping a fully loaded or unloaded vehicle according to FMVSS standards.
- 2.13.3 A drum or disc microprocessor controlled Anti-lock Braking System (ABS) with Automatic Traction Control shall be provided. The microprocessor for the ABS system shall be protected yet in an accessible location to allow for ease of service. Actuation of ABS shall override the operation of the brake retarder.
- 2.13.4 The parking/emergency brake shall be capable of holding the bus according to FMVSS standards.
Proposal shall include description/information on parking brake systems.
- 2.13.5 The controls for a wheelchair ramp shall be interlocked with the vehicles parking brake and transmission to ensure the vehicle cannot be moved when the ramp is not stowed and so the ramp cannot be deployed unless the interlocks are engaged. The interlock must meet ADA Title 49 Lift Interlock requirements and be FMVSS 403 and 404 compliant.
- 2.13.6 The rear brake system shall be interlocked with the passenger door, front and rear, if rear door offered. The system shall use a zero motion detector connected to the door(s), which will not allow the door(s) to open until the coach is brought to a complete stop. When the door(s) is open, the rear brakes shall apply and stay applied until the door(s) is closed.
Proposal shall include a description of the braking system.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.14.0 STEERING

- 2.14.1 All friction points on the front axle shall be equipped with replaceable bushings or inserts and lubrication fittings easily accessible from a pit or hoist.

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- 2.14.2 Fatigue life of all steering components shall exceed 1,000,000 miles. No element of the steering system shall sustain a Class I failure when one of the tires hits a curb or strikes a severe road hazard. Damages to steering as a result of striking road hazards shall not result in steering failures.
- 2.14.3 Outside body corner turning radius including the bumper for a standard configuration bus shall not exceed the length of the bus.
- 2.14.4 Power steering shall be provided. The steering gear shall be an integral type with flexible lines. With the bus on dry, level, commercial asphalt pavement, and tires inflated to recommended pressure and the front wheels positioned straight ahead, the torque required to turn the steering wheel 10 degrees shall be no less than 5 foot pounds and no more than 10 foot pounds. Steering torque may increase to 70 foot pounds when the wheels are approaching the steering stops, as the relief valve activates. Steering effort shall be measured with the bus at GVWR, stopped with the brakes released and the engine at normal idling speed.. Power steering failure shall not result in loss of steering control. With the bus in operation the steering effort shall not exceed 55 pounds at the steering wheel rim. Free play in the steering system shall not increase as a result of power steering failure. Gearing shall require no more than seven turns of the steering wheel lock-to-lock. Caster angle shall be selected to provide a tendency for the return of the front wheels to the straight position with minimal assistance from the driver.
- 2.14.5 The steering wheel diameter shall be no less than 20". The rim diameter shall be 7/8" to 1 1/4" and shaped for a firm comfortable grip for long periods of time. The steering wheel shall be removable with a standard or universal puller. Steering wheel spokes and wheel thickness should be such as to insure that visibility is within the range of a 95-percentile range as described in SAE 1050a, section 4.2.2 and 4.2.3. Placement of steering column must be as far forward as possible, but either in-line or behind the instrument cluster.
- 2.14.6 The steering wheel shall have a rearward tilt adjustment range of no less than 40 degrees as measured from the horizontal and upright position. The steering wheel shall also include a telescoping capability.

On above specifications, this Proposal (circle one below)

EXCEEDS

MEETS

DOES NOT MEET

COMMENT:

2.15.0 TIRES AND WHEELS

- 2.15.1 Buses shall be equipped with single front and dual rear wheels. Wheels shall be hub-piloted steel with a white powder coat finish. ALCOA Aluminum wheels with a machine finished on both sides will be offered as an option and be priced separately. Option shall include all six wheels.

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- 2.15.2 All wheels shall be interchangeable and shall be removable without a puller. Wheels shall be compatible with tires in size and load-carrying capacity; minimum 19.5" x 7.5". Front wheels and tires shall be balanced as an assembly per SAE J1986.
Proposal shall include size being offered.
- 2.15.3 Tires shall be suitable for the conditions of transit service and sustained operation at the maximum speed capability of the bus. Load on any tire at GVWR shall not exceed the tire supplier's rating.
Proposal shall include size being offered.
- 2.15.4 All tires front and rear shall be equipped with a tire pressure monitoring system to warn the driver if a specific tire has low air pressure.
Proposal shall include information on system offered.
- 2.15.5 Proposer shall provide a hub-o-meter as a separately priced option. This hub- o-meter must be calibrated for the tire size and mounted on the right rear (curb-side) wheel hub.
Proposal shall include description of hub-o-meter offered.
- 2.15.6 A matching mounted and balanced spare tire and wheel assembly shall be provided and shipped loose with each vehicle. Spare tire shall be secured inside the bus to protect floor covering and other components.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.16.0 ELECTRICAL SYSTEM

- 2.16.1 A Multiplex Electrical System meeting applicable sections of CFR 49 respectively shall be proposed. **Proposal shall include a detailed description of the multiplex system.**
- 2.16.2 The system shall supply 12 and/or 24 volts of direct current (DC) power by a minimum of two batteries based on **exhibit 6, Charging System Performance Test**. Design shall minimize hazards to service personnel. The alternator shall be rated sufficiently higher than the total possible electrical load to maintain the charge on the batteries at all operating conditions including engine idle. All branch circuits, except battery-to-starting motor and battery-to-generator/alternator circuits, shall be protected by current-limiting devices such as circuit breakers, fuses or solid-state devices sized to the requirements of the circuit. Electronic circuit protection for the cranking motor shall be provided to prevent engaging of the motor for more than 30 seconds at a time to prevent overheating. The circuit breakers or fuses shall be easily accessible for authorized personnel. Fuses shall be used only where it can be demonstrated that circuit breakers are not practicable. This applies to manufacturers and component suppliers. Fuse holders shall be constructed to be rugged and waterproof. All manual reset circuit breakers critical to the operation of the bus shall be mounted in a location convenient to technicians with visible indication of

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open circuits. Any additional wiring or circuit protection devices apart from the standard systems shall be included in the final electrical system drawings. Circuit breakers and fuses shall be sized to a minimum of 15 percent larger than the total circuit load. The current rating for the wire used for each circuit must exceed the size of the circuit protection being used. All wiring routing and securement shall eliminate chafing and pinch points.

- 2.16.3 Redundant grounds shall be used for all electrical equipment except where it can be demonstrated that redundant grounds are not practical. Grounds shall not be carried through hinges, bolted joints (except those specifically designed as electrical connectors) or power plant mountings. Electrical equipment shall not be located in an environment that will reduce the performance or shorten the life of the component or system. To the extent practical, electrical wiring and equipment shall not be located under the bus. When located under the bus, wiring and electrical equipment shall be protected from water, heat, corrosion and damage.
- 2.16.4 The design of electrical systems shall be modular so that each major component, apparatus, panel or wiring bundle is easily separable with standard hand tools or by means of connectors. Each module except the main body wiring harness shall be removable and replaceable in less than 1 hour by a skilled mechanic. Power plant wiring shall be an independent wiring harness. Replacement of the engine compartment wiring harness(s) shall not require pulling wires through any bulkhead or removing any terminals from the wires. All wiring routing and securement shall eliminate chafing and pinch points.
- 2.16.5 All wiring between electrical components and terminations shall have double electrical insulation, be waterproof and conform to specification requirements of SAE Recommended Practice J1127 and J1128. All wiring routing and securement shall eliminate chafing and pinch points. Positive and negative battery cables shall remain separated, be flexible and shall be sufficiently long to reach the batteries with the tray in the extended position without stretching or pulling on any connection and shall not lie directly on top of the batteries. Except as interrupted by the master battery disconnect switch, battery and starter wiring shall be continuous cables, grouped, numbered and/or color-coded with connections secured by bolted terminals and shall conform to specification requirements of SAE Standard J1127-Type SGT or SGX and SAE Recommended Practice J541. Installation shall permit ease of replacement. All wiring harnesses over 5' in length and containing at least five wires shall include 5% excess for spares that are the same size, exclusive of battery cables and modular harnesses, as the largest wire in the harness.
- 2.16.6 Wiring harnesses shall not contain wires of different voltages unless all wires within the harness are sized to carry the current and insulated for the highest voltage wire in the harness. Double insulation shall be maintained and secured as close to the terminals as possible. The requirement for double insulation shall be met by sheathing all wires and harnesses with non-conductive, rigid or flexible conduit. Strain-relief fittings shall be provided at points where wiring enters all electrical components. Grommets of flexible and non-conductive material shall be provided at points where wiring penetrates metal structures outside of electrical enclosures. Wiring supports shall be protective and non-

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conductive at areas of wire contact and shall not be damaged by heat, water, solvents or chafing. Wiring length shall allow end terminals to be replaced twice without pulling, stretching or replacing the wire. Large terminals such as battery cable ends shall be soldered at the connection and protected with heat shrink. Other terminals shall be crimped to the wiring and may be soldered if the wire is not stiffened outside of the crimp area. Residual flux material must be removed from all soldered connections. Terminals shall be corrosion-resistant and full ring type or interlocking lugs with insulating ferrules. All wiring shall be numbered and/or color-coded identically between all buses and coding used shall be identified on all schematics.

- 2.16.7 All relays, controllers, flashers, circuit breakers and other electrical components shall be grouped according to voltage and mounted in easily accessible junction boxes. The boxes shall be sealed to prevent moisture from normal sources including engine compartment cleaning from reaching the electrical components and shall prevent fire that may occur inside the box from propagating outside the box. The components and circuits in each box shall be identified and their location permanently recorded on a schematic drawing attached to or printed on the inside of the box cover or door. The drawing shall be protected from oil, grease, fuel and abrasion. The front junction box shall be completely serviceable from the vestibule. A rear start and run control box shall be mounted in an accessible location in the engine compartment.
- 2.16.8 The manufacturer shall provide training on programming of components and report formatting and usage of the multiplex system.
- 2.16.9 All electrical components including switches, relays, flashers and circuit breakers shall be heavy-duty designs with either a successful history of application to heavy-duty vehicles, or design specifications for an equivalent environment. All relays, controllers, flashers, circuit breakers and other electrical components exposed to the outside environment shall be corrosion resistant and sealed.
- 2.16.10 All electric motors shall be heavy-duty permanent magnet motors and have a continuous duty rating of no less than 40,000 hours (except cranking motors). All electric motors shall be easily accessible for servicing.
- 2.16.11 Charging system must comply with exhibit 6, Charging System Performance Test.
- 2.16.12 The battery compartment shall prevent accumulation of contaminants and debris on top of the batteries and shall be vented and self-draining. It shall be accessible only from the outside of the vehicle. The battery compartment and the components within shall be protected from damage or corrosion from the electrolyte. The batteries shall be securely mounted on a stainless steel or equivalent tray that can accommodate the size and weight of the batteries. Each battery cell shall be easily accessible for service. The battery hold-down bracket shall be constructed of a rigid, **nonconductive** and corrosion-resistant material. The battery tray, if a slide out type, shall pull out easily and properly support the batteries while they are being serviced. A locking device shall retain the slide out battery tray to the stowed position. The inside surface of the battery compartment's access door shall be electrically insulated, as required, to prevent the battery terminals

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from shorting on the door if the door is damaged in an accident or if a battery comes loose. The battery compartment temperature shall not exceed battery manufacturers' specifications. The vehicle shall be equipped with a master disconnect switch in the battery compartment near the batteries for complete disconnecting from all bus electrical systems except for safety devices such as fire suppression system and other systems as specified. The battery master disconnect access door shall be conveniently located on the battery compartment door to accommodate operation of the master disconnect switch. This access door shall not require any special locking devices to gain access to the switch and shall be accessible without removing or opening the battery compartment door. The battery master disconnect access door shall contain a decal not less than 3.5 x 5 inches in size. If batteries are not located in the engine compartment, the construction shall preclude or retard propagation of a battery compartment fire into the passenger compartment. No sparking devices should be located within the battery compartment.

- 2.16.13 All electrical compartments exposed to the outside environment shall be corrosion resistant and sealed. The components and circuits in each electrical compartment shall be identified and their location permanently recorded on a drawing attached to the inside of the access panel or door. The drawing shall be protected from oil, grease, fuel and abrasion.
- 2.16.14 The bus shall be equipped with a built-in diagnostic system to monitor critical systems and/or components. This diagnostic system shall have visual and audible indicators. The diagnostic indicator light panel shall be located in clear sight of the operator. The intensity of indicator lamps shall permit easy determination of on/off status in bright sunlight but shall not cause a distraction or visibility problem at night. All indicators shall have a method of momentarily testing the operation of the lamp. Whenever possible, sensors shall be of the closed circuit type so that failure of the circuit and/or sensor shall activate the malfunction indicator. The audible alarm shall be tamper resistant and shall have an output level between 80 and 83 dBA when measured at the location of the operator's ear. Malfunction and other indicators listed in the following table shall be supplied on all buses.

STANDARD ONBOARD DIAGONSTIC INDICATORS:

<i>VISIBLE INDICATOR</i>	<i>GAUGE</i>	<i>AUDIBLE ALARM</i>	<i>FUNCTION</i>
Low oil	YES	YES	Low engine oil pressure
Hot engine	YES	YES	Engine coolant temperature high
Low air pressure	YES	YES	Low air pressure system in primary or secondary reservoirs
Low engine coolant	NO	YES	Radiator water level low
Alternator(s) stop	NO	YES	Alternator(s) not charging
Kneel activated	NO	YES	Kneeling system activated
A/C stopped	NO	YES	Compressor off at high/low switch

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Fuel capacity YES YES Low fuel warning

- 2.16.15 Space shall be provided on the panel for future installation of not less than 3 additional indicators as the capability of on board diagnostic systems improves.
- 2.16.16 Proposal shall include copies of all electrical system design calculations.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.17.0 LIGHTING AND OPERATOR CONTROLS

- 2.17.1 All exterior lights shall be LED type and be designed to prevent entry and accumulation of moisture or dust, and each light shall be replaceable in less than 5 minutes by a skilled mechanic helper. Lights mounted on the engine compartment doors shall be protected from the impact shock of door opening and closing. Lights, lenses and fixtures shall be interchangeable to the extent practical. Two hazard lights at the rear of the bus shall be visible from behind when the engine service doors are opened. Light lenses shall be designed and located to prevent damage when running the vehicle through an automatic bus washer. Lights located on the roof and sides of the bus shall have protective shields or be of the flush mount type to protect the lens against minor impacts.
- 2.17.2 Lighting at the front passenger door shall comply with ADA requirements and shall activate only when the doors open. These lights shall illuminate the street surface to a level of no less than 1 foot-candle for a distance of 3 feet outward from the outboard edge of the door threshold equipped with the loading system. The lights shall be shielded to protect passengers' eyes from glare.
- 2.17.3 Front headlights are to be 12 volt sealed beam type, four (4) in total and located horizontally. The outboard headlight shall be dual type with low beam and high beam capacity. The adjacent or inboard headlight shall be capable of high beam only. High beam, low beam functions shall be controlled by a sealed and moisture protected driver's foot switch. Sealed beam units shall be of latest type and low beam rating of 320-hour rack life, at 12 volts. Headlights shall be wired to operate on reduced voltage in the "Run" position.
- 2.17.4 Directional signal lights shall be 12 or 24 volt and provided on front, rear, and both sides of the bus. All directional lights shall be LED. Front lights to be amber reflective lenses, and rear lenses to be amber also.
- 2.17.5 Separate stop and tail lights will be 7 inch LED type mounted on outside corner of body to be visible even when engine compartment door is open, and to maximize access when door is open. The top lights on each side shall be one red stop/tail light and the bottom

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on each side shall be one amber turn. One 4 inch LED back up light shall be mounted between the stop and turn lights on each side.

2.17.6 LED type marker lights shall be provided:

- Two amber near front side roof line
- Two amber near center side roof line
- Two red near rear side roof line

2.17.7 LED type individual I.D. lights to be mounted:

- Three amber at front center roof crown
- Three red at rear center roof crown

2.17.8 One amber LED light to be mounted mid ship on both sides and shall operate in conjunction with directional signals when activated. These lights shall be visible 180 degrees and in protective fixtures.

2.17.9 Reflectors LED lighting shall be size, type, color and location required to comply with the requirements of both FMVSS - 108 and the regulations established by the State of Florida.

2.17.10 A switch shall be provided for operator control that will enable all directional light to flash in unison to indicate a hazard condition.

2.17.11 A 2-candlepower LED light shall be provided to illuminate the rear license plate.

2.17.12 Lights shall be provided in the engine compartment and all other compartments where service may be required to generally illuminate the area for service or repairs. A sealed light assembly will be provided in the engine compartment, The light will be on a reel with 18' of cord to allow the light to be placed where needed and has a magnetic back and shall be controlled by a switch located on the light housing near the rear start controls in the engine compartment. Necessary lights located in other service compartments shall be provided with switches on the light fixture or convenient to the light.

2.17.13 Interior lighting shall be LED type and designed to minimize reflections on the interior glass surfaces. The level of illumination and control shall be U.S. standard. Lighting fixtures shall be designed to present a smooth interface to the other components of the bus interior. Entire interior shall be finished in an aesthetically pleasing manner with no exposed open tracks or access areas.

2.17.14 A switch, independent of the "RUN" switch shall be provided. When this switch is in "ON" position and the door is open, all LED lighting shall turn on. When door is closed the two forward most LED light fixtures on the curbside and the forward-most light fixtures on the roadside shall be extinguished. When the master switch is in the "RUN" or "NITE/RUN" mode, these same light modules on each side of the coach shall slowly fade to darkness

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when the front door is in the closed position, and light output shall gradually illuminate to reach maximum light level when the door is opened. Solid state LED lighting shall have unlimited on-off cycles. When switch is in "OFF" position all lights are off, when in "Normal" position, with door closed, all lights are on.

- 2.17.15 The operator's area shall have a swivel-mounted ceiling light to provide general illumination and it shall be capable of illuminating the area between the lower half of the steering wheel nearest the operator and the operators seat to a level of 10 to 15 foot-candles. This light shall be controlled by the operator through a switch on the front or side console.
- 2.17.16 All switches and controls necessary for the operation of the bus shall be conveniently located in the operator's area and shall provide for ease of operation. Switches and controls shall be essentially within the hand reach envelope described in SAE Recommended Practice, J287, and Driver Hand Control Reach. Controls shall be located so that boarding passengers may not easily tamper with control settings. All switches are illuminated for night vision. The four-way light hazard switch shall be a toggle switch extended in length and located next to the passenger door operator switch, convenient in location and touch to the driver's left hand.
- 2.17.17 Accelerator and brake pedals shall be designed for ankle motion. Foot surfaces of the pedals shall be faced with wear-resistant, nonskid, replaceable material. Driver's foot operated switches shall be protected and sealed from moisture and dirt. The installation of all switches and other controls shall be environmentally sealed. A heel wear plate shall be mounted at the base of the throttle and brake pedals. Controls for engine operation shall be closely grouped within the operator's compartment. These controls shall include separate master run switch and start switch or button. The run switch shall be a four-position rotary switch with the following functions:
- OFF:** All electrical systems off except power available for the passenger interior lighting, stoplights, turn lights, hazard lights, silent alarm, horn, farebox, transfer machine, two-radio and other ITS accessories.
 - CL/ID:** All electrical systems off except those listed in engine stop and parking lights.
 - RUN:** All electrical systems and engine on except headlights, parking lights and marker and taillights.
 - NITE/RUN** - All electrical systems and engine on.
- 2.17.18 Adjustable brake and accelerator pedal shall be offered as an option and priced separately.
- 2.17.19 The door control, kneel control, windshield wiper/washer controls and run switch shall be identifiable by shape, touch and permanent markings. Doors shall be operated by a

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single control conveniently located and operable in a horizontal plane by the operator's left hand. The setting of this control shall be easily determined by position and touch.

- 2.17.20 The wiring at these controls shall be serviceable from the vestibule or the operator's seat. Switches, controls and instruments shall be dust- and water-resistant.
- 2.17.21 The speedometer, air pressure gauge(s) and certain indicator lights shall be located on the front cowl immediately ahead of the steering wheel. Illumination of the instruments shall be simultaneous with the marker lights. Glare or reflection in the windshield, side window or front door windows from the instruments, indicators or other controls shall be minimized. Instruments and indicators shall be easily readable in direct sunlight.
- 2.17.22 The operator's area shall be of modern ergonomic design and provide for ease of operation, comfort and efficiency, and minimize glare to the extent possible. All control functions shall be within easy reach of the 95th percentile operator when steering and seat positions are optimally adjusted.
- 2.17.23 Indicator lights and/or switches immediately in front of the operator or in the side console shall include:

INDICATOR/WARNING LIGHTS:

- High beam headlight
- Right turn
- Left turn
- Hazard warning (may be common with turn indicators)
- Parking brake applied
- Service brake applied (may be common with parking brake indicator)

SWITCHES:

- Master run switch
- Start switch or button
- Kneel switch
- Turn signal switches
- Interior lighting switch
- Instrument lighting intensity control
- Passenger chime switch
- Driver's area light switch
- Hazard warning lights switch
- Horn button, center of steering column - debris deflecting
- Headlight dimmer switch
- Fast idle switch
- Master door switch

CONTROLS:

- Accelerator pedal
- Brake pedal

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- Door control
- Windshield wiper control
- Windshield washer control
- Interior climate control
- Driver's heater control
- Defroster control
- Parking/emergency brake control (indicates brake application)
- Transmission control
- Front door dump valve
- Public address system controls
- Destination sign controls

- 2.17.24 The instrument panel shall include an electronic speedometer indicating no more than 80 mph and calibrated in maximum increments of 5 mph. The instrument panel shall be mounted forward of the driver and in full view while in the seated position. The instruments listed in Exhibit 2 shall be considered as the minimum required.
- 2.17.25 The instrument panel shall also include air brake reservoir pressure gauge(s) with indicators for primary and secondary air tanks. A voltmeter(s) to indicate the operating voltage across the bus batteries shall be included. The instrument panel and wiring shall be easily accessible for service from the operator's seat or top of the panel. Wiring shall have sufficient length and be routed to permit service without stretching or chafing the wires.
- 2.17.26 A lockable "driver's box" shall be installed in a location convenient to the driver. The box shall be approximately six (6) inches wide, fourteen inches in height and sixteen inches in depth. The box shall be constructed from minimum .080 steel and primed and painted to match adjacent interior.
- 2.17.27 Visible and audible warning that conforms to SAE Standard J593 and 994 shall alert traffic and pedestrians of reverse operation
- 2.17.28 One each high and low tone horns shall be installed and positioned to minimize wheel wash spray.
- 2.17.29 Proposers shall separately price an optional fare box including pre-wiring, mounting structure and ceiling light in accordance with the following technical specification.
- 2.17.30 If selected, a fare box shall be installed in a space as far forward as practical and/or structural provisions shall be made for installation of a fare box (if not installed by component manufacturer). Location of this fare collection device shall not restrict traffic in the vestibule and shall allow the driver to easily reach the coin levers and view the change platform. The fare box shall not restrict access to the driver's area and shall not restrict operation of driver controls. Fare box location shall permit accessibility to the vault for easy manual removal or attachment of suction devices. Meters and counters on the fare box shall be readable on a daily basis. A LED type light fixture must be mounted to illuminate the fare box when applicable. This light is to be activated in conjunction with

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the front passenger lights/door/lights operation. The floor under the fare box shall be reinforced by eighteen gauge steel plate, to provide a sturdy mounting platform and to prevent shaking of the fare box. Manufacturer shall furnish and install electrical wiring for the fare box. The fare box electrical system shall be a 12 volt DC with a ground wire running from the main electrical panel. Necessary holes for the mounting of the fare box shall be drilled by manufacturer. **Proposal shall include name and information on fair box equipment offered.**

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.18.0 LEFT BLANK INTENTIONALLY

2.19.0 MIRRORS

- 2.19.1 The bus shall be equipped with remote controlled outside mirrors with heated glass and turn signal on each side of the bus. Mirrors shall permit the operator to view the highway along both sides of the bus including the rear wheels. Each mirror shall have a minimum 85 square inches of flat glass and 45 square inches of convex glass. The curbside mirror shall be mounted as required by FAC 14-90. Mirrors shall be mounted to minimize vibration, but to yield without damage to bus or its structure if mirror contacts an object. **Proposal shall include information on mirrors offered.**
- 2.19.2 Interior mirrors shall be provided for the operator to observe passengers throughout the bus without leaving driver's seat and without shoulder movement. With a full standee load the driver shall be able to observe passengers in the front entrance and rear exit areas anywhere in the aisle and in the rear seats. Inside mirrors shall not be in the line of sight to the right outside mirror. A center-mounted 4 inch by 16 inch mirror shall be installed above the windshield.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.20.0 DESTINATION SIGNS - OPTIONAL

- 2.20.1 A manually operated destination sign for limited readings shall be offered as an option. Front destination sign shall be a single roller curtain type installed above the windshield with a glass exposure of 8 inches x 60 inches. The side destination sign for a front door only bus will be a single roller type installed in the upper curbside window immediately behind the entrance door with a glass exposure of 5-3/4" x 28". The side destination sign for a front and rear door bus shall be installed in the upper curbside window immediately in front of the rear door. Destination signs will be electrically operated, LED, fluorescent or incandescent backlit display, single curtain, .003 mil. thick Mylar anti-glare material,

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with provisions for a minimum of 25 readings and a maximum of 175 readings of 5 inch high Helvetica medium font letters for the front sign and Helvetica medium font letters 4" high characters for the side sign. Control switch is to be located on the left hand of the driver's console. Curtain destination signs will conform to the Americans With Disabilities Act Part 38. Characters on these signs will have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10. Generally, the space between letters will be 1/16 the height of upper case letters and will contrast with the background using either yellow letters on green or black background; or white letters on red, green, blue or black background per the purchaser's choice, for route and destination identification. The following readings will be standard on all destination signs ordered under this contract, individual sign reading colors noted:

Bus Garage (yellow letters on black background)
Not In Service (yellow letters on black background)
Special Service (yellow letters on black background)
Shuttle Service (yellow letters on black background)
Downtown (yellow letters on black background)
BLANK SIGN (all black background, no lettering)
Emergency Service (white letters on red background)
Emergency Shelter (white letters on red background)
Evacuation Route (white letters on red background)
Express (white letters on red background)

- 2.20.2 An option for an Electronic Destination system, full front and side signs; and a separate rear number only sign shall be provided. The system shall be compatible with Windows 2000 or Windows XP software, using IBM 486 or higher PC/AT capacity, PCMCIA memory download technology or later versions. Electronic destination signs will conform to the Americans With Disabilities Act Part 38. The electronic destination sign shall utilize Helvetica yellow medium lettering on black background. The readings listed in 2.20.1 above, shall also be standard in all electronic signs ordered under this contract.
Proposal shall include information on system offered.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.21.0 BLOCK/RUN NUMBER BOX - OPTIONAL

- 2.21.1 An dash mounted Block/Run Number Box shall also be provided as an option. White, red or yellow LED letters/numbers on a black background, displayed in a plastic or metal frame, to operate on a 12 or 24 volt system.
Proposal shall include information on system offered.

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On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.22.0 STOP REQUEST SIGN

2.22.1 Bus shall be equipped with an interior stop request system. The activation device for the sign, chime and driver signal shall be mounted on each side wall even with the bottom of the tip-in-transom portion of the windows. Signal touch buttons mounted in an ADA mandated wheelchair accessible area shall be no higher than 4' above the floor with no exposed wiring. A single "stop request" chime shall sound when the system is activated at the side walls. A double chime shall sound when the system is activated from wheelchair passenger areas. A tell-tale light indicator on the driver console will stay lit continuously until the passenger door is opened.
Proposal shall include information on system offered.

2.22.2 A "Stop Requested" message in Helvetica medium yellow letters on a green background shall be illuminated when the passenger "Stop Requested" system is activated. The "Stop Requested" message shall remain visible until doors are opened. The sign unit shall be flush mounted on the front destination compartment door and the message shall be visible to the seated operator and all seated passengers. The operator shall be able to deactivate the system from the operator's area. The system shall reset each time the passenger door is opened.
Proposal shall include information on system offered.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.23.0 PUBLIC ADDRESS SYSTEM - OPTIONAL

2.23.1 An option shall be provided for a public address system that complies with the ADA requirements of 49 CFR, Part 38.35 and enables the operator to address passengers either inside or outside the bus shall be provided. Inside speakers shall broadcast, in a clear tone, announcements that are clearly perceived from all seat positions at approximately the same volume level. An operator-controlled switch shall select inside only, outside only, or both announcements. The system shall be muted when not in use, but activated with either a microphone switch or floor mounted foot activated switch.
Proposal shall include information on system offered.

2.23.2 The microphone shall be mounted on a heavy-duty flexible gooseneck secured with tamper-proof fasteners and will allow the operator to comfortably speak into it without using their hands. A provision shall be made to secure the microphone in a stored position when not in use.
Proposal shall include information on system offered.

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On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.24.0 WINDSHIELD WIPERS AND WASHERS

- 2.24.1 The bus shall be equipped with a two speed electrically operated windshield wiper system that meets SAE Standard J198. A variable intermittent feature shall be provided to allow adjustment of wiper speed between approximately 5 to 25 cycles per minute. Windshield wiper motors and mechanisms shall be easily accessible for repairs or service and shall be removable as complete units. The fastener that secures the wiper arm to the drive mechanism shall be corrosion resistant.
- 2.24.2 The electrical windshield washer system shall evenly deposit washing fluid on the windshield and completely wet the entire wiped area. The windshield washer system shall have a minimum 3-gallon reservoir located for easy refilling through an access door from outside of the bus. Reservoir pumps, lines and fittings shall be corrosion-resistant and the reservoir itself shall be translucent for easy determination of fluid level.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.25.0 INTERIOR CLIMATE CONTROL

- 2.25.1 The Heating, Ventilation and Air Conditioning (HVAC) climate control system shall be capable of maintaining the interior of the bus at the temperature and humidity levels defined in the following paragraphs. System shall incorporate a dedicated dash air system for the operator's area.
- 2.25.2 The proposed system **must** be capable of passing the Florida Department of Transportation Air Conditioning Pull-Down Performance Test.
- 2.25.3 Air circulation shall be high volume with low velocity to provide draft-free comfort.
- 2.25.4 All hoses shall be routed and secured in such a way that they will not rub or chafe. Routing of these hoses shall not interfere with access to maintenance items such as dipsticks, air filters, doors, etc. When routing hoses under the coach the hoses shall be run in a straight line and shall be secured with rubber or plastic coated p-clamps every 12 inches. Refrigerant hoses shall be a refrigerant type double braided barrier construction. Refrigerant fittings shall be "Quick Click" or equivalent. Hoses and fittings must be qualified to SAE specification J2064.
- 2.25.5 The proposal shall include a description of the air conditioning unit and the related

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components that they intend to furnish to meet the performance requirements described in Air Conditioning Performance Test.

- 2.25.6 The front heater shall include a means to defrost the windshield and driver's windows in accordance with FMVSS-103. There shall be a separate control to give heat to the driver's foot area.
- 2.25.7 Passenger area heating must achieve a 65 degree interior temperature with an empty coach when the ambient temperature is 30 degrees Fahrenheit within 45 minutes (measured at thirty inches above the floor at the standee line, at the center of the passenger area and twelve inches from the rear wall of the passenger area). Any additional heater(s) required to accomplish this performance standard shall be mounted at the manufacturer's standard location/s to produce an even interior temperature.
- 2.25.8 Bus shall be equipped with automatic heater shut off valves located under the bus. Shut off valves shall be controlled by the heater switch(s).
- 2.25.9 Any booster/auxiliary pump installed shall be designed to last the useful life of the bus.
- 2.25.10 Heater hoses shall be of top quality material. Hose clamps shall be constant torque type. **Proposal shall include information on hose offered.**
- 2.25.11 Hoses shall be protected and supported by stainless steel/rubber inserted p-clamps. Where hoses pass through metal frame members protection shall be provided to prevent chafing. Hoses shall be shielded against heat at locations where they pass over or near any part of the exhaust system.
- 2.25.12 Interior air flow shall be uniform to prevent hot and/or cold spots throughout the passenger compartment.
- 2.25.13 The HVAC system shall be centrally controlled with an advanced computerized electronic/diagnostic control system with provisions for extracting/reading data. System shall include an A/C Stop indicator for status display to the operator.

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COMMENT:

2.26.0 COMPRESSED AIR SYSTEM

- 2.26.1 The compressed air system provided shall be capable of operating air braking, air suspension and air accessories on the bus and maintain an adequate reserve capacity. The system shall meet requirements of FMVSS 121. **Proposal shall include information on the system offered.**

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- 2.26.2 The air system reservoirs shall have bottom mounted pull type drain valves at the lowest point. Pull cables shall be reachable from outside of bus. Manual drain valves shall also be installed for maintenance purposes. The total volume of the air reservoirs dedicated to the brake system shall be equal to twelve (12) times the total volume of all service brake chambers as required by FMVSS 121.
- 2.26.3 The air system shall be equipped with an appropriately sized air dryer with integral heated moisture ejector. The air dryer shall be vertically mounted with an easily replaceable desiccant cartridge and include automatic drain and purge function that is serviceable from the bottom. The air dryer shall meet all FMVSS 121 and SAE Standard J10 requirements.
- 2.26.4 The third reservoir shall be considered the "wet tank" and shall supply all systems with air and act as a reserve for all systems. The accessory air system shall be supplied from the fourth protected air reservoir. The reservoir system is equipped with a low-pressure protection valve set at 65 PSI.
- 2.26.5 An air system governor shall be mounted at the rear of the coach in a serviceable location.
- 2.26.6 Air lines shall be color coded nylon-tubing and routed for maximum protection and serviceability. All component fittings shall be installed for maximum serviceability. Air lines, except necessary flexible lines shall conform to the installation and material requirements of SAE Standard J1149 for copper tubing with standard brass, flared or ball sleeve fittings or SAE Standard J844 for nylon tubing if not subject to temperatures over 200 degrees F. Nylon tubing shall be installed in accordance with the following color-coding standards:
- Green:** Indicates primary brakes and supply
 - Red:** Indicates secondary brakes
 - Brown:** Indicates parking brake
 - Yellow:** Indicates compressor governor signal
 - Black:** Indicates accessories
- 2.26.7 Air for the compressor shall be filtered through the main engine air cleaner system. The air system shall be protected by a pressure relief valve set at 150 psi and shall be equipped with check valve and pressure protection valves to assure partial operation in case of line failures.
- 2.26.8 Line supports shall prevent movement, chaffing, flexing, tension strain and vibration. Stainless Steel lines shall be supported to prevent the lines from touching one another or any component of the bus. To the extent practical and before installation, the lines shall be pre-bent on a fixture that prevents tube flattening or excessive local strain. Copper lines shall be bent only once at any point, including pre-bending and installation. Rigid lines shall be supported at no more than 5-foot intervals. Nylon lines may be grouped and shall be supported at 2-foot intervals or less.

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- 2.26.9 The compressor discharge line between engine and body-mounted equipment shall be flexible convoluted copper or stainless steel line or may be flexible Teflon hose with a braided stainless steel jacket. Other lines necessary to maintain system reliability shall be SAE 100R14 hose. End fittings shall be standard SAE or JIC brass or steel flanged swivel type fittings. Flexible hoses shall be as short as practical and individually supported. They shall not touch one another or any part of the bus except for the supporting grommets. Flexible lines shall be supported at 2-foot intervals or less. Air lines shall be cleaned before installation.
- 2.26.10 All air lines shall be routed to prevent water traps. Grommets or insulated clamps shall protect the air lines at all points where they pass through understructure components. A standard shop air quick disconnect fitting shall be conveniently located in the engine compartment.

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2.27.0 SUSPENSION SYSTEMS

- 2.27.1 Both front and rear suspension shall be full air spring type using rolling lobe air springs. The suspension system shall offer superior ride and handling. The suspension system shall be designed to last the life of the bus without major overhaul or replacement. Adjustable shock absorbers shall be provided to ensure maximum ride smoothness and control. Floor height above axles shall remain constant regardless of load, up to GVWR. All bushings in both front and rear suspension to include both torque and lateral control arms will be a lube free design. All thrust washers in both the front and rear suspension shall be steel with a Teflon coating to prevent squeaking.
Proposal shall include information on the system offered.
- 2.27.2 The front suspension shall have adequate travel of 3" in rebound and 3.5" in jounce shall be provided to allow for proper suspension function and kneel.
- 2.27.3 The bus shall kneel a minimum of 3" at entrance doorways. A brake and throttle interlock shall prevent movement when the bus is kneeled. The Kneel control shall be disabled when the bus is in motion. The bus shall kneel at a maximum rate of 1.25 inches per second at a constant rate. After kneeling, the bus shall rise within 2 seconds to a height permitting the bus to resume service and shall rise to the correct operating height within 7 seconds regardless of load, up to GVWR. During the lowering and raising operation, the maximum acceleration shall not exceed 0.2g and the jerk shall not exceed 0.3g/sec. An indicator visible to the driver shall be illuminated until the bus is raised to a height adequate for safe street travel. An audible warning alarm shall sound simultaneously with the operation of the kneeling device to alert passengers and bystanders. A minimum 2.5" diameter amber lens warning light mounted near the curbside of the front door shall blink when kneel feature is activated. Kneeling shall not be operational while the

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wheelchair ramp is deployed or in operation. On buses equipped with a with a wheelchair ramp kneeling function shall be at the operators discretion.

On above specifications, this Proposal (circle one below)

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COMMENT:

2.28.0 FUEL TANK

- 2.28.1 The fuel tank shall be securely mounted to prevent movement under all in-service conditions, but shall be capable of removal and reinstallation by a skilled mechanic in 1.5 hours or less. The fuel tank shall be designed so that all fuel shall flow to the lowest point. The fuel tank capacity shall be a minimum of 70 usable U.S. gallons and be the largest available for vehicle application. The fuel tank shall be equipped with an external brass drain plug located at the lowest point of the tank. The fuel tank shall have an inspection plate or easily removable filler neck to permit cleaning and inspection of the tank without removal from the bus. The tank shall be baffled internally to prevent fuel-sloshing noise regardless of fill level. The baffles and fuel pickup location shall assure continuous fuel pick-up operation. The capacity, date of manufacture, manufacturer name, location of manufacture and certification of Federal Motor Carrier Regulation compliance shall be permanently marked on the fuel tank. The markings shall be readily visible from the fuel filler access door and shall not be covered by an undercoating material.
- 2.28.2 The fuel fill shall accommodate a 1-1/2-inch diameter nozzle and fill rate of not less than 20 gallons per minute of foam-free fuel without spitting back or causing the nozzle to shut off before the tank is full. The fuel fill shall be located behind the centerline of the bus. The fill cap shall twist/screw on to the fuel fill neck and must be chained to the bus body to prevent loss. The fuel fill neck shall be equipped with a pressure relief vent and level control. A fill whistle shall also be provided.
- 2.28.3 To accommodate existing refueling equipment the fuel fill shall accommodate a nozzle that forms a locked and sealed connection during the refueling process to eliminate spills. Fuel shall not be allowed to flow into the tank unless the nozzle has been properly coupled, locked and sealed to the filler. With the nozzle open fuel shall enter the tank at a fill rate of not less than 40 gallons per minute of foam-free fuel without causing the nozzle to shut off before the tank is full. The nozzle shall automatically shut off when the tank is essentially full. Once disconnected fuel shall not be allowed to flow through the nozzle at any time. Any pressure over 3 psi shall be relieved from the fuel tank automatically. An audible signal shall indicate when the tank is essentially full.
- 2.28.4 The fuel tank fill neck must be equipped with an internally mounted poppet valve to prevent splash back.

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COMMENT:

2.29.0 SERVICEABILITY

- 2.29.1 The engine, accessories and all maintenance components such as dip sticks and fluid fill locations shall be easily accessible for service through compartment doors. Access for maintenance and repairs shall be designed with a minimum requirement for the movement of unrelated components. Components requiring frequent service shall have first ease of access priority.

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COMMENT:

2.30.0 BODY CONSTRUCTION

- 2.30.1 The body assembly shall be a modular design and shall be comprised of lightweight and corrosion resistant materials. The body frame assembly shall be of modular construction.
Proposal shall include structural drawings of body and description of construction methods.
- 2.30.2 The body frame shall be designed for rapid repair/replacement of frame members and panels located in the Strike Zone; an area on both sides of the bus from a level six inches below the windows to the ground level.
- 2.30.3 The body shall be attached directly to the chassis. In order to achieve maximum strength, maximum durability and close-tolerance alignment, all body attachments shall be by high strength steel, treated bolts and shims as required. To prevent bimetallic corrosion between dissimilar metals an insulating compound shall be used.
- 2.30.4 The bus body and roof structure shall be manufactured and assembled in a manner to meet requirements of applicable FMVSS standards. Additionally, the bus shall withstand a 25-mph impact by a 4,000-pound automobile at any point, excluding doorways, along either side of the bus with no more than 3 inches of permanent structural deformation at seated passenger hip height. This impact shall not result in sharp edges or protrusions in the bus interior. . In addition to FMVSS requirements the manufacturer shall also meet all applicable State of Florida Regulations in effect at the time of manufacture.
Proposal shall include test reports on the requirements above.
- 2.30.5 All joints shall be caulked and sealed at the time of construction to produce water and dust tight seal.

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- 2.30.6 All dimensions, positioning of components, clearances, etc., shall be based on adult passengers.
- 2.30.7 All interior and exterior fiberglass reinforced plastic panels and assemblies shall meet the flammability protection requirement of FMVSS-302.
- 2.30.8 The passenger and engine compartments shall be separated by a bulkhead(s) that by incorporation of fireproof materials is a firewall. The engine compartment shall include areas where the engine and exhaust system is housed, if mounted above the horizontal shelf. This firewall shall preclude or retard propagation of an engine compartment fire into the passenger compartment and shall be in accordance with the most current Recommended Fire Safety Practices defined by FTA. Any passageways for the climate control system air shall be separated from the engine compartment by fireproof material. Piping through the bulkhead shall have copper, brass or fireproof fittings sealed at the firewall with copper or steel piping on the forward side. Wiring may pass through the bulkhead only if connectors or other means are provided to prevent or retard fire propagation through the firewall. Engine access panels in the firewall shall be fabricated of fireproof material and secured with fireproof fasteners. These panels, their fasteners and the firewall shall be constructed and reinforced to minimize warping of the panels during a fire that will compromise the integrity of the firewall.
- 2.30.9 The front and rear section (caps) shall be molded fiberglass installed to provide quick and low-cost body repair.
- 2.30.10 Wheel housings shall be constructed of corrosion and fire-resistant material. Wheel housings as installed and trimmed shall withstand impacts of a 2-inch steel ball with at least 200 foot-pounds of energy without penetration.
- 2.30.11 Features to minimize water spray from the bus in wet conditions shall be included in wheel housing design. Any fender skirts shall be easily replaceable. They shall be flexible if they extend beyond the allowable body width. Wheels and tires shall be removable with the fender skirts in place.
- 2.30.12 Each proposer's design will be evaluated by the Proposal Committee.

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COMMENT:

2.31.0 FLOOR

- 2.31.1 Floor material shall be composite material. Floor sections shall be secured to the body understructure. If proposed, the rear exit step area shall be constructed of 12-ga. stainless steel and shaped to taper toward the door to reduce rear doorstep height. The entire floor shall have no visible seams.
Proposal shall include a description of installation method.

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- 2.31.2 The floor deck shall be reinforced as needed to support passenger loads. At GVWR the floor shall withstand the application of 2.5 times gross load weight without permanent detrimental deformation.
- 2.31.3 The floor shall be a continuous flat plane from the entrance door to the upper rear section, except at the wheel housings, and shall not interfere with passenger seating. Where the floor meets the walls of the bus the surface edges shall be blended with a circular section of radius not less than ¼”.
- 2.31.4 The assembled floor, including the covering, sealant, and attachments, shall be waterproof, non- hygroscopic, resistant to mold growth and impervious to insects.
- 2.31.5 All interior panels shall be tamper proof and attached so there are no rough surfaces or exposed edges.
- 2.31.6 Access floor openings shall be minimized in this design. Any required openings shall have flush stainless trim and a shape that allows proper installation only in the right orientation and shall be secured by flush fasteners.
- 2.31.7 The interior of all box frame structures (tubing) shall be coated. The coating shall pass all requirements of Military Specifications A-A-59295, MIL-C-62218, MIL-C-0082933 and SAE J1804.
- 2.31.8 Floor shall be covered with transit quality rubber flooring. .-Aisle shall be 3/16" thick ribbed rubber. Under seat areas will be 1/8" smooth. Driver's area shall be covered with 1/8" smooth rubber. All step edges shall have yellow nosing. All joints shall be sealed to prevent moisture intrusion on to the sub floor. The floor covering shall turn up the wall, non-jointed to a point 11 inches from the floor and shall be trimmed.
Proposal shall include a sample of material to be used.
- 2.31.9 A 2" white standee line shall extend across the bus aisle in line with the barrier to the rear of the driver and the front edge of the first door-side passenger seat, behind the front entrance area.
- 2.31.10 The bus flooring, sides, roof, understructure, axle and suspension components shall be designed to resist rust, corrosion or deterioration from atmospheric conditions and road salts. Bus shall maintain structural integrity and original appearance throughout its service life, provided that it is maintained by the purchaser in accordance with the procedures specified in the bus manufacturer’s service manual. With the exception of periodically inspecting the visible coatings applied to prevent corrosion and reapplying these coatings in limited spots, the manufacturer shall not require the complete reapplication of corrosion compounds over the life of the bus.
- 2.31.11 All materials that are not inherently corrosion resistant shall be protected with corrosion-resistant coatings. All joints and connections of dissimilar metals shall be protected from

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bimetallic corrosion. Representative samples of all materials and connections shall withstand a 2-week (336-hour) salt spray test in accordance with ASTM Procedure B-117 with no detrimental structural effects to normally visible surfaces, and no weight loss of over 1 percent.

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COMMENT:

2.32.0 INSULATION AND UNDERCOATING

- 2.32.1 Manufacturer shall propose insulation to be used including the R-factor of the insulation. Insulation must not impede mechanics ability to perform repairs to hoses or wiring.
- 2.32.2 The entire underside of the coach chassis, body, wheel housings, rear step well, passenger and driver's areas shall be sealed with an application of minimum 1/8" thick undercoating.
Proposal shall include information on the coating offered.
- 2.32.3 Splash aprons, composed of 1/4-inch-minimum composition or rubberized fabric, shall be installed behind front wheels as needed to reduce road splash and protect under floor components. The splash aprons shall extend downward to within 3 inches of the road surface at static conditions. Apron widths shall be no less than tire widths, except for the rear apron, which may be sectional, and which shall extend across the width of the bus. Splash aprons shall be bolted to the bus understructure. Splash aprons and their attachments shall be inherently weaker than the structure to which they are attached. The flexible portions of the splash aprons shall not be included in the road clearance measurements. Other splash aprons shall be installed where necessary to protect bus equipment from road splash.

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COMMENT:

2.33.0 SERVICE COMPARTMENTS AND ACCESS DOORS

- 2.33.1 Interior access for maintenance and replacement of equipment shall be provided by panels and doors that appear to be an integral part of the interior. Removal of fixtures or equipment unrelated to the repair task shall be minimized. Access doors shall be hinged with props or over-center springs, where practical to hold the doors out of the mechanic's way.

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- 2.33.2 Access doors for the door actuator compartments shall be secured with hand screws or latches and shall prevent entry of mechanism lubricant into the bus interior. All fasteners that retain access panels shall be captive in the cover.
- 2.33.3 Exterior access shall be provided by conventional hinged doors for the engine compartment and for all auxiliary equipment compartments including doors for access to the swing out battery tray, fuel tank and radiator/aftercooler. Access openings shall be sized for easy performance of tasks within the compartment including tool-operating space. Access doors shall be of rugged construction and shall maintain mechanical integrity and function under normal operations throughout the service life of the bus. They shall close flush with the body surface. All doors shall be hinged at the top or on the forward edge and shall be prevented from coming loose or opening during transit service or in bus washing operations. All access doors shall be retained in the open position by counterbalancing with over-center or gas-filled springs and shall be easily operable by one person. Springs and hinges shall be corrosion resistant. Latch handles shall be flush with or recessed behind the body contour and shall be sized to provide an adequate grip for opening. Access doors, when opened, shall not restrict access for servicing other components or systems. The locks shall be standardized so that no tools are required or only one tool, a standard 5/16" square, shall be required to open access doors on the bus. At the front of the coach under the windshield there shall be a door utilizing flush latches to allow access to the windshield washer reservoir, driver's heater and air piping board. The door shall be hinged on the bottom and swings down and rest against a stop to allow easy servicing of components.
- 2.33.4 Rain gutters shall be provided over the entrance, exit doors and driver's side window to prevent water from flowing onto passengers.

On above specifications, this Proposal (circle one below)
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COMMENT:

2.34.0 BUMPER SYSTEM

- 2.34.1 The bumpers shall provide impact protection for front and rear of the bus up to 26" above the street. The bumpers shall wrap around the bus to the extent practical without exceeding allowable width.
- 2.34.2 **FRONT BUMPER:** No part of the bus, including the bumper, shall be damaged as a result of a 5-mph impact of the bus at curb weight with a fixed, flat barrier perpendicular to the bus longitudinal centerline. The bumper shall return to its pre-impact shape within 10 minutes of the impact. The bumper shall protect the bus from damage as a result of 6.5 mph impacts at any point by the Common Carriage with Contoured Impact Surface defined in Figure 2 of FMVSS 301 loaded to 4,000 pounds parallel to the longitudinal centerline of the bus and 5.5-mph impacts into the corners at a 30 degree angle to the longitudinal centerline of the bus. The energy absorption system of the bumper shall be independent of every power system of the bus and shall not require service or

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maintenance in normal operation during the service life of the bus. The bumper may increase the overall bus length specified by no more than 6 inches. Bumpers may be painted to match the coach color.

- 2.34.3 **REAR BUMPER:** No part of the bus, including the bumper, shall be damaged as a result of a 2-mph impact with a fixed, flat barrier perpendicular to the longitudinal centerline of the bus. The bumper shall return to its pre-impact shape within 10 minutes of the impact. When using a yard tug with a smooth, flat plate bumper 2 feet wide contacting the horizontal centerline of the rear bumper, the bumper shall provide protection at speeds up to 5 mph, over pavement discontinuities up to 1 inch high, and at accelerations up to 2 mph/sec. The rear bumper shall protect the bus, when impacted anywhere along its width by the Common Carriage with Contoured Impact Surface defined in Figure 2 of FMVSS 301 loaded to 4,000 pounds, at 4 mph parallel to, or up to a 30 degree angle to, the longitudinal centerline of the bus. The rear bumper shall be shaped to preclude unauthorized riders standing on the bumper. The bumper shall be independent of all power systems of the bus and shall not require service or maintenance in normal operation during the service life of the bus.
Proposal shall include information on bumpers offered.
- 2.34.4 Bumper material shall be corrosion-resistant and withstand repeated impacts of the specified loads without sustaining damage. Visible surfaces shall be black or color - coordinated with the bus exterior. These bumper qualities shall be sustained throughout the service life of the bus.
- 2.34.5 Towing devices shall be provided on each end of the bus. Each towing device shall withstand, without permanent deformation, tension loads up to 1.2 times the curb weight of the bus within 20 degrees of the longitudinal axis of the bus. The rear towing device(s) shall not provide a toehold for unauthorized riders.
- 2.34.6 The front towing devices shall allow attachment of adapters for a rigid tow bar and shall permit lifting and towing of the bus, at curb weight, until the front wheels are clear off the ground. Towing device should accommodate flat bedding. The rear tow eyes shall permit towing of the bus for a short distance, such as in cases of an emergency. Each towing device shall accommodate a crane hook with a 1-inch throat.
- 2.34.7 There shall be a quick disconnect air fitting provided in the front and rear of the coach to charge the air system while towing.

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COMMENT:

2.35.0 ENTRY DOOR

- 2.35.1 The forward entrance door shall be forward of the front axle and shall be of a twinleaf design with a clear opening of 34" minimum. Glass area shall be maximum area

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practical and glass shall have a gray single density tint and 73% light transmission. Doors and fittings shall be of durable and corrosion resistant materials.

- 2.35.2 Passenger entrance doors shall be two position and pneumatically or electrically powered. Full door opening or closing cycle shall be adjustable from 1 to 3 seconds of operator's control activation. Operation of and power to, the passenger door shall be completely controlled by the operator by the actuation of an open and a close push button switch located on the driver's panel. Door actuators shall be adjustable so that the door opening and closing speeds can be independently adjustable to satisfy the requirements. Actuators and the complex door mechanism shall be concealed from passengers but shall be easily accessible for servicing. On pneumatically powered doors an air dump valve near the operator shall allow manual operation.
- 2.35.3 A master door switch not within reach of the seated operator when set in the "OFF" position shall close the doors, deactivate the door control system, release the interlocks and permit only manual operation of the doors.
- 2.35.4 No more than a 10 pound force shall be imposed on a one square inch area of any passenger struck by a closing door. A maximum force of 35 pounds shall be required for a passenger to free himself/herself after having door close on him/her, even if the sensitive edge or safety device fails.
- 2.35.5 A door interlock signal shall be required for brake control if the intended use of vehicle is for paratransit service. The door system shall be interlocked with the brake and accelerator to stop the coach when doors open or prevent the coach from being operated while the door is open. A zero (0) motion detector shall be provided that will prevent the doors from opening prior to the vehicle coming to a complete stop. This system is not required if the intended use of the bus is for fixed-route service.
- 2.35.6 The clear opening between grab rails shall be at least 34" wide and at least 80" high. Mating edges shall be of the overlapping type and provide a minimum of 4" between door edges. The leading edge of each door shall be equipped with extruded rubber safety sensitive edge to reverse the door closing cycle when obstructed.
- 2.35.7 Entry doors shall incorporate gaskets and/or seals to provide a barrier against intrusion by wind, water and dust around their perimeter. The seal at the center of the door shall be by means of full height overlapping rubber seals, and shall include a barrier or sweep at the bottom of both doors.
- 2.35.8 In the event of an emergency it shall be possible to open the door manually from inside the bus using a force of no more than 25 pounds after actuating the door release device at the door. The release device shall be clearly marked as an emergency-only device and shall require two distinct actions to actuate. The respective door emergency release device shall be accessible from the door area. When this emergency device is actuated, the door interlock throttle system shall return the engine to idle and the door interlock brake system shall apply to stop the bus.

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- 2.35.9 Locked doors shall require a force of more than 100 pounds to open manually. When the locked doors are manually forced to open, damage shall be limited to the bending of minor door linkage with no resulting damage to the doors, engines, and complex mechanism.

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2.36.0 WHEELCHAIR RAMP

- 2.36.1 A wheelchair ramp shall be an automatically-controlled, power-operated ramp system, compliant to requirements defined in 49 CFR Part 38, Subpart B, §38.23c
- 2.36.2 The front or rear door shall be equipped with a fully automated, electric ramp. The ramp effective length shall be a minimum 70 inches and 30" wide with a minimum capacity of 660 lbs. Ramp deployment shall interlock brakes and throttle. Must meet ADA slope and width standard.
Proposal shall include manufacturer and pricing of ramp.
- 2.36.3 The ramp controls shall be of simple yet durable design to be controlled by the seated operator. The design shall allow for easy pullout manual operation, and shall be fully ADA compliant.
- 2.36.4 All ramp manufacturers or installers shall legibly and permanently mark each wheelchair ramp assembly with the following minimum information in a location easily visible without deploying the ramp:
1. The manufacturers name and address.
 2. The month and year of manufacture.
 3. A certificate that the wheelchair ramp and installation conforms to State of Florida requirements applicable to accessible vehicles.
 4. The vehicle manufacturer shall affix a label to each wheelchair ramp installed verifying that the manufacturer has physically inspected each lift and each lift meets the technical specifications described in 49 CFR PART 38 Accessibility Specifications for Transportation Vehicles, Section 38.23 Mobility Aid Accessibility.
 5. All labels described above shall be affixed to the wheelchair ramp in such a manner that each is visible to inspection in the stowed position.

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2.37.0 SECUREMENT DEVICES

- 2.37.1 Securement devices, their design, installation and operation shall comply with The Americans With Disabilities Act (ADA), Regulations and Requirements as Amended (Title 49 Code of Federal Regulations, Part 38, and Subpart B. Section 38.23) and 30MPH/20G Impact Test Criteria Per SAE J2249. *General guidance for securement devices is provided below. Omission in this specification does not relieve the successful bidders from compliance requirements of the ADA and SAE J2249.*
- 2.37.2 In vehicles with securement device or system, the wheelchair or mobility aid, shall face toward the front of the vehicle.
- 2.37.3 Retractors shall be heavy duty with heat treated components and a metal or impact resistant plastic housing.
- 2.37.4 The securement system shall be complete with four retractor straps for securing the wheelchair or mobility aid and two retractors for the occupant restraint system.
- 2.37.5 The wheelchair mobility aid retractors shall not be equipped with manual tension knobs.
- 2.37.6 The wheelchair or mobility aid retractors shall be equipped with “S” or “J” hooks to simplify operation.
- 2.37.7 The occupant restraint system shall be equipped with a height adjuster for the shoulder belt, having a vertical adjustment of approximately 12 inches.
- 2.37.8 The tie-down system shall be able to secure a standard wheelchair or mobility aid in less than 10 seconds. A set of “quick straps” are to be provided at each station.
- 2.37.9 The retractor securement system shall meet the following requirements:
1. 30MPH/20G impact test criteria per SAE J2249, and
 2. 49 CFR Part 38 Americans with Disabilities Act (ADA).
- 2.37.10 The occupant restraint system shall meet the following requirements when used in conjunction with the retractor system:
- Federal Motor Vehicle Safety Standards (FMVSS209 & FMVSS302)
 - 49 CFR Part 38 Americans with disabilities Act (ADA)
 - 30MPH/20G impact test criteria SAE J2249.
- 2.37.11 Proposer shall provide an option for a WC-18 tie down system.
- 2.37.12 Proposer shall provide an option for a fully automatic, self-securing wheel chair system.
- 2.37.13 Proposer shall provide an option for a fully integrated wheel securement station.

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On above specifications, this Proposal (circle one below)

EXCEEDS

MEETS

DOES NOT MEET

COMMENT:

2.38.0 EMERGENCY EXIT

2.38.1 Hinge-out windows shall be installed for emergency escape. Emergency escape windows shall comply with FMVSS-217.

2.38.2 Emergency escape windows shall be clearly labeled and operation instruction shall be clearly visible at each escape window. The emergency release handle (or bar) shall meet FMVSS-217 requirements and shall not return to the locked position automatically: it shall require the driver or other authorized person to manually re-lock it.

All emergency exits must comply with F.A.C. 14-90.

2.38.3 Each emergency exit shall be identified with a 12 VDC red LED light assembly with a 10,000 hour life bulb wired to the vehicle ignition circuit. This system, along with window signage, shall provide passengers with a clear understanding of exit routes.

2.38.4 For standardization purposes all vehicles shall be equipped with a roof hatch with both an internal and external operating handle. Hatch shall open from rear toward the front.
Proposal shall include information on the system offered.

On above specifications, this Proposal (circle one below)

EXCEEDS

MEETS

DOES NOT MEET

COMMENT:

2.39.0 SASH AND GLASS

2.39.1 The windshield shall permit an operator's field of view as referenced in SAE Recommended Practice J1050. The vertically upward view shall be a minimum of 15 degrees, measured above the horizontal and excluding any shaded band. The vertically downward view shall permit detection of an object 3-1/2 feet high no more than 2 feet in front of the bus. The horizontal view shall be a minimum of 90 degrees above the line of sight. Any binocular obscuration due to a center divider may be ignored when determining the 90-degree requirement, provided that the divider does not exceed a 3-degree angle in the operator's field of view. Windshield pillars shall not exceed 10 degrees of binocular obscuration. The windshield shall be designed and installed to minimize external glare and reflections from inside the bus.

2.39.2 The windshield shall be easily replaceable by removing zip-locks from the windshield retaining moldings. Bonded-in-place windshield shall not be used. The windshield glazing material shall have a 1/4-inch or 6-mm nominal thickness laminated safety glass conforming to the requirements of ANSI Z26.1 Test Grouping 1A and the Recommended Practices defined in SAE J673.

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- 2.39.3 A sun visor shall be provided and located in a recessed area above the driver's side windshield.
Proposer shall provide optional sun visors.
- 2.39.4 Each side window except the side destination side window shall be a tip in transom type. The transom shall be between 25 and 35 percent of the total window area. The lower portion of the window shall be fixed. The transom portion shall be hinged along the lower edge and open inward. Side windows glazing material shall have a 1/4-inch nominal thickness, AS 3, 28% density, blue/gray laminated safety glass. The material shall conform to the requirements of ANSI Z26.1 Test Grouping 2 and the Recommended Practices defined in SAE J673.
- 2.39.5 The operator's side window shall open sufficiently to permit the seated operator to easily adjust the street side outside rearview mirror. This window section shall slide rearward in tracks or channels designed to last the service life of the bus. The operator's side window shall not be bonded in place and shall be easily replaceable. The glazing material shall have a single density tint.
- 2.39.6 The operator's side window glazing material shall have a 1/4-inch nominal thickness laminated safety glass conforming to the requirements of ANSI Z26.1 Test Grouping 2 and the Recommended Practices defined in SAE J673.
- 2.39.7 The use of transit quality, scratch resistant plastic glazing material is acceptable in side windows and rear end windows; excluding windshield and driver's windows. Glazing material shall be in accordance with the latest version of ANSI - Z26.1, Safety Code for Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highways. Glass must be AS-2 tempered. Glass grade shall be visible on each window pane.

On above specifications, this Proposal (circle one below)

EXCEEDS MEETS DOES NOT MEET

COMMENT:

2.40.0 SEATING

- 2.40.1 An air ride driver's seat shall be provided. The standard seat shall have a pneumatic suspension system with two (2) shock absorbers. The side bolsters shall be adjustable with dual side manual recliner. The lumbar will be a three (3) cell pneumatic system and the seat cushion will have a manual tilt adjustment. The seat shall adjust fore and aft with 9.05" travel. The steel riser base shall be painted color coordinated with the driver's floor covering and seat color selection.
Proposal shall include pricing for optional driver seats.

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- 2.40.2 All passenger seats shall include Fiberglass shell with vandal-resistant inserts, cantilevered carbon steel frames and hardware; coated grab handles; thermo-formed plastic backs; supplied with the Advanced Restraint Module (ARM) or similar. All floor plans shall accommodate as many forward facing seats as possible.
Proposal shall include standard seats offered and copies of all floor plans.
- 2.40.3 The contractor shall provide and install sign(s) which indicate that seats in the front of the vehicle are priority seats for persons with disabilities and that other passengers should make such seats available to those who wish to use them. Each securement location shall have a sign designating it as such.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.41.0 INTERIOR FINISH

- 2.41.1 The interior shell shall be designed to provide a pleasing aesthetic appearance designed to resist debris collection and wear and tear. All coves and corners shall be finished in a manner that precludes the accumulation of debris, permit easy cleaning, and present a clean appearance. The materials used shall be color impregnated, not painted.
- 2.41.2 Materials shall be selected on the basis of maintenance, durability, appearance, safety, flammability and tangible qualities. Trim and attachment details shall be kept simple and unobtrusive. Materials shall be strong enough to resist everyday abuse and vandalism; they shall be resistant to scratches and markings. Interior trim shall be secured to avoid resonant vibrations under normal operational conditions.
- 2.41.3 Sidewall panels below the windows shall be constructed of color coordinated panels and retained by color coordinated plastic moldings.
- 2.41.4 The ceiling material shall be color coordinated. Formed material shall be supported as required to prevent buckling, drumming or flexing and shall be secured without loose edges.
- 2.41.5 Ceiling shall be designed to appear as if entire interior is a single, molded, color matched, component.
- 2.41.6 The entire front end of the bus shall be sealed to prevent debris accumulation behind the dash and to prevent the operator's feet from kicking or fouling wiring and other equipment. The front end shall be free of protrusions that are hazardous to passengers standing or walking in the front of the bus during rapid decelerations. Paneling across the front of the bus and any trim around the operator's compartment shall be formed metal, composite or plastic material. Formed fiberglass dash panels shall be painted and finished to reduce glare. Plastic dash panels shall be reinforced as necessary,

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vandal-resistant and replaceable. All colored, painted and plated parts forward of the operator's barrier shall be finished with a dull matte surface to reduce glare.

- 2.41.7 The rear bulkhead and rear interior surfaces shall be material suitable for exterior skin, painted and finished to exterior quality or paneled with melamine-type material, plastic or carpeting and trimmed with stainless steel, anodized aluminum or plastic.
- 2.41.8 Headroom above the aisle and above all aisle seats shall exceed 74".
- 2.41.9 A 6" thick driver's barrier shall be provided behind the driver and shall house most of the electrical system control components. The barrier shall extend from the ceiling, down the roadside sidewall to the wheel housing, to prevent passengers from reaching to the driver or his/her personal effects. Barrier shall be of a sturdy material with a finish that will reduce windshield glare and reflections during nighttime operation.
- 2.41.10 Sturdy composite divider panels constructed of durable, unpainted, corrosion-resistant material complementing the interior trim shall be provided to act as both a physical and visual barrier for seated passengers. Modesty panels shall be located at doorways to protect passengers on adjacent seats and along front edge of rear upper level. Design and installation of modesty panels located in front of forward facing seats shall include a handhold/grab handle along its top edge. These dividers shall project toward the aisle no farther than passenger knee projection in longitudinal seats or the aisle side of the transverse seats. Modesty panels shall extend no higher than the lower daylight opening of the side windows and those forward of transverse seats shall extend downward to a level between 4-8 inches above the floor. Panel's forward of longitudinal seats shall extend to below the level of the seat cushion. Dividers positioned at the doorways shall provide no less than a 1-inch clearance between the modesty panel and the opened door to protect passengers from being pinched. Modesty panels installed at doorways shall be equipped with grab rails. The modesty panel and its mounting shall withstand a static force of 250 pounds applied to a four-inch by four-inch area in the center of the panel without permanent visible deformation.
- 2.41.11 All materials must comply with FMVSS-302.
- 2.41.12 A metal builder's plate shall be installed on the inside of the front of the bus, listing the manufacturer's name, bus and chassis model, serial number and date of manufacture. The plate shall be installed with permanent fasteners. Include a FMVSS sticker in addition to the builder's plate
- 2.41.13 Interior decals such as, but not limited to the following, "*Stand Behind White Line*," "*No Smoking, Eating or Drinking*," "*Exit Door*," "*Emergency Exit*," "*Watch Your Step*," "*Wheelchair instructions*," "*Priority Seating*" and "*Reserved for Wheelchairs*," etc. shall be provided. All decals shall be in English. All decals shall conform to FAC 14-90.

On above specifications, this Proposal (circle one below)

EXCEEDS

MEETS

DOES NOT MEET

COMMENT:

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2.42.0 GRAB RAILS AND STANCHIONS

- 2.42.1 Handrails and stanchions shall be provided in the entrance of the vehicle and elsewhere in a configuration as specified in 49 Code of Federal Regulation Part 38, Subpart B. Section 38.29.
- 2.42.2 Passenger assists in the form of full grip vertical stanchions and grab rails shall be provided for the safety of standees and for ingress/egress. From the entrance door throughout the bus and out the exit door, vertical assist shall be provided as a part of seat backs or hand rails so that a 5th-percentile passenger may easily move from one assist to another without losing support. Stanchions and hand rails shall have a cross-sectional diameter of between 1-1/4 and 1-1/2 inches. All passenger assists shall permit a full handgrip. Passenger assists shall be designed to minimize the catching or snagging of clothes or personal items and shall be capable of passing the NHTSA Drawstring Test.
- 2.42.3 A crash resulting in a 1-foot intrusion shall not produce sharp edges, loose rails or other potentially dangerous conditions associated with a lack of structural integrity of the assist. All joints in the assist structure shall be underneath supporting brackets and shall not twist inside brackets. With the exception of seat and door handholds all areas of the passenger assists shall be 16-gauge stainless steel with 180 grid finish. Assists shall withstand a force of 300 pounds applied over a 12-inch lineal dimension in any direction without permanent visible deformation. All passenger assist components including brackets, clamps, screw heads and other fasteners used shall be flush with the surface and free from burrs or rough edges.
- 2.42.4 Passengers shall be able to lean against the assist for security while paying fares. The assist shall be no less than 36 inches above the floor or the average step tread surface. The assists at the front of the bus shall be arranged to permit a 5th-percentile passenger to easily reach from the door assist to the front assist, to vertical assists on the operator's barrier or front modesty panel.
- 2.42.5 Non forward facing seats shall have vertical assists located at every seating position, except for seats that fold/flip up to accommodate wheelchair securement. Assists shall extend from near the leading edge of the seat and shall be no more than 52 inches apart.
- 2.42.6 A full height wrap around driver's barrier shall be provided. This must meet all ADA requirements. The barrier shall extend from the left side panel to the right rear of the driver's station. The back panel shall in no way detract from, or interfere with the safe, normal operation of the bus nor restrict full movement of the driver's seat. Colors will be specified in individual orders. Available colors should be listed in proposals. The barrier assembly shall be rigid, shall not shake or rattle in service.
- 2.42.7 There shall be an approximately 6" x 6" x 1" pocket, preferably on the left side of the

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driver's station to store permits, etc.

- 2.42.8 An option for a schedule holder and consumer/public information display frame to be mounted on the driver's protective shield facing passenger seating shall be proposed.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.43.0 EXTERIOR FINISH

- 2.43.1 All welds shall be chipped to remove slag. All metal parts shall be de-greased and properly cleaned and sanded in preparation for painting. All metal surfaces shall be sprayed with rust preventative primer. Parts and surfaces that will be covered in the finished vehicle shall be given a second coat of primer to prevent corrosion as much as possible. If any parts are pre-primed prior to assembly and should any welding be done during assembly then the weld shall be chipped. The weld and the surrounding area shall be primed again. The manufacturer shall propose exterior body material used.
- 2.43.2 All surfaces that will be exposed on the finished vehicle shall be properly sanded prior to finish color paint application. This proposal shall also include an outline of their painting procedure.
- 2.43.3 Buses shall have fleet numbers on the interior and exterior of the bus in sequence with factory serial numbers. Exterior numbers shall be high quality reflective material. Each individual order will include the correct starting number, location, size and color of numbers. Agency
- 2.43.4 Proposer shall submit a minimum of three and a maximum of five samples of different paint schemes with their proposals. Samples should give Agencies options regarding paint schemes and use of reflective material such as, but not limited to window black-out versus non-black out. Purchaser may request a specific corporate design and/or vinyl wrap but any additional expense over the contract standards will be borne by the purchaser.
- 2.43.5 Proposal shall include an option for fleet numbers to be installed on the roof of the bus.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.44.0 LEFT BLANK INTENTIONALLY

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2.45.0 FIRE SUPPRESSION SYSTEM

- 2.45.1 Each vehicle shall be equipped, as standard, with an automatic thematic fire suppression system to provide adequate coverage in the engine compartment and main electrical box areas.
- 2.45.2 The system shall incorporate a dash mounted operator warning light, audible indicator and function that will automatically shut off all fans and climate control systems in the event of discharge.
- 2.45.3 Each vehicle shall be delivered with a certificate identifying the vehicle identification number (VIN) for which the fire suppression system applies. The system shall be U.L., U.C.L., and F.M. listed and meets all D.O.T. and FMVSS regulations and is certified by the vehicle and equipment manufacturer. Additionally, an independent certification in accordance with EN45011 (ISO Guide 65) as detailed in SPCR 183, SP Technical Research Institute, shall be included.
- 2.45.4 Purchaser will select fire suppression system when ordering the bus.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.46.0 NOISE ABATEMENT

- 2.46.1 The combination of inner and outer panels and any material used between them shall provide sufficient sound insulation so that a sound source with a level of 80 dBA measured at the outside skin of the bus shall have a sound level of 65 dBA or less at any point inside the bus. These conditions shall prevail with all openings, including doors and windows, closed and with the engine and accessories switched off. The bus generated noise level experienced by a passenger at any seat location inside the bus shall not exceed 83 dBA and the driver shall not experience a noise level of more than 75 dBA.
- 2.46.2 Exterior airborne noise generated by the bus and measured from either side shall not exceed eighty-three (83) dBA under full power acceleration when operated at or below thirty-five (35) mph at curb weight and just prior to transmission up shift. The bus-generated noise at curb idle shall not exceed sixty-five (65) dBA.
- 2.46.3 Proposer shall conduct noise testing as part of this proposal. All noise readings shall be taken fifty (50) feet from, and perpendicular to, the centerline of the bus with all accessories operating. Instrumentation, test sides, and other general requirements shall be in accordance with SAE Standard J366. The pull-away test shall be conducted with the rear bumper even with the microphone.

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Proposal shall include certificate of compliance with proposal.

- 2.46.4 TRIPS requests a proposal for a noise canceling function employing a single momentary switch that shuts down noise making equipment such as A/C and heater fans, auxiliary fans, etc. This function shall not shut down the two-way radio system.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.47.0 GENERAL SAFETY EQUIPMENT

- 2.47.1 Each vehicle shall be equipped with a first aid kit, (see Exhibit 3), mounted in an accessible location.
- 2.47.2 Each vehicle shall be equipped with a 5-pound rechargeable ABC type Fire extinguisher, mounted in an easily accessible location near the driver's position. The bottle shall be dated with the most recent charge date and have a visible indicator of the status of the charge for quick reference.
- 2.47.3 Each vehicle shall be equipped with reflective type warning triangles secured in a readily accessible location.
- 2.47.4 Each vehicle shall be equipped with a seat belt cutter mounted in an accessible location near the wheelchair ramps.
- 2.47.5 Each vehicle shall be equipped with a bio-hazard kit mounted in an accessible location. Kit must meet federal OSHA regulation 29 CFR1910.1030(d)(3)(i).
- 2.47.6 An oxygen tank holder shall be provided uninstalled inside each bus at delivery.
- 2.47.7 Provide a G-force accelerometer monitor and recorder as standard, configured with 2 Accelerometer devices allowing it to detect and record G-forces in 3 axes, front/rear – left/right – up/down. System should also provide the following inputs: reverse, brake and left and right turn signals. Data shall be recorded and retained for a maximum of 60 seconds before and 15 seconds after an event.
- 2.47.8 The EDR Manufacturer shall provide a document with each bus certifying the unit is operating properly and defining the parameters of the initial set-up. **Proposal shall include information on EDR used.**

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

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2.48.0 SPARE PARTS

2.48.1 90 days before delivery of the first bus, successful bidders shall submit to TRIPS and subsequently to each purchaser initial parts inventory and a price list which recommends the types and quantities of parts most likely to be required to support the buses for a one-year period. The manufacturer shall submit their current transit parts price list for all parts covered in the parts manual and all parts utilized in the construction of the bus. A cross reference shall list components by manufacturer and part number.

2.48.2 Proposers shall submit option pricing for the following parts:

- (1) Differential center section (drop-in unit only)
- (1) A/C compressor, complete with clutch assembly
- (1) Heater core
- (1) Set of wiper motors
- (1) Set of windshields
- (1) Set of type window glazing
- (1) Complete set of skirt panels
- (1) Spare Power Pack (see description below)
- (1) Spare Engine
- (1) Spare Transmission
- (1) Destination Sign package (Including; front, side(s), and rear
- (1) Set of Entrance Doors
- (1) Door Motor
- (1) Left Rear corner panel
- (1) Right Rear corner panel
- (1) Rear Bumper
- (1) Front cap excluding windshield
- (1) Engine Door
- (1) Set of Access door(s) and exterior door(s)

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

2.49.0 MAINTENANCE MANUALS

2.49.1 Successful bidders shall provide to each purchaser one (1) set of loose-leaf "AS BUILT" manuals per four (4) buses delivered. This set will include a Service/Maintenance Manual, Parts Manual, Electrical Schematic Manual, Operator's Manual and the same for all subsystems and sub components incorporated in the bus. In addition to loose leaf

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manuals the contractor will provide all the aforementioned manuals in an electronic format. A final copy of all literature must be delivered within 90 days of delivering the first bus of each order. Failure to provide a final copy of all literature within the 90 day period will result in the manufacturer being required to supply onsite representation to address literature related concerns.

- 2.49.2 Successful bidders shall keep maintenance information available for a period of ten (10) years after the date of acceptance of the equipment procured under this contract. The Contractor shall also keep all information up-to-date for the same ten (10) year period.
- 2.49.3 Successful bidders shall provide large body/structure drawings that include structure component part numbers and locations to each purchaser before delivery of the first bus Agency.
- 2.49.4 Successful bidders shall furnish a complete bill of materials of all parts/components used in the assembly of the bus. This list shall include bus manufacturer's part number, part description, name and part number of original part manufacturer.
- 2.49.5 Successful bidders shall provide the purchaser a quarterly parts update referencing component part up-grades with part number change cross reference. This quarterly update shall be provided for the life of the bus.

On above specifications, this Proposal (circle one below)
EXCEEDS MEETS DOES NOT MEET
COMMENT:

EXHIBITS

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Exhibit 1

DATACenter Dealer Requirements
(VERSION 1)

The Transit Research Inspection Procurement Services (TRIPS) DATACenter is managed by the Florida Department of Transportation (FDOT) and administered by the Center for Urban Transportation Research (CUTR). The TRIPS DATACenter is an online application developed to capture data related to vehicles procured from TRIPS vehicle contracts. The TRIPS DATACenter can be found at www.cutr.usf.edu/fvpp2

The Dealer is required to enter various information into the DATACenter as the vehicle moves through the procurement process, from order origination to agency acceptance.

All pertinent vehicle data must be entered into the TRIPS DATACenter prior to vehicle arriving at the TRIPS Springhill Bus Inspection & Testing facility (SBITF), located in Tallahassee, FL. Any vehicle(s) arriving at the TRIPS Springhill facility without complete “Vehicle Information Form” data in the DATACenter will not be inspected, which may delay the vehicle delivery process. Failure to enter prescribed vehicle information into the TRIPS DATACenter may result in contract suspension after two (2) violations.

Once the vehicle has been inspected, the dealer is **required** to enter all actions taken to correct defects found during the **SBITF** vehicle inspection. These actions are entered into the DATACenter through the **“Inspection Letter”** form that is generated from the inspection.

The Dealer is required to input any reported and actionable ***standard repair*** issues with the vehicle after the vehicle has been delivered and is put into service and report the actions taken to fix these issues during the vehicle’s entire useful life period. These actions are entered into the DATACenter through the ***“Vehicle Defect Form”***, accessed through the **“Repairs”** Tab. Select **“standard”** on the form.

The Dealer is required to input any reported and actionable ***warranty repair*** issues with the vehicle after the vehicle has been delivered and put into service, and report the actions taken to fix these issues during the entire warranty period. These actions are entered into the DATACenter through the ***“Vehicle Defect Form”***, accessed through the **“Repairs”** Tab. Select **“warranty”** on the form.

The DATACenter provides various other means of extracting information for the dealer, including PO management, searches, and reporting features. Please refer to the provided User’s Manuals as needed for complete information.

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Exhibit 2

Instruments

DISPLAY	GAUGE	LIGHT(S)	AUDIBLE
VOLTMETER	X	X	
ENGINE WATER TEMP	X	X High Temp	X High Temp
ENGINE OIL PRESSURE	X	X Low Pressure	X Low Pressure
TRANSMISSION TEMPERATURE	X	X High Temp	X High Temp
FUEL GAUGE	X	X Low Fuel	X Low fuel
GENERATOR/ALTERNATOR NOT CHARGING	X	X	X
DIRECTIONAL / HAZARD SIGNALS		X	X
HEADLIGHT HIGH BEAM		X	
PARKING BRAKE ON		X	
SPEEDOMETER WITH ODOMETER	X		
AIR PRESSURE	X		
LOW AIR WARNING		X	X

NOTE: The instrument package above shall be provided by the OEM manufacturer. After market substitutes will not be accepted.

Exhibit 3

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Medical Kit Supplies

<u>Contents</u>	<u>Amount</u>
Deluxe Kit, Metal, Empty	1 box
Clean Wipes 50/Box	5 each
Antibacterial Towelettes	20/box / 1 box
Tape, ½" X 5 Yd. Spool	1 each
Eye Wash, Sterile	1 each 4 oz.
Sheer Strip 1"	100 per box
QR Wound Seal	2 per package
Sterile Dressing 5" X 9"	1 each
Elastic Roller Gauze N/S	2" X 4.5 YD, 1 each
Pain-Aid	100 per Box (Zee)
First Aid Pocket Guide	1 each
Small Instant Ice Pack	1 each
Bandage, Triangular 40" N/S	1/Un, 1 each
3-in-1 Antibiotic Ointment	6 per unit, 1 each
Fingertip Bandages	10 per unit, 1 each
Gauze Pads, 3" X 3"	1 each
Knuckle Bandages	10 per unit, 1 each
Water-Jell Burn Jell	6 per box, 1 each
Eye Pads w/Adhesive Strips	2 per unit, 1 each
Nitrile Gloves, Large	2 pairs, 1 each
Disposable Tweezers, Sterile	1 each

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Exhibit 4

FLORIDA DEPARTMENT OF TRANSPORTATION

GASEOUS FUEL SYSTEM INSTALLATION STANDARD
(VERSION 1)

OVERVIEW

The gaseous fuel system installation standard will be evaluated on all vehicles procured from TRIPS vehicle contracts in support of both performance standards and quality star ratings. Testing conditions will replicate severe duty transit operations. Evaluation will be performed on all vehicles up-fitted with an after-market gaseous fuel system.

EVALUATION CRITERIA

Evaluation will occur at FDOT's Springhill Bus Testing and Inspection Facility (SBTIF) located at 2612 Springhill Road, Tallahassee, FL 32305. A gaseous fuel powered engine, which is the manufacturer's standard for this size bus considering components and accessories proposed, will be provided. The specified engine must give satisfactory performance over terrain encountered in Florida with maximum passenger load.

Gaseous fuel systems shall include up-graded components to ensure durability when used with gaseous fuels. The only fuels covered by this program are compressed natural gas (CNG) and liquefied petroleum gas (LPG). Gaseous fuel systems shall meet all current applicable **FMVSS**, **NFPA** and **OEM UPFITTER** guidelines.

INSTALLATION REQUIREMENTS

1. A service and parts manual shall be made available that specifies all gaseous fuel system components along with tank removal and installation methods and any special tools that may be required to prevent damage or injury to the tanks, facilities, and personnel. This manual should state that the fuel tank must be grounded prior to servicing the system and include a grounding procedure.
2. The CNG/LPG fuel system maximum pressure and working pressure shall be specified in the installation documentation. The working pressure of CNG is the settled pressure at a uniform gas temperature of 70°F at full gas content.
3. Heat shields shall be added for all new fuel components located within 8 inches of the exhaust system. Isolate all fuel handling components at least 8 inches from unshielded heat sources or at least 3 inches if shielded.
4. All components for the gaseous fuel fill and de-fuel ports shall be located in the normal fueling location. An interlock switch shall be provided to prevent starting the vehicle when fueling or de-

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fueling. All gaseous fuel lines, fittings and tubes shall be stainless steel or flex tubing approved for use with CNG at 3600PSI; LPG at 300PSI to meet current NFPA 52 and 58 guidelines and:

- Be routed away from, and not attached to, items that are likely to move during normal vehicle operation
- Be routed in such a manner that they will not be affected by the deformation or displacement of adjacent components during a crash
- Be routed inboard of the frame rails (except for connection to the filler) and above the plane of the lower frame flange
- Have adequate flexibility to avoid rupture or disconnection during crash situations
- Be routed away from sharp objects and be retained adequately to prevent movement into such regions or against such objects
- Be clear of moving suspension components
- Avoid exposure to road debris or undercoating
- Be properly grommets where they pass through panels

5. When CNG/LPG fuel tanks are mounted outside of the OEM frame rails, an additional crash barrier structure shall be provided to surround the tanks. This structure must equal or exceed the section modulus and material strength of the OEM frame rail. Final design shall be approved by FDOT.

6. The CNG fuel tanks shall be a minimum Type III; aluminum and carbon fiber construction with a minimum twenty (20) year life that complies with current NGV2-2007 and FMVSS 304 regulations. The conversion shall include stainless steel dust and gravel shields to protect the tanks and valves. The tanks shall have a production date of no more than 24 months from the date the vehicle is delivered.

7. A methane detection system shall be provided that alerts the driver with an audible and visual alarm when fumes exceed the specified threshold greater than 20% and disable the fuel system when fumes exceed specified threshold greater than 50%. The power supply for the methane detection system shall be separate from the chassis.

8. This standard is written to compliment and to be in compliance with NFPA 52 and 58. In the event of conflicting standards, NFPA 52 and 58 take precedence.

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Exhibit 5

FLORIDA DEPARTMENT OF TRANSPORTATION

AIR CONDITIONING PULL-DOWN TEST PROCEDURE

OVERVIEW

This test will be performed on all air-conditioning systems installed in vehicles procured from TRIPS vehicle contracts in support of both performance standards and quality star ratings. Testing conditions will replicate severe duty transit operations. FDOT will test one or more buses (systems) from each contract within the first award year. If a system fails the test, FDOT reserves the right to suspend vehicle orders utilizing this system, or terminate the contract associated with the failed system. FDOT reserves the right to randomly test new buses at any time during the contract period to ensure compliance.

TEST CONDITIONS / EQUIPMENT

The test will be performed on an asphalt parking lot in direct sunlight. The vehicle will be surrounded by a wall five (5) feet high, fifteen (15) feet wide and the length adjusted to the length of the bus. The minimum testing conditions require an ambient temperature of 94 degrees Fahrenheit (F) (+- 3 degrees) with 60% relative humidity.

All temperature measurements will be recorded in degrees of F using a 12 channel Omega data acquisition device. Calibration of the device is conducted prior to the test using the manufacturer's software.

Voltage readings are captured using the Fluke model 78 automotive multi-meter.

Amperage readings are captured using the Fluke model 336 True RMS Clamp Meter.

TEST SET-UP

1. Perform a system inspection to verify proper function of A/C system to be tested.
2. Ensure all windows and doors are closed properly, with no gaps or leaks. Ensure interior engine cover is sealed properly.

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3. Connect all test equipment:
 - a. T0 Lead: An Omega Engineering J-Type 5 position Fine Wire Thermocouple will be placed outside of the vehicle, away from mechanical and radiant heat sources, to capture ambient temperature
 - b. T1 Lead: An Omega Engineering J-Type 5 position Fine Wire Thermocouple will be placed 48 inches to 52 inches from the rear wall and four feet above the floor surface to capture bus interior temperature
 - c. T2 Lead: An Omega Engineering J-Type 5 position Fine Wire Thermocouple will be placed at the center line of the bus interior, four feet above the floor surface, to capture bus interior temperature
 - d. T3 Lead: An Omega Engineering J-Type 5 position Fine Wire Thermocouple will be placed at the first row of seats, four feet above the floor surface, to capture bus interior temperature
 - e. T4 Lead: An Omega Engineering J-Type ICSS Thermocouple will be placed near the center of the evaporator core to capture rear evaporator core temperature
 - f. T5 Lead: An Omega Engineering J-Type 5 position Fine Wire Thermocouple will be placed above the engine, near the fire wall, to capture the bus engine compartment temperature
 - g. T6 Lead: An Omega Engineering J-Type ICSS Thermocouple will be placed near the center at the air-in side of the condenser to capture the condenser core temperature
 - h. T7 Lead: An Omega Engineering J-Type 5 position Fine Wire Thermocouple will be placed near the center of the air-out side of the condenser to capture the condenser air temperature
 - i. Connect the multi-meter to the battery (s).
 - j. Connect the ammeter to the battery cable.

TEST PROCEDURE

1. Heat-soak the bus under test conditions for a minimum of two hours. Record the date, time of day, vehicle identification number and location.
2. With the vehicle in park and all doors and windows closed, start the engine.
3. Turn on the air conditioning system, set the a/c system to maximum cooling position and turn on all interior and exterior lights.

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4. Let vehicle run with the high idle on (approximately 1200 RPM on diesel engines and approximately 1500 RPM on gasoline engines). If the high idle is designed to automatically turn off after the first 15 minutes, the driver's door will be opened and the high idle immediately turned back on to complete the test. This action will not invalidate the test
5. Record all temperature readings (seven leads) in 30 second increments
6. Record battery voltage readings at the battery (s) at the beginning of the test and at ten (10) minute increments thereafter
7. Record amperage readings at the positive cable coming off the battery (s) at the beginning of the test and at ten (10) minute increments thereafter
8. At the end of the 30 minute A/C pull down test there will be a 30 minute heat-gain test performed to determine the efficiency of the insulation in the bus using the same measurement equipment used for the A/C pull down test. Record all temperature readings (seven leads) in 15 second increments to determine fastest rise and total rise in bus interior temperature

SYSTEM TEST RESULTS

During the test, the interior temperature of the bus should lower uniformly throughout and should lower the interior temperature within the prescribed time.

The system will **fail** the test if:

- a) The temperature difference between C1, C2, and C3 varies more than two degrees during each 30 second reading during the last 15 minutes of the test
- b) The system fails to lower the interior temperature to a minimum of 70 degrees F (+ or - 2 degrees) measured at C1 by the end of the 30 minute test (conditions must reflect an ambient temperature of 94 degrees F (+ or - 3 degrees) measured at T0, with a minimum of 60% relative humidity).
- c) The voltage readings at the batteries fall below 12.9 volts at any time during the test

Additional data will be captured to allow the TRIPS program to analyze and compare system attributes and configurations:

- i. Fastest time to achieve 70 degrees with the lowest amperage draw
- ii. Fastest overall time to achieve 70 degrees
- iii. Lowest temperature retained during the 30 minute heat-gain test
- iv. Lowest head pressure reading captured during step 6 of the test
- v. Highest voltage output captured during step 7 of the test
- vi. Lowest amperage draw captured during step 8 of the test

Exhibit 6

FLORIDA DEPARTMENT OF TRANSPORTATION

Alternator Output Test Procedure **(VERSION 1)**

OVERVIEW

This test will be performed on all vehicles procured from TRIPS vehicle contracts in support of both performance standards and quality star ratings. Testing conditions will replicate severe duty transit operations. Testing will be performed on both OEM and after-market alternators, as determined by contract.

TEST CONDITIONS / EQUIPMENT

Testing will occur at FDOT's Springhill Bus Testing and Inspection Facility (SBTIF) located at 2612 Springhill Road, Tallahassee, FL, 32305. The Crumbliss 2115 Alternator testing device will be utilized. The alternator will be shrouded and heat applied to it during the test via a five hundred (500) degree heat gun, simulating a real-world, under-hood operating environment. A 12 or 24 volt battery (as applicable) is used during testing to simulate an active charging system. Two (2) DC condenser fan motors are added to the circuit. These fans are turned on and off as needed to prevent the battery from overcharging during testing.

TEST SET-UP

1. Install alternator into testing machine vise
2. Verify correct size pulley on alternator
3. Verify and install correct size pulley on testing machine to drive alternator at prescribed (production) engine idle RPM
4. Install drive belt between alternator pulley and tester pulley
5. Check for proper pulley alignment
6. Attach test leads to alternator
7. Connect cables to batteries
8. Place heat-shroud over alternator/vise assembly
9. Position heat gun
10. Turn on test machine cooling fans
11. Turn on BATTERY switch (if needed)

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12. Set MOTOR switch to **slow** position
13. Set VOLT switch to 12 or 24 volt position
14. Set PULLEY knob to diameter of pulley being used
15. Turn on START switch

TEST PROCEDURE

1. Adjust RPM to prescribed engine idle speed
2. Slowly turn FIELD CURRENT load control from minimum position toward maximum position until VOLT gauge reads 12.4 volts
3. Note reading from AMP gauge: **This reading is Maximum Output at Idle under Full Load**

Continue testing to determine SAE (hot) rating Performance Curve

*Raise RPM gradually another 500 RPM;
Note reading from AMP gauge*

*Raise RPM gradually another 500 RPM;
Note reading from AMP gauge*

*Raise RPM gradually another 500 RPM;
Note reading from AMP gauge*

*Raise RPM gradually another 500 RPM;
Note reading from AMP gauge*

Using the four (4) readings documented in the performance test above, plot Alternator Performance Curve using appropriate software

4. Capture temperature readings of housing surface, stator, rotors and both bearings
 5. Document these readings for use in subsequent comparisons and/or star rating computation
- During the test period, the temperature inside the heat shroud will be between 120 - 150 degrees F. The alternator will run at minimum idle speed (600 rpm) for 30 minutes and at maximum rpm speed (2000) for 30 minutes
 - The alternator amperage output, minimum battery voltage, and temperature of the alternator will be continuously monitored and readings documented during testing for use in subsequent comparisons and/or star rating computation

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SYSTEM TEST RESULTS

Alternator will **fail** the test if:

- a. Amperage output falls below the maximum amperage draw for the type bus it will be used on
- b. Alternator Performance Curve rating is lower than manufacturer provided Performance Curve rating

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Exhibit 9

After Sales Service

1. Successful bidder shall provide a contact person(s) for warranty and parts with a dedicated phone line to be answered during normal business hours.
2. Successful bidder shall provide a list of most often requested bus parts to be used in creating a parts stockage level list at the dealer's location.
3. Successful bidder shall provide a list of authorized service centers in the state of Florida capable of general bus repairs, wheelchair lift/ramp repair, and A/C repair.
4. Successful bidder shall provide a minimum of one field service technician familiar with all areas of the bus. This technician must be prepared to travel throughout the state and provide repairs when local agencies cannot make the repair.

Exhibit 10

TRIPS PROGRAM-STAR RATING GUIDELINES

Air Conditioner *(Version 5)*

Stars are earned for achievements in each of the categories listed below. Air conditioner manufacturers have the ability to receive up to 5 stars (one per category). Continuous type data will be averaged by contract to obtain ratings. Ratings will be updated semi-annually.

Category One: Temperature: One star will be earned if the temperature captured individually by the C1, C2, and C3 Leads during the A/C pull-down test is between 67- 69 degrees F. If unable to obtain this metric, a half star will be earned if the **average** on all three sensors as captured by the C1, C2, and C3 Leads during the A/C pull-down test is between 67- 69 degrees.

Category Two: Amperage Draw: One star will be earned if the system has the lowest amperage draw as captured by step 8 of the A/C pull-down test. A half star will be earned if the system has the second lowest amperage draw as captured by step 8 of the A/C pull-down test. A quarter star will be earned if the system has the third lowest amperage draw as captured by step 8 of the A/C pull-down test.

Category Three: After Sales Service: One star will be earned if the A/C manufacturer displays timeliness in repairing any and all system defects. TRIPS defines “timeliness” as four (4) business days or less, from notification of defective system/component to completion of repairs. A half star will be earned if the repair occurs between five (5) and eight (8) days, a quarter star will be earned for repairs taking longer than eight (8) days.

Category Four: Warranty: A half star will be earned for providing the longest system warranty as detailed in the vehicle purchasing agreement. A half star will be earned for **exceeding** the provisions of Part 5, Section 5.4.0 of the vehicle purchasing agreement, “work necessary to affect the repairs defined in Section 5.1.2 shall commence within ten (10) working days after receipt of notification by Dealer.” A quarter star will be earned for **meeting** the provisions of Part 5, Section 5.4.0.

Category Five: Product Reliability: One star will be earned for having ten percent (10%) or less of A/C systems encountering any type of defect for the useful life of the system (as determined by vehicle type), excluding post-delivery inspection results. A half star will be earned for having less than fifteen percent (15%) but greater than ten percent (10%) of A/C systems encountering any

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type of defect for the useful life of the system (as determined by vehicle type), excluding post-delivery inspection results.

Exhibit 11

TRIPS PROGRAM-STAR RATING GUIDELINES

Alternator *(Version 5)*

Stars are earned for achievements in each of the categories listed below. Alternator manufacturers have the ability to receive up to 5 stars (one per category). Continuous type data will be averaged by contract to obtain ratings. Ratings will be updated semi-annually.

Category One: Temperature: One star will be earned for the lowest average temperature captured on the housing surface, stator, rotors and both bearings as compared to alternators with similar characteristics. A half star will be earned for the second lowest average temperature captured on the housing surface, stator, rotors and both bearings as compared to alternators with similar characteristics

Category Two: Performance: One star will be earned if alternator maintains a 150 amp output with a minimum of fourteen (14) volts supplied to the battery for 30 minutes, at an alternator rotor speed of 2000 RPM.

Category Three: After Sales Service: One star will be earned if the alternator manufacturer displays timeliness in repairing any and all product defects. TRIPS defines “timeliness” as four (4) business days or less, from notification of defective system/component to completion of repairs. A half star will be earned if the repair occurs between five (5) and eight (8) days, a quarter star will be earned for repairs taking longer than eight (8) days.

Category Four: Warranty: A half star will be earned for longest alternator warranty provided as detailed in the vehicle purchasing agreement. A half star will be earned for ***exceeding*** the provisions of Part 5, Section 5.4.0 of the vehicle purchasing agreement, “work necessary to affect the repairs defined in Section 5.1.2 shall commence within ten (10) working days after receipt of notification by Dealer.” A quarter star will be earned for ***meeting*** the provisions of Part 5, Section 5.4.0.

Category Five: Product Reliability: One star will be earned for having ten percent (10%) or less of alternators encountering any type of defect for the useful life of the system (as determined by vehicle type), excluding post-delivery inspection results. A half star will be earned for having less than fifteen percent (15%) but greater than ten percent (10%) of alternators encountering any type of defect for the useful life of the system (as determined by vehicle type), excluding post-delivery inspection results.

Exhibit 12

TRIPS PROGRAM-STAR RATING GUIDELINES

Manufacturer *(Version 5)*

Stars are earned for achievements in each of the categories listed below. Manufacturers have the ability to receive up to 5 stars (one per category). Continuous type data will be averaged by contract to obtain ratings. Ratings will be updated semi-annually.

Category One: Quality: One star will be earned if the results of the post-delivery inspection conducted at the SBTIF reveal an average of four (4) defects or less for all vehicles inspected, specific to purchasing agreement. A half star will be earned if the results of the post-delivery inspection conducted at the SBTIF reveal an average of between five (5) and eight (8) defects for all vehicles inspected, specific to purchasing agreement. A quarter star will be earned if the results of the post-delivery inspection conducted at the SBTIF reveal an average of between nine (9) or greater defects for all vehicles inspected, specific to purchasing agreement.

Category Two: Design / Crashworthiness: One star will be earned if the manufacturer's Pre-Qualification Structural Test results equal or exceed:

- Floor to Wall (FTW) connection test- 400 J/m
- Roof to Wall (RTW) connection test- 200 J/m
- Sidewall Panel Test - 1000 J/m with less than 150 mm deflection

A half star will be earned if the manufacturer's Pre-Qualification Structural Test results are between the passing standard and the one-star criteria listed in this Category.

Category Three: Compliance: One star will be earned for complying with Part 4, Quality Assurance Provisions, of the contract, in its entirety and having a completed TRIPS generated Plant Inspection report on file for the current production year. A half star will be earned for meeting one of the two requirements of this Category.

Category Four: Product Reliability: One star will be earned for having twenty five percent (25%) or less of vehicles encountering any type of defect for the useful life of the system (as determined by vehicle type), specific to purchasing agreement and excluding post-delivery inspection results. A half star will be earned for having less than thirty five percent (35%) but greater than twenty five percent (25%) of vehicles encountering any type of defect for the useful life of the system (as determined by vehicle type), specific to purchasing agreement and excluding post-delivery inspection results.

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Category Five: Insulation / R value: One star will be earned for the lowest retained temperature captured during the 30 minute heat-gain test conducted as part of the A/C pull down test, specific to purchasing agreement. A three quarter star will be earned for the second lowest retained temperature captured during the 30 minute heat-gain test conducted as part of the A/C pull down test, specific to purchasing agreement. A half star will be earned for the third lowest retained temperature captured during the 30 minute heat-gain test conducted as part of the A/C pull down test, specific to purchasing agreement. A quarter star will be earned for the fourth lowest retained temperature captured during the 30 minute heat-gain test conducted as part of the A/C pull down test, specific to purchasing agreement.

Exhibit 13

TRIPS PROGRAM-STAR RATING GUIDELINES

Dealer

(Version 5)

Stars are earned for achievements in each of the categories listed below. Dealers have the ability to receive up to 5 stars (one per category). Continuous type data will be averaged by contract to obtain ratings. Ratings will be updated semi-annually.

Category One: After Sales Service: One star will be earned if the dealer fully complies with Exhibit 9, After Sales Service, as defined in the purchasing agreement, and receives an average score of four (4) or above from the agency post-delivery surveys. A three-quarter star will be earned if the dealer is in partial compliance with **Exhibit 9, After Sales Service**, as defined in the purchasing agreement and receives an average score of at least four (4) or above from the agency post-delivery surveys. A half star will be earned if the dealer is in full or partial compliance with **Exhibit 9, After Sales Service**, as defined in the purchasing agreement and receives an average score of greater than three (3) but less than four (4) from the agency post-delivery surveys.

Category Two: Warranty: One star will be earned if the dealer starts work immediately on warranty claims, as defined in Part 5, Section 5.4.0 and fully complies with Part 5, Section 5.10.5. A half star will be earned for complying with one of the two Sections referenced in this Category.

Category Three: Compliance: One star will be earned if the dealer is in full compliance with **Exhibit 1, DATACenter Dealer Requirements**, of the contract.

Category Four: TRIPS Satisfaction Survey: One star will be earned if the dealer receives an average score of four (4) or above from the TRIPS Overall Satisfaction survey. A half star will be earned if the dealer receives an average score of greater than three (3) but less than four (4) from the TRIPS Overall Satisfaction survey. A quarter star will be earned if the dealer receives an average score of greater than two (2) but less than three (3) from the TRIPS Overall Satisfaction survey.

Category Five: Contract Management: One star will be earned if both the dealer and manufacturer participate in TRIPS requested annual meeting to review contract status and problem solve. One half star will be earned for dealer-only participation.

Exhibit 14

Provide signs #1, #2, and #3 with black letters on white background. Agency is to be consulted on exact wording prior to delivery.

Sign #1

*Transportation services
provided by this vehicle
are open to the general
public.*

Sign #2

*Florida Law and Title VI of the Civil
Rights Act of 1964 Prohibits
Discrimination in:*

*Public accommodations on the basis of
race, color, religion, sex, national origin,
handicap, or marital status.*

*Persons believing they have been
discriminated against on these conditions
may file a complaint with the Florida
Commission on Human Relations at 850-
488-7082 or 800-342-8170 (voice
messaging).*

Sign #3

*Florida Law and Title VI of the Civil
Rights Act of 1964 Prohibits*

Discrimination in:

*Public accommodations on the basis of
race, color, religion, sex, national origin,
handicap, or marital status.*

*Persons believing they have been
discriminated against on these conditions
may file a complaint with the
(xxxxxxxxxxxxxxxxxx) at (xxxxxxxxxxxxxxxxxx)*

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Exhibit 15

FDOT AMP Draw Analysis Worksheet

CHASSIS

MANUFACTURER & MODEL _____ VIN# _____ BUS NO. _____
DATE: _____ VEHICLE DESCRIPTION _____
ALTERNATOR MANUFACTURER _____ RATED AMP. OUTPUT _____

TOTAL IDLE AMP. OUTPUT (a) _____

SYSTEMS

AMP. DRAW

OEM Chassis	
Lift	
Entry Door	
Second Stage A/C	
Additional Second Stage Components	

TOTAL AMP. DRAW (b) _____

{ (a)-(b)=(c) } TOTAL RESERVE AMPS. AVAILABLE (c) _____

Amp. Draw of Anticipated Components to be added _____

NOTE: Anticipated and/or Add on component(s) Amp draw should not total more than 90% of (c) above.

Bus Manufacturer: _____
Address: _____
Prepared By: _____
Signed: _____
Title: _____

PART 3

OPTIONS



Contract # TRIPS-MD-17-RFP

MEDIUM DUTY CHASSIS TYPE TRANSIT
VEHICLES

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OPTIONS

#TRIPS-MD-17-RFP

3.1.0 ENGINES, DIESEL OR ALTERNATIVE FUELED

- 3.1.1 Diesel engine meeting current EPA requirements in place of the standard engine. Engine must meet standards described in Part 2, Section 2.3.0.
- 3.1.2 Compressed Natural Gas (CNG) or Alternative Fueled engine meeting current EPA requirements in place of the standard diesel engine. Engine must meet standards described in Part 2, Section 2.3.0.
- 3.1.3 Hybrid-electric propulsion system meeting current EPA requirements in place of the standard diesel engine. Engine must meet standards described in Part 2, Section 2.3.0.
- 3.1.4 Full stainless steel exhaust system.

3.2.0 TRANSMISSION

- 3.2.1 Specify the type and manufacturer of any alternative transmissions.

3.3.0 WHEELS

- 3.3.1 Provide Aluminum wheels in place of standard steel wheels.
- 3.3.2 Additional matching mounted and balanced spare tire and wheel assemblies.
- 3.3.3 Hub O Meter See 2.15.5.

3.4.0 SEATS

- 3.4.1 American Seating – 6468-VR 50 Inserts:
 - Standard
 - Flip Type
 - Foldaway
- 3.4.2 Freedman Seating City-Seats, AV Inserts:
 - Standard
 - Flip Type
 - Foldaway
- 3.4.3 Seat Covers (Passenger)

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3.5.0 DRIVER'S SEAT

- 3.5.1 USSC Evolution G2A with pedestal
- 3.5.2 USSC Q90
- 3.5.3 USSC LX Series
- 3.5.4 USSC 9000 Series
- 3.5.5 Freedman G2ELPQR
- 3.5.6 Recaro Ergo M with pedestal
- 3.6.0 Adjustable three speed driver's fan.

3.7.0 FLOOR COVERING

- 3.7.1 Provide Altro Transflor slip resistant sheet vinyl flooring with smooth, all welded seams. Each customer will determine color / design selection. Include Altro step tread material with *yellow* step nosing and *white* "standee line" insert.
- 3.7.2 Provide Gerfloor slip resistant sheet vinyl flooring with smooth, all welded seams. Each customer will determine color / design selection. Include Gerfloor step tread material with *yellow* step nosing and *white* "standee line" insert.

3.8.0 LUGGAGE RACK

- 3.8.1 Floor mounted luggage Rack(s).

3.9.0 GRAB RAILS AND STANCHIONS

- 3.9.1 Yellow powder-coated hand rails and stanchions.
- 3.9.2 Stainless steel hand rails and stanchions.

3.10.0 REMOTE EXTERIOR MIRRORS

- 3.10.1 Specify type and manufacturer of alternative mirrors meeting MD-17 specifications 2.19.1.

3.11.0 REVERSE ASSISTANCE DETECTION SYSTEM

- 3.11.1 Reverse assist system.
- 3.11.2 Reverse camera and monitor backing system.

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3.12.0 AIR PURIFICATION SYSTEM

- 3.12.1 The system shall be designed for bus application to eliminate the spread of virus, bacteria, odors, mold and fungus growth within the bus air conditioning evaporator coils, drain pan and ducting.

3.13.0 WHEEL CHAIR RAMP

- 3.13.1 Ricon Ramp
- 3.13.2 Lift-U Ramp
- 3.13.3 Braun Ramp

3.14.0 SECUREMENT DEVICES

- 3.14.1 SURE-LOK Titan restraint system.
- 3.14.2 Q-Straint QRT Max restraint system.
- 3.14.3 WC-18 Compliant restraint system.
- 3.14.4 Q-Pod Securement Station.
- 3.14.5 Q-Straint Quantum Securement Station.
- 3.14.6 W/C lap/shoulder restraint belt extensions.

3.15.0 SAFETY EQUIPMENT

- 3.15.1 Fogmaker Fire Suppression System; a complete turn-key automatic fire suppression system.
- 3.15.2 Kidde Fire Suppression System; a complete turn-key automatic fire suppression system.
- 3.15.3 DAFO fire suppression system; a complete turn-key automatic fire suppression system.
- 3.15.4 Camera systems priced by camera quantity, i.e., 2 camera system, 4 camera system, etc.
- 3.15.5 ROSCO Dual Vision video event recorder.
- 3.15.6 LYTX drive cam

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- 3.15.7 Event Data Recorder meeting MD-17 specification 2.47.7.
- 3.15.8 Camera system replacement parts, i.e., cameras, hard drives, supporting equipment, etc.
- 3.15.9 An in-vehicle computer that allows electronic delivery of passenger manifests, automatic data collection, in-vehicle navigation and enhanced driver/dispatcher communication. The system shall be capable of integration to other on-board systems, including existing APC, IVR and GPS onboard units and shall be a turn-key installation.
- 3.15.10 Avail MDT –Driver Interface, Communications, Interface Expansion Box (IEB), Emergency Alarm, and Navigational Assistance Unit.
- 3.15.11 Pre-Trip inspection module. The pre-trip module shall sequentially turn on and off all the lights on the bus, including the brake and reverse lights.

3.16.0 PA & ENTERTAINMENT SYSTEMS

- 3.16.1 A Radio Engineering Industries (REI) public address system meeting MD-17 specification 2.23.1.

3.17.0 DESTINATION SIGNS

- 3.17.1 A manually operated destination sign for limited destination readings shall be offered. Front destination sign shall be a Transign LLC, single roller curtain type installed above the windshield with a glass exposure of 8 inches x 60 inches. The side destination sign for a front door only bus will be a single roller type installed in the upper curbside window immediately behind the entrance door with a glass exposure of 5-3/4" x 28". The side destination sign for a front and rear door bus shall be installed in the upper curbside window immediately in front of the rear door. Destination signs will be electrically operated, LED, fluorescent or incandescent backlit display, single curtain, .003 mil. thick Mylar anti-glare material, with provisions for a minimum of 25 readings and a maximum of 175 readings of 5 inch high Helvetica medium font letters for the front sign and Helvetica medium font letters 4" high characters for the side sign. Control switch is to be located on the left hand of the driver's console. Curtain destination signs will conform to the Americans With Disabilities Act Part 38. Characters on these signs will have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10. Generally, the space between letters will be 1/16 the height of upper case letters and will contrast with the background using either yellow letters on green or black background; or white letters on red, green, blue or black background per the purchaser's choice, for route and destination identification. The following destination readings will be standard on all destination signs ordered under this contract, with colors noted:

Bus Garage (yellow letters on black background)

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Not In Service (yellow letters on black background)
Special Service (yellow letters on black background)
Shuttle Service (yellow letters on black background)
Downtown (yellow letters on green background)
Town Center (yellow letters on green background)
Public Transportation (yellow letters on green background)
Emergency Service (white letters on red background)
Emergency Shelter (white letters on red background)
Evacuation Route (white letters on red background)
Express (white letters on red background)

- 3.17.2 Twin Vision Elyse software Electronic Destination system full front and side signs; and a separate rear number only sign shall be provided. The system shall be compatible with Windows 2000 or Windows XP software, using IBM 486 or higher PC/AT capacity, PCMCIA memory download technology. Electronic destination signs will conform to the Americans With Disabilities Act Part 38. The electronic destination sign shall utilize Helvetica yellow medium lettering on black background. The readings listed in 3.16.1 above shall also be standard in all Elyse electronic destination signs ordered under this contract.
- 3.17.3 A Twin Vision Mobi-Lite electronic destination sign, or approved equal, with side destination sign, using amber LED's and has fully programmable features that allow both large single and double line capabilities. The readings listed in 3.16.1 above shall also be standard in all Mobi-Lite electronic signs ordered under this contract.
- 3.17.4 A Transign Vista Star electronic destination sign, or approved equal, with side destination sign, using amber LED's and has fully programmable features that allow both large single and double line capabilities. The readings listed in 3.16.1 above shall also be standard in all Transign electronic signs ordered under this contract.
- 3.17.5 A Transign LLC 2-digit incandescent backlight, with anti-glare finish, dash mounted Block/Run Number Box, or approved equal, shall be provided. White, red or yellow LED letters/numbers on a black background, displayed in a plastic or metal frame, to operate on a 12 volt system.
- 3.17.6 A Transign LLC 3-digit incandescent backlight, with anti-glare finish, dash mounted Block/Run Number Box, or approved equal, shall be provided. White, red or yellow LED letters/numbers on a black background, displayed in a plastic or metal frame, to operate on a 12 volt system.
- 3.17.7 A "STOP REQUESTED" sign, as manufactured by Transign LLC, or approved equal, installed in the front vestibule area. Sign is activated by passengers and de-activates with the opening of the passenger entry door. Injected molded with display area of 2.5 X 19.75 minimum. Provide a silk screened lens display face with yellow letters on green background, or as required by Purchaser.

3.18.0 BODY

PART 4

QUALITY ASSURANCE



Contract # TRIPS-MD-17-RFP

MEDIUM DUTY CHASSIS TYPE TRANSIT
VEHICLES

QUALITY ASSURANCE PROVISIONS

#TRIPS-MD- 17-RFP

4.1.0 CONTRACTORS IN-PLANT QUALITY ASSURANCE REQUIREMENTS

4.1.1 QUALITY ASSURANCE ORGANIZATION

Manufacturer shall establish and maintain an effective in-plant quality assurance organization. It shall be a specifically defined organization and should be directly responsible to Manufacturer's top management. **Proposal shall include a complete description of manufacturer's Quality Control Program.**

4.1.2 CONTROL

The quality assurance organization shall exercise quality control over all phases of production from initiation of design through manufacture and preparation for delivery. The organization shall also control the quality of supply articles.

4.1.3 AUTHORITY AND RESPONSIBILITY

The quality assurance organization shall have the authority and responsibility for reliability, quality control, inspection planning, establishment of the quality control system, and the acceptance/rejection of materials and manufactured articles in the production of the vehicles.

4.2.0 QUALITY ASSURANCE ORGANIZATION FUNCTIONS

The quality assurance organization shall include the following minimum functions.

4.2.1 WORK INSTRUCTIONS

The quality assurance organization shall verify inspection operation instructions to ascertain that the manufactured product meets all prescribed requirements.

4.2.2 RECORDS MAINTENANCE

The quality assurance organization shall maintain and use records and data essential to the effective operation of its program. These records and data shall be available for review by the resident inspectors. Inspection and test records for this procurement shall be available for a minimum of one (1) year following the completion of the inspections and tests.

4.2.3 CORRECTIVE ACTION

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The quality assurance organization shall detect and promptly assure correction of any conditions that may result in the production of defective vehicles. These conditions may occur in design, purchases, manufacture, tests or operations that culminate in defective supplies, services, facilities, technical data, or standards.

4.3.0 STANDARDS AND FACILITIES

The following standards and facilities shall be basic in the quality assurance process.

4.3.1 CONFIGURATION CONTROL

Manufacturer shall maintain drawings and other documentation that completely describe a qualified vehicle that meets all of the options and special requirements of this procurement. The quality assurance organization shall verify that each transit vehicle is manufactured in accordance with these controlled drawings and documentation.

4.3.2 MEASURING AND TESTING FACILITIES

Manufacturer shall provide and maintain the necessary gauges and other measuring and testing devices for use by the quality assurance organization to verify that the vehicles conform to all specification requirements. These devices shall be calibrated at established periods against certified measurement standards that have known valid relationships to national standards.

4.3.3 PRODUCTION TOOLING AS MEDIA OF INSPECTION

When production jigs, fixtures, tooling masters, templates, patterns, and other devices are used as media of inspection, they shall be proved for accuracy at formally established intervals and adjusting, replaced, or repaired as required to maintain quality.

4.3.4 EQUIPMENT USE BY TRIPS LINE INSPECTORS

Manufacturer's gauges and other measuring and testing devices shall be made available for use by the resident inspectors to verify the vehicles conform to all specification requirements. If necessary, Manufacturer's personnel shall be made available to operate the devices and to verify their condition and accuracy.

4.4.0 CONTROL OF PURCHASES

Manufacturer shall maintain quality control of purchases.

4.4.1 SUPPLIER CONTROL

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Manufacturer shall require that each supplier maintains a quality control program for the services and supplies that it provides. Manufacturer's quality assurance organization shall inspect and test materials provided by suppliers for conformance to specification requirements. Materials that have been inspected, tested, and approved shall be identified as acceptable to the point of use in the manufacturing or assembly processes. Controls shall be established to prevent inadvertent use of nonconforming materials.

4.4.2 PURCHASING DATA

Manufacturer shall verify that all applicable specification requirements are properly included or referenced in purchase orders of articles to be used on vehicles.

4.5.0 MANUFACTURING CONTROL

Manufacturer shall ensure that all basic production operations, as well as other processing and fabricating, are performed under controlled conditions. Establishment of these controlled conditions shall be based on the documented work instructions, adequate production equipment, and special work environments if necessary.

4.5.1 COMPLETED ITEMS

A system for final inspection and test of completed vehicles shall be provided by the quality assurance organization. It shall measure the overall quality of each completed vehicle.

4.5.2 NONCONFORMING MATERIALS

The quality assurance organization shall monitor Manufacturer's system for controlling nonconforming materials. The system shall include procedures for identification, segregation, and disposition.

4.5.3 STATISTICAL TECHNIQUES

Statistical analysis, tests, and other quality control procedures may be used when appropriate in the quality assurance processes.

4.5.4 INSPECTION STATUS

A system shall be maintained by the quality assurance organization for identifying the inspection status of components and completed vehicles. Identification may include cards, tags, or other normal quality control devices.

4.6.0 INSPECTION SYSTEM

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The quality assurance organization shall establish, maintain, and periodically audit a fully-documented inspection system. The system shall prescribe inspection and test of materials, work in progress, and completed articles. As a minimum, it shall include the following controls.

4.6.1 INSPECTION STATIONS

Inspection stations shall be at the best locations to provide for the work content and characteristics to be inspected. Stations shall provide the facilities and equipment to inspect structural, electrical, hydraulic, and other components and assemblies for compliance with the design requirements. Stations shall also be at the best locations to inspect or test characteristics before they are concealed by subsequent fabrication or assembly operations. These locations shall minimally include, as practicable, under-body structure completion, body framing completion, body prior to paint preparation, water test before interior trim and insulation installation, engine installation completion, under-body dress-up and completion, vehicle prior to final paint touch-up, vehicle prior to road test, and vehicle final road completion.

4.6.2 INSPECTION PERSONNEL

Sufficiently trained inspectors shall be used to ensure that all materials, components, and assemblies are inspected for conformance with the qualified vehicle design.

4.6.3 INSPECTION RECORDS

Acceptance, rework, or rejection identification shall be attached to inspected articles. Articles that have been accepted as a result of approved materials review actions shall be identified. Articles that have been reworked to specified drawing configurations shall not require special identification. Articles rejected as unsuitable or scrap shall be plainly marked and controlled to prevent installation on the vehicle. Articles that become obsolete as a result of engineering changes or other actions shall be controlled to prevent unauthorized assembly or installation. Unusable articles shall be isolated and then scrapped. Discrepancies noted by Manufacturer during assembly shall be entered on a record that accompanies the major component, subassembly, assembly, or vehicle from start of assembly through final inspection. Actions shall be taken to correct discrepancies or deficiencies in the manufacturing processes, procedures, or other conditions that cause articles to be in nonconformity with the requirements of the contract specifications. The inspection personnel shall verify the collective actions and mark the discrepancy record. If discrepancies cannot be corrected by replacing the nonconforming materials, the procuring agency shall approve the modification, repair, or method of correction to the extent that the contract specifications are affected.

4.6.4 QUALITY ASSURANCE AUDITS

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The quality assurance organization shall establish and maintain a quality control audit program. Records of this program shall be subject to review by the TRIPS.

4.7.0 ACCEPTANCE TESTS

4.7.1 RESPONSIBILITY

Fully documented tests shall be conducted on each production vehicle following manufacture to determine its acceptance to the TRIPS. These acceptance tests shall include pre-delivery inspections and testing by Manufacturer, and inspections and testing by the TRIPS prior to and after the vehicles have been delivered.

4.7.2 PRE-DELIVERY TESTS

Manufacturer shall conduct acceptance tests at its plant on each vehicle following completion of manufacture and before delivery to the TRIPS. The pre-delivery tests shall include visual and measured inspections, as well as testing the total vehicle operation. The tests shall be conducted and documented in accordance with written test plans. Additional tests may be conducted at Manufacturer's discretion to ensure that the completed vehicles have attained the desired quality and have met the requirements in **Part 2: Technical Specifications**. This additional testing shall be recorded on appropriate test forms provided by Manufacturer. The pre-delivery tests shall be scheduled and conducted with sufficient notice so that they may be witnessed by TRIPS line inspectors, who may accept or reject the results of the tests. The results of pre-delivery test, and any other tests, shall be filed with the assembly inspection records for each vehicle. The under-floor equipment shall be made available for inspection by the resident inspectors, using a pit or vehicle hoist provided by Manufacturer. A hoist, scaffold, or elevated platform shall be provided by Manufacturer to easily and safely inspect vehicle roofs. The TRIPS shall also conduct pre-delivery tests at the Springhill facility located in Tallahassee. It is Proposer's responsibility to ensure that the vehicle arrives at the Springhill facility prior to Proposer taking delivery of vehicle from Manufacturer. The results of this inspection will accompany the vehicle upon delivery to the purchaser.

4.7.3 INSPECTION-VISUAL AND MEASURED

Visual and measured inspections shall be conducted with the vehicle in a static condition. The purpose of the inspection testing is to verify overall dimensional and weight requirements, to verify that the required components are included and are ready for operation, and to verify that components and subsystems that are designed to operate with the vehicle in the static condition do function as designed.

4.7.4 TOTAL VEHICLE OPERATION

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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 subsystem that can be operated only while the vehicle is in motion. Each vehicle shall be driven for a minimum of fifteen (15) miles during the road tests. Observed defects shall be recorded on the test forms. The vehicle shall be retested when defects are corrected and adjustments are made. This process shall continue until defects or required adjustments are no longer detected. Results shall be pass/fail for these vehicle operation tests. After the road test, the line inspector representing the TRIPS reserves the right to have Manufacturer either raise the vehicle or drive the vehicle across a pit to allow the inspector to check the undercarriage.

4.8.0 POST-DELIVERY TESTS

The TRIPS may conduct acceptance tests on each delivered vehicle. These tests shall be completed within ten (10) working days after vehicle delivery. The purpose of these tests are to identify defects that have become apparent between the time of vehicle release and delivery to the purchaser. The post-delivery tests shall include visual inspection and vehicle operations. Vehicles that fail to pass the post-delivery tests are subject to non-acceptance. The TRIPS shall record details of all defects notify Manufacturer of non-acceptance of each vehicle within five (5) working days after completion of these tests. The defects detected during these tests shall be repaired according to the procedures defined in **Part 1: Solicitation, Offer and Award/Contractual Provisions**.

4.8.1 VISUAL INSPECTION

The post-delivery inspection is similar to the inspection at Manufacturer's plant and shall be conducted with the vehicle in a static condition.

4.8.2 VEHICLE OPERATION

The road tests for total vehicle operation are similar to those conducted at Manufacturer's plant. Operational deficiencies of each vehicle shall be identified and recorded.

PART 5

WARRANTY



Contract # TRIPS-MD-17-RFP

MEDIUM DUTY CHASSIS TYPE TRANSIT VEHICLES

WARRANTY PROVISIONS

#TRIPS-MD-17-RFP

5.0.0 BASIC PROVISIONS

5.1.0 WARRANTY REQUIREMENTS

Warranties in this document are in addition to any statutory remedies or warranties imposed on Contractor. A description of the local dealer warranty process shall be included in the Purchasing Agreement package including information on how warranty issues are tracked. The Contractor warrants and guarantees to the TRIPS each complete vehicle, and specific subsystems and components as follows:

5.1.1 COMPLETE VEHICLE

The vehicle is warranted and guaranteed to be free from defects for a minimum of Thirty-six (36) months or thirty-six thousand (36,000) miles, whichever comes first, beginning on the date of acceptance of each vehicle. During this warranty period, the vehicle shall maintain its structural and functional integrity. The warranty is based on regular operation of the vehicle under the operating conditions prevailing in the purchaser's locale.

5.1.2 SUBSYSTEMS AND COMPONENTS

Specific subsystems and components are warranted and guaranteed to be free from defects and related defects for the times and/or mileages given in **Exhibit 5-1**.

NOTE: *Parts and labor to be covered in all warranty provisions.*

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Exhibit 5-1

STANDARD WARRANTY

Subsystem and Component Minimum Warranty, whichever occurs first.

NOTE: Parts and labor to be covered in all warranty provisions.

	Manufacturer's. Standard Warranty	Manufacturer's. Standard Warranty	Proposed	Proposed
Item	Years	Miles	Years	Miles
Complete Bus Warranty				
Full Power Train				
HVAC System				
Alternator				
Wheelchair Ramp				
Body Structural				
Alternative Fuels System				

Proposal shall also include warranty terms for components not listed above.

5.2.0 VOIDING OF WARRANTY

The warranty shall not apply to any part or component of the vehicle that has been subject to misuse negligence, accident, or that has been repaired or altered in any way so as to affect adversely its performance or reliability, except insofar as such repairs were in accordance with Contractor's maintenance manuals and the workmanship was in accordance with recognized standards of the industry. The warranty shall also be void if the purchaser fails to conduct normal inspections and scheduled preventive maintenance procedures as recommended in Contractor's maintenance manuals.

5.3.0 EXCEPTIONS TO WARRANTY

The warranty shall not apply to scheduled maintenance items, and items such as tires and tubes, nor to items furnished by the purchaser such as radios, fare boxes, and other auxiliary equipment, except insofar as such equipment may be damaged by the failure of a part or component for which Contractor is responsible.

5.4.0 DETECTION OF DEFECTS

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If the purchaser detects a defect within the warranty periods defined in **Section 5.1.1**, it shall promptly notify the Dealer representative. Within five (5) working days after receipt of notification, Dealer representative shall either agree that the defect is in fact covered by the "complete vehicle" warranty, or reserve judgment until the subsystem or component is inspected by Dealer's representative and/or is removed and examined at the purchaser's property or at the Contractor's facility. At that time, the status of warranty coverage, either subsystem or vehicle, shall be mutually resolved between the purchaser and Dealer. If the defect belongs to a subsystem or component, then work necessary to affect the repairs defined in **Section 5.1.2** shall commence within ten (10) working days after receipt of notification by Dealer. Otherwise, **Section 5.1.1** applies and repairs will be started immediately.

5.5.0 SCOPE OF WARRANTY REPAIRS

When warranty repairs are required, the purchaser and Dealer's representative shall agree within five (5) days after notification on the most appropriate course for the repairs and the exact scope of the repairs to be performed under the warranty. If no agreement is obtained within the five (5) day period, the purchaser reserves the right to commence the repairs in accordance with **Section 5.7.1**.

5.6.0 FLEET DEFECTS

A fleet defect is defined as the failure of identical items covered by the warranty and occurring in the warranty period in a proportion of the vehicles delivered under this contract. For the purpose of this bid, identical defects occurring in sixty (60) percent of vehicles delivered shall be considered a "fleet defect."

5.6.1 SCOPE OF WARRANTY PROVISIONS

Dealer shall correct a fleet defect under the warranty provisions defined in **Section 5.4.0**. After correcting the defect, Dealer shall promptly undertake and complete a work program reasonably designed to prevent the occurrence of the same defect in all other vehicles purchased under this contract. The work program shall include inspection and/or correction of the potential or defective parts in all of the vehicles. The warranty on items determined to be fleet defects shall be extended for the time and/or miles of the original warranty. This extended warranty shall begin on the date a fleet defect was determined to exist, or on the repair/replacement date for corrected items.

5.6.2 VOIDING OF WARRANTY PROVISIONS

The fleet defect provisions shall not apply to vehicle defects caused by noncompliance with Dealer's recommended normal maintenance practices and procedures.

5.6.3 EXCEPTIONS TO WARRANTY PROVISIONS

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Fleet defect warranty provisions shall not apply to damage that is a result of normal wear and tear in service to such items as seats, floor covering, windows, interior trim, and paint. The provisions shall not apply to purchaser supplied items such as fareboxes, two-way radios, and tires.

5.7.0 REPAIR PROCEDURES

5.7.1 REPAIR PERFORMANCE

In some instances, the TRIPS may require Dealer or its designated representative to perform warranty-covered repairs that are clearly beyond the scope of its capabilities. In these cases, this work will be done by the bus manufacturer.

5.7.2 REPAIRS BY CONTRACTOR

If the TRIPS requires Dealer to perform warranty-covered repairs, Dealer's representative must begin within ten (10) working days after receiving notification of a defect from the purchaser, work necessary to effect repairs. The purchaser shall make the vehicle available to complete repairs timely with Dealer repair schedule. Dealer shall provide at its own expense all spare parts, tools, and space required to complete repairs. At the TRIPS option, Dealer may be required to remove the vehicle from the purchaser's property while repairs are being affected. If the vehicle is removed from the purchaser's property, repair procedures must be diligently pursued by Dealer's representative.

5.8.0 REPAIRS BY THE PURCHASER

5.8.1 PARTS USED

If the purchaser performs the warranty-covered repairs, it shall correct or repair the defect and any related defects using contractor-specified spare parts available from its own stock or those supplied by Dealer specifically for this repair. Monthly (or at a period to be mutually agreed upon) reports of all repairs covered by this warranty shall be submitted by the purchaser to Proposer for reimbursement or replacement of parts. Dealer shall provide forms for these reports.

5.8.2 CONTRACTOR SUPPLIED PARTS

The TRIPS may request that Dealer supply new parts for warranty-covered repairs being performed by the purchaser. These parts shall be shipped prepaid to the purchaser, from any source selected by Dealer, the "next business day" from receipt of the request for said parts.

5.8.3 DEFECTIVE COMPONENTS RETURN

Dealer may request that parts covered by the warranty be returned to the

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manufacturing plant. The total cost for this action shall be paid by Dealer. Materials should be returned in accordance with contractor's instructions.

5.8.4 REIMBURSEMENT FOR LABOR

The purchaser shall be reimbursed by Dealer for labor. The amount shall be determined by multiplying the number of man-hours actually required to correct the defect by the purchaser's current per hour, master mechanic, straight wage rate, plus 32 percent fringe benefits, plus the cost of towing in the vehicle if such action was necessary and if the vehicle was in the normal service area. These wage and fringe benefit rates shall not exceed the rates in effect in the purchaser's service garage at the time the defect correction is made. The purchaser shall not accept parts credit as payment of warranty labor claims.

5.8.5 REIMBURSEMENT FOR PARTS

The purchaser shall be reimbursed by Dealer for defective parts and for parts that must be replaced to correct the defect. The reimbursement shall be at the invoice cost of the part(s) at the time of repair and shall include taxes where applicable and 2 percent handling charges. The purchaser shall not accept parts credit as payment of warranty part claims.

5.9.0 WARRANTY AFTER REPLACEMENT / REPAIRS

If any component, unit, or subsystem is repaired, rebuilt, or replaced by Dealer or by the TRIPS personnel, with the concurrence of Dealer, the subsystem shall have the unexpired warranty period of the original subsystem.

5.10.0 DEALER WARRANTY SERVICE AND REPORTING

Contract dealers and the manufacturers they represent will have representatives meet with FDOT in Tallahassee, three to four times each year. The primary focus of these meetings will be discussion of contract concerns, handling of warranty requests and areas receiving repetitive inspection write-ups.

5.10.1 CONTRACT DEALERS WARRANTY SERVICE

Should clearly instruct and encourage procuring agencies that when they have maintenance issues that may be covered under warranty, to always contact their dealer FIRST. Dealers should have an effective system in place to allow agencies to speak with a representative about an issue, in a timely manner.

5.10.2 CONTRACT DEALERS RESPONSIBILITY

Contract Dealers are responsible for all aspects of the warranty process. This includes scheduling, coordinating and monitoring all warranty repairs and parts replacements until they are fully resolved. This applies to the OEM chassis, bus

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manufacturer and vendor related warranty work. When two or more subcomponents are tied together by design to create a functional system, and those subcomponents are provided or installed by different manufacturers, TRIPS expects the Contract Dealer/Manufacturer to obtain written agreements for system defects and warranty provisos. Examples of these functional groups/systems are Alternator, A/C, Brackets, Camera/Data, etc. TRIPS reserves the right to view these agreements at any time, for the duration of the contract. Dealers should seek to minimize the time required for resolving warranty issues. Dealers are to coordinate with agencies to provide qualified warranty repairs with minimal disruption to agencies.

5.10.3 MAINTAIN TRACKING SYSTEM

Contract Dealers should maintain a “tracking” system with information on the below responsibilities.

- Note when an agency reports a problem with description of problem;
- Contact repair facility and schedule diagnostics/repair;
- Notify the agency of the repair facility/appointment date/contact person;
- Communicate with repair facility until repair is complete;
- Notify the agency that the vehicle is ready for pick up;
- Follow-up with agency to confirm that the repair resolved the problem;

5.10.4 AGENCY PERFORM REPAIRS

Contract Dealer may, when requested, authorize an agency’s maintenance certified technicians to perform warranty service. However, dealers are still responsible for monitoring that the agency receives correct replacement parts; return shipping and proper labor reimbursements in a timely manner.

5.10.5 WARRANTY REPORTING

The Dealer is required to input any reported and actionable **warranty repair** issues with the vehicle after the vehicle has been delivered and put into service, and report the actions taken to fix these issues during the entire warranty period. Information should include dates, contact persons, telephone numbers, description of the problem, repair facility, release date from the repair facility, agency notification dates and agency follow-up dates. These actions are entered into the DATACenter through the “**Vehicle Defect Form**”, accessed through the “**Repairs**” Tab. Select “warranty” on the form. Failure to enter prescribed warranty claims information into the TRIPS DATACenter will result in contract suspension after two (2) violations.”

PART 6

PAINT SCHEMES



Contract # TRIPS-MD-17-RFP

MEDIUM DUTY CHASSIS TYPE TRANSIT
VEHICLES

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PAINT SCHEMES

#TRIPS-MD- 17-RFP

6.1.0 EXTERIOR VEHICLE IDENTIFICATION

- 6.1.1 Window exterior black out and anodized black window frame shall be a customer option on all three paint schemes. Proposer shall submit pricing, including cost of blackout and finish of passenger window frames.
- 6.1.2 Individual corporate logos, agency name in specific size block lettering, reflective material, vinyl wrap or other vehicle identification requested by the Purchaser will be negotiated separately between the Purchaser and the Dealer outside of the TRIPS contract, but included in the final Purchase Order specifications and pricing for each vehicle.
- 6.1.3 FDOT assigns a specific number to each vehicle purchased using its Capital funding sources. The identification shall be displayed as **FDOT #000000** in 3M reflective material, or approved equal, Helvetica Medium two inch lettering/numbering. The numbering will be displayed on the rear and front of the vehicle at locations agreed to by TRIPS. It will be the dealer's responsibility to obtain this number from FDOT and post on the vehicle at delivery or immediately thereafter.
- 6.1.4 All buses purchased with funding provided through the American Recovery & Reinvestment Act (ARRA) shall have an official ARRA logo (**see Exhibit 6A**) attached to the rear surface of the vehicle above the bumper.

6.2.0 INTERIOR VEHICLE IDENTIFICATION

- 6.2.1 Manufacturer must post a "maximum capacity" of each vehicle placard on the interior bulkhead, including maximum number of standees. It must be visible from within the coach, mounted as far forward as practical, and within close proximity of the entrance door. Lettering to be a minimum of 2 inches.

EXHIBIT 6A



PAINT SCHEME #1
Optional

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PAINT SCHEME #2
Optional

PAINT SCHEME #3
Optional