DEPARTMENTAL INPUT
CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

☑ New ☐ OTR ☐ Sole Source ☐ Bid Waiver ☐ Emergency Previous Contract/Project No.

☐ Contract ☐ Re-Bid ☐ Other LIVING WAGE APPLIES: ☐ YES ☐ NO

Requisition No./Project No.: RQID1500065 TERM OF CONTRACT 1 YEAR(S) WITH 0 YEAR(S) OTR

Requisition /Project Title: Type A, Type C and Type D School Buses and Optional Equipment

Description: The Community Action and Human Services Department has requested to acquire a school bus for the Head Start program to replace a previously retired 1998 Blue Bird Bus by accessing the DOE contract # 2015-01. The current contract expires 12/31/2015.

Issuing Department: ID Contact Person: Lorrie Kola Phone: 305-375-4884

Estimate Cost: $113,450.00

	GENERAL	FEDERAL	OTHER
Funding Source:	Int. Serv. F		

ANALYSIS

Commodity Codes: 07030

Contract/Project History of previous purchases three (3) years

Check here ☐ if this is a new contract/purchase with no previous history.

	EXISTING	2ND YEAR	3RD YEAR
Contractor:			
Small Business Enterprise:			
Contract Value:	$	$	$

Comments:

Continued on another page (s): ☐ YES ☐ NO

RECOMMENDATIONS

	Set-aside	Sub-contractor goal	Bid preference	Selection factor
SBE				

Basis of recommendation:

Signed: Lorrie Kola Date sent to SBD: 12/11/15

Date returned to DPM:

State of Florida
Florida Department of Education
Bureau of Contracts, Grants and Procurement Management Services
332 Turlington Building
325 West Gaines Street
Tallahassee, Florida 32399-0400

BID REGISTRATION

****

COMPLETE AND RETURN THIS FORM

****

BID NO.: ITB 2015-01

TITLE: Type A, Type C and Type D School Buses and Optional Equipment

DATE & TIME BID RESPONSE IS DUE: April 24, 2014 @ 9:15 a.m. Eastern Time (ET)

Potential bidders should notify the Florida Department of Education, Bureau of Contracts, Grants and Procurement Management Services of their intent to submit bid responses by returning this Bid Registration Form as soon as possible after downloading. Complete the information below and send this sheet only.

COMPANY NAME: _____

CONTACT PERSON: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

TELEPHONE: ( ) _____ FAX: ( ) _____

INTERNET E-MAIL ADDRESS: _____

SIGNATURE: _____ DATE: _____

For further information about the bid process, you may contact Christina Davis at 850-245-9191 or Christina.Davis@fldoe.org.

(Revised 10/15/13)

INVITATION TO BID
BID NO: ITB 2015-01

For

TYPE A, TYPE C AND TYPE D SCHOOL BUSES

and

OPTIONAL EQUIPMENT

DEADLINES

TECHNICAL QUESTIONS: February 21, 2014
BID RESPONSE SUBMITTAL DUE: April 24, 2014 @ 9:15 a.m.

ESTIMATED POSTING DATE: May 23, 2014

MAIL OR DELIVER BID RESPONSES TO:

Florida Department of Education
Bureau of Contracts, Grants and Procurement Management Services
325 West Gaines Street
332 Turlington Building
Tallahassee, Florida 32399-0400
Attention: Christina Davis

DOES THE SINGLE AUDIT ACT APPLY? (yes or no) PLEASE CALL ALRICKY SMITH AT 850-245-9875 FOR ASSISTANCE IN DETERMINATION

TABLE OF CONTENTS

INVITATION TO BID
FLORIDA DEPARTMENT OF EDUCATION
Type A, Type C and Type D School Buses and Optional Equipment
BID NUMBER: ITB 2015-01

SECTION 1 – INSTRUCTIONS

1.0 GENERAL INSTRUCTIONS TO RESPONDENT

This section contains instructions explaining the solicitation process and the actions necessary to respond to this invitation to bid. General Instructions to Respondent (Form PUR 1001 – incorporated herein by reference) must be downloaded for review. This document need not be returned with the respondent's bid response. Form PUR 1001 may be accessed at http://dms.myflorida.com/business_operations/state_purchasing under "Documents, Forms, References and Resources."

In the event of any conflict between Form PUR 1001 and other instructions provided in this document, the additional instructions in this document shall take precedence over Form PUR 1001 unless the conflicting term is required by any section of the Florida Statutes, in which case the statutory requirements shall take precedence.

SECTION 2 – CONTRACT CONDITIONS

2.0 GENERAL CONTRACT CONDITIONS

Standard terms and conditions that will apply to the contract that results from the solicitation event are provided in this section. General Contract Conditions (Form PUR 1000 – incorporated herein by reference) must be downloaded for review. This document need not be returned with the respondent's bid response. Form PUR 1000 may be accessed at http://dms.myflorida.com/business_operations/state_purchasing under "Documents, Forms, References and Resources."

In the event of any conflict between the PUR 1000 form and any other special conditions, the special conditions shall take precedence over the PUR 1000 form unless the conflicting term in the PUR form is required by any section of the Florida Statutes, in which case the term contained in PUR 1000 shall take precedence.

SECTION 3 - INTRODUCTION

3.0 INTENT

The Florida Department of Education (hereinafter referred to as the "Department") is soliciting written bid responses from qualified vendors to establish an 18-month term contract for the purchase of Type A, Type C and Type D school buses and optional equipment. The intent of these specifications is to set forth and convey to prospective bidders the general type, character, performance and level of quality of the vehicles desired by the Department and purchasing school districts. The contractor is authorized to provide vehicles to any and all eligible users in the State of Florida. The sale of any vehicles to an eligible user not included in the definition herein is prohibited unless the contractor has received prior written approval from the Department and such services are set forth in an addendum hereto executed by all parties. The parties agree that the laws and rules that apply to this contract shall be those applicable to contracts in excess of Purchasing Category Two, or $35,000, as defined in section 287.017, Florida Statutes (F.S.).

The resulting contract may not be renewed.

3.1 BACKGROUND

Section 1006.27, F.S., states that the Department shall assist district school boards in securing school buses at prices that are as reasonable as possible by providing a plan under which district school boards may voluntarily pool their bids for such purchases. Accordingly, the Department, in cooperation with the Department of Management Services, prepares and awards term contracts for the purchase of various types of school buses and optional equipment, and makes the contracts available to district school boards. District school boards, from time to time, as prescribed by the Florida Administrative Code, are required to furnish the Department with information concerning the prices paid for such items. The Department furnishes to district school boards periodic information concerning the lowest prices at which school buses, equipment and related supplies are available based upon comparable specifications.

School bus units may be purchased by Florida district school boards, the Florida School for the Deaf and the Blind (FSDB) and eligible private schools as outlined, if purchased by the specified dates.

Representatives of the Florida Department of Management Services, State Purchasing, may be asked to serve as advisors in final determination and acceptance of bids.

3.2 DEFINITIONS

As used herein, the following definitions apply:

1. Contract: The agreement entered into between the Department and the successful bidder after completion of the invitation to bid process.
2. Contractor: The successful bidder, selected as a result of this invitation to bid (ITB), with which the Department executes a contract to provide the required services.
3. Department: Refers to the Florida Department of Education.
4. Bid: All documents and materials contained in the formal ITB package submitted by a bidder in response to this solicitation.
5. Bid Response: The complete response of the bidder to the ITB, including properly completed forms and supporting documentation.
6. Bidder: A potential contractor, acting on his or her own behalf and on behalf of those individuals, partnerships, firms, or corporations comprising the bidder's team, who submits a response to this solicitation.
7. VBS: Florida Vendor Bid System.
8. Deliverable: A tangible, specific, quantifiable and measurable event or item that must be produced to complete a project or part of a project directly related to the scope of services.
9. Configuration: Each unique combination of the following vehicle characteristics: bus capacity (e.g., 65 capacity), engine type (e.g., wet-sleeve), and wheelchair lift (if applicable). An example of a configuration for this purpose is a 65 capacity type C wet-sleeve with lift.
10. Eligible Users: Florida district school boards, Florida School for the Deaf and the Blind (FSDB), and eligible private schools.
11. FE: Front engine.
12. FSDB: Florida School for the Deaf and the Blind.
13. N/A or NA: Not available or not applicable.
14. N/B or NB: No bid submitted for base bus or option. A "no bid" on a base bus or option will continue to be considered as "no bid" throughout the term of the contract, including dealer-offered options.
15. N/C or NC: No-charge item – the Department reserves the right to determine whether the item is to be included as standard equipment.
16. PB: Parent bore engine.
17. Price: Base unit or option price.
18. RE: Rear engine.
19. Ready-to-Use Condition: Units meeting all applicable specifications, with all equipment functioning properly, and without substantive defects (as determined by the Florida Department of Education, School Transportation Management Section).

20. Responsive Bidder: A person who has submitted a bid response that conforms in all material aspects to the ITB.
21. Responsible Bidder: A bidder who demonstrates the capacity in all respects to satisfy the contract requirements with the integrity and reliability that will assure good-faith performance.
22: STD: Standard.
23. STMS: School Transportation Management Section.
24. Unit(s): Buses produced and sold via the Florida Department of Education's Bid No: ITB 2015-01 for School Buses and Optional Equipment.
25. Vehicles: Collective reference to various Type A, Type C and Type D school buses and optional equipment.
26. WS: Wet-sleeve engine.

3.3 SCHEDULE OF EVENTS

SCHEDULED ACTIVITY	DATE	METHOD/CONTACT
ITB Release	Monday, February 3, 2014	Vendor Bid System Advertisement Website – http://vbs.dms.state.fl.us/vbs/main_menu
Prospective Bidder Questions	Due: Friday, February 21, 2014 by 4:30 p.m., Eastern Time	Questions must be identified as such and submitted by mail, e-mail, or facsimile to the Department contact person: Christina Davis 325 W. Gaines St., 332 Turlington Building Tallahassee, Florida 32399-0400 Christina.Davis@fldoe.org Fax 850-245-9189
Mandatory Pre-Bid Meeting (attendance required by at least one representative of each bidder)	Monday, March 10, 2014 10:00 a.m., Eastern Time	Florida Department of Education 1721 Turlington Building 325 W. Gaines Street Tallahassee, Florida 32399-0400
Departmental Answers Provided to Bidder Questions	Monday, March 24, 2014 5:00 p.m., Eastern Time	Written response (addenda) to any written questions received by the deadline will be provided via the Vendor Bid System Advertisement Website - http://vbs.dms.state.fl.us/vbs/main_menu
Sealed Bids Receipt and Opening NOTE: Visitors to the Turlington Building are required to sign in at the security desk in the main lobby, obtain a visitor's pass, and be escorted by designated Department representatives. Please allow enough time if hand-delivering your response to the Procurement Office.	Thursday, April 24, 2014 Received NO LATER THAN 9:15 a.m. Opened 10:15 a.m., Eastern Time	Submit to: Florida Department of Education Procurement Office Attn: Christina Davis 324 Turlington Building 325 W. Gaines Street Tallahassee, Florida 32399-0400 Bids will be opened in Room 1706 of the Turlington Building at 10:15 a.m.
Posting of Intended Decision (on or about)	Friday, May 23, 2014	Vendor Bid System Advertisement Website - http://vbs.dms.state.fl.us/vbs/main_menu
Enter Into A Contract With Successful Bidders (Anticipated)	Tuesday, July 1, 2014	The Department and contractor
Anticipated Contract Start Date	Tuesday, July 1, 2014	The Department and contractor
Anticipated Contract End Date	Thursday, December 31, 2015	The Department and contractor

SECTION 4 – SPECIAL INSTRUCTIONS

4.0 ENFORCED REQUIREMENTS

The Department has established certain mandatory requirements that must be included as part of any bid response. The terms "shall," "must," and "will" (except to indicate simple futurity) in this ITB indicate a mandatory requirement or condition. The words "should" and "may" in this ITB indicate desirable attributes or conditions, but are permissive in nature. Deviation from, or omissions of, such a desirable feature will not by itself cause rejection of a bid response.

4.1 NON-RESPONSIVE BIDS, NON-RESPONSIBLE BIDDERS

Bid responses that fail to provide all required information will be rejected as non-responsive. Material requirements of the ITB are those set forth as mandatory, or without which an adequate analysis and comparison of bid responses is impossible, or those that affect the competitiveness of bids or the cost to the state. A bidder whose bid responses, past performance or current status do not reflect the capability, integrity or reliability to perform fully and in good faith the requirements of the contract may be rejected as non-responsible. The Department reserves the right to waive any minor irregularities or technicalities in any bid response received, to reject any or all bid responses in whole or in part, with or without cause, to solicit new bid responses or to accept the bid response which, in its judgment, will be in the best interest of the Department. The Department reserves the right to use any information presented in any response to this ITB.

4.2 POOR PERFORMANCE NOTICE

The bidder shall provide for both the bidder and his/her employees, subcontractors and subcontractor employees, copies of any and all documents regarding complaints filed, investigations made, warning letters or inspection reports issued, any notice of breach, notice of default, termination notice, suspension notice, or any disciplinary action initiated or taken under any contract or job performance within the past seven (7) years. For each instance listed, provide a narrative summary of the contract's purpose and scope of work, the bidder's performance (including the concerns of the project owner), and any major adverse findings. In addition, provide the contract or job number; the name of the owner; the term of the contract; and the name, address and telephone number of the owner's contract manager. Please also include any relevant documentation evidencing the performance issues.

The Department reserves the right to seek further information on this matter from the bidder or to make inquiries with the project owner. The information obtained from this review may be used to declare the bidder not a responsible vendor.

4.3 QUESTIONS

Potential bidders shall examine the ITB to determine if the Department's requirements are clearly stated. If there are any requirements that restrict competition, the bidder may request, in writing to the state, that the specifications be changed. The bidder who requests changes to the state's specifications must identify and describe the bidder's difficulty in meeting the state's specifications, must provide detailed justification for a change, and must provide recommended changes to the specifications. Questions concerning conditions and specifications of this ITB, and/or requests for changes to the bid response, must be received in writing by the Bureau of Contracts, Grants and Procurement Management Services as specified in SECTION 3.3 SCHEDULE OF EVENTS. A bidder's failure to request changes by the specified date shall be considered to constitute bidder's acceptance of the state's specifications. The state shall determine what changes to the ITB shall be acceptable to the state.

Questions may be mailed, faxed or delivered to the address below:

Florida Department of Education
Bureau of Contracts, Grants and Procurement Management Services
Attn: Christina Davis
325 West Gaines Street, Room 332
Tallahassee, Florida 32399-0400

E-mail (preferred): Christina.Davis@fldoe.org
FAX 850-245-0719

Only those responses to the bidder's inquiries that are posted on the Florida Vendor Bid System website by the Bureau of Contracts, Grants and Procurement Management Services will be considered duly authorized on behalf of the Florida Department of Education.

Language in this document takes precedence over any conflicting language in the attached General Contract Conditions (PUR 1000) and General Instructions to Respondents (PUR 1001).

4.4 RESTRICTIONS ON COMMUNICATIONS WITH DEPARTMENT STAFF

Bidders shall not communicate with any Department staff concerning this ITB except for the Department contact person identified in SECTION 4.3 QUESTIONS of this ITB. Only those communications that are in writing from the Bureau of Contracts, Grants, and Procurement Management Services shall be considered as duly authorized responses on behalf of the Department. For violation of this provision, the Department reserves the right to reject a bid response.

Bidders to this solicitation or persons acting on their behalf may not contact, between the release of the solicitation and the end of the 72-hour period following the agency posting of the notice of intended award, excluding Saturdays, Sundays and state holidays, any employee or officer of the executive or legislative branch concerning any aspect of this solicitation, except in writing to the procurement officer or as provided in the solicitation documents. Violation of this provision may be grounds for rejecting a bid response.

4.5 PROCUREMENT PROTESTS/NOTICE OF RIGHTS

Pursuant to section 120.57(3)(b), F.S.:

Any person who is adversely affected by the agency decision or intended decision shall file with the agency a notice of protest in writing within 72 hours after the posting of the notice of decision or intended decision. With respect to a protest of the terms, conditions and specifications contained in a solicitation, including any provisions governing the methods for ranking bids, proposals, or replies; awarding contracts; reserving rights of further negotiation; or modifying or amending any contract, the notice of protest shall be filed in writing within 72 hours after the posting of the solicitation. The formal written protest shall be filed within 10 days after the date the notice of protest is filed. Failure to file a notice of protest or failure to file a formal written protest shall constitute a waiver of proceedings under this chapter. The formal written protest shall state with particularity the facts and law upon which the protest is based. Saturdays, Sundays and state holidays shall be excluded in the computation of the 72-hour time periods referenced in this paragraph. Section 120.57(3)(a), F.S., reads, "Failure to file a protest within the time prescribed in section 120.57(3), F.S., or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, F.S."

Rule 28-110.002(2), Florida Administrative Code (FAC), defines the term "decision or intended decision," and includes the solicitation terms (and any addenda), the award of the contract, and a rejection of all bid responses.

At the time of filing the formal written protest, the protestor must also file a protest bond payable to the Department in an amount equal to 1 percent of the estimated contract amount. Section 287.042(2)(c), F.S. and Rule 28-110.005, FAC, contain further information relating to the protest bond, including how to determine the estimated contract amount. In lieu of a protest bond, the Department will accept cashier’s checks, official bank checks or money orders. The bond shall be conditioned upon the payment of all costs and charges that are adjudged against the protestor in the administrative hearing in which the action is brought and in any subsequent appellate court proceeding.

The notice of protest, formal written protest and protest bond shall be addressed to the issuing office as defined in SECTION 6.0 BID SUBMISSION and filed with the agency clerk.

4.6 ADDENDA

No negotiations, decisions or actions will be initiated or executed by a bidder as a result of any oral discussions with a Department employee. Only those communications that are in writing from the Bureau of Contracts, Grants and Procurement Management Services will be considered as duly authorized expressions on behalf of the Department.

If the Department determines that it should modify or interpret any portion of the ITB documents prior to the closing time and date, such changes will be included as a written addendum to the ITB. No other methodology will be considered binding or authorized in giving information concerning, or to explain or interpret the ITB document.

Notice of changes (addenda) will be posted on the Florida Vendor Bid System (VBS) at www.myflorida.com under this bid number. (From website, select "Business," "Doing Business with the State," "Everything for Vendors and Customers," "Vendor Bid System (VBS)," and "Search Advertisements." Select "Department of Education" in the drop-down menu for "Agency." Finally, select "Initiate Search.") It is the responsibility of all potential bidders to monitor this site for any changing information prior to submitting a bid response.

NOTE: SIGNED ACKNOWLEDGEMENT OF ANY ADDENDA MUST ACCOMPANY ITB RESPONSE. FAILURE TO SUBMIT THE ACKNOWLEDGEMENT FORM WILL RESULT IN DISQUALIFICATION OF THE BIDDER.

4.7 MINOR EXCEPTIONS

The Department may waive minor deviations or exceptions in bids providing such action is in the best interest of the State of Florida. Minor deviations/exceptions are defined as those that have no adverse effect upon the state's interest and would not affect the amount of the bid by giving a contractor an advantage or benefit not enjoyed by other contractors.

4.8 COPYRIGHTED MATERIAL

Copyrighted material will be accepted as part of a bid response only if accompanied by a waiver that will allow the Department to make paper and electronic copies necessary for use by Department staff and agents. It is noted that copyrighted material is not exempt from the Public Records Law, chapter 119, F.S. Therefore, such material will be subject to viewing by the public, but copies of the material will not be provided to the public. All development and use of copyrighted material in fulfilling the terms of the bid shall be governed by the terms of the contract between the contractor and the Department.

4.9 CONFIDENTIAL MATERIAL

The Department takes its public records responsibilities as provided under chapter 119, F.S., and article I, section 24 of the Florida Constitution, seriously. If respondent considers any portion of the documents, data or records submitted in response to this solicitation to be confidential, trade secret or otherwise not subject to disclosure pursuant to chapter 119, F.S., the Florida Constitution or other authority, respondent must clearly mark and identify in its response those portions that are confidential, trade secret or otherwise exempt. Respondent must also simultaneously provide the Department with a separate redacted copy of its response. This redacted copy shall contain the Department's solicitation name and number and the name of the respondent on the cover, and shall be clearly titled "Redacted Copy." The redacted copy shall be provided to the Department at the same time respondent submits his/her response to the solicitation and must only exclude or obliterate those exact portions that are claimed confidential, proprietary, or trade secret.

Bidder shall be responsible for defending his/her determination that the redacted portions of his/her response are confidential, trade secret or otherwise not subject to disclosure. Further, bidder shall protect, defend and indemnify the Department for any and all claims arising from or relating to respondent's determination that the redacted portions of its response are confidential, proprietary, trade secret or otherwise not subject to disclosure.

If bidder fails to submit a redacted copy with his/her response, the Department is authorized to produce all documents, data and records submitted by respondent in answer to a public records request.

4.10 PREPARATION COST

Bid responses shall contain all information solicited, plus any additional data, prints or literature that the bidder deems pertinent to the Department's understanding and evaluation of the bidder's response. This ITB does not commit the Department or any other public agency to pay any costs incurred by the bidder in the submission of a bid response or to make necessary studies or designs for the preparation thereof, nor to procure or contract for any articles or services.

4.11 WITHDRAWAL

Bidders may modify submitted bid responses at any time prior to the bid due date. Requests for modification of a submitted bid response shall be in writing and must be signed by an authorized representative of the bidder. Upon receipt and acceptance of such a request, the entire bid response will be returned to the bidder and not considered unless resubmitted by the due date and time. Bidders may also send a change in a sealed envelope to be opened at the same time as the bid response. The ITB number and the deadline for bid responses should appear on the envelope of the modified bid response.

4.12 PUBLIC OPENING OF BID RESPONSES

Each bid response shall be dated and time-stamped by the Department as received. Any bid response received after the specified deadline for bid acceptance shall be rejected and returned unopened to the bidder. Bid responses will be opened at the designated date and time at the Department's Bureau of Contracts, Grants and Procurement Management Services, 325 West Gaines Street, Room 332, Tallahassee, Florida.

4.13 CORRECTION OF BID RESPONSE ERRORS

Information that is required to be included in the bid response is expected to be present and to be accurate. Corrections of erroneous information or typographical errors will not be permitted after the Department has received the bid responses. The contractor is solely responsible for proofreading his/her bid response and verifying its accuracy.

4.14 VISITOR PASS TO THE TURLINGTON BUILDING

Each visitor to the Turlington Building is required to sign in and obtain a visitor's pass at the security desk in the main lobby. Please allow at least 15 minutes prior to bid response due time if hand-delivering your bid response to the Bureau of Contracts, Grants and Procurement Management Services.

4.15 ACCESSIBILITY FOR PERSONS WITH DISABILITIES

Any person requiring a special accommodation because of a disability should call the Department's Bureau of Contracts, Grants and Procurement Management Services at 850-245-0735 at least five (5) workdays prior to the bid response opening. If you are hearing or speech impaired, please contact the Department by using the Florida Relay Service at 1-800-955-8771 (TDD).

4.16 RESPONSE DURATION

All submitted bid responses are binding until December 31, 2015.

4.17 PRICING

All bid prices are to include the furnishing of all parts, labor, transportation and incidental services or materials required. There shall be no additional costs charged for work performed under this bid. All bid prices are to be submitted on the forms provided.

All bid prices quoted for Type A, Type C and Type D school buses and optional equipment shall be in even dollar amounts. All bid prices for base units, standard options and additional contract options, including warranty agreements, are to be submitted on the Microsoft Excel worksheets provided in Attachment 1 - Vendor's Bid Pricing Sheets, of this ITB. Pricing is also to be submitted in Microsoft Excel file format for base buses and options. These worksheets will be provided via e-mail to bidders listed on the bid notification list. Prospective bidders may also request to receive the electronic worksheets from Christina Davis at Christina.Davis@fldoe.org. The electronic worksheets are identical to the paper bid sheets included in the bid. Hard copies of your price quotes are still

required, but may be printed from the electronic spreadsheets. Pricing must include the furnishing of all parts, labor, transportation, incidental services and materials required. There shall be no additional price charged for work performed under this bid. All bid prices must remain firm until December 31, 2015. Prices are to be submitted on the forms provided in a SEALED ENVELOPE with the bid number written on the outside. No price changes will be allowed throughout the contract period.

Each price sheet must be signed or initialed at the bottom of the page by the person who signs the transmittal letter.

Representatives of the Florida Department of Management Services, State Purchasing, may be invited to act as advisors in final determination and acceptance of bids.

Language in this document takes precedence over any conflicting language in the attached General Contract Conditions (PUR 1000) and General Instructions to Respondents (PUR 1001).

4.18 AWARD

As is in the best interest of the state, the right is reserved to award based on all or none of the items, a group of items, item by item or any combination thereof, to a responsive, responsible bidder. As is in the best interest of the State of Florida, the right is reserved to reject any and/or all bid responses or to waive any minor irregularity in bid responses received. Conditions that may cause rejection of a bid response include, without limitation, evidence of collusion among bidders, obvious lack of experience or expertise to perform the required work, or failure to perform or meet financial obligations on previous contracts.

Bid tabulations will be posted and available for public viewing in the reception room of the Bureau of Contracts, Grants and Procurement Management Services and posted on the VBS. A printed copy of the bid tabulation will be available upon written request to the Bureau of Contracts, Grants and Procurement Management Services. Telephone requests will not be accepted. Each written request must contain a self-addressed, stamped envelope and must reference the bid title and number.

Bid awards will be made in conformance with applicable requirements of chapter 287, F.S.; chapters 60A-1 and 6A-3, FAC; and the requirements of this invitation to bid, where this ITB may include additional or more specific procedures. Awards will be made for the following school bus configurations, as available, meeting standard Florida School Bus Specifications, Revised 2013: Type A; Type C (wet-sleeve engine); Type C (parent-bore engine); Type D rear engine (wet-sleeve engine); Type D rear engine (parent-bore engine); Type D front engine (wet-sleeve engine); and Type D front engine (parent-bore engine), subject to the following procedures:

- Low price shall be calculated for each configuration based on the combination price for completed units, selected options (not including air-conditioning), and average regional delivery cost using price quotes as supplied in this bid (Bid No: ITB 2015-01, Attachment 1 – Vendor's Bid Pricing Sheets).
- Bid awards will be made on the basis of a multiple supplier award.
- Overall awards will be made to each responsive and responsible bidder for all configurations on which that bidder submits price quotes within 10 percent of the lowest price for that configuration. A configuration is defined as a unique combination of the following vehicle characteristics: bus capacity (e.g., 65 capacity), engine type (e.g., wet-sleeve), and wheelchair lift (if applicable). An example of a configuration for this purpose is a 65 capacity Type C wet-sleeve with lift. Exception: In order to allow interested school districts and charter schools to gain experience with available alternative fuel-powered buses, and given the low-volume, specialty nature of these buses, bid awards will be made for alternative fuel-powered buses, as available, without regard to the pricing offered for such buses by other bidders.

Technical variations to published bid award procedures may be invoked at the discretion of the Department when necessary to ensure equitability.

4.19 DOING BUSINESS IN THE STATE OF FLORIDA

Foreign corporations and foreign limited partnerships must be authorized to do business in the State of Florida. Domestic corporations must be active and in good standing in the State of Florida. Such authorization and status should be obtained by the bid due date and time, but must be obtained prior to award of contract. For authorization, contact:

Florida Department of State
Tallahassee, Florida 32399
850-245-6053

4.20 LICENSED TO CONDUCT SERVICES IN THE STATE OF FLORIDA

If the service(s) being provided require(s) that individuals be licensed by the Florida Department of Business and Professional Regulation or any other state or federal agency, such licenses should be obtained by the bid due date and time, but in any case, must be obtained prior to award of contract. For state licensing, contact:

Florida Department of Business and Professional Regulation
Tallahassee, Florida 32399-0797
850-487-9501

4.21 NOTICE TO CONTRACTOR

The Department shall consider the employment by any contractor of unauthorized aliens a violation of section 274A(e) of the Immigration and Nationalization Act. If the contractor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of this contract.

All labor shall be paid in accordance with the applicable prevailing wage laws.

4.22 QUALIFICATIONS

The Department will determine whether the bidder is qualified to perform the services being contracted based upon his/her bid demonstrating satisfactory experience and capability in the work area. The bidder shall identify necessary experienced personnel and/or facilities to support the activities associated with this bid.

Those individuals who will be directly involved in the project should have demonstrated experience in the areas delineated in the scope of work. Individuals whose qualifications are presented will be committed to the project for its duration unless otherwise excepted by the Department. In the event it becomes necessary for the contractor to substitute key personnel, such substitution will take place in consultation with the Department and will be made upon the Department's prior approval, which will not be unreasonably withheld.

4.23 SUBMISSION OF BID RESPONSES BY SUBSIDIARIES OR AFFILIATES

A bidder, its subsidiaries, affiliates and related entities shall be limited to one bid response. Submission of more than one bid response per activity by a bidder will cause the rejection of all bids submitted by the bidder. A subsidiary or affiliate of a prime bidder may also be included as a subcontractor in another bidder's bid response.

4.24 IDENTICAL EVALUATION OF BID RESPONSES

Whenever two or more bids that are equal with respect to price, quality and service are received, the Department will determine the order of award using the criteria established in rule 60A-1.011, FAC.

4.25 METHOD OF PAYMENT

Payment for these products will be made in accordance with the terms and conditions of the contract.

4.26 EXTENSION

In the event that circumstances arise that make performance by the contractor impracticable or impossible within the time allowed or that prevent a new contract from being executed, the Department, in its discretion, may grant an extension of the contract. An extension of the contract resulting from this bid shall be in writing for a period not to exceed 6 months and shall be subject to the same terms and conditions set forth in the contract; the Department

may, in its discretion, grant a proportional increase in the total dollar amount based on the method and rate established in the contract. There shall be only one extension of the contract unless the failure to meet the criteria set forth in this ITB or resulting contract is due to events beyond the control of the contractor. It shall be the responsibility of the contractor to ensure at all times that sufficient time remains in the project schedule within which to complete services on the project. In the event there have been delays that would affect the project completion date, the contractor shall submit a written request to the Department that identifies the reason(s) for the delay and the amount of time related to each reason. The Department will review the request and make a determination whether to grant all or part of the requested extension.

4.27 INSPECTION AUDIT AND MAINTENANCE OF REPORTS

Representatives of the Department, the Comptroller of the State of Florida, and the Auditor General of the State of Florida, or their duly authorized representatives, shall have access, for purposes of examinations and recovery, to any books, documents, papers and records of the contractor as may relate to this contract. The contractor shall maintain books, records and documents in accordance with acceptable accounting principles and practices that sufficiently and properly reflect charges made. The Department may unilaterally cancel any resultant contract for refusal by the contractor to allow public access to all documents, papers, letters and other material originated or received by the contractor in conjunction with this contract, subject to the provisions of chapter 119, F.S.

4.28 DIVERSITY IN CONTRACTING

The State of Florida is committed to supporting its diverse business industry and population through ensuring participation by minority, women and service-disabled veteran business enterprises in the economic life of the state. The State of Florida Mentor Protégé Program connects minority, women and service-disabled veteran business enterprises with private corporations for business development mentoring. We strongly encourage firms doing business with the State of Florida to participate in this program. For more information on the Mentor Protégé Program, please call the Office of Supplier Diversity at 850-487-0915.

The state is dedicated to fostering the continued development and economic growth of small, minority, women and service-disabled veteran business enterprises. To this end, it is vital that small, minority, women and service-disabled veteran business enterprises participate in the state's procurement process as both contractors and sub-contractors in this solicitation. Small, minority, women and service-disabled veteran business enterprises are strongly encouraged to contribute to this solicitation.

The bidder shall submit documentation addressing diversity and describing the efforts being made to encourage the participation of small, minority, women and service-disabled veteran business enterprises.

Information on Certified Minority Business Enterprises (CMBE) and Certified Service-Disabled Veteran Business Enterprises (CSDVBE) is available from the Office of Supplier Diversity at:
http://dms.myflorida.com/other_programs/office_of_supplier_diversity_osd/

4.29 SUB-CONTRACTING

Neither this contract nor any portion thereof, shall be sub-contracted without the prior written approval of the Department. No sub-contract shall, under any circumstances, relieve the contractor of his/her liability and obligation under this contract. Despite any such sub-contracting, the Department shall deal through the contractor, who shall retain the legal responsibility for performing the contractor's obligations.

The prime contractor shall report all small, minority, women and service-disabled veteran business enterprise subcontractors, identifying the name, address, type of certification and dollar amount on the utilization summary form, provided as Attachment 4. The contractor shall provide a list of subcontractors to the Department's contract manager upon execution of the contract. The prime contractor shall provide the utilization summary form with each invoice submitted for payment. The form must be submitted with all invoices, regardless of whether or not funds have been spent with a small, minority, women and service-disabled veteran business enterprise subcontractor for the period covered by the invoice. The Department of Management Services, Office of Supplier Diversity will furnish

names of qualified small, minority, women and service-disabled veteran business enterprises. The Office of Supplier Diversity can be reached at 850-487-0915; the website address is http://dms.myflorida.com/other_programs/office_of_supplier_diversity_osd/.

The bidder shall address small, minority, women and service-disabled veteran business enterprise participation in the transmittal letter.

4.30 CONTRACTUAL OBLIGATIONS

The Department's Contract Standard Terms and Conditions are incorporated in this ITB as Attachment 6 and will govern the relationship between the contract vendor and the Department. Bid response(s) submitted by the successful bidder(s) shall be incorporated into the final purchase order(s) or contract(s).

4.31 CONTRACT COMPLETION

The contractor will be required to ensure that each individual, partnership, firm, corporation or subcontractor who performs on the contract is subject to, and complies with, the contractual requirements. When contract negotiations are successfully concluded, a written contract will be prepared that will incorporate the following documents:

- This ITB
- Addenda to this ITB
- The bidder's response

The contractor shall begin performing services only upon execution of a valid contract between the parties.

4.32 DISPOSITION OF BID RESPONSES

All responses become the property of the State of Florida and will be a matter of public record subject to the provisions of chapter 119, F.S.

4.33 ALTERNATES

ALTERNATE BRANDS OR PRODUCTS WILL NOT BE CONSIDERED FOR THIS BID RESPONSE. Bid as required per specifications provided in Attachment 12, Florida School Bus Specifications, Revised 2013.

4.34 WARRANTY/SUBSTITUTIONS

A warranty is required on all items purchased against defective materials, workmanship and failure to perform in accordance with required industry performance criteria. Any deviation from this criterion must be documented in the bid response or the above statement shall prevail. Delivery of substitute commodities requires prior written approval from the Department.

The selected bidder, upon receiving award and entering into a contract with the Department, must warrant that all materials and services delivered to the Department and purchasers pursuant to the contract conform to all of the specifications contained or referred to herein. The bidder must comply with warranty requirements provided in Attachment 12 - Florida School Bus Specifications, Revised 2013. Failure or neglect of the Department to require compliance with any term or condition of the contract or specifications shall not be deemed a waiver of such term or condition. The awarded contractor, by entering into a contract with the Department, warrants and represents that all materials and services delivered to the Department and purchasers pursuant to the contract conform to all of the specifications included or referred to in the ITB document, attachments and addenda.

By submitting this bid, the bidder agrees to accept, process and pay within 45 days properly completed warranty claims on behalf of purchasing school districts via any paper forms, electronic system, or Internet-based warranty system that may be available. The warranty process will be initiated with the bidder or bidder's representative, who will either perform the warranty repairs or facilitate the warranty repairs if they are performed by another entity. Completed claims for warranty reimbursement not paid within 45 days shall incur 3 percent penalties for 0-30 days' late payment.

Successful bidders shall agree to accept electronic notification of school district in-service dates in lieu of forms or update forms. Such notification shall serve to update the actual warranty start dates for all chassis, chassis components and body warranties.

4.35 PRODUCT REQUIREMENTS/SPECIFICATIONS

Any deviation from specifications indicated herein must be clearly pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications and successful bidder will be held responsible therefore. Deviations must be explained in detail on separate attached sheet(s).

4.36 ACCEPTANCE

All buses shall be inspected and accepted or rejected by an authorized representative of the school board or other purchasing entity within 10 business days of delivery or pickup of the completed units. Districts that take delivery on a quantity greater than five school buses within a two-day period shall be allowed one extra day for the number of buses over five. For example, a district that takes delivery of eight school buses within a two-day period shall be allowed 13 business days to inspect and accept or reject the buses. Should any agency purchasing a bus not be satisfied that the requirements of the specifications have been met, representatives of the Florida Department of Education, School Transportation Management Section (STMS); the Florida Department of Management Services; State Purchasing; and the purchasing agency shall have the right to inspect the unit and issue an order of acceptance or rejection.

Purchasers must inspect the vehicle and compare the purchase order and the bidder's invoice, as well as the bidder's pre-delivery inspection (PDI) form, to ensure that the vehicle meets or exceeds the requirements of Attachment 12 - Florida School Bus Specifications, Revised 2013, and the purchase order. Purchasers must also inspect the vehicle for physical damage. Failure of the purchaser to discover an error (excluding physical damage) in the vehicle's components relating to specifications compliance and proper operation (subject to applicable warranties) will not relieve the bidder from correcting the error in the event it is found after the vehicle is accepted by the purchaser.

Delivery of the vehicle to a purchaser does not constitute acceptance for the purpose of payment. Final acceptance and authorization of payment shall be given only after a thorough inspection indicates that the vehicle meets contract specifications and is in ready-to-use condition.

At the time of the inspection, should the delivered vehicle differ in any respect from required specifications or exhibit poor fit, finish, or quality, 5 percent of the payment for the specific vehicle may be withheld until such time as the bidder completes necessary corrective action.

Vehicles provided under this bid are not considered "delivered" until:

a. They are physically on the purchasing district's property,
b. They are in ready-to-use condition, and
c. The manufacturer's certificate of origin (MCO), PDI form, manuals and all associated literature have been delivered.

Language in this document takes precedence over any conflicting language in the attached General Contract Conditions (PUR 1000) and General Instructions to Respondents (PUR 1001).

SECTION 5 – SPECIAL TERMS AND CONDITIONS

5.0 PRE-BID MEETING

A pre-bid meeting will be held in Tallahassee, Florida, in Room 1721 Turlington Building, 325 West Gaines Street, starting at 10:00 a.m. EST, Monday, March 10, 2014. The purpose of this meeting is to provide an open forum for the Florida Department of Education, STMS, to review the ITB requirements and make clarifications regarding the ITB requirements, contractual requirements and other conditions or requirements that may, in any manner, affect

the work to be performed. Any changes and/or resulting addenda to the ITB will be the sole prerogative of the Department.

Attendance at this pre-bid conference is MANDATORY. Failure by a bidder to attend or be represented at this pre-bid conference will constitute a non-responsive determination of bidder's bid response package. Bid responses found to be non-responsive will not be considered.

Accessibility for Persons with Disabilities: Any person requiring special accommodations at any pre-bid/bid meeting, public opening, or event because of a disability or physical impairment should call the listed contact person no later than five days prior to the event. If you are hearing or speech impaired, please contact the Department using the Florida Relay Service at 1-800-955-8771 (TDD).

5.1 PERFORMANCE BOND

A performance bond or cashier's check will be required of all successful bidders of type A, C and D school buses and will be held by the Florida Department of Education, STMS, as surety of full, complete and timely performance on any and all orders duly issued against the contract. The performance bond may be used to provide coverage for ALL aspects of compliance with the contract including, but not limited to, liquidated damages for delayed delivery, specifications compliance, warranty compliance and reprocurement procedures, in the event of contract non-compliance or default.

Successful bidders agree to furnish, within ten days after award of bids, at no additional cost to the Florida Department of Education and school districts, a performance bond or cashier's check in the amount of $750,000 for type C and D bidders and $100,000 for type A only bidders to guarantee full and complete performance of the contract. Such bond, if provided, shall be issued to the "Florida Department of Education and Purchasing School Districts" with language that specifies coverage for compliance with all aspects of the contract. The bidder shall be responsible for reviewing the adequacy of the bond and ensuring it provides the coverage required by this contract. Failure of the bond to provide the required coverage shall not absolve the bidder of responsibility for the required level of financial and other obligations. The bond shall be provided from a reliable surety company, licensed to do business in the State of Florida and acceptable to the Florida Department of Education. To be acceptable to the Florida Department of Education as surety for performance bonds, a surety company shall comply with the following provisions:

1) The surety company must be qualified to do business in the State of Florida.
2) The surety company shall have been in business and have a record of successful continuous operation for at least five years.
3) All bonds shall be signed by a Florida licensed resident agent who holds a current power of attorney from the surety company issuing the bond.

5.2 INSURANCE, WORKER'S COMPENSATION

During the contract term, the contractor at its sole expense shall provide commercial insurance of such a type and with such terms and limits as may be reasonably associated with the contract, which, at a minimum, shall be: workers' compensation and employer's liability insurance in accordance with chapter 440 of the Florida Statutes, with minimum employers' liability limits of $100,000 per accident, $100,000 per person, and $500,000 policy aggregate. Such policy shall cover all employees engaged in any contract work.

Employers who have employees who are engaged in work in Florida must use Florida rates, rules and classifications for those employees. In the construction industry, only corporate officers of a corporation or any group of affiliated corporations may elect to be exempt from workers' compensation coverage requirements. Such exemptions are limited to a maximum of three per corporation and each exemption holder must own at least 10 percent of the corporation. Independent contractors, sole proprietors and partners in the construction industry cannot elect to be exempt and must maintain workers' compensation insurance.

5.3 INSURANCE, GENERAL LIABILITY

The contractor shall take out and maintain during the life of this agreement comprehensive general liability insurance as shall protect the contractor from claims for personal injury, including accidental death, as well as claims for property damages that may arise from operating under this agreement, whether such operations are by the contractor or by anyone directly or indirectly employed by the contractor, and the amount of such insurance shall be the minimum as follows:

Contractor's Comprehensive General Liability Coverage, Bodily Injury & Property Damage - $100,000 Each Occurrence, Combined Single Limit

The certificate(s) of insurance must comply with the following standards:

- No exclusions or restrictions in coverage will be accepted.
- The insurance coverage must be with an insurance company with a Best's rating of "A" or better.
- The certificate must include a 30-day notice of cancellation.
- Purchasing school districts must be listed as "additional insured" on coverage.

5.4 INDEMNIFICATION

Contractor agrees to indemnify, hold harmless and defend, at contractor's own expense, including reasonable attorney's fees, the Department and its employees against any and all claims or suits for property loss or damage and/or personal injury including death, to any and all persons, of any kind and character, whether real or asserted, arising out of and in connection with contractor's negligence related to privileges granted herein.

5.5 SCRUTINIZED COMPANIES LISTS

Section 287.135, F.S., requires that at the time a company submits a bid or proposal for a contract for goods or services of $1 million or more, the company must certify that it is not on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List. Both lists are created pursuant to section 215.473, F.S.

Bids of $1 million or more must include the attached ***Scrutinized Companies Lists*** form (Attachment 5) to certify the respondent is not on either of those lists. The form should be submitted with the technical reply.

SECTION 6 – SPECIAL INSTRUCTIONS – BID FORMAT AND CONTENT

6.0 BID RESPONSE SUBMISSION

Bid Responses are due as specified in SECTION 3.3 SCHEDULE OF EVENTS.

Mailed or Delivered To: Florida Department of Education
(DO NOT FAX OR E-MAIL) Bureau of Contracts, Grants and Procurement Management Services
Attn: Christina Davis
332 Turlington Building
325 West Gaines Street
Tallahassee, Florida 32399-0400

Bids received after this time and date will not be considered. By submitting a bid response, the bidder represents that he or she understands and accepts the terms and conditions to be met and the character, quality and scope of commodities to be provided. All bid responses and associated forms must be signed and dated in ink by a duly authorized representative of the bidder. Dates may be printed and the bidder may initial in ink on pricing sheets only.

Each bidder must fully acquaint himself or herself with the conditions relating to performance requirements under the conditions of this ITB. All bid prices are to be submitted on the sheets provided in this ITB. All bid prices must remain firm until December 31, 2015.

All bid responses and related documents submitted in response to this ITB shall become the property of the State of Florida.

6.1 BID CONDITIONS

No conditions may be applied to any aspect of the ITB by the prospective bidder. Any conditions placed on any aspect of the bid documents by the prospective bidder may result in the bid response being rejected as a conditional bid (see "RESPONSIVENESS OF BIDS"). DO NOT WRITE IN CHANGES ON ANY ITB SHEETS. The only recognized changes to the ITB prior to bid opening will be by written addendum(a) issued by the Department.

6.2 BID RESPONSE FORMAT INSTRUCTIONS

This section contains instructions that describe the required format for the bid. All bids submitted shall be marked as follows:

Bid Number: ITB 2015-01
Opening Date/Time: April 24, 2014, at 10:15 a.m.

The bidder must submit one original, one copy and one electronic copy of the entire bid response. Since the Department will expect all bids to be in this format, failure of the bidder to follow this outline may result in the rejection of the bid.

Section 1

- Transmittal Letter (completed on company letterhead)

Section 2

- Vendor's Bid Pricing Sheets (Attachment 1 for base buses and options, each page signed or initialed)
- Disclosure Statement (Attachment 2)
- Drug-Free Workplace Form (Attachment 3)
- Minority Certificate (Attachment 4)
- All addenda (if applicable; must be signed by authorized company representative)
- Attachment 5 – Scrutinized Companies List
- Attachment 7 - Bidder Representation
- Attachment 8 - Purchase Order Preference/Customer Contact Preference Form
- Attachment 9 - File Structure for Required Status Report
- Letter representing that buses will meet all applicable Federal Motor Vehicle Safety Standards; and representing the adequacy of Gross Axle Weight Ratings (GAWRs)
- Letter representing that lift installation will be in compliance with each lift manufacturer's and Florida's specifications
- Estimated delivery dates for Type A, C and D chassis delivery (supplied by chassis manufacturer and included with this bid)
- Letter acknowledging the procedures for liquidated damages as specified in Section 7.16
- Letter specifying the seat covering material manufacturer and model number
- Letter stating that all Type C and D buses will meet chassis performance requirements and that manufacturers have run all required Allison System for Computerized Application Analysis (SCAAN) evaluations
- PDI inspection program outline (Section 6.14)

Section 1. Transmittal Letter

The bidder shall provide a transmittal letter (on company letterhead) certifying that the person signing the proposal is authorized to represent the bidder and bind the bidder relative to all matters contained in the bidder's proposal. The letter must contain the company's federal tax identification number and a statement certifying that the bidder has read, understands and agrees to all provisions of this ITB. The transmittal letter must contain a statement

certifying that the bidder is authorized to conduct business in Florida. In lieu of such statement, the bidder must alternatively certify that he or she will secure authorization to do business in Florida prior to the award of the contract. The transmittal letter must designate the bidder's contract manager and full contact information. The transmittal letter must contain a statement certifying that the bidder is registered on the MyFloridaMarketPlace website. In lieu of such statement, the bidder must alternatively certify that he or she will complete such registration authorization prior to the award of the contract. When applicable, bidder shall address small, minority, women and service-disabled veteran business enterprise participation in the transmittal letter. The bidder is encouraged to limit the letter to no more than two pages.

Section 2. Preliminary Administrative Review Requirements

The bidder must complete all required forms and submit them as part of the bid response. Any bid response in which these forms are not used or in which these forms are improperly executed may be considered non-responsive and the bid response may be subject to rejection.

SECTION 7 – DELIVERABLES

7.0 SCOPE OF SERVICES

Section 1006.27, F.S., states that the Department shall assist district school boards in securing school buses at prices that are as reasonable as possible by providing a plan under which district school boards may voluntarily pool their bids for such purchases. The Department, in cooperation with the Florida Department of Management Services, has prepared and awarded term contracts for the purchase of various types of school buses and optional equipment, and made the contract available to district school boards in order to facilitate this service.

7.1 GENERAL BID REQUIREMENTS

All terms and conditions as outlined, and specifications given for school bus bodies and school bus chassis in Attachment 12 - Florida School Bus Specifications, Revised 2013, are a part of this bid.

7.2 ESTIMATED QUANTITIES

It is anticipated that the State of Florida agencies and other eligible users will purchase approximately 1,000 total buses under contracts resulting from this bid. The types and total dollar figures from the previous two bids are as follows:

BID #2013-01 (as of November 5, 2013)			BID #2010-16 (including renewal)	
TYPE	# PURCHASED	TOTAL DOLLARS	# PURCHASED	TOTAL DOLLARS
A	0	$0	0	0
C	493	$51,852,032	1047	$104,371,469
D	7	$844,712	82	$11,786,972
Total	500	$52,696,744	1129	$116,158,441

NOTE: These figures are provided only as a guideline for preparing your bid and should not be construed as representing actual figures under the contract.

7.3 BIDDING REQUIREMENTS

Each bidder shall bid ALL OR NONE OF EACH BUS CONFIGURATION. A bid on only part of the units in any one configuration will not be accepted.

Language in this document takes precedence over any conflicting language in the General Contract Conditions (PUR 1000) and General Instructions to Respondents (PUR 1001).

7.4 DEALER-OFFERED OPTIONS AND SALES INCENTIVES

Occasionally, a customer may request a vehicle option that is not included on this contract. Additional dealer-offered options may NOT be offered after the bid opening.

Bidders are prohibited from offering sales incentives not specifically included within this ITB, such as rebates, parts credits, extended warranties, etc. Bidders shall also notify component, equipment and service suppliers that they may not offer such incentives, and shall notify the STMS immediately if they become aware of any such offers or transactions. Violators of this provision may be penalized up to $2,000 for each violation and may be removed from the bidders list.

7.5 ORDERING INSTRUCTIONS

The following ordering process will be adhered to by all eligible users desiring to purchase buses from this bid:

(1) Entity will first submit purchase order (made out to the awarded bidder) to the Florida Department of Education STMS for review and approval. Awarded bidders receiving purchase orders not approved by the STMS must immediately forward them to the STMS for review/approval.

(2) Purchase orders that have been cleared by the STMS will bear a stamp showing the applicable purchase plan, date of processing and processor's initials. Purchase orders that reach the bidder without the STMS stamp shall not be considered processed and cleared by the STMS and must be rerouted to the STMS office.

7.6 TECHNICAL DOCUMENTATION

All products bid must meet or exceed all conditions and specifications of the ITB. When technical documentation is required by the STMS, its purpose is to demonstrate compliance of the product bid with applicable technical requirements of the ITB or to allow a technical evaluation of the product. The STMS may, at its discretion, determine the technical acceptability of the products offered through the use of any technical documentation available within the STMS as of the date and time of bid opening and evaluation. Such authority of the STMS shall in no way relieve the bidder from the ultimate responsibility to provide any required technical documentation, nor shall any bidder assume that such documentation is otherwise available to the STMS. The state shall not be responsible for the accuracy of the technical documentation in its possession.

7.7 STATUS REPORTS: ORDERING, PRODUCTION AND DELIVERY

The successful bidder is required to furnish, on at least a bi-weekly basis, a status report of all units ordered by eligible users from this bid or local purchasing agreements, following the format prescribed in Attachment 9 – File Structure for Required Status Report. This report shall be submitted electronically in the same format. These bi-weekly status reports shall be sent or e-mailed to the Florida Department of Education, STMS, 824 Turlington Building, 325 West Gaines Street, Tallahassee, Florida 32399-0400 (the e-mail address will be made available after the contract is awarded). This information shall be provided on an ongoing basis until all units ordered by eligible users from this bid or local purchasing agreements are delivered. Failure to submit the aforementioned reports on time and in the proper format may be considered when determining the bidder's fitness for the next bid.

A sample status report, as specified in Attachment 9 – File Structure for Required Status Report, shall be provided with the bid response.

7.8 PILOT MODEL INSPECTIONS

The successful bidder is responsible for providing a pilot model of each size and type bus awarded for inspection by representatives of the STMS. The pilot model inspection may take place at the assembly plant or other inspection facility. Units equipped with wheelchair lifts shall be made available for pilot inspection first. The successful bidder shall incur expenses associated with travel and per diem for the pilot model inspection for up to two persons from the STMS and one representative from each school district that purchased one or more buses included in the pilot inspection. If a representative of the purchasing school district is not available for the pilot model inspection, a member of the Florida Association for Pupil Transportation (FAPT) Specifications Committee may substitute upon request. If specifications or quality problems are noted as part of the initial inspection, or if some equipment cannot be inspected during the initial pilot inspection, the STMS reserves the right to require the bidder to pay all costs involved for two persons selected by STMS to conduct a follow-up inspection at the assembly plant. Alternatively, such follow-up inspection may be required in Tallahassee, Florida, as determined by the Department. Regular production of school buses shall not be scheduled until specifications and quality have been determined to meet Florida school bus requirements.

7.9 PRE-DELIVERY INSPECTIONS

Bidders will be required to perform and document a Florida-specific pre-delivery inspection (PDI) of each unit prior to delivery to the purchasing school district. This inspection shall include all items and be documented on the PDI form included in Attachment 10 of this document. These inspections shall be conducted by bidder representatives trained and certified as Florida school bus inspectors by the Department. Inspector training and certification will be provided by the Department, at each bidder's expense. It is each bidder's responsibility to ensure that all inspection items applicable to its products are properly inspected and documented.

A completed copy of this form shall accompany each unit delivered for district verification. Any items found to be missing; inoperative; out of compliance with Florida specifications; out of compliance with the criteria outlined in the Florida School Bus Safety Inspection Manual; or of poor fit, finish, or quality shall be repaired and/or replaced prior to delivery to the purchasing school district.

The Department and/or purchasing district personnel may additionally conduct random post-delivery inspections on units that have previously been inspected by the bidder or manufacturer. Post-PDI units may be inspected with little or no notice to the bidder at the assembly plant or other inspection facility at no expense to the bidder.

7.10 CONTRACT

The Department's contract for Type A, Type C and Type D school buses and optional equipment is incorporated in this ITB as Attachment 6. The contract may be executed with a responsive and responsible bidder that submits price quotes within 10 percent of the lowest price for a configuration. The contract will govern the relationship between the contractor and the Department. In the event there is a conflict between the requirements of this ITB and those of the contract, the requirements as stated in the ITB shall apply. When bid calculations are successfully concluded, a written contract will be executed that will incorporate the following documents as each was changed or affected by the calculations:

- This ITB
- Addenda to this ITB
- Bidder's response
- Award letter
- Department contract

7.11 VARIATION OR SUBSTITUTION OF EQUIPMENT

Substitution of equipment on which information or pricing are specifically requested as part of this ITB will not be allowed except as noted herein (pricing pages P-18, P-20 to P-25, and P-32 to P-33). Substitution of certain equipment, as noted herein (pricing pages P-18, P-20 to P-25, and P-32 to P-33), may be allowed, contingent upon notification to the STMS and approval by the STMS and the FAPT Specifications and/or Purchasing Committee(s). Violators of this provision may be penalized up to $2,000 for each violation and may be removed from the bidder's list. Penalties resulting from violations will be deposited in the Education Trust Fund.

Language in this document takes precedence over any conflicting language in the attached General Contract Conditions (PUR 1000) and General Instructions to Respondents (PUR 1001).

7.12 PAYMENT

Payments will be made in accordance with section 215.422, F.S., which delineates contractor's rights and the eligible users' responsibilities concerning time allowances for payment of invoices and applicable interest penalties. Pursuant to section 287.058, F.S., all invoices must be submitted in detail sufficient for a proper pre-audit and post-audit thereof. Please see sections 7.1, 7.2 and 7.9 for specific requirements related to acceptance of and payment for school buses.

Subject to the preceding requirements for acceptance, all payment for Type A, C and D buses will be due within 40 days after acceptance by the local purchasing agency or receipt of invoice and the manufacturer's certificate of origin, whichever is later.

7.13 MYFLORIDAMARKETPLACE

Purchases of school buses and equipment by school districts, FSDB and private schools under the terms of this contract are not subject to the provisions of MyFloridaMarketPlace.

7.14 CONTACT BETWEEN CONTRACTOR AND THE DEPARTMENT AFTER AWARD OF CONTRACT

One staff member from the Department will be assigned to be the project manager, who will be responsible for the implementation of the contract resulting from this ITB. The contact information is listed below:

Charlie Hood
Department of Education, School Transportation Management Section
325 West Gaines Street, #225
Tallahassee, Florida 32399-0400
Telephone: 850-245-9795
Fax: 850-245-9935
e-mail: charlie.hood@fldoe.org

The bidder shall designate at least one contract manager with responsibility to the State of Florida. The contract manager should remain readily available by telephone, cellular phone, or e-mail for unresolved contract concerns and be responsible for managing said concerns with the assembly plant, dealer, or other entity as appropriate. The bidder's contract manager and full contact information shall be included on the transmittal letter.

7.15 TERMINATION FOR CAUSE

The Department reserves the right to immediately terminate the contract by providing written notice to the contractor if the Department determines any of the following has occurred:

- Contractor fails to perform to the Department's satisfaction any material requirement of the contract; or
- The action or inaction of the contractor substantially endangers the execution of the contract, or such occurrence can be reasonably anticipated.

7.16 PROCEDURES FOR LIQUIDATED DAMAGES

The contractor's failure to complete purchased school buses both correctly and on time will result in substantial injury to purchasing school districts, but the amount of damages resulting from such injury cannot be calculated with certainty. Each such failure to complete a school bus correctly and on time is hereinafter referred to as a default. Defaults shall be deemed corrected on the day that the school bus has been delivered in ready-to-use condition. "Ready-to-use" shall be defined as meeting all applicable specifications, with all equipment functioning properly, and without substantive defects (as determined by the purchaser or the Florida Department of Education, STMS). For each default, the contractor shall be liable to the purchasing school district for liquidated damages and not as a penalty, as set forth herein.

Buses not ready for pickup or delivered to the purchasing school district (as specified by purchaser) by the dates specified in Section 7.0 will be assessed liquidated damages of $25 per bus, per calendar day that delivery is late for non-lift units and $50 per bus, per calendar day that delivery is late for units equipped with wheelchair lifts.

a. Calculation of Liquidated Damages

Eligible users will be responsible for calculating, assessing and collecting liquidated damages.

Delays in delivery caused by strikes at the bidder's or chassis manufacturer's plant, acts of God, or circumstances beyond the control of the company are excepted. The date the bus is delivered, or ready for pickup, in ready-to-use condition, shall be used for the purposes of these provisions.

b. Collection of Liquidated Damages

Purchasing school districts and the FSDB will be permitted to deduct calculated liquidated damages for late delivery from the payment for the bus. Purchasing school districts and the FSDB are required to notify the bidder, in writing,

at least 30 days in advance, of their intent to deduct liquidated damages in a specified amount, and provide the bidder an opportunity to resolve or adjust the calculation of the damages prior to their assessment.

Language in this document takes precedence over any conflicting language in the attached General Contract Conditions (PUR 1000) and General Instructions to Respondents (PUR 1001).

7.17 DELIVERY PRICING ADJUSTMENT

In accordance with PUR 1000, item 4(e), the Department may make an equitable adjustment in the contract terms for delivery pricing related to increased costs of diesel fuel based on the index below. This index is subject to the Department of Energy National Average Fuel Price Index. The index will be reviewed on January 30, 2015, and June 30, 2015. Subsequent price changes, if any, will become effective upon notification to district transportation officials.

DIESEL FUEL INDEX DOE FUEL COST PER GAL ($)	ADJUSTMENT AMOUNT DELIVERY PRICING INCREASE %
Below 4.26 –	Bidder's ITB response delivery pricing schedules apply
4.26 to 4.60 –	10% above bidder's ITB response delivery pricing schedules
Above 4.60 –	20% above bidder's ITB response delivery pricing schedules

7.18 RECALL NOTIFICATIONS

The National Traffic and Motor Vehicle Safety Act (originally enacted in 1966 and now recodified as 49 U.S.C. Chapter 301) gives the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA) the authority to issue vehicle safety standards and to require manufacturers to recall vehicles that have safety-related defects or do not meet federal safety standards. Successful bidders will be responsible for ensuring that the Department is notified of all NHTSA safety recalls related to vehicles purchased from contracts resulting from this invitation to bid. Such notification shall include an electronic list of affected vehicles in either Microsoft Excel or Access format. Other electronic formats may not be substituted without prior approval.

7.19 TIME LINES

Purchase orders will be accepted beginning immediately after contract execution through December 31, 2015. The required delivery date will be 240 days from the date the bidder and/or bidder's representative(s) receives the district's electronic purchase order notification after processing by the Department.

Bidder must furnish a schedule showing the cost of delivery of each completed unit from the manufacturing plant to the county seats of Florida, by region, as requested on the attached sheet. This data shall be used in determining the successful bidder. Any purchaser may elect to accept delivery of the buses included in the order at the factory. When delivery by the bidder is specified, the bidder shall deliver buses to the applicable district or agency's central school bus garage or main office of a purchasing private school. Purchasers opting for delivery of their completed bus(es) must be contacted by the school bus bidder to schedule final delivery five business days prior to the delivery of their completed units. Deliveries shall be scheduled between the hours of 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

Language in this document takes precedence over any conflicting language in the attached General Contract Conditions (PUR 1000) and General Instructions to Respondents (PUR 1001).

7.20 ESTIMATED DELIVERY DATES

For all buses bid as complete units for which chassis and bodies are to be built by separate manufacturers, the bidder shall be responsible for securing from the chassis manufacturer estimated delivery dates for the completed

chassis to the body plant, based upon the chassis ordering time lines specified or required to meet the completed unit delivery time lines called for in this request for bids. Estimated delivery dates shall be submitted as part of the bid response package.

7.21 REPRESENTATIONS

As part of this bid, each bidder must represent in a letter to be included with the bid that each unit sold by the bidder's company or representative for school buses will meet Attachment 12 - Florida School Bus Specifications, Revised 2013; National School Transportation Specifications and Procedures, Revised 2010; and all applicable Federal Motor Vehicle Safety Standards.

This letter shall also represent that the chassis furnished will have adequate gross axle weight ratings (GAWRs), front and rear, for mounting and representing bodies meeting Florida School Bus Specifications. The letter must be submitted as part of the bid response.

In the event that a Type A or C bus is manufactured by separate chassis and body manufacturers, each bidder shall represent by letter any and all specifications as required in the paragraph above.

As per Attachment 12 - Florida School Bus Specifications, Revised 2013, for wheelchair lifts and installations, the successful bidder will be required to comply with all applicable design testing pertaining to the installed lift. A letter indicating such compliance will be required before buses equipped with wheelchair lifts may be delivered.

Specifications also require that the bidder shall submit with the bid written representation that the lift will be installed according to lift manufacturer's specifications and Florida specifications.

Please include as part of your bid an attachment providing information on the seat covering material to be supplied on buses sold via the bid. This information shall include the name of the company supplying the material and the name or number designation for the material. NOTE: The seat covering material as bid must be provided throughout the term of the bid and may not be subject to substitution or change.

7.22 FLOOR PLAN (ORDER CONFIRMATION)

Upon receipt of the purchase order(s), the bidder shall provide the purchaser one line drawing for every configuration ordered. The line drawing will inform the purchaser of the unit's floor plan, including air-conditioning evaporator locations, and will also serve as bidder confirmation of the order.

7.23 WHEELCHAIR LIFT BUS REQUIREMENTS

Florida School Bus Specifications require wheelchair lift school buses to be offered with wheelchair lifts mounted in front of and behind the rear wheels, except for body sizes on which both locations are not available. Wheelchair lift bus (WLB) seating capacity shall be based on the maximum regular student seating that can be accommodated with the standard three wheelchair spaces per bus (see specifications for wheelchair space dimensions, minimum aisle width, barrier requirements and other pertinent WLB specifications), as follows:

NOTE: 29-capacity Type C wheelchair lift buses must be bid with an extra body section or spacing, as required, to ensure availability with the lift mounted behind the rear wheels.

NOTE: Maximum available regular student seating shall be made available with the specified number of wheelchair spaces, whenever possible, consistent with specifications (usually with wheelchair spaces rearward and 39-inch seats forward).

- TYPE A1 WLBs, 19-29 capacity - Net 1 in wheelchair, maximum number available in regular seats.
- TYPE A2 WLBs, 30-47 capacity - Net 2 in wheelchairs, maximum number available in regular seats.
- TYPE C WLBs, 29-77 capacity - Net 3 in wheelchairs, maximum number available in regular seats.
- TYPE D WLBs, all sizes - Net 3 in wheelchairs, maximum number available in regular seats.

7.24 TRAINING, EQUIPMENT AND PUBLICATION REQUIREMENTS

A. Wheelchair Lift and Body Service Training

Florida School Bus Specifications require that the successful bidder "shall be responsible for providing or arranging wheelchair lift service training as needed." This training shall include, at a minimum, one-day training seminars on overall features, operation, preventive maintenance, diagnosis and rebuild of wheelchair lifts offered through the bid. The seminars are to be conducted free of charge at district garage locations. At least one seminar on each given lift model shall be conducted per five school districts purchasing a bus or buses equipped with that lift. The successful bidder shall also be responsible for providing eight one-day body service training seminars in conjunction with the Florida Summer Technicians Training Seminar (or equivalent, as determined by the STMS).

B. Chassis/Engine Training

The successful bidder of Type A, C and D school buses shall be responsible for providing chassis service training as needed. These seminars are to be conducted free of charge at district garage locations. This training shall include, at a minimum, one-day training seminars on overall features, tune-up, diagnosis and preventive maintenance of diesel engines or other major chassis components offered through this bid (at the discretion of the STMS). At least one seminar on each given diesel engine model or other major component shall be conducted per four school districts purchasing a bus or buses equipped with that engine or componentry. Additionally, the bidder will be responsible for providing eight days of training in conjunction with the Florida Summer Technicians Training seminar. Training to be supplied by the bidder shall include provisions for supplying and transporting to each location a live training engine and/or other components, training aids and student handouts pertinent to the instruction. The STMS may provide assistance in organizing the training.

C. Air-Conditioning

The successful Type C and D bus bidder shall be responsible for providing or arranging air-conditioning training as needed. The training seminars are to be conducted free of charge at district garage locations. This training shall include, at a minimum, one-day training seminars on overall features, operation, preventive maintenance, diagnosis and repair of optional air-conditioning systems offered through the bid. At least one seminar on each given air-conditioning manufacturer's system shall be conducted per five school districts purchasing a bus or buses equipped with that optional air-conditioning system. The successful bidder shall also be responsible for providing eight days of training in conjunction with the Florida Summer Technicians Training seminar.

D. Service Manuals

The successful Type C and D bus bidder is responsible for providing each school district purchasing one or more units prior to or concurrent with delivery of buses one service manual per shop location, giving complete coverage of models purchased, including chassis and bodies. The service manuals shall contain all instructions, pictures and line drawings necessary for the maintenance, repair and rebuilding of all chassis, power train, antilock, air or hydraulic brake system components and body components. Chassis manuals shall include complete coverage of the engine, including all rebuild and service procedures. The service manuals shall contain all instructions, pictures and line drawings necessary for the maintenance, repair and rebuilding of all body components. This requirement may be fulfilled via use of a portable electronic storage medium or online access to an Internet site with the required information.

E. Parts Manuals

The successful bidder is responsible for providing each school district purchasing one or more units prior to or concurrent with delivery of buses one parts catalog per shop location, giving complete coverage of models purchased, including chassis and bodies. Parts manuals shall include component part numbers and illustrations that clearly allow easy identification of component and sub-component parts. This requirement may be fulfilled via use of a portable electronic storage medium or online access to an Internet site with the required information.

Delivery of service and parts manuals, or electronic access thereto, shall be confirmed to the STMS no later than five business days after delivery of the buses. Failure to provide the manuals, electronic files, or Internet access within five business days of delivery of buses may be considered when determining the bidder's fitness for the next bid. Internet access to a manual or at least one representative set of manuals or compact disks shall also be provided to the STMS.

7.25 SERVICE REQUIREMENTS

When inadequate dealer support, lack of parts availability, or other factors result in downtime of bus(es) due to chassis, body, or component problems subject to coverage under the warranties required via this bid, the Florida Department of Education, STMS, shall reserve the right to determine when downtime has become excessive. Downtime (for each given service problem) of five business days or fewer (consecutively or otherwise) shall not be deemed excessive for the purpose of these provisions. In instances when the STMS has determined that downtime is excessive, the STMS shall reserve the right to require on-site or other distributor or factory-level service representation and assistance as needed to resolve the problem. Items delivered not conforming to specifications may be rejected and returned at vendor's expense. These items and items not delivered as per delivery dates specified in the bid may result in bidder being found in default, in which event any and all reprocurement costs may be charged against the defaulting contractor. Any violation of these stipulations may also result in the cancellation of this contract in whole or in part with 30 days' prior notice in writing and supplier's name being removed from the state purchasing vendor mailing list.

7.26 MANUFACTURER'S CERTIFICATE OF ORIGIN (MCO)

Florida law requires a second-stage manufacturer's certificate of origin (MCO) if the chassis is built by one manufacturer, then delivered to another manufacturer for the purpose of manufacturing a complete vehicle. The successful bidder is responsible for providing this second-stage MCO for all Type A and C units if chassis for these units are built by a different first-stage manufacturer. Additionally, the successful bidder is also responsible for providing a second-stage MCO for Type D units if the chassis and body are produced by different manufacturers. The successful bidder of Type C and D units built by the same manufacturer as a complete unit (chassis and body) shall supply a single MCO.

7.27 ALTERNATIVE FUEL ENGINE OPTION

Bidders who are able to provide a compressed natural gas (CNG), liquid propane (LP), plug-in hybrid electric vehicle (PHEV), fuel cell, or diesel/electric hybrid powered school bus should include pricing on the optional alternative engine pricing sheet (pricing page P-27). The price should reflect ALL additional costs associated with this option. Please include or attach a summary explanation of modifications, if any, that would be required for the alternative fuel engine option.

7.28 DISCLOSURE OF ACCIDENT(S) OR MECHANICAL BREAKDOWN

If a school bus is involved in an accident or if it has experienced mechanical breakdown prior to delivery, bidders are required to disclose such information to the purchasing school district or FSDB upon delivery.

SECTION 8 – SUBMITTALS AND EVALUATION

8.0 PRELIMINARY SUBMITTAL REVIEW

The absence of any of these documents may deem the bid response to be non-responsive and the bid response may not be evaluated. The bid forms furnished must be used when submitting your response. Forms are to be filled out in ink or typewritten, SIGNED AND DATED with no alterations or amendments made, and enclosed with a signed cover letter. Submittal information shall consist of the following:

The bidder must submit one original, one copy and one electronic copy of the entire bid response. Since the Department will expect all bids to be in this format, failure of the bidder to follow this outline may result in the rejection of the bid.

Section 1

- Transmittal Letter (completed on company letterhead)

Section 2

- Vendor's Bid Pricing Sheets (Attachment 1 for base buses and options, each page signed or initialed)
- Disclosure Statement (Attachment 2)
- Drug-Free Workplace Form (Attachment 3)
- Minority Certificate (Attachment 4)
- All addenda (if applicable; must be signed by authorized company representative)
- Attachment 5 – Scrutinized Companies List
- Attachment 7 - Bidder Representation
- Attachment 8 - Purchase Order Preference/Customer Contact Preference Form
- Attachment 9 - File Structure for Required Status Report
- Letter representing that buses will meet all applicable Federal Motor Vehicle Safety Standards; and representing the adequacy of Gross Axle Weight Ratings (GAWRs)
- Letter representing that lift installation will be in compliance with each lift manufacturer's and Florida's specifications
- Estimated delivery dates for Type A, C and D chassis delivery (supplied by chassis manufacturer and included with this bid)
- Letter acknowledging the procedures for liquidated damages as specified in Section 7.16
- Letter specifying the seat covering material manufacturer and model number
- Letter stating that all Type C and D buses will meet chassis performance requirements and that manufacturers have run all required Allison System for Computerized Application Analysis (SCAAN) evaluations
- PDI inspection program outline (Section 6.14)

8.1 POSTING OF BID TABULATION

The bid tabulation will be posted at the Department's Bureau of Contracts, Grants and Procurement Management Services, 332 Turlington Building, 325 West Gaines Street, Tallahassee, Florida, and on the VBS as specified in SECTION 3.3 SCHEDULE OF EVENTS, and will remain posted for a period of 72 hours.

8.2 PROTEST OF BID TABULATION OR PROCUREMENT TERMS

Any bidder who is adversely affected by the Department's recommended award or intended decision must file a written "Intent to Protest" with the Department at the address of posting. See SECTION 4.4 PROCUREMENT PROTESTS/NOTICE OF RIGHTS for protest information.

8.3 INABILITY TO POST

If the Department is unable to post as defined above, the Department will notify all bidders by posting a notice on the VBS. The Department will provide written notification via the VBS of any future posting in a timely manner.

8.4 AWARD OF THE CONTRACT

Services will be authorized to begin when the contractor receives a fully executed contract from the Department's contract administrator and the Department receives the performance bond from the contractor.

8.5 SUBMISSION OF ALTERNATE RESPONSES

A company, its subsidiaries, affiliates and related entities shall be limited to one response. Submission of more than one response will cause the rejection of all responses submitted. A firm may not propose to serve as the prime contractor in one response and as a subcontractor in a different response.

ATTACHMENTS

For

BID NO: ITB 2015-01

ATTACHMENT 1

VENDOR'S BID PRICING SHEETS

BID NO: ITB 2015-01 SCHOOL BUS BASE UNIT AND CONFIGURATION PRICING				
Type A				
Type A - No A/C	**19 Capacity**	**23 Capacity**	**29 Capacity**	
Base Unit Price - No Lift, No A/C:				
Base Unit Price - With Lift, No A/C:				
Type C Lighter Weight Version (LT)				
Type C LT - No A/C	**29 Capacity**			
Base Unit Price - No Lift, No A/C:				
Base Unit Price - With Lift, No A/C:				
Type C Basic Safety Bus				
Type C - No A/C	**65 Capacity**			
Base Unit Price - No Lift, No A/C:				
Type C Conventional - 29, 47, and 65 Capacity				
Type C - No A/C	**29 Capacity**	**47 Capacity**	**65 Capacity**	
Base Unit Price - No Lift, No A/C:				
Base Unit Price - With Lift, No A/C:				
Type C Conventional - 71 and 77 Capacity				
Type C - No A/C	**71 Capacity**	**77 Capacity**		
Base Unit Price - No Lift, No A/C:				
Base Unit Price - With Lift, No A/C:				
Type D Front Engine				
Type D Front Engine (FE) -	**71 Capacity**	**77 Capacity**	**83 Capacity**	**89 Capacity**
No A/C				
Base Unit Price - No Lift, No A/C:				
Base Unit Price - With Lift, No A/C:				
Type D Rear Engine				
Type D Rear Engine (RE) -	**72 Capacity**	**78 Capacity**	**84 Capacity**	**89 Capacity**
No A/C				
Base Unit Price - No Lift, No A/C:				
Base Unit Price - With Lift, No A/C:				

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*19 Capacity Type A1 Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[1A] Front Tow Hooks		
[1B] Rear Tow Hooks		
[2] Spare Radial Tubeless Tire and Wheel		
[12] Straight Floor		
[13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B3] Vandal Box w/Key		
[B4] 77" High Headroom		
[B5C] Stereo Radio		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B22] Delete W/C - Add Seat	N/A	
[B23] Delete Seat - Add W/C	N/A	
[B24] Wheelchair Securement Area Lighting	N/A	
[B26] Standard Track Seating Seat	N/A	
[B28] Electric Powered Entrance Door		

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01	*23 Capacity Type A1 Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Radial Tubeless Tire and Wheel		
[C12] Straight Floor		
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B3] Vandal Box w/Key		
[B4] 77" High Headroom		
[B5C] Stereo Radio		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B22] Delete W/C - Add Seat	N/A	
[B23] Delete Seat - Add W/C	N/A	
[B24] Wheelchair Securement Area Lighting	N/A	
[B26] Standard Track Seating Seat	N/A	
[B28] Electric Powered Entrance Door		

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01	*29 Capacity Type A1 Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Radial Tubeless Tire and Wheel		
[C12] Straight Floor		
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B3] Vandal Box w/Key		
[B4] 77" High Headroom		
[B5C] Stereo Radio		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B22] Delete W/C - Add Seat	N/A	
[B23] Delete Seat - Add W/C	N/A	
[B24] Wheelchair Securement Area Lighting	N/A	
[B26] Standard Track Seating Seat	N/A	
[B28] Electric Powered Entrance Door		

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01	*29 Capacity Type C Complete School Bus Lighter Weight Version*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	
[B27] Driver's Seat with Integrated Seat Belt		

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01	*29 Capacity Type C Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting		
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*47 Capacity Type C Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting		
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*65 Capacity Type C Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*71 Capacity Type C Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*77 Capacity Type C Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C8] Adjustable Pedals		
[C9] 2500-PTS Transmission		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*71 Capacity Type D Front Engine (FE) Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C7] Type D Front Air Ride Suspension		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*77 Capacity Type D Front Engine (FE) Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C7] Type D Front Air Ride Suspension		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B27] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*83 Capacity Type D Front Engine (FE) Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C7] Type D Front Air Ride Suspension		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*89 Capacity Type D Front Engine (FE) Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C7] Type D Front Air Ride Suspension		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01	*72 Capacity Type D Rear Engine (RE) Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C7] Type D Front Air Ride Suspension		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01	*78 Capacity Type D Rear Engine (RE) Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C7] Type D Front Air Ride Suspension		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01	*84 Capacity Type D Rear Engine (RE) Complete School Bus*	
	NO LIFT	**WITH LIFT**
Unit Base Price:		
OPTIONAL EQUIPMENT PRICES		
[C1A] Front Tow Hooks		
[C1B] Rear Tow Hooks		
[C2] Spare Disc Wheel		
[C3] Auto Trans Warranty (5 yr unlimited)		
[C4] 75-100 Gallon Fuel Tank*		
[C5] Low Profile Radial Tires**		
[C6] 270 Amp L/N 4864 Alternator		
[C7] Type D Front Air Ride Suspension		
[C8] Adjustable Pedals		
[C10] Air Ride Rear Suspension		
[C11] Silicone Only Heater and Engine Coolant Hoses		
[C12] Straight Floor	**N/A**	
[C13] Auto Headlamp System		
[B1] Pro Lo Hatch		
[B4] 77" High Headroom		
[B5A] Intercom/PA		
[B5B] PA with Radio		
[B5C] Stereo Radio (no PA)		
[B6] Locking Door at Fuel Tank		
[B7A] CE White Integrated Child Restraint Seat		
[B7B] IMMI Child Safety Seat		
[B8] Exterior Body Light Monitor		
[B11] Lap/Shoulder Belts (all seating positions - no reduction in seating capacity)***		
[B12] Full Perf Ceiling Panel		
[B13] Bus Lockup System		
[B14] Wire Pupil Crossing Arm		
[B15] Stainless Steel Mirror System (Brackets & Fasteners)		
[B16] Battery Disconnect Switch Label		
[B17] Red Light Emergency Door		
[B18] Underseat Rear Heater		
[B19] Tailpipe through Bumper		
[B20] Powder Coated Windows		
[B21] Driver's Seat with Integrated Seat Belt		
[B22] Delete W/C - Add Seat	**N/A**	
[B23] Delete Seat - Add W/C	**N/A**	
[B24] Wheelchair Securement Area Lighting	**N/A**	
[B25] Track Seating	**N/A**	
[B26] Standard Track Seating Seat	**N/A**	

* Between Frame Rail Fuel Tank - Specify capacity and price in chart above if available.
** Low Profile Radial Tires: Specify model, size and price in chart above if available.
*** Lap/shoulder belts - Specify manufacturer and model in your bid response.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01 STANDARD TIRE INFORMATION (ALL TYPES AND SIZES)			
Body Type and Size	**Tire Manufacturer** **	**Tire Model** **	**Tire Size** **
19 Cap Type A1			
23 Cap Type A1			
29 Cap Type C			
47 Cap Type C			
65 Cap Type C			
71 Cap Type C			
77 Cap Type C			
71 Cap Type D (FE)			
77 Cap Type D (FE)			
83 Cap Type D (FE)			
89 Cap Type D (FE)			
72 Cap Type D (RE)			
78 Cap Type D (RE)			
84 Cap Type D (RE)			

BID NO: ITB 2015-01 OPTIONAL TIRE INFORMATION AND PRICING (ALL TYPES AND SIZES)				
Body Type and Size	**Tire Manufacturer** *	**Tire Model** *	**Tire Size** *	**Price:** *
19 Cap Type A1				
23 Cap Type A1				
29 Cap Type C				
47 Cap Type C				
65 Cap Type C				
71 Cap Type C				
77 Cap Type C				
71 Cap Type D (FE)				
77 Cap Type D (FE)				
83 Cap Type D (FE)				
89 Cap Type D (FE)				
72 Cap Type D (RE)				
78 Cap Type D (RE)				
84 Cap Type D (RE)				

Please list in detail all requested information by body size. (See Attachment XII - Florida School Bus Specifications, Revised 2013, for tire specifications.)

*** THESE ITEMS MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES**

****UNDER CERTAIN CONDITIONS, THESE ITEMS MAY BE SUBJECT TO CHANGE. SEE SECTION 7.11 FOR SPECIFIC INFORMATION.**

Signed or Initialed: **Date:**

BID NO: ITB 2015-01 STANDARD AND OPTIONAL WHEELCHAIR LIFTS AND WHEELCHAIR/OCCUPANT SECUREMENT SYSTEMS

Standard Wheelchair Lift

Bus Type	Lift Make	Lift Model
Type A		
Type C		
Type D		

Optional Wheelchair Lift #1 *

Bus Type	Lift Make	Lift Model	Additional Price *
Type A			
Type C			
Type D			

Optional Wheelchair Lift #2 *

Bus Type	Lift Make	Lift Model	Additional Price *
Type A			
Type C			
Type D			

Optional Wheelchair Lift #3 * 34" Wide Platform

Bus Type	Lift Make		Additional Price *
Type A			
Type C			
Type D			

Standard Wheelchair Tiedown/Occupant Restraint System (WTORS)

Bus Type	WTORS Make	WTORS Model
Type A		
Type C		
Type D		

Optional Wheelchair Tiedown/Occupant Restraint System (WTORS) *

Bus Type	WTORS Make	WTORS Model	Additional Price *
Type A			
Type C			
Type D			

* Specify any additional cost for these lifts over and above base prices of lift buses quoted on prior pages, or credit if the cost is less.
NOTE: The body and lift manufacturers are responsible for certification and testing of lift and body combinations to Florida School Bus Specifications.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01 OPTIONAL AIR-CONDITIONING SYSTEM A SPECIFICATIONS								
Body Type and Size	**A/C MAKE ***	**A/C MODEL ***	**COMPRESSOR MAKE, MODEL, DISPLACEMENT ****	**IMACA #250 (CITY) BTU OUTPUT ***	**TOTAL CURRENT DRAW (AMPS) ***	**NUMBER OF:**		**PRICE: ***
						EVAPORATORS **	**CONDENSERS ****	
Type A1								
With Lift:								
Florida Safety Bus								
29 Cap Type C								
With Lift:								
47 Cap Type C								
With Lift:								
65 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type D (FE)								
With Lift:								
77 Cap Type D (FE)								
With Lift:								
83-89 Cap Type D (FE)								
With Lift:								
72 Cap Type D (RE)								
With Lift:								
78 Cap Type D (RE)								
With Lift:								
84 Cap Type D (RE)								
With Lift:								

Please list in detail all requested information by body size. (See Attachment X - Florida School Bus Specifications, Revised 2013, for A/C specifications.)

* THESE ITEMS MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.
** UNDER CERTAIN CONDITIONS, THESE ITEMS MAY BE SUBJECT TO CHANGE. SEE SECTION 7.11 FOR SPECIFIC INFORMATION.

Signed or Initialed: Date:

BID NO: ITB 2015-01 ADDITIONAL OPTIONAL AIR-CONDITIONING SYSTEM A SPECIFICATIONS

Body Type and Size	A/C MAKE *	A/C MODEL *	COMPRESSOR MAKE, MODEL AND DISPLACEMENT **	IMACA #250 (CITY) BTU OUTPUT *	TOTAL CURRENT DRAW (AMPS) *	NUMBER OF:		PRICE: *
						EVAPORATORS **	CONDENSERS **	
Type A1								
With Lift:								
Florida Safety Bus								
29 Cap Type C								
With Lift:								
47 Cap Type C								
With Lift:								
65 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type D (FE)								
With Lift:								
77 Cap Type D (FE)								
With Lift:								
83-89 Cap Type D (FE)								
With Lift:								
72 Cap Type D (RE)								
With Lift:								
78 Cap Type D (RE)								
With Lift:								
84 Cap Type D (RE)								
With Lift:								

Please list in detail all requested information by body size. (See Attachment X - Florida School Bus Specifications, Revised 2013, for A/C specifications.)

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** UNDER CERTAIN CONDITIONS, THESE ITEMS MAY BE SUBJECT TO CHANGE. SEE SECTION 7.11 FOR SPECIFIC INFORMATION.

Signed or Initialed: Date:

BID NO: ITB 2015-01 OPTIONAL AIR-CONDITIONING SYSTEM
SYSTEM B SPECIFICATIONS

Body Type and Size	A/C MAKE *	A/C MODEL *	COMPRESSOR MAKE, MODEL AND DISPLACEMENT **	IMACA #250 (CITY) BTU OUTPUT *	TOTAL CURRENT DRAW (AMPS) *	NUMBER OF:		PRICE: *
						EVAPORATORS **	CONDENSERS **	
Type A1								
With Lift:								
Florida Safety Bus								
29 Cap Type C								
With Lift:								
47 Cap Type C								
With Lift:								
65 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type D (FE)								
With Lift:								
77 Cap Type D (FE)								
With Lift:								
83-89 Cap Type D (FE)								
With Lift:								
72 Cap Type D (RE)								
With Lift:								
78 Cap Type D (RE)								
With Lift:								
84 Cap Type D (RE)								
With Lift:								

Please list in detail all requested information by body size. (See Attachment X - Florida School Bus Specifications, Revised 2013, for A/C specifications.)

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** UNDER CERTAIN CONDITIONS, THESE ITEMS MAY BE SUBJECT TO CHANGE. SEE SECTION 7.11 FOR SPECIFIC INFORMATION.

Signed or Initialed: Date:

BID NO: ITB 2015-01 ADDITIONAL OPTIONAL AIR-CONDITIONING SYSTEM
SYSTEM B SPECIFICATIONS

Body Type and Size	A/C MAKE *	A/C MODEL *	COMPRESSOR MAKE, MODEL AND DISPLACEMENT **	IMACA #250 (CITY) BTU OUTPUT *	TOTAL CURRENT DRAW (AMPS) *	NUMBER OF:		PRICE: *
						EVAPORATORS **	CONDENSERS **	
Type A1								
With Lift:								
Florida Safety Bus								
29 Cap Type C								
With Lift:								
47 Cap Type C								
With Lift:								
65 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type D (FE)								
With Lift:								
77 Cap Type D (FE)								
With Lift:								
83-89 Cap Type D (FE)								
With Lift:								
72 Cap Type D (RE)								
With Lift:								
78 Cap Type D (RE)								
With Lift:								
84 Cap Type D (RE)								
With Lift:								

Please list in detail all requested information by body size. (See Attachment X - Florida School Bus Specifications, Revised 2013, for A/C specifications.)

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** UNDER CERTAIN CONDITIONS, THESE ITEMS MAY BE SUBJECT TO CHANGE. SEE SECTION 7.11 FOR SPECIFIC INFORMATION.

Signed or Initialed: Date:

BID NO: ITB 2015-01 ADDITIONAL OPTIONAL AIR-CONDITIONING SYSTEM
SYSTEM B SPECIFICATIONS

Body Type and Size	A/C MAKE *	A/C MODEL *	COMPRESSOR MAKE, MODEL AND DISPLACEMENT **	IMACA #250 (CITY) BTU OUTPUT *	TOTAL CURRENT DRAW (AMPS) *	NUMBER OF:		PRICE: *
						EVAPORATORS **	CONDENSERS **	
Type A1								
With Lift:								
Florida Safety Bus								
29 Cap Type C								
With Lift:								
47 Cap Type C								
With Lift:								
65 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type C								
With Lift:								
71 Cap Type D (FE)								
With Lift:								
77 Cap Type D (FE)								
With Lift:								
83-89 Cap Type D (FE)								
With Lift:								
72 Cap Type D (RE)								
With Lift:								
78 Cap Type D (RE)								
With Lift:								
84 Cap Type D (RE)								
With Lift:								

Please list in detail all requested information by body size. (See Attachment X - Florida School Bus Specifications, Revised 2013, for A/C specifications.)

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** UNDER CERTAIN CONDITIONS, THESE ITEMS MAY BE SUBJECT TO CHANGE. SEE SECTION 7.11 FOR SPECIFIC INFORMATION.

Signed or Initialed: Date:

BID NO: ITB 2015-01 OPTIONAL AIR-CONDITIONING SYSTEM WITH MODULAR EVAPORATOR/CONDENSOR ASSEMBLY SYSTEM A SPECIFICATIONS								
Body Type and Size	**A/C MAKE ***	**A/C MODEL ***	**COMPRESSOR MAKE, MODEL AND DISPLACEMENT ****	**IMACA #250 (CITY) BTU OUTPUT ***	**TOTAL CURRENT DRAW (AMPS) ***	**NUMBER OF:**		**PRICE: ***
						EVAPORATORS **	**CONDENSERS ****	
72 Cap Type D (RE)								
With Lift:								
78 Cap Type D (RE)								
With Lift:								
84 Cap Type D (RE)								
With Lift:								

Please list in detail all requested information by body size. (See Attachment X - Florida School Bus Specifications, Revised, 2013, for A/C specifications.)

** THESE ITEMS MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.*
*** UNDER CERTAIN CONDITIONS, THESE ITEMS MAY BE SUBJECT TO CHANGE. SEE SECTION 7.11 FOR SPECIFIC INFORMATION.*

Signed or Initialed: *Date:*

BID NO: ITB 2015-01 ADDITIONAL AIR CONDITIONER OPTIONS

Option Description	Manufacturer	Model #	Price

Bidders may bid additional dealer-offered options, but must include complete item information for each space above.

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01 OPTIONAL ENGINE PRICING
Please insert optional engines available by size.

TYPE and SIZE	Optional Engine #1 & Price		Optional Engine #2 & Price		Optional Engine #3 & Price	
TYPE C BUS	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**
29 Cap. Type C Bus						
47 Cap. Type C Bus						
65 Cap. Type C Bus						
71 Cap. Type C Bus						
77 Cap. Type C Bus						
TYPE D FE BUS	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**
71 Cap. Type D FE Bus						
77 Cap. Type D FE Bus						
83 Cap. Type D FE Bus						
89 Cap. Type D FE Bus						
TYPE D RE BUS	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**
72 Cap. Type D RE Bus						
78 Cap. Type D RE Bus						
84 Cap. Type D RE Bus						

If transmission changes with optional engine, please note. Specify any additional cost for these systems over and above base prices of buses quoted on prior pages, or credit if the cost is less.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

Copy this sheet for additional optional engines

BID NO: ITB 2015-01 OPTIONAL ALTERNATIVE ENGINE PRICING -
Please insert optional engines available by size.

TYPE and SIZE	CNG or LP Engine & Price*		Hybrid, Diesel/Electric Drive Train & Price*		Fuel Cell or Hydrogen Engine & Price*	
TYPE C BUS	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**
29 Cap. Type C Bus						
47 Cap. Type C Bus						
65 Cap. Type C Bus						
71 Cap. Type C Bus						
77 Cap. Type C Bus						
TYPE D FE BUS	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**
71 Cap. Type D FE Bus						
77 Cap. Type D FE Bus						
83 Cap. Type D FE Bus						
89 Cap. Type D FE Bus						
TYPE D RE BUS	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**	**Model/HP & Torque**	**Price**
72 Cap. Type D RE Bus						
78 Cap. Type D RE Bus						
84 Cap. Type D RE Bus						
* Please provide complete documentation of system bid.						

If transmission changes with optional engine, please note. Specify any additional cost for these systems over and above base prices of buses quoted on prior pages, or credit if the cost is less.

THE INFORMATION SUBMITTED FOR ALL ITEMS ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: Date:

BID NO: ITB 2015-01 SEATING CAPACITY FOR WHEELCHAIR LIFT BUSES							
WITH FRONT-MOUNTED LIFT					**WITH REAR-MOUNTED LIFT**		
Capacity	**Type**	**Standard Wheelchair Spaces**	**Maximum # Passengers in Regular Seats (with 3 wheelchairs)**	**Maximum # Wheelchair Spaces Available (reduces regular seating)**	**Standard Wheelchair Spaces**	**Maximum # Passengers in Regular Seats (with 3 wheelchairs)**	**Maximum # Wheelchair Spaces Available (reduces regular seating)**
19	**A1**	**1**			**N/A**	**N/A**	**N/A**
23	**A1**	**1**			**1**		
29	**C**	**3**			**3**		
47	**C**	**3**			**3**		
65	**C**	**3**			**3**		
71	**C**	**3**			**3**		
77	**C**	**3**			**3**		
71 F.E.	**D**	**3**			**3**		
77 F.E.	**D**	**3**			**3**		
83 F.E.	**D**	**3**			**3**		
89 F.E.	**D**	**3**			**3**		
72 R.E.	**D**	**3**			**3**		
78 R.E.	**D**	**3**			**3**		
84 R.E.	**D**	**3**			**3**		

BID NO: ITB 2015-01 SEATING CAPACITY FOR STRAIGHT FLOOR WHEELCHAIR LIFT BUSES							
WITH FRONT-MOUNTED LIFT					**WITH REAR-MOUNTED LIFT**		
Capacity	**Type**	**Standard Wheelchair Spaces**	**Maximum # Passengers in Regular Seats (with 3 wheelchairs)**	**Maximum # Wheelchair Spaces Available (reduces regular seating)**	**Standard Wheelchair Spaces**	**Maximum # Passengers in Regular Seats (with 3 wheelchairs)**	**Maximum # Wheelchair Spaces Available (reduces regular seating)**
19	**A1**	**1**			**N/A**	**N/A**	**N/A**
23	**A1**	**1**			**1**		
29	**C**	**3**			**3**		
47	**C**	**3**			**3**		
65	**C**	**3**			**3**		
71	**C**	**3**			**3**		
77	**C**	**3**			**3**		
71 F.E.	**D**	**3**			**3**		
77 F.E.	**D**	**3**			**3**		
83 F.E.	**D**	**3**			**3**		
89 F.E.	**D**	**3**			**3**		
72 R.E.	**D**	**3**			**3**		
78 R.E.	**D**	**3**			**3**		
84 R.E.	**D**	**3**			**3**		

BID NO: ITB 2015-01 Extended Warranty Contract Options			
Option Description	Engine Model	Extended Coverage Duration	Price
Extended Engine Warranty (A1 Chassis)		60 Months/150,000 Miles	
Extended Engine Warranty (A1 Chassis)		60 Months /250,00 Miles	
Extended Engine Warranty (A1 Chassis)		60 Months /500,00 Miles	
Option Description	Engine Model	Extended Coverage Duration	Price
Extended Engine Warranty (A2 Chassis)		60 Months/150,000 Miles	
Extended Engine Warranty (A2 Chassis)		60 Months /250,00 Miles	
Extended Engine Warranty (A2 Chassis)		60 Months /500,00 Miles	
Option Description	Engine Model	Extended Coverage Duration	Price
Type C Chassis Extended Engine Warranty		60 Months/150,000 Miles	
Type C Chassis Extended Engine Warranty		60 Months /250,00 Miles	
Type C Chassis Extended Engine Warranty		60 Months /500,00 Miles	
Option Description	Engine Model	Extended Coverage Duration	Price
Type D Chassis Extended Engine Warranty		60 Months/150,000 Miles	
Type D Chassis Extended Engine Warranty		60 Months /250,00 Miles	
Type D Chassis Extended Engine Warranty		60 Months /500,00 Miles	

BID NO: ITB 2015-01 Manufacturer's Standard Warranty Body and Chassis			
Basic/Standard Body Warranty Coverage Period	Bus Type	Basic/Standard Chassis Warranty Coverage Period	Credit Option Price
Example: 12,000 miles or 12 months	*Type C*	*Example: 12 months*	*-400*
	Type A1		
	Type A2		
	Type C		
	Type D		

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Signed or Initialed: ***Date:***

BID NO: ITB 2015-01 BAGGAGE COMPARTMENTS OFFERED (PRICE IS 1 PER BUS)

Size	Price	PUT A CHECK IN EACH TYPE AND SIZE IF AVAILABLE											
		C					DFE				DRE		
		29	47	65	71	77	71	77	83	89	72	78	84

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Signed or Initialed: ***Date:***

BID NO: ITB 2015-01 COMPONENTS AND EQUIPMENT BID FOR STANDARD COMPLETE SCHOOL BUS - WITHOUT LIFT, WITHOUT AIR-CONDITIONING

Bus Type	Bus Capacity	Chassis Model Number *	Body Model Number *	Engine Manufacturer and Model *	Engine Horsepower/ Torque *	Alternator *	GVWR		Wheelbase *	Transmission Model and # Forward Gears *	Front Axle Mfr. And Model **	Front Axle Capacity **	Rear Axle Mfr. And Model **	Rear Axle Capacity **	Rear Axle Ratio **
							GAWR Front/Rear *	Total GVWR *							
A1	19														
A1	23														
A1	29														
C - LT	29														
Type C Safety Bus	65														
C - PB	29														
C - PB	47														
C - PB	65														
C - PB	71														
C - PB	77														
C - WS	29														
C - WS	47														
C - WS	65														
C - WS	71														
C - WS	77														
D-FE (PB)	71														
D-FE (PB)	77														
D-FE (PB)	83														
D-FE (PB)	89														
D-FE (WS)	71														
D-FE (WS)	77														
D-FE (WS)	83														
D-FE (WS)	89														
D-RE	72														
D-RE	78														
D-RE	84														

This is the base information page. Items from this page not listed on other pages will be assumed to be the same unless otherwise noted on that page.

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Signed or Initialed: **Date:**

BID NO: ITB 2015-01 COMPONENTS AND EQUIPMENT BID FOR STANDARD COMPLETE SCHOOL BUS WITH LIFT- WITHOUT AIR-CONDITIONING

Bus Type	Bus Capacity	Chassis Model Number *	Body Model Number *	Engine Manufacturer and Model *	Engine Horsepower/ Torque *	Alternator *	GVWR		Transmission Model and # Forward Gears *	Wheelbase *	Front Axle Mfr. And Model **	Front Axle Capacity **	Rear Axle Mfr. And Model **	Rear Axle Capacity **	Rear Axle Ratio **
							GAWR Front/Rear *	Total GVWR *							
A1	19														
A1	23														
A1	29														
C - LT	29														
C - PB	29														
C - PB	47														
C - PB	65														
C - PB	71														
C - PB	77														
C - WS	29														
C - WS	47														
C - WS	65														
C - WS	71														
C - WS	77														
D-FE (PB)	71														
D-FE (PB)	77														
D-FE (PB)	83														
D-FE (PB)	89														
D-FE (WS)	71														
D-FE (WS)	77														
D-FE (WS)	83														
D-FE (WS)	89														
D-RE	72														
D-RE	78														
D-RE	84														

This is the base information page. Items from this page not listed on other pages will be assumed to be the same unless otherwise noted on that page.

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Signed or Initialed: **Date:**

BID NO: ITB 2015-01 Additional Seat Contract Options			
Option Description	Seating Capacity		Price
IMMI 3pt Belt Track Seating Seat			
CE White 3pt Belt Track Seating Seat			
CE White 4pt Belt Track Seating Seat			
CE White 30" Seat			
CE White 39" Track Seating Seat			
30" Combo Seat with 30" barrier			
(first row left or right)			

BID NO: ITB 2015-01 Additional Contract Options			
Option Description	Seating Capacity	Manufacturer	Price
System B A/C Aluminum Cored Evaporators			
Driver's Cooling Fan			
Transit Compressor - Carrier System Bitzer F400			

BID NO: ITB 2015-01		
Computer diagnostic equipment for engine, transmission, brakes, body, and chassis multiplexing. Equipment shall consist of, but not be limited to, PC-compatible software with perpetual license, and all required cables, leads and adapters applicable to a complete set for bus with:	Model # (If Applicable)	Price
International Engine		
Cummins Engine		

BID NO: ITB 2015-01					
This option consists of a one-day training session equivalent to the training required and described on pages 19-20 in the ITB, to be conducted at a district garage location of the purchasing district's choice.	Price for One-Day Training in Region 1 *	Price for One-Day Training in Region 2 *	Price for One-Day Training in Region 3 *	Price for One-Day Training in Region 4 *	Price for One-Day Training in Region 5 *
Engine Electronic Diagnostics and Familiarization					
Other (provide description)					
* See Delivery Pricing Pages for Regional Areas (P-30 through P-32)					

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED OR SUBSTITUTED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

TYPE A BUS DELIVERY PRICING

TO: Commissioner
Florida Department of Education
Tallahassee, Florida 32399-0400

BID NO: ITB 2015-01
Delivery Pricing

FROM:	
ADDRESS:	

The schedule of rates for delivery of completed school buses to each county seat is as follows:

REGION 1	COUNTY SEAT	DELIVERY
Bay	Panama City	
Calhoun	Blountstown	
Escambia	Pensacola	
Franklin	Apalachicola	
Gulf	Port St. Joe	
Holmes	Bonifay	
Jackson	Marianna	
Liberty	Bristol	
Okaloosa	Crestview	
Santa Rosa	Milton	
Walton	Defuniak Springs	
Washington	Chipley	

REGION 2	COUNTY SEAT	DELIVERY
Alachua	Gainesville	
Baker	Macclenny	
Bradford	Starke	
Clay	Green Cove Springs	
Columbia	Lake City	
Dixie	Cross City	
Duval	Jacksonville	
Gadsden	Quincy	
Gilchrist	Trenton	
Hamilton	Jasper	
Jefferson	Monticello	
Lafayette	Mayo	
Leon	Tallahassee	
Levy	Bronson	
Madison	Madison	
Nassau	Fernandina Beach	
Suwannee	Live Oak	
Taylor	Perry	
Union	Lake Butler	
Wakulla	Crawfordville	

REGION 3	COUNTY SEAT	DELIVERY
Citrus	Inverness	
Flagler	Bunnell	
Hernando	Brooksville	
Hillsborough	Tampa	
Lake	Tavares	
Marion	Ocala	
Orange	Orlando	
Pasco	New Port Richey	
Pinellas	Clearwater	
Putnam	Palatka	
St. Johns	St. Augustine	
Seminole	Sanford	
Sumter	Bushnell	
Volusia	DeLand	

REGION 4	COUNTY SEAT	DELIVERY
Brevard	Cocoa	
Charlotte	Punta Gorda	
DeSoto	Arcadia	
Glades	Moore Haven	
Hardee	Wauchula	
Hendry	LaBelle	
Highlands	Sebring	
Indian River	Vero Beach	
Lee	Fort Myers	
Manatee	Bradenton	
Martin	Stuart	
Okeechobee	Okeechobee	
Osceola	Kissimmee	
Polk	Bartow	
St. Lucie	Fort Pierce	
Sarasota	Sarasota	

REGION 5	COUNTY SEAT	DELIVERY
Broward	Ft. Lauderdale	
Collier	Naples	
Miami-Dade	Miami	
Monroe	Key West	
Palm Beach	W. Palm Beach	

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: _____

Date: _____

TYPE C BUS DELIVERY PRICING

TO: Commissioner
Florida Department of Education
Tallahassee, Florida 32399-0400

BID NO: ITB 2015-01
Delivery Pricing

FROM:	
ADDRESS:	

The schedule of rates for delivery of completed school buses to each county seat is as follows:

REGION 1	COUNTY SEAT	DELIVERY
Bay	Panama City	
Calhoun	Blountstown	
Escambia	Pensacola	
Franklin	Apalachicola	
Gulf	Port St. Joe	
Holmes	Bonifay	
Jackson	Marianna	
Liberty	Bristol	
Okaloosa	Crestview	
Santa Rosa	Milton	
Walton	Defuniak Springs	
Washington	Chipley	

REGION 2	COUNTY SEAT	DELIVERY
Alachua	Gainesville	
Baker	Macclenny	
Bradford	Starke	
Clay	Green Cove Springs	
Columbia	Lake City	
Dixie	Cross City	
Duval	Jacksonville	
Gadsden	Quincy	
Gilchrist	Trenton	
Hamilton	Jasper	
Jefferson	Monticello	
Lafayette	Mayo	
Leon	Tallahassee	
Levy	Bronson	
Madison	Madison	
Nassau	Fernandina Beach	
Suwannee	Live Oak	
Taylor	Perry	
Union	Lake Butler	
Wakulla	Crawfordville	

REGION 3	COUNTY SEAT	DELIVERY
Citrus	Inverness	
Flagler	Bunnell	
Hernando	Brooksville	
Hillsborough	Tampa	
Lake	Tavares	
Marion	Ocala	
Orange	Orlando	
Pasco	New Port Richey	
Pinellas	Clearwater	
Putnam	Palatka	
St. Johns	St. Augustine	
Seminole	Sanford	
Sumter	Bushnell	
Volusia	DeLand	

REGION 4	COUNTY SEAT	DELIVERY
Brevard	Cocoa	
Charlotte	Punta Gorda	
DeSoto	Arcadia	
Glades	Moore Haven	
Hardee	Wauchula	
Hendry	LaBelle	
Highlands	Sebring	
Indian River	Vero Beach	
Lee	Fort Myers	
Manatee	Bradenton	
Martin	Stuart	
Okeechobee	Okeechobee	
Osceola	Kissimmee	
Polk	Bartow	
St. Lucie	Fort Pierce	
Sarasota	Sarasota	

REGION 5	COUNTY SEAT	DELIVERY
Broward	Ft. Lauderdale	
Collier	Naples	
Miami-Dade	Miami	
Monroe	Key West	
Palm Beach	W. Palm Beach	

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: _____

Date: _____

TYPE D BUS DELIVERY PRICING

TO: Commissioner
Florida Department of Education
Tallahassee, Florida 32399-0400

BID NO: ITB 2015-01
Delivery Pricing

FROM:	
ADDRESS:	

The schedule of rates for delivery of completed school buses to each county seat is as follows:

REGION 1	COUNTY SEAT	DELIVERY
Bay	Panama City	
Calhoun	Blountstown	
Escambia	Pensacola	
Franklin	Apalachicola	
Gulf	Port St. Joe	
Holmes	Bonifay	
Jackson	Marianna	
Liberty	Bristol	
Okaloosa	Crestview	
Santa Rosa	Milton	
Walton	Defuniak Springs	
Washington	Chipley	

REGION 2	COUNTY SEAT	DELIVERY
Alachua	Gainesville	
Baker	Macclenny	
Bradford	Starke	
Clay	Green Cove Springs	
Columbia	Lake City	
Dixie	Cross City	
Duval	Jacksonville	
Gadsden	Quincy	
Gilchrist	Trenton	
Hamilton	Jasper	
Jefferson	Monticello	
Lafayette	Mayo	
Leon	Tallahassee	
Levy	Bronson	
Madison	Madison	
Nassau	Fernandina Beach	
Suwannee	Live Oak	
Taylor	Perry	
Union	Lake Butler	
Wakulla	Crawfordville	

REGION 3	COUNTY SEAT	DELIVERY
Citrus	Inverness	
Flagler	Bunnell	
Hernando	Brooksville	
Hillsborough	Tampa	
Lake	Tavares	
Marion	Ocala	
Orange	Orlando	
Pasco	New Port Richey	
Pinellas	Clearwater	
Putnam	Palatka	
St. Johns	St. Augustine	
Seminole	Sanford	
Sumter	Bushnell	
Volusia	DeLand	

REGION 4	COUNTY SEAT	DELIVERY
Brevard	Cocoa	
Charlotte	Punta Gorda	
DeSoto	Arcadia	
Glades	Moore Haven	
Hardee	Wauchula	
Hendry	LaBelle	
Highlands	Sebring	
Indian River	Vero Beach	
Lee	Fort Myers	
Manatee	Bradenton	
Martin	Stuart	
Okeechobee	Okeechobee	
Osceola	Kissimmee	
Polk	Bartow	
St. Lucie	Fort Pierce	
Sarasota	Sarasota	

REGION 5	COUNTY SEAT	DELIVERY
Broward	Ft. Lauderdale	
Collier	Naples	
Miami-Dade	Miami	
Monroe	Key West	
Palm Beach	W. Palm Beach	

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: _____

Date:

BID NO: ITB 2015-01 VIDEO CAMERA AND GPS SYSTEMS CONTRACT OPTIONS

Option Description	Manufacturer	Model #	Price
Replay Systems Digital Video Recorder Package, Installed			
Mobile Digital Video Recorder			
Color Camera, 4-8mm variable focus, Microphone			
Safety Vision Video Systems			
Digital 1-2 Channel, B/W, 1-2 Camera(s)			
Digital 1-2 Channel, Color, 1-2 Camera(s)			
Digital 1-2 Channel, Day/Night Recording, 1-2 Camera(s)			
Digital 4+ Channel, B/W, 1-2 Camera(s)			
Digital 4+ Channel, Color, 1-2 Camera(s)			
Digital 4+ Channel, Day/Night Recording, 1-2 Camera(s)			
VHS 1-2 Channel Color System, 1-2 Camera(s)			
VHS 1-2 Channel B/W System, 1-2 Camera(s)			
VHS 1-2 Channel Day/Night Recording, 1-2 Camera(s)			
Additional Safety Vision Accessories:			
Additional Camera			
Infrared Illuminator for BW or Day/Night Cameras			
Expansion Port			
40 GB Hard Drive			
60 GB Hard Drive			
80 GB Hard Drive			
Hard Drive (Other GB Capacity)			
Docking Bay			
Software			
Digital Viewing Station			
Download Kit, Starter			
Download Kit, Basic			
Download Kit, Advanced			
GPS Package			
REI Video Systems			
Digital 1-2 Channel, B/W, 1-2 Camera(s)			
Digital 1-2 Channel, Color, 1-2 Camera(s)			
Digital 1-2 Channel, Day/Night Recording, 1-2 Camera(s)			
Digital 4+ Channel, B/W, 1-2 Camera(s)			
Digital 4+ Channel, Color, 1-2 Camera(s)			
Digital 4+ Channel, Day/Night Recording, 1-2 Camera(s)			
VHS 1-2 Channel Color System, 1-2 Camera(s)			
VHS 1-2 Channel B/W System, 1-2 Camera(s)			
VHS 1-2 Channel Day/Night Recording, 1-2 Camera(s)			

Vendors may bid additional dealer-offered video system options, but must include complete item information for each space above.

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01 VIDEO CAMERA AND GPS SYSTEMS CONTRACT OPTIONS (Continued)

Option Description	Manufacturer	Model #	Price
Additional REI Accessories:			
Additional Camera			
Infrared Illuminator for BW or Day/Night Cameras			
Expansion Port			
40 GB Hard Drive			
60 GB Hard Drive			
80 GB Hard Drive			
Hard Drive (Other GB Capacity)			
Docking Bay			
Software			
Digital Viewing Station			
Download Kit, Starter			
Download Kit, Basic			
Download Kit, Advanced			
GPS Package			
Gatekeeper Video Systems			
Digital 1 Channel, B/W, One Camera			
Digital 1 Channel, Color, One Camera			
Digital 1 Channel, Day/Night Recording, One Camera			
Digital 4 Channel, B/W, One Camera			
Digital 4 Channel, Color, One Camera			
Digital 4 Channel, Day/Night Recording, One Camera			
VHS 1-2 Channel Color System, 1-2 Camera(s)			
VHS 1-2 Channel B/W System, 1-2 Camera(s)			
VHS 1-2 Channel Day/Night Recording, 1-2 Camera(s)			
Additional Gatekeeper Accessories:			
Additional Camera			
Infrared Illuminator for BW or Day/Night Cameras			
Expansion Port			
40 GB Hard Drive			
60 GB Hard Drive			
80 GB Hard Drive			
Hard Drive (Other GB Capacity)			
Docking Bay			
Software			
Digital Viewing Station			
Download Kit, Starter			
Download Kit, Basic			
Download Kit, Advanced			
GPS Package			

Vendors may bid additional dealer-offered video system options, but must include complete item information for each space above.

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

BID NO: ITB 2015-01 VIDEO CAMERA AND GPS SYSTEMS CONTRACT OPTIONS (Continued)

Option Description	Manufacturer	Model #	Price
SEON Video Systems			
Digital 1-2 Channel, B/W, 1-2 Camera(s)			
Digital 1-2 Channel, Color, 1-2 Camera(s)			
Digital 1-2 Channel, Day/Night Recording, 1-2 Camera(s)			
Digital 4+ Channel, B/W, 1-2 Camera(s)			
Digital 4+ Channel, Color, 1-2 Camera(s)			
Digital 4+ Channel, Day/Night Recording, 1-2 Camera(s)			
VHS 1-2 Channel Color System, 1-2 Camera(s)			
VHS 1-2 Channel B/W System, 1-2 Camera(s)			
VHS 1-2 Channel Day/Night Recording, 1-2 Camera(s)			
Additional Seon Accessories:			
Additional Camera			
Infrared Illuminator for BW or Day/Night Cameras			
Expansion Port			
40 GB Hard Drive			
60 GB Hard Drive			
80 GB Hard Drive			
Hard Drive (Other GB Capacity)			
Docking Bay			
Software			
Digital Viewing Station			
GPS Package			
GPS Vehicle Monitoring Systems And Accessories			

Vendors may bid additional dealer-offered video system options, but must include complete item information for each space above.

INFORMATION SUBMITTED ON THIS PAGE MAY NOT BE CHANGED UNDER ANY CIRCUMSTANCES.

Signed or Initialed: ***Date:***

ATTACHMENT 2

DISCLOSURE STATEMENT

(Rev. 07/02)

PARTNERSHIP OR INDIVIDUAL

I hereby certify that I, if an individual, or each of us, if a partnership, doing business as

_____

(Name of Individual or Partnership)

(am)(is) not now involved in nor have I/has it ever engaged in any private business venture or enterprise, directly or indirectly, with the Commissioner of Education, the Deputy Commissioner of Education, any Deputy Commissioner of Education, Division Director or Bureau Chief within the Florida Department of Education.

I further certify that neither I, nor any partner, (if a partnership), nor anyone acting in my or our behalf have requested that any of the above-designated persons or any other employee of the Florida Department of Education exert any influence to secure the appointment of _____ under this proposed agreement.

(Name of Individual or Partnership)

*(1)*_____

Signature

_____

Signature

_____

Signature

COMPANY OR CORPORATION

I hereby certify that neither I nor any owner, officer, director, or shareholder of _____*, a*

(*Name of Corporation (Company))*

_____(2) corporation licensed to do business in Florida, is presently involved in

(Name of State of Inc.)

or has engaged in any private business venture or enterprise, directly or indirectly, with the Commissioner of Education, the Deputy Commissioner of Education, any Deputy Commissioner of Education, Division Director, or Bureau Chief within the Florida Department of Education.

I further certify that neither I nor any owner, officer, director, or shareholder of this corporation or anyone acting on behalf of this corporation or any of its owners, officers, directors, or shareholders have requested that any of the above designated persons or any employee of the Florida Department of Education exert any influence to secure the appointment of

_____ under this proposed agreement.

(*Company)* *(Corporation)*

(3)_____

Signature

_____

Title

(1) If partnership, each partner must sign and execute.
(2) If company is not incorporated, insert "not incorporated" in this space.
(3) If incorporated, this statement is to be executed by same person who will execute contract, if awarded.

ATTACHMENT 3

DRUG-FREE WORKPLACE

(will be considered in case of tie bids)

Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids that are equal with respect to price, quality and service are received by the state or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893, F.S., or of any controlled substance law of the United States or any state, relating to such violation occurring in the workplace no later than five days after such conviction.

5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program (if such is available in the employee's community) by, any employee who is so convicted.

6) Make a good-faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

_____

Vendor's Signature

ATTACHMENT 4

STATE OF FLORIDA DEPARTMENT OF EDUCATION
MINORITY SUBCONTRACTORS UTILIZATION SUMMARY

The Department's Supplier Diversity Initiative strives to ensure the promise of Florida's future is shared by all of its residents, regardless of race, ethnicity, disability, neighborhood, or background. To that end, the Department is dedicated to support, track and increase its small, minority, women and service-disabled veteran business enterprise spending with prime contractors and subcontractors. This form was developed to assist in these efforts.

The prime contractor shall report all small, minority, women and service-disabled veteran business enterprise subcontractors, identifying the name, address, type of certification and dollar amount on the form below. The prime contractor shall submit this form with each invoice submitted for payment, whether or not funds have been spent with a small, minority, women, or service-disabled veteran business enterprise subcontractor for the period covered by the invoice. The Office of Supplier Diversity, Florida Department of Management Services will assist in furnishing names of qualified minorities. The Office of Supplier Diversity can be reached at 850-487-0915; the website is http://dms.myflorida.com/other_programs/office_of_supplier_diversity_osd .

PRIME CONTRACTOR: _____

CONTRACT NO.:_____

CONTRACT TITLE:_____

MBE CONTRACTORS Full Name, Address, Telephone Number	State Certified	Non-Certified	Non-Profit	Dollar Amount

Total Amount $_____

Certified True and Correct by:

_____
Prime Contractor

_____
Title

_____
Date

Submit Report to:

Mrs. Janice Brown
Bureau of Contracts, Grants & Procurement
Management Services
332 Turlington Bldg
325 West Gaines Street
Tallahassee, Florida 32399-0400

For additional information, you may call Mrs. Brown at 850-245-0819, or e-mail janice.brown@fldoe.org.

ATTACHMENT 5

VENDOR CERTIFICATION REGARDING

SCRUTINIZED COMPANIES LISTS

Respondent Vendor Name: _____

Vendor FEIN: _____

Vendor's Authorized Representative Name and Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____

Email Address: _____

SECTION 287.135, F.S., PROHIBITS AGENCIES FROM CONTRACTING WITH COMPANIES FOR GOODS OR SERVICES OVER $1,000,000, WHICH ARE ON EITHER THE SCRUTINIZED COMPANIES WITH ACTIVITIES IN SUDAN LIST OR THE SCRUTINIZED COMPANIES WITH ACTIVITIES IN THE IRAN PETROLEUM ENERGY SECTOR LIST. BOTH LISTS ARE CREATED PURSUANT TO SECTION 215.473, F.S.

AS THE PERSON AUTHORIZED TO SIGN ON BEHALF OF RESPONDENT, I HEREBY CERTIFY THAT THE COMPANY IDENTIFIED ABOVE IN THE SECTION ENTITLED "RESPONDENT VENDOR NAME" IS NOT LISTED ON EITHER THE SCRUTINIZED COMPANIES WITH ACTIVITIES IN SUDAN LIST OR THE SCRUTINIZED COMPANIES WITH ACTIVITIES IN THE IRAN PETROLEUM ENERGY SETOR LIST. I UNDERSTAND THAT, PURSUANT TO SECTION 287.135, F.S., THE SUBMISSION OF A FALSE CERTIFICATION MAY SUBJECT THE COMPANY TO CIVIL PENALTIES, ATTORNEY'S FEES AND/OR COSTS.

CERTIFIED BY: _____,

WHO IS AUTHORIZED TO SIGN ON BEHALF OF THE ABOVE-REFERENCED COMPANY.

Authorized Signature (Print Name and Title): _____

ATTACHMENT 6

Contract for Type A, Type C and Type D School Buses and Optional Equipment

THIS CONTRACT FOR TYPE A, TYPE C AND TYPE D SCHOOL BUSES AND OPTIONAL EQUIPMENT, BID NO: ITB 2015-01, by and between the Department, 325 West Gaines, Suite 824, Tallahassee, Florida 32399-0400, and _____, the contractor, a for-profit corporation registered in Florida, collectively referred to as the "Parties,"

WITNESSETH:

WHEREAS, the Department desires to provide eligible users, defined herein, with various Type A, Type C and Type D school buses and optional equipment (defined herein as "Vehicles"), through the use of a state term contract pursuant to rule 60A-1.001, F.A.C., and section 1006.27, F.S., and

WHEREAS, the Department solicited responses to an Invitation to Bid No: ITB 2015-01 (ITB), to prospective contractors of said Vehicles; and,

WHEREAS, the contractor responded to the ITB and desires to provide said Vehicles; and,

NOW THEREFORE, in consideration of the premises, terms and conditions set forth herein, the Parties execute this contract so same becomes binding and enforceable by and through the Parties and their assigns, and agree heretofore:

SCOPE OF WORK

The intent of these specifications is to set forth and convey to prospective bidders the general type, character, performance and quality of the Vehicles desired by the Department and school districts. The contractor is authorized to provide Vehicles to any and all eligible users in the State of Florida. The Parties agree that the laws and rules that apply to this contract shall be for those applicable to contracts in excess of Category Two, or $35,000, as defined in section 287.017, F.S.

Pursuant to section 7.9 of Bid No: ITB 2015-01, the following documents are hereby incorporated by reference:

- ITB No: 2015-01
- Any addenda to Bid No: ITB 2015-01
- Contractor's response
- Award letter

IN WITNESS WHEREOF, the Parties hereto have caused this contract For Type A, Type C and Type D school buses and optional equipment, Bid No: ITB 2015-01, to be executed on the dates shown below their respective names.

DEPARTMENT	CONTRACTOR
_____	_____
Signature	Signature
Print Name:_____	Print name:_____
Title:_____	Title:_____
Date:_____	Date:_____

ATTACHMENT 7

BIDDER REPRESENTATION

TO: Commissioner
Florida Department of Education
Tallahassee, Florida 32399-0400

I, the bidder, hereby represent that the specifications of school bus equipment furnished under terms of this bid will comply with the National Specifications for School Buses, Revised 2010, and the Florida School Bus Specifications, Revised 2013, as represented by the manufacturer to the Commissioner of the Florida Department of Education, State of Florida.

NOTES:

1. Do not include excise tax in price schedule. A tax exemption certification or number will be furnished by the purchasing agency.
2. All prices must be quoted in even dollar amounts.
3. Bidders bidding Type A1 school buses must publish maximum seating capacity when meeting pre-k seating specifications requires reduced seating capacity.
4. Twenty-nine capacity Type C buses shall be offered with both front-mounted and rear-mounted lift availability.
5. All standard and optional tires bid shall be all-wheel position highway rib radials.
6. All buses equipped with air brakes shall have air-operated stop arm assemblies.
7. All chassis supplied for the purpose of this bid shall be equipped with air-operated brake systems, with the exception of Type A1 19-23 capacity complete units and Type C 29 capacity lighter-weight (LT) units.

Comments regarding production schedules and remarks (for informational purposes only):_____

_____

_____

Company:_____

By:_____

Address:_____

Telephone:_____

F.E.I.D. #:_____

Signature:_____ Date:_____

ATTACHMENT 8

PURCHASE ORDER
ADDRESSING PREFERENCE INFORMATION

Please provide the pertinent address information your company requires on all purchase orders for buses purchased from your company pursuant to this bid:

ATTN (Contact Person's Name):_____

Contact Person's Title:_____

Company Name:_____

Street Address:_____

City, State, Zip:_____

Telephone:_____

CUSTOMER CONTACT PREFERENCE INFORMATION

Please indicate the proper contact person for all inquiries related to bus orders:

Contact Person's Name:_____

Contact Person's Title:_____

Company Name:_____

Street Address:_____

City, State, Zip:_____

Telephone:_____

Fax: _____

E-mail address:_____

ATTACHMENT 9

FILE STRUCTURE FOR REQUIRED STATUS REPORT

ITEM #	FIELD TYPE	FIELD NAME	FIELD DESCRIPTION
1	TEXT	BUYER	PURCHASING ENTITY
2	DATE	PODATE	DATE PO RECEIVED (MM/DD/YY)
3	TEXT	DELIVERY	TYPE OF DELIVERY (P) = Pickup (D) = Delivered
4	TEXT	BUS NUMBER	LOCAL SCHOOL BUS NUMBER
5	TEXT	BUS TYPE	BUS TYPE (A, C, OR D)
6	TEXT	VIN #	VEHICLE IDENTIFICATION NUMBER
7	NUMBER	SHELLCAP	BODY SHELL SIZE
8	NUMBER	SEATING CAP	REGULAR SEATING POSITIONS
9	NUMBER	W/CCAP	WHEELCHAIR POSITIONS
10	TEXT	A/C	BODY A/C EQUIPPED (Y OR N)
11	TEXT	LIFT	BODY LIFT EQUIPPED (Y OR N)
12	TEXT	ACMAN	AC MANUFACTURER
13	TEXT	ACMOD	AC MODEL
14	TEXT	LIFTMOD	LIFT MODEL
15	TEXT	LIFT SERIAL	LIFT SERIAL NUMBER
16	TEXT	CHASMAN	CHASSIS MANUFACTURER
17	TEXT	CHASMOD	CHASSIS MODEL
18	DATE	BLD_DATE	BUILD DATE (MM/DD/YY)
19	TEXT	BODMODEL	BODY MODEL OR SIZE
20	TEXT	BOD SERIAL	BODY SERIAL NUMBER
21	TEXT	ENGMOD	ENGINE MODEL
22	TEXT	ENGINE SERIAL	ENGINE SERIAL NUMBER
23	TEXT	TRANSMOD	TRANSMISSION MODEL
24	TEXT	TRANS #	TRANSMISSION SERIAL NUMBER
25	TEXT	EXT WARRANTY	EXTENDED TRANSMISSION WARRANTY (Y OR N)
26	TEXT	STAT	PRODUCTION STATUS
27	DATE	ESTDATE	ESTIMATED COMPLETION DATE
28	TEXT	FINDATE	UNIT DELIVERY OR PICKUP DATE (MM/DD/YY)

NOTE: File shall be a Microsoft Excel spreadsheet.

ATTACHMENT 10

PRE-DELIVERY INSPECTION (PDI) FORM

Revised 2013 Combination Florida School Bus Check-in and Pre-Delivery Inspection Form

District: _____ Local Bus #: _____

Bus Type: [A] [B] [C] [D (Front Engine)] [D (Rear Engine)] Shell Seating Capacity: _____ Equipped Seating Capacity: _____ Wheelchair Capacity: ____

Chassis Mfr.: _____ Chassis Model: _____ Chassis Build Date: _____ Chassis VIN: _____

Eng. Model: _____ Eng. S/N: _____ Trans. Model: _____ Trans. S/N: _____

Body Mfr.: _____ Body Model: _____ Body S/N: _____ Fuel Type: _____

Lift: Yes / No Lift Mfr.: _____ Lift Model: _____ Lift S/N: _____

A/C: Yes / No A/C Mfr.: _____ Evap. S/N: _____ Comp. S/N: _____

STATUS CODES: √ = OK X = Malfunction (but Meets Specs) O = Does Not Meet Specs N/A = Not Applicable

Status Code	INSPECTION ITEMS	COMMENTS (Note specific deficiencies)	MECH INIT.
	A. INSIDE BUS		
	1. **Emergency Equipment -** Fire Ext. (pressure, tag, mount), First Aid Kit, Body Fluid Cleanup Kit and Reflectors		
	3. **Neutral Safety Switch and Shifter**		
	4. **Engine Controls** - Key Switch, Accelerator and Engine Shutdown		
	5 **Gauges, Indicators and Dash Lights, Engine Warning Lights, and Buzzers**		
	6. **Air Brake System-** Gauge(s), Build-Up, Governor, Park Brake, Adjustment, Air Leaks, Low Air Warning, PP-1 Pop-Off and Pedal		
	7. **Hydraulic Brake System -** Warning Light, Gauge, Pedal, Travel and Fade, Power Assist and Park Brake		
	8. **Windshield Wipers and Washers -** Operation, Park and Blades		
	9. **Heaters, Defrosters, External Dash Fan(s) and Noise Abatement switch**		
	10. **Dome and Step Well Lights**		
	11. **Service Door –** Operation, Control and Overhead Pad		
	12. **Horn(s)**		
	13. **Mirror Adjustment and Condition –** Rearview, Convex and Interior		

Revised 2013 Combination Florida School Bus Check-In and Pre-Delivery Inspection Form

CODE	A. INSIDE BUS (Continued)	COMMENTS	INIT.
	14. **Driver's Seat and Seat Belt**		
	15. **Passenger Seats -** Frames, Mounting, Pads, Cuts, Bottoms, Modesty Panels, Stanchions and Passenger Securement Systems		
	16. **Emergency Door(s), Windows and Hatches -** Operation, Buzzers, Labeling and Overhead Pad		
	17. **Windshield, Side and Rear Windows -** Cracks, Fogging, Latches, and Visor		
	18. **Wheelchair Lift, Door and Securement System** (if equipped)		
	19. **2-Way Radio Operation** (if equipped)		
	20. **Interior Wiring, Cab Hoses and Fire Wall Seals**		
	21. **Post Trip Passenger Check System**		
	22. **General Condition, Bus Interior -** Floor, Step Well, Grab Rail, Paneling, Broom Mounting, Loose Objects Secured, Fit and Finish, Maintenance Access Covers and Vandal Box		
	B. OUTSIDE BUS		
	1. **Headlights, Turn Signals, Hazard, Side Marker, Brake, Tail, Backup Lights, Backup Alarm and Dash Sticker (if equipped) and Park Lights**		
	2. **Clearance & ID Lights, Reflectors and Strobe Light** (if equipped)		
	3. **Pupil Warning Lights -** (see eight-light warning system chart)		
	4. **Stop Arm(s), Student Crossing Arm -** Wiring, Air or Vacuum Leak and Decal		
	5. **General Condition, Bus Exterior -** Mirrors, Bumpers, Lettering, Body Damage, Paint, Reflective Markings, Emergency Door, Engine Hood, Cleanliness and Fit and Finish		
	C. ENGINE COMPARTMENT		
	1. **Steering -** Play, Column, Steering Gear Box Mounting, Pitman Arm, Drag Link, Steering Arm, Tie Rod and Ends and Idler Arm		
	2. **Batteries -** Hold Down, Terminals, Cables, Cleanliness, Slide Tray, and Load Test		
	3. **Fluid Levels and Condition -** Brake, Power Steering, Oil, Transmission, Windshield Washer and Coolant (Antifreeze _____ °F)		
	4. **Belts & Hoses -** Tightness, Condition, Routing and Belt Alignment		
	5. **Accessory Mounting & Condition -** Air Cleaner Restriction (____"H20), P.S. Pump, Air Compressor and Filter, Water Pump, Fan and Alternator		
	6. **Wiring -** Routing and Condition		
	7. **Fuel System and Lines**		
	8. **Radiator -** Mounting, Cap, Reservoir and Fan Shroud		

Revised 2013 Combination Florida School Bus Check-in and Pre-Delivery Inspection Form

CODE	D. UNDERNEATH BUS	COMMENTS	INIT.
	1. **Front Suspension –** Wheel Bearings, I-Beam, King Pins, Shackles, Spring Mounts, Pins and Bushings, A-Frames and Bushings, Ball-Joints, U-Bolts, Shocks, Springs and Seals		
	2. **Front Brakes –** Hoses, Lines, Chambers, Slack Adjusters, Pushrods, Linings, Drums, Rotors, Wheel Cylinders or Calipers and Brake Adjustment		
	3. **Engine/Transmission Mounts and Starter Mounting**		
	4. **Transmission –** Bolts, Linkage, Lines, Filter and Cooler		
	5. **Fluid Leaks –** Oil, Coolant, Transmission, P.S., etc.		
	6. **Fuel Tank –** Leaks, Mounting, Hoses and Wiring		
	7. **Brake Equipment –** Lines, Valves, Reservoir Mounting and Bleed Reservoirs		
	8. **Driveline –** Shafts, U-Joints, Yokes, Hanger Bearings, Guards, and Driveshaft Park Brake		
	9. **Rear Suspension –** Axle Housing, Vent, Differential, Springs, U-Bolts, Shocks, Spring Shackles, Pins and Bushings, Hangers, Seals and Wheel Bearings		
	10. **Rear Brakes –** Hoses, Lines, Chambers, Slack Adjusters, Pushrods, Linings, Drums, Rotors, Wheel Cylinders or Calipers and Brake Adjustment		
	11. **Body Securement and Structure –** Hold Downs, Floor, Outriggers, Braces, Skirts and Chassis Frame Rails		
	12. **Exhaust Systems –** Leaks, Mounting, Muffler/DPF and Tailpipe		
	13. **Wheels and Tires –** Tread Depth, Pressure, Damage, Matching, Alignment and Wheel Hardware		
	E. ROAD TEST		
	1. **Brake Performance –** Park Brake, Stopping Distance & Equalization		
	2. **Engine, Transmission, Driveline –** Engine Performance and Governor, Shifting		
	3. **Steering and Handling –** Free Play, Power Assist, Column, and Tracking		
	F. MAINTENANCE CHECKS		.
	1. **Test Starting and Charging System** - Amps (_____) Volts (_____)		
	2. **Record Cooling System DCA Level -** (_____)		

Revised 2013 Combination Florida School Bus Check-in and Pre-Delivery Inspection Form

CODE	G. ITEM SPECIFICATIONS	COMMENTS	INIT.
	1. **Body Data Plate**		
	2. **Body Structure**		
	3. **A/C Equipment**		
	4. **Wheel Chair Lift Equipment**		
	5. **Wheel Chair Tie-Down and Securement System**		
	6. **Driver's Document Compartment**		
	7. **Publications**		
	8. **Engine Equipment**		
	9. **Engine Performance**		
	10. **Ventilation**		
	11. **Square and Level -** (RF_____) (LF_____) (RR_____) (LR_____)		
	H. OPTIONAL EQUIPMENT		
	1. **Type A Chassis Options**		
	2. **Type B, C and D Chassis Options**		
	3. **Type A, B, C and D Body Exceptions and Options**		

I. TIRE INFORMATION				
POSITION	SERIAL NUMBER		PRESSURE	COMMENTS
Left **F**ront			psi	
Right **F**ront			psi	
Right **R**ear **O**uter			psi	
Right **R**ear **I**nner			psi	
Left **R**ear **O**uter			psi	
Left **R**ear **I**nner			psi	

Body Inspector's Signature: _____ Certification #: _____ Date: ____/____/_____

Chassis Inspector's Signature: _____ Certification #: _____ Date: ____/____/_____

Basic Bus, Type C 65 Capacity, Bid Specifications		
Spec Area	**Standard Florida Specifications Requirement:**	**Basic Bus Bid Requirements:**
Warranty	Current chassis and body extended warranty items	Manufacturer's and component suppliers' standard chassis, body and component warranties; no required extended warranties
Alternator	160 Amp minimum	130 Amp minimum
Engine Equipment	Inline 6 cylinder, 7 liter minimum	Delete engine displacement and configuration requirements. Allow all engines meeting Florida School Bus Specifications performance requirements
Engine Equipment	Fuel filtration requirements	Manufacturer's standard
Headlights	Daytime running lights	Daytime running lights not required
Insulation	Firewall	Florida-specific firewall insulation not required
Paint and Finish	Yellow powder-coated rims	Black-painted rims required
Tires and Rims	11R-22.5 Load range G	10R-22.5 Load range G minimum
Tires and Rims	8.25" rims	7.5" rims minimum
Wiring	Manually resettable circuit breakers	Manufacturer's standard circuit protection
Axles	Minimum front GAWR 10,000 lbs.	Minimum front GAWR 8,000 lbs.
Axles	Minimum rear GAWR 19,000 lbs.	Minimum rear GAWR 17,500 lbs.
Axles	Minimum 28,000 lbs GVWR	Minimum 25,500 lbs. GVWR
Springs, Front	Minimum front 4,500 lbs.	As required to meet GVWR
Springs, Rear	Minimum rear 9,500 lbs.	As required to meet GVWR
Steering	Tilt steering wheel	Manufacturer's standard
Driver's Document Compartment	Requirement, Size	None required
Driver's Seat	Air ride suspension seat	Standard non-suspension base with minimum 4" up and down adjustment
Electrical Equip. & Wiring, Back Up Alarm	Variable volume	Standard 112db backup alarm
Electrical Equip. & Wiring, Brake/Tail Lights 7"	LED	Sealed incandescent bulb lights
Electrical Equip. & Wiring, Brake/Tail Lights 4"	LED	Sealed incandescent bulb lights
Electrical Equip. & Wiring, Circuit Breakers	Manual reset circuit breakers	Manufacturer's standard circuit protection
Electrical Equip. & Wiring, Clearance and ID Lights	Sealed incandescent	Standard bulb and socket
Electrical Equip. & Wiring, Defogger fan	Required	Not required

Basic Bus, Type C 65 Capacity, Bid Specifications		
Spec Area	**Standard Florida Specifications Requirement:**	**Basic Bus Bid Requirements:**
Electrical Equip. & Wiring, Heaters and Defrosters	Silicone or equiv. heater hose	Manufacturer's standard heater hoses
Electrical Equip. & Wiring, Heaters and Defrosters	1/4 turn ballcock valves	Manufacturer's standard
Electrical Equip. & Wiring, Interior lights,	Two circuits, driver and passengers	Manufacturer's standard
Electrical Equip. & Wiring, Stop Arm Signals	Strobing lights	Incandescent bulbs
Electrical Equip. & Wiring, Turn Signal Lights	LED required	Sealed incandescent bulbs
Emergency Roadside Reflectors	Sealed box	Manufacturer's standard
Floor and Covering	Pressure treated plywood underlayment	Manufacturer's standard, no plywood
Mirror System, Interior Mirror	6" X 30" with thumbwheel, safety glass and heavy-duty bracket	Manufacturer's standard 6" X 30" mirror
Mirror System, Rear Vision Mirror System	Elec. Adjustable	Manufacturer's standard meeting FMVSS 111
Paint and Finish, Exterior	Required	Manufacturer's standard exterior paint
Paint and Finish, Interior	Required	Manufacturer's standard interior paint
Paneling, Exterior, Sheet Metal	20 gauge required	Manufacturer's standard sheet metal
Rub Rails	Four required	Manufacturer's standard
Seating, Crash Barriers, Lap Belts	First three rows at 28.5" knee room	Minimum 25" knee room all seats
Seating, Crash Barriers, Lap Belts	Modesty panels	Manufacturer's standard
Service Door	Air or electric operation	Manufacturer's standard
Stepwell	Pebble top material w/ polymer base	Standard ribbed step with steel backing
Side Mounted Vandal Box	33" X 10" X 9"	None required
Windows	Tinting	Manufacturer's standard
Windshield Step and Handle	Windshield step and handle	None required

ATTACHMENT 12

FLORIDA SCHOOL BUS SPECIFICATIONS

REVISED 2013

FLORIDA

SCHOOL BUS SPECIFICATIONS

Revised 2013

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FOREWORD

Florida School Bus Specifications are adopted as authorized under Section 1006.25, Florida Statutes (F.S.), and Rule 6A-3.0291, Florida Administrative Code (FAC).

FLORIDA SCHOOL BUS SPECIFICATIONS

General Information and Warranty Provisions

1. All public school buses (bodies and chassis) owned, operated, rented, leased, and contracted for by any public school board and charter school in Florida, used to transport children to and from school or school-related events, and purchased after the effective date of this document, as specified in Rule 6A-3.0291, FAC, must:

    a. Meet or exceed the minimum requirements of these specifications; and,

    b. Meet or exceed the 2010 National School Transportation Specifications and Procedures (also referred to herein as the 2010 National Specifications), except when in conflict with the requirements herein. In such cases, the requirements specified in this document shall prevail.

2. The requirements specified herein are the minimum requirements for school buses in Florida. The date used to determine the applicability of these specifications is defined as the date the vendor receives the purchase order or signs a valid sales contract with the purchaser.

3. All school bus chassis and body manufacturers must certify to the Commissioner of Education, Florida Department of Education, by letter, that all school buses offered for sale to or use by the public school systems, including charter schools, in Florida meet or exceed all standards, specifications, and requirements as specified herein.

4. Used school buses purchased or operated by a public school board or charter school in Florida must meet or exceed all federal and state requirements for public school buses that were in effect on the date the vehicle was manufactured.

5. Under the authority of Section 316.615, F.S., certain capacity size school buses owned, operated, or leased by nonpublic schools in Florida are required to meet the specifications prescribed herein.

6. **Definition of School Bus:**

    State Definition: In Section 1006.25, F.S., a “school bus” is defined as "a motor vehicle regularly used for the transportation of prekindergarten disability program and kindergarten through grade 12 students of the public schools to and from school or to and from school activities, and owned, operated, rented, contracted, or leased by any district school board..."

7. **School Bus Types:**

    Type A: A Type A school bus is a conversion bus constructed using a cutaway front-section vehicle with a left side driver’s door. This definition includes two classifications: Type A-1, with a Gross Vehicle Weight Rating (GVWR) of 14,500 pounds or less; and Type A-2, with a GVWR greater than 14,500 pounds and less than or equal to 21,500 pounds.

    Type C: A Type C school bus is constructed using a chassis with a hood and front fender assembly. The entrance door is behind the front wheels; also known as a conventional school bus. This type also includes the cutaway truck chassis or truck chassis with cab, with or without a left side door, and with a GVWR greater than 21,500 pounds.

    Type D: A Type D school bus is constructed using a stripped chassis. The entrance door is ahead of the front wheels; also known as a rear engine or front engine transit-style school bus.

8. **Warranties and Parts Availability: New Vehicles**

All warranties listed herein must apply to all school buses manufactured after the effective date of these specifications and sold through the state school bus bid purchase program. Body and chassis manufacturers' warranty policies must allow revision of warranty start date for each vehicle to the actual in-service date by the school district. Appropriate forms to update chassis warranties must be included in the owner-operator's packet supplied with the chassis and must be conveyed along with the body warranty by the body builder to the district upon delivery of the completed unit. Above requirements must apply to the basic warranties, all component warranties, and any extended warranties offered or required. There must be no hours-of-use limitation on any warranty required in these specifications or the associated state bid for school buses.

Manufacturers offering school bus chassis or bodies for sale in the State of Florida must make available replacement parts for said buses for a period of no less than 10 years.

The minimum labor rate for all warranty related repairs must be $75.00 per hour.

a. Chassis Warranties

1) The chassis warranty must be manufacturer's standard, and minimum 12,000 miles or 12 months.

2) Diesel engines (including flywheel, flex plate, and harmonic balancer) on types A2, C, and D chassis must be warranted for 60 months/100,000 miles, 100 percent parts and labor.

3) Pricing requests will be added to the bid for the following extended engine warranty options: a) pricing for 60 months/150,000 miles; b) pricing for 60 months/200,000 miles; and, c) pricing for 60 months/unlimited mileage.

4) The chassis or component supplier for all types A2, C, and D chassis must warranty or provide extended service coverage for the following items, including removal and replacement, for five years, or 100,000 miles, 100 percent parts and labor: radiator and coolant recovery tank; and, rear axle assembly (hub to hub), but not including gaskets and seals covered under the basic 12 months/12,000 miles chassis warranty. Types C and D buses are required to include a 60 months/100,000 miles, 100 percent parts and labor warranty on rear axle seals and brake components if the axle is not equipped with oil diverter rings. Chassis frame rails, cross members, fuel tanks, front axle I-beams, and rear axle housings must be warranted for a period of 10 years, from the updated in-service date of the vehicle, 100 percent parts and labor. Automatic transmissions must be warranted for three years, 50,000 miles, 100 percent parts and labor, for all types A, C, and D school buses.

5) All bus chassis electrical components, including wiring, switches, alternators, computers, and controllers, must be warranted for 60 months/100,000 miles against failure, 100 percent parts and labor, including, but not limited to, damage resulting from wiring or connectors becoming abraded, pierced by fasteners, shorted, or otherwise damaged during manufacture or use.

6) Paint finish coats to chassis hood, fenders, and cowl must be warranted for 60 months/100,000 miles, 100 percent parts and labor, for adhesion, color retention, and gloss retention. Acceptable lower limits during the warranty period are as follows:

a) Adhesion: During the 60-month warranty period, paint and priming compounds must not fail to adhere to the bus with normal use and care.

b) Color Retention: During the first 36 months from the in-service date, the color coat must not shift colors more than 4 ΔE from the centroid as specified in School Bus Manufacturers Technical Council Publication SBMTC-008. During the 60-month warranty period, the color coat must not shift color more than 8 ΔE from the centroid as specified in SBMTC-008.

c) Gloss: During the first 36 months from the in-service date, the gloss reading must not fall below 60 at 60°. During the 60-month warranty period, the gloss reading must not drop below 30 at 60°.

d) All measurements must be the average of 12 readings taken at various points on the bus, but no reading must be more than 3 points under the stated minimum. All readings must be taken after the bus is thoroughly washed to remove road film and dust.

b. Body Warranties

1) The body warranty must be manufacturer's standard, minimum 12 months.

2) Wheelchair lifts on any bus so equipped must be warranted for 24 months from the updated in-service date of the vehicle. The warranty must provide 100 percent coverage for parts.

3) The total air conditioner system on any bus so equipped must be warranted for 24 months, including parts (excluding fluids, gases, and air filters used in normal preventive maintenance) and labor with no warranty limitation on number of operating hours. Warranty must include at least the items listed in Appendix B. Chassis engine-driven air conditioner compressor applications must be approved in writing by the engine manufacturer, stating that the installation will not void or reduce the engine manufacturer's warranty or extended service liabilities in any way.

4) All mirror assemblies (including mounting bracketry) must be warranted (100 percent parts replacement coverage) for 60 months against rust and corrosion and against any reduction in clarity of view due to discoloration or other deterioration of the lens.

5) All bus body electrical wiring and switches must be warranted for 60 months/unlimited mileage against failure, 100 percent parts and labor, including, but not limited to, damage resulting from wiring or connectors becoming abraded, pierced by fasteners, shorted, or otherwise damaged during manufacture or use.

6) Paint finish coats to body, hood, and cowl must be warranted for 60 months, unlimited mileage, 100 percent parts and labor, for adhesion, color retention, and gloss retention. Acceptable lower limits during the warranty period are as follows:

a) Adhesion: During the 60-month warranty period, paint and priming compounds must not fail to adhere to the bus with normal use and care.

b) Color Retention: During the first 36 months from the in-service date, the color coat must not shift colors more than 4 ΔE from the centroid, as specified in SBMTC-008. During the 60-month warranty period, the color coat must not shift color more than 8 ΔE from the centroid, as specified in SBMTC-008.

c) Gloss: During the first 36 months from the in-service date, the gloss reading must not fall below 60 at 60°. During the 60-month warranty period, the gloss reading must not drop below 30 at 60°.

d) All measurements must be the average of 12 readings taken at various points on the bus but no reading must be more than 3 points under the stated minimum. All readings must be taken after the bus is thoroughly washed to remove road film and dust.

7) All emergency exit roof hatches must be warranted (100 percent parts and labor) for 60 months against defects in material and workmanship and against leakage.

8) All passenger seat back cushions and seat frame assemblies must be warranted for 60 months, 100 percent parts and labor. This warranty must not apply to vandalism of any exposed foam.

9) All powered entrance doors and operating and control systems must be warranted for a period of 5 years, unlimited mileage, 100 percent parts and labor.

c. Lift Warranty

A statement of warranty must be provided with each lift assuring the quality of materials and workmanship of the product for at least two years from the date of acceptance by the final consumer. The warranty must provide 100 percent coverage for parts.

d. Manufacturer's Standard Warranty

Each manufacturer or dealer must include as part of its bid package credit option allowances for districts who wish to forego the aforementioned extended warranty plans and purchase the manufacturer's standard/base warranty option package.

9. **Changes or Clarification of Specifications:**

Florida School Bus Specifications may be amended pursuant to the provisions of Rule 6A-3.0291, FAC.

The School Transportation Management Section, with the concurrence of the Florida Association for Pupil Transportation (FAPT), School Bus Specifications Committee, and consistent with Florida purchasing laws and the bus bid contract, may at its discretion grant variances or exemptions and may from time to time issue clarifications of these specifications as necessary to provide safe, efficient, and cost-effective equipment to Florida school districts and charter schools and to provide for advances in technology.

Should a clarification or interpretation of these Florida School Bus Specifications be requested, inquiries should be directed to **Administrator, School Transportation Management Section, Florida Department of Education, 325 West Gaines Street, Suite 824, Tallahassee, Florida 32399-0400.**

SECTION I

CHASSIS SPECIFICATIONS

TYPE A1 (19-29 Capacity)

TYPE A2 (30-47 Capacity)

DUAL REAR WHEEL

CUTAWAY CHASSIS

BASIC MINIMUM SPECIFICATIONS
FOR TYPE A GASOLINE AND DIESEL SCHOOL BUS CHASSIS
FOR MOUNTING TYPES A1 (19-29 capacity) and A2 (30-47 capacity)
SCHOOL BUS BODIES

ALTERNATOR

Type A1 chassis alternators must have a 120 amp minimum rating, with 50 amperes (amp) minimum output at manufacturer's recommended engine idle speed. Type A2 chassis alternators must have a minimum of 160 amperes current output, hot rated.

BATTERY (IES)

Type A1 chassis batteries must provide a total of 1,200 cold cranking amps (CCA) minimum at 0°F, and must be 12 volts. For Type A2, chassis batteries must provide a total of 1,750 CCA minimum at 0°F and must be 12 volts.

BRAKE, PARKING

On Type A1 chassis the manufacturer's standard parking brake is acceptable. On Type A2 chassis with hydraulic brakes the parking brake control must be mounted for easy access by the driver. On air brake models, the control valve to spring-set the parking brakes on the rear wheels must be dash-mounted.

BRAKES, SERVICE

Hydraulic brake models must have power assist. Types A1 and A2 buses equipped with hydraulic brakes must be equipped with the manufacturer's standard antilock brake system.

All air brake models (drum, disc-drum, or air disc) must be equipped with spring-set parking brakes on the rear wheels. Drum brakes must be cam-actuated and brake S-cam rotation must be in same direction as forward wheel rotation. All brake drums must be outboard mounted; i.e., drums must be removable without removal of the axle hub. A minimum 12 cubic feet per minute (CFM), engine oil-fed air compressor is required on all air brake models. Clean air to the air compressor must be supplied from the "clean" side of the engine air cleaner or air system. The compressor must not be equipped with a separate, compressor-mounted air filter. Air brake system design must provide for anti-compounding of service and emergency brakes and spring brake modulation upon application of the front service brakes in the event of loss of air pressure to the rear service brakes. The rear axle of all buses with air brakes must be equipped with grease guards to divert excessive oil or grease leaks away from brake linings in the event of a rear wheel seal leak; alternatively, the bus supplier must provide a warranty for rear axle seals and brake components as noted under **GENERAL INFORMATION AND WARRANTY PROVISIONS**. Buses equipped with air brakes must be equipped with an antilock braking system (ABS) with independent controls for each wheel position.

BUMPER, FRONT

Type A1 buses must have a front bumper of channel design that is a minimum of six inches wide (vertically) and is the full width of the vehicle.

Type A2 buses must have a front bumper that is black, of full-width channel type, and is a minimum of eight inches wide (vertically). The bumper on Type A2 buses must have sufficient structural and mounting strength to ensure that front of vehicle can be lifted by means of an air bumper-type jack, without permanent deformation of the bumper, brackets, or chassis frame rail(s).

ENGINE EQUIPMENT

a. A dry type air cleaner is required. An air filter restriction indicator is required on diesel engines in Type A2 buses.

b. The engine must be equipped with full-flow, spin-on, or cartridge-type oil filter(s), with the filter header(s) mounted directly to engine.

c. An engine coolant recovery or deaeration system is required on all chassis. Type A2 diesel engines must include a means to visually check the coolant level without removing the deaeration tank cap or releasing pressure from the cooling system.

d. A warning system consisting of a light and a buzzer is required on diesel powered Type A2 chassis to notify the driver of low engine oil pressure and/or coolant overheating.

e. A fuel filtration system and water separator is required on all Type A2 diesel engines. The system must remove from the fuel prior to entry into the engine all contaminants capable of adversely affecting the fuel system. The system must have a clear sight bowl or be equipped with a water-in-fuel light to notify technicians of the presence of water. The system must provide a valve for draining trapped water from the system. The fuel system must include an electric or a manual priming pump.

f. An engine oil pressure gauge is required. It must provide accurate, easily discernible readings across the entire operating range from hot idle to full oil pressure. The gauge on engines with idle oil pressure that under normal conditions is low must provide a clear distinction between no oil pressure and engine idle oil pressure. The gauge must be directly visible to the driver in the normal seated position and must not be mounted near the center of the dash where the service door control or its associated hardware could block visibility of the gauge.

g. Radiator and other engine coolant hoses supplied by the chassis manufacturer (not including heater hoses) must be constructed of silicone rubber or must be constructed with ethylene propylene diene monomer (EPDM) covering and aramid fiber reinforcement. Silicone hose, if used, must include stainless steel shoe-type hose clamps or constant-torque clamps. Hoses must have markings, coloring, or other visible means of distinguishing this hose from the standard hoses.

ENGINE PERFORMANCE REQUIREMENTS FOR TYPE A2 BUSES

a. Each bus must be furnished with a power train that meets or exceeds the following minimum criteria when tested at the gross vehicle weight rating (GVWR) required for a given bus capacity, and with all accessories (including air conditioner compressor(s), if equipped) on and operating:

   (1) Startability of 20 percent.

   (2) Gradeability of 5 percent at 25 miles per hour.

   (3) Gradeability of 1.5 percent at 50 miles per hour.

   (4) Top speed of 60 miles per hour minimum.

b. Performance must be measured with the actual completed vehicle (i.e., with the body installed, unloaded except for the driver and one passenger). The vehicle must be in drive, with the engine at idle, the service brakes applied, the emergency brakes released, and all accessories on and operating. Measurement of acceleration time must begin at the moment the throttle is applied (the throttle is to be immediately and rapidly depressed to full throttle).

   NOTE: The chassis manufacturer should use the heaviest chassis/body combination meeting these specifications for the specific bus size to determine required power train components. This test is an on-road test and will be performed using the heaviest available chassis/body, depending on body(ies) supplied. At the discretion of the Department, unanticipated factors or variations in test conditions affecting performance test results that are beyond the control of the chassis manufacturer may be taken into account. A Pro Link, a diagnostic computer, or a speed wheel are also acceptable tools for this test.

Maximum acceleration time (from zero mph), under the conditions specified above, must be as follows (measured in seconds):

TEST METHOD	0-10 MPH	0-20 MPH	0-30 MPH	0-40 MPH	0-50 MPH
ACTUAL	3.4	6.2	12.0	20.0	32.2

Manufacturers may offer additional engine configurations and horsepower ratings that exceed these requirements as optional equipment.

EXHAUST SYSTEM

Type A1

The exhaust system on Type A1 buses must be corrosion resistant and the exhaust must exit behind the rear wheels and left of the left frame rail. As an exception, a dual exhaust system may be used on Type A1 diesel chassis.

Type A2

The exhaust system on Type A2 buses must have a corrosion-resistant muffler and tailpipe. The tailpipe must exit to the left of left frame rail and behind the rear wheels. The chassis manufacturer must ensure that the exhaust design allows the exit location left of the left frame rail to be maintained after any modifications to frame length by the chassis or body manufacturer. Manufacturers must ensure that exhaust temperature exiting the tailpipe with the engine running during any normal loading or unloading activity will not produce first, second, or third-degree burns on students or other individuals present. The bus must not automatically regenerate the diesel particulate filter while the bus is stationary.

FRAME SIDE MEMBERS

Frame side members must be of one-piece construction between the front and rear spring hangers. Frame rails of Type A2 chassis must have a minimum tensile strength of 50,000 pounds per square inch (psi).

FRONT AXLE WHEEL SEALS

All Type A2 buses must have oil-lubricated front axles and seals.

FUEL TANK

The fuel tank filler spout must be located for ease in servicing. See the Chassis Specifications Chart in this section for minimum tank capacities by size.

HEADLIGHTS

Headlights must use a quartz halogen bulb. All buses must be equipped with Full-Time Lights (FTL) meeting the following requirements:

a. With the ignition switch off, the headlights will operate normally and the FTL system will not operate.

b. With the ignition switch on or in the accessory position, and with the engine not running, the FTL must not operate.

c. With the ignition switch on and the engine running with the headlight switch off, the FTL system must operate; it must provide low-beam headlights, and tail, clearance, and identification (ID) lights. This activation may be accomplished by any reasonable means, including the use of the park brake system.

d. In all cases, the headlight switch must override the FTL system when in the “on” position.

e. This system must include a buzzer that activates if the headlight system is on with the key switch in the "off" position.

IGNITION SYSTEM

Ignition systems on all Type A2 chassis must be keyed alike. All buses of like chassis manufacturer must have one key, regardless of the type of key supplied to Florida purchasers.

INSULATION

Type A2 chassis must include heat and noise insulation inside the bus covering the dash panel (fire wall) area to as great an extent as possible. Insulation must extend at least down to the point where the body floor connects to the fire wall, including the engine cover (doghouse), which may be insulated on the interior or exterior.

LINE-SETT TICKET

The manufacturer must include with delivery of the vehicle a line-sett ticket to accurately reflect all chassis components, the GAWR of both front and rear axles, and the gross vehicle weight rating (GVWR).

PAINT AND FINISH

School bus yellow paint must meet SBMTC-008 for color and must have a finished gloss rating of at least 85 at 60°F and a distinctness of image rating of an average of at least 50, measured using the same method specified for gloss under **GENERAL INFORMATION AND WARRANTY PROVISIONS**. Paint must be applied for a total dry thickness of at least 1.8 mils over all painted surfaces. Trim, lettering, and the bumper must be black except that the bumper must be striped with reflective material in accordance with National School Transportation Specifications and Procedures or these specifications. Rims for all Type A1 buses must be manufacturer's standard. Rims for all Type A2 buses with hub-piloted wheels must be powder-coated, National School Bus Yellow, by the rim manufacturer. Lug nuts must not be painted. All Type A2 stud-piloted rims must be painted black.

STEERING

A factory installed tilt steering wheel/column is required.

TIRES AND RIMS

Chassis must be equipped with radial tubeless tires. Type A1 buses must have dual rear wheels (see **Chassis Specifications Chart** in this section). Type A2 buses must use hub-piloted disc wheels. Tires and rims must conform to current standards of the Tire and Rim Association.

TRANSMISSION, AUTOMATIC

a. An automatic transmission is required on all chassis. It shall be heavy-duty, with a minimum of four forward speeds, on all units. On Type A2 chassis, 30 capacity and larger, the transmission must be an Allison 1000 or 2000 or approved equal. An external filter in the transmission oil cooler return line is required on Allison 1000 and 2000 equipped units.

b. Automatic transmissions incorporating a parking pawl must have a transmission shifter interlock controlled by the application of the service brake to prohibit accidental engagement of the transmission. All non-park pawl transmissions must incorporate a park brake interlock that requires the service brake to be applied to allow release of the parking brake.

VOLTAGE CONTROL

The voltage regulator must be solid state (transistorized) and readily accessible for service. A voltmeter is required with a graduated scale.

WARRANTIES

See required chassis and component warranties under **GENERAL INFORMATION AND WARRANTY PROVISIONS**.

WIRING HARNESS

The wiring must be rated for 100 amps load and include complete wiring for the tail and stop lights. It must be designed with color coding for circuits. The fuse box door, if equipped, must have a positive latch.

Chassis Specifications Chart
Types A1 and A2 Buses

Maximum Design (Passenger) Capacity		**19**	**23**	**29**	**30**	**36**	**42**	**47**
Type		**A1**	**A1**	**A1**	**A2**	**A2**	**A2**	**A2**
GVWR (pounds)		11,500	14,050	14,050	14,500	21,500	21,500	21,500
Minimum engine size for diesel engines (liters)		6.0L	6.0L	6.0L	6.0L	6.0L	6.0L	6.0L
Approximate wheelbase (inches)		139	139	152	152	170	194	202
Minimum fuel tank (gallons)		30	30	30	35	35	35	60
Minimum Sizes and Ratings	**Tires***	LT225/75R16, Load Range D	LT225/75R16, Load Range D	LT225/75R16 Load Range D	225/70R19.5 Load Range F	225/70R19.5 Load Range F	225/70R19.5 Load Range F	225/70R19.5 Load Range F
	Rims	6.0 X 16	6.0 X 16	6.0 X 16	6.75 x 19.5	6.75 x 19.5	6.75 x 19.5	6.75 x 19.5
Transmission minimum specifications		Automatic 4 Speed	Automatic 4 Speed	Automatic 4 Speed	Allison PTS 2200	Allison PTS 2200	Allison PTS 2200	Allison PTS 2200
Alternator minimum amps		120	120	120	160	160	160	160

*** Low-profile tubeless radial tires of size and load range meeting Tire and Rim Association Standards for the required GAWRs may be approved in lieu of standard conventional tubeless radial tires. Minimum tire sizes specified above are to be supplied as standard equipment, unless specific approval is granted for use of low-profile sizes.**

SPECIFICATIONS for OPTIONAL CHASSIS EQUIPMENT for TYPE A BUSES

AIR-SPRUNG REAR SUSPENSION SYSTEM

There shall be an option for an air-ride or approved equivalent air-sprung rear suspension system, when available. Rear shock absorbers are also required with this option, as on standard suspension systems.

HIGHER OUTPUT ALTERNATOR

There shall be an option for an alternator having a minimum of 270 amps hot-rated output.

LOW-PROFILE RADIAL TIRES

There shall be an option for all-wheel-position, highway-ribbed, low-profile, tubeless radial tires of size and load range meeting Tire and Rim Association Standards for the required GAWRs.

SILICONE COOLANT HOSES

There shall be an option on Type A2 buses for radiator and coolant hoses manufactured using silicone rubber.

SPARE DISC WHEEL

There shall be an option for a spare disc wheel, which must be same size and type as the original rims.

STRAIGHT FLOOR CHASSIS

There shall be an option for Type A chassis to accept straight floor bodies (i.e., bodies with no wheel wells). This type chassis must have a combination of axles, suspension, tires, wheels, and axle stops that ensures that the maximum upward travel of the rear suspension in normal straight-ahead driving does not protrude above the top of the frame rails.

TOW HOOKS OR TOW EYES

There must be two subcategories for this option: (1) two heavy-duty front tow hooks or tow eyes (each hook or eye must be installed by the chassis manufacturer in an approved manner to each frame rail); (2) two heavy-duty rear tow hooks or tow eyes (each hook or eye must be installed by the chassis manufacturer in an approved manner to each frame rail).

TRANSMISSION FLUID

Type A2 chassis shall have an option to have original fill of the transmission with TES-295 (*Transynd*) or approved equal transmission fluid.

AUTOMATIC TRANSMISSION WARRANTY

There shall be an option for extension of the transmission warranty to 5 years, unlimited mileage, 100 percent parts and labor. Also see **GENERAL INFORMATION AND WARRANTY PROVISIONS**.

SECTION II

TYPES C AND D CHASSIS

SPECIFICATIONS

BASIC MINIMUM SPECIFICATIONS
FOR SCHOOL BUS CHASSIS
FOR MOUNTING TYPES C and D SCHOOL BUS BODIES

ALTERNATOR

Types C and D chassis alternators must have a 200 amperes (amp) minimum rating, with 50 amp minimum output at manufacturer's recommended engine idle speed.

All chassis on which lift bodies are to be mounted must be equipped with an alternator producing at least 75 amp current output at the chassis manufacturer's recommended engine idle speed, while maintaining the chassis manufacturer's recommended regulated voltage.

BATTERY(IES)

For diesel-powered chassis, the battery(ies) must provide a total of 1,750 cold cranking amps (CCA) minimum at 0°F.

BRAKE, PARKING

On hydraulic brake models a parking brake is required, with the control mounted for easy access by the driver. On air brake models, a dash-mounted control valve to spring-set the parking brake on the rear wheels is required.

BRAKES, SERVICE

Hydraulic brakes are acceptable only on 29-35 capacity Type C buses. Brake lining material must not contain asbestos. Type C buses equipped with hydraulic brakes must be equipped with the manufacturer's standard antilock brake system.

Air brakes are required on all Type C buses larger than 41 capacity, and all Type D front and rear engine buses. A minimum 12 cubic feet per minute (CFM), engine oil-fed air compressor is required on all air brake models. Clean air to the air compressor must be supplied from the "clean" side of the engine air cleaner or air system. The compressor must not be equipped with a separate, compressor-mounted air filter. Air brake models must be equipped with a desiccant air dryer with an automatic purge and drain cycle and a heating element. The air brake system design must provide for anti-compounding of service and emergency brakes, and spring brake modulation upon application of the front service brakes in the event of loss of air pressure to the rear service brakes. All hoses used in the air brake system must be constructed of nylon tubing and must be color-coded. The chassis must be equipped with an antilock braking system (ABS) with independent controls for each wheel position.

All air brake equipped chassis, including air disc/drum or air disc, must be equipped with a spring-set parking brake on the rear wheels. Drum brakes must be cam-actuated, and brake S-cam rotation must be in same direction as forward wheel rotation. All brake drums must be outboard mounted; i.e., drums must be removable without removal of the axle hub. The rear axle of all types C and D buses with air brakes must be equipped with grease guards to divert excessive oil or grease leaks away from brake linings in the event of a rear wheel seal leak; alternatively, the bus supplier must provide warranty of rear axle seals and brake components as noted under **GENERAL INFORMATION AND WARRANTY PROVISIONS**. All air brake chambers less than Type 20 must have at least a 2.5 inch stroke. All air brake chambers of Type 20 or greater must have at least a 3.0 inch stroke. All spring brake chambers must be equipped with a spring brake caging device. All air brake equipped chassis must have a minimum rear brake shoe width of 7 inches.

BUMPER, FRONT

Types C and D buses must have a front bumper that is black, of full width channel type, and a minimum of 8 inches wide (vertically). The bumper must have sufficient structural and mounting strength to ensure that the front of the vehicle can be lifted by means of an air bumper-type jack, without permanent deformation of the bumper, brackets, or chassis frame rail(s).

ENGINE EQUIPMENT

a. Configuration: Diesel engines must be available in at least one of the following two configurations:

(1) Parent bore type block; in-line 6 cylinder design; minimum 6.4 liters displacement.

(2) Wet sleeve type block; in-line 6 cylinder design; minimum 6.4 liters displacement.

NOTE: Additional diesel engines of other configurations or displacements (not in lieu of the above) meeting all other requirements listed herein may be offered, subject to approval by the Department of Education.

b. Engine Requirements

(1) A dry type air cleaner is required. An air filter restriction indicator is required on diesel engines. The restriction indicator must incorporate a system that does not allow unfiltered air into the engine if the indicator cracks or breaks.

(2) The engine must be equipped with a full-flow, spin-on, or cartridge-type oil filter(s), with the filter header(s) mounted directly to engine.

(3) An engine coolant recovery or deaeration system is required on all chassis. Diesel engines must include a means for visually checking the coolant level without removing the deaeration tank cap or releasing pressure from the cooling system.

(4) A warning system consisting of a light and a buzzer is required on diesel-powered chassis to notify the driver of low engine oil pressure and/or coolant overheating.

(5) A fuel filtration system with a water separator is required on diesel engines. The system must remove from the fuel prior to entry into the engine all comtaminants capable of adversely affecting the fuel system. System must have a clear sight bowl, or be equipped with a water-in-fuel light to notify technicians of the presence of water. The system must provide a valve for draining trapped water from the system. The fuel system must include an electric or a manual priming pump.

(6) An engine oil pressure gauge and a coolant temperature gauge are required. The oil pressure gauge must provide accurate, easily discernible readings across the entire operating range from hot idle to full oil pressure. Gauges on engines with idle oil pressure, which under normal conditions is low, must provide a **clear** distinction between no oil pressure and engine idle oil pressure. Gauges must be directly visible to the driver in the normal seated position and must not be mounted near the center of the dash where the service door control or associated hardware could block visibility of the gauges.

(7) Radiator and other engine coolant hoses supplied by the chassis manufacturer (not including heater hoses) must be constructed of silicone rubber or must be constructed with ethylene propylene diene monomer (EPDM) covering and aramid fiber reinforcement. Silicone hose, if used, must include stainless steel shoe-type hose clamps or constant-torque clamps. Hoses must have markings, coloring, or other visible means of distinguishing this hose from the standard hoses.

(8) Manufacturers must use the largest capacity oil pan available for each engine configuration in order to achieve the longest duration oil change interval.

ENGINE PERFORMANCE REQUIREMENTS

a. Each bus must be furnished with a power train that meets or exceeds the following minimum criteria when tested at the gross vehicle weight rating (GVWR) required for a given bus capacity, and with all accessories (including air conditioning compressor(s), if equipped) on and operating:

(1) Startability of 20 percent.

(2) Gradeability of 5 percent at 25 miles per hour.

(3) Gradeability of 1.5 percent at 50 miles per hour.

(4) Top speed of 60 miles per hour minimum.

Performance must be measured with the actual completed vehicle (i.e., with body installed, unloaded except for the driver and one passenger). The vehicle must be in drive, with the engine at idle, the service brakes applied, the emergency brakes released, and all accessories on and operating. Measurement of acceleration time must begin at the moment the throttle is applied (the throttle is to be immediately and rapidly depressed to full throttle).

NOTE: The chassis manufacturer should use the heaviest chassis/body combination meeting these specifications for the specific bus size to determine required power train components. This test is an on-road test and will be performed using the heaviest available chassis/body, depending on body(ies) supplied. At the discretion of the Department, unanticipated factors or variations in test conditions affecting performance test results that are beyond the control of the chassis manufacturer may be taken into account. A Pro Link, a diagnostic computer, or a speed wheel are also acceptable tools for this test.

Maximum acceleration time (from zero mph), under conditions specified above, must be as follows (measured in seconds):

29-77 Capacity Types C and D:

TEST METHOD	0-10 MPH	0-20 MPH	0-30 MPH	0-40 MPH	0-50 MPH
ACTUAL	3.4	6.2	12.0	20.0	32.2

78-90 Capacity Type D

TEST METHOD	0-10 MPH	0-20 MPH	0-30 MPH	0-40 MPH	0-50 MPH
ACTUAL	3.7	7.1	12.0	20.0	32.2

Manufacturers may offer additional engine configurations and horsepower ratings that exceed these requirements as optional equipment.

EXHAUST SYSTEM

The exhaust system must have a corrosion-resistant muffler and tailpipe. The tailpipe must exit to the left of left frame rail and behind the rear wheels. Manufacturers must ensure that exhaust temperature exiting the tailpipe with the engine running during any normal loading or unloading activity will not produce first-, second-, or third-degree burns on students or other individuals present. The bus must not automatically regenerate the diesel particulate filter while the bus is stationary. Also see **Section III, Electrical Equipment and Wiring.**

FRAME SIDE MEMBERS

Frame side members must be of one-piece construction between the front and rear spring hangers. Frame rails must have a minimum tensile strength of 50,000 pounds per square inch (psi).

FRONT AXLE LUBRICATION

All buses must have oil-lubricated front axle hubs, providing an externally visible means of checking the lubricant level.

FUEL TANK

The fuel tank filler spout must be located for ease in servicing. The filler neck must be located on the right side of the bus unless other locations are pre-approved by the Department. The fuel tank may be located on the right chassis frame rail or between the frame rails. See **Chassis Specifications Charts** for the required fuel tank capacity.

HEADLIGHTS

Headlights must use a quartz halogen bulb. All buses must be equipped with Full-Time Lights (FTL) meeting the following requirements:

a. With the ignition switch off, the headlights will operate normally and the FTL system will not operate.

b. With the ignition switch on or in the "accessory" position, and with the engine not running, the FTL must not operate.

c. With the ignition switch on and the engine running with the headlight switch off, the FTL system must operate; it must provide low-beam headlights, tail, clearance, and identification (ID) lights. This activation may be accomplished by any reasonable means, including the use of the park brake system.

d. In all cases the headlight switch must override the FTL system when in the "on" position.

e. This system must include a buzzer that activates if the headlight system is on with the key switch in the "off" position.

HOOD

Engine hood on Type C buses must not require more than 20 pounds of force to open or close.

IGNITION SYSTEM

All ignition switches must be keyed alike. All buses of like chassis manufacturer and type must have one key.

INSULATION

Type C chassis must include full width and height heat and noise insulation on the inside or outside of the bus covering the dash panel (firewall) area to as great an extent as possible and at least up to the top of the firewall and down to the point that the body floor connects to the firewall, including the engine cover (doghouse). Type D Front Engine buses must include complete heat and noise insulation of the doghouse area.

LINE-SETT TICKET

Manufacturer must include with delivery of vehicle a line-sett ticket to accurately reflect all chassis components, GAWR of both front and rear axles, and GVWR.

PAINT AND FINISH, TYPES C and D CHASSIS

School bus yellow paint must meet SBMTC-008 for color and must have a finished gloss rating of at least 85 at 60° and a distinctness of image rating of an average of at least 50 measured using the same method specified for gloss under **GENERAL INFORMATION AND WARRANTY PROVISIONS**. Paint must be applied for a total dry thickness of at least 1.8 mils over all painted surfaces. Trim, lettering, and bumper must be black except that bumper must be striped with reflective material in accordance with National School Transportation Specifications and Procedures or these specifications. Rims must be powder-coated, National School Bus Yellow, by the wheel manufacturer. Lug nuts must not be painted.

RADIATOR FILLER TUBE

The radiator filler must be located for ease of service from the engine compartment on Type C and Type D rear engine buses. It must be located for ease of service from outside the bus on Type D front engine buses.

STEERING

A tilt steering wheel/column is required.

TIRES AND RIMS

Chassis must be equipped with radial tubeless tires mounted on hub-piloted disc wheels. All wheels of 8.25 inches or greater width must be two hand-hold wheels. Tires and rims must conform to current standards of the Tire and Rim Association (see **Chassis Specifications Charts** for sizes). See **PAINT AND FINISH** for wheel color information.

TRANSMISSION, AUTOMATIC

An automatic transmission is required on all chassis as specified:

a. Type C 29-47 capacity, Allison PTS 2100, 5 speed or approved equal.

b. Type C 65-78 capacity, Allison PTS 2500, 5 speed or approved equal.

c. Type D 71 capacity front engine, Allison PTS 2500, 5 speed or approved equal.

d. Type D 78-89 capacity front engine, Allison PTS 3000, 5 speed or approved equal.

e. Type D 72 capacity rear engine, Allison PTS 2500, 5 speed or approved equal.

f. Type D 78-89 capacity rear engine, Allison PTS 3000, 6 speed or approved equal.

Allison PTS 2000 series transmissions must include an external spin-on type, vertically mounted, transmission fluid filter. The shifter must be dash- or console-mounted and must be either a T-handle or push-button design.

Allison PTS 3000 series transmissions must have at least five speeds enabled for front engine Type D and six speeds for rear engine Type D.

All transmissions require original filling of the transmission with TES-295 (*Transynd*) or approved equal transmission fluid.

Automatic transmissions incorporating a parking pawl must have a transmission shifter interlock controlled by the application of the service brake to prohibit accidental engagement of the transmission. All non-park pawl transmissions must incorporate a park brake interlock that requires the service brake to be applied to allow release of the parking brake.

WIRING HARNESS

All chassis electrical wiring must be coded by color, insulated, and completely encased in convoluted loom or equivalent protective wrapping. In locations that prevent such looming, wires must be properly held in place by appropriate fasteners at intervals necessary to prevent possible damage to wire insulation. The fuse box door, if equipped, must have a positive latch. All chassis electrical circuits must be fused. Buses using multiplexed electrical systems may meet the intent of these specifications without the use of specified equipment, subject to approval by the Department.

TYPE C CHASSIS

Maximum Design (Passenger) Capacity	**29LT**	**29**	**47**	**65**	**71**	**77**
Front Axle Weight Rating (pounds)	5,000	6,000	7,000	9,000	10,000	10,000
Rear Axle Weight Rating (pounds)	10,000	13,000	15,000	19,000	19,000	20,000
Cowl to axle, minimum (inches)	123	123	162	229	250	250
Minimum tire size-Load Range; tubeless-radial ply*	225R-19.5F	10R-22.5-F	11R-22.5-G	11R-22.5-G	11R-22.5-G	11R-22.5-G
Disc wheels -- minimum rim width (inches)	6.75	7.5	8.25	8.25	8.25	8.25
Hub-piloted disc wheels for tubeless radial tires	6 stud, 5 hand hold	6 stud, 5 hand hold	10 stud, 2 hand hold	10 stud, 2 hand hold	10 stud, 2 hand hold	10 stud, 2 hand hold
Fuel tank minimum size (gallons)	30	30	60	60	60	60
Allison transmission series (# of forward gears)	PTS 1000 or 2200 (5)**	PTS 2100 (5)	PTS 2100 (5)	PTS 2500 (5)	PTS 2500 (5)	PTS 2500 (5)

- *Low-profile tubeless radial tires of size and Load Range meeting Tire and Rim Association Standards for the required GAWRs may be approved in lieu of standard conventional tubeless radial tires. Minimum tire sizes specified above are to be supplied as standard equipment, unless specific approval is granted for use of low-profile tires.
- ** Must include park pawl.

TYPE D FORWARD CONTROL FRONT ENGINE

Maximum Design (Passenger) Capacity	**71**	**77**	**83**	**89**
Front Axle Weight Rating (pounds)	10,800	12,000	12,000	12,000
Rear Axle Weight Rating (pounds)	17,000	19,000	21,000	23,000
Tires – minimum size, Load Range acceptable*	11R-22.5G	11R-22.5G	11R-22.5-G	11R-22.5-G
Hub-piloted disc wheels-10 stud, minimum rim width (inches)	8.25, 2 hand hold	8.25, 2 hand hold	8.25, 2 hand hold	8.25, 2 hand hold
Minimum size fuel tank (gallons)	60	60	60	60
Allison transmission series (# of forward gears)	PTS 2500 (5)	PTS 3000 (5)	PTS 3000 (5)	PTS 3000 (5)

NOTES: 1) An automatic transmission is required on all chassis. See **TRANSMISSION, AUTOMATIC** for required specifications.

2) Maximum overall length of the bus must not exceed 45 feet, bumper to bumper.

*Low-profile tubeless radial tires of size and Load Range meeting Tire and Rim Association Standards for the required GAWRs may be approved in lieu of standard conventional tubeless radial tires.

TYPE D REAR ENGINE CHASSIS SPECIFICATIONS CHART

Maximum Design (Passenger) Capacity	**72**	**78**	**84**	**90**
Front Axle Weight Rating (pounds)	11,000	12,000	12,000	12,000
Rear Axle Weight Rating (pounds)	19,000	21,000	23,000	23,000
Tires – minimum size, Load Range acceptable *	11R-22.5-G	11R-22.5-G	11R-22.5-G	11R-22.5-G
Hub-piloted disc wheels-10 stud, minimum rim width (inches)	8.25, 2 hand hold	8.25, 2 hand hold	8.25, 2 hand hold	8.25, 2 hand hold
Minimum size fuel tank (gallons)	60 gal.	60 gal.	60 gal.	60 gal.
Allison transmission series (# of forward gears)	PTS 2500 (5)	PTS 3000 (6)	PTS 3000 (6)	PTS 3000 (6)

NOTE: Maximum length of vehicle must not exceed 45 feet, bumper to bumper.

*Must meet Tire and Rim Association Standards. Low-profile tubeless radial tires of size and Load Range meeting Tire and Rim Association Standards for the required GAWRs may be approved in lieu of standard conventional tubeless radial tires.

SPECIFICATIONS FOR OPTIONAL CHASSIS EQUIPMENT IN TYPES C AND D BUSES

AIR-SPRUNG FRONT SUSPENSION SYSTEM

There shall be an option for an air-ride or approved equivalent air-sprung front suspension system, when available. Front shock absorbers are also required with this option, as on standard suspension systems.

AIR-SPRUNG REAR SUSPENSION SYSTEM

There shall be an option for an air-ride or approved equivalent air-sprung rear suspension system, when available. Rear shock absorbers are also required with this option, as on standard suspension systems.

ALTERNATOR, HIGHER OUTPUT

There shall be an option for alternators having a minimum of 270 amps hot-rated output.

HIGH CAPACITY FUEL TANK

There shall be an option for a fuel tank of higher capacity than the standard fuel tank, mounted on the right side or between the frame rails, when available.

LOW-PROFILE RADIAL TIRES

There shall be an option for all-wheel-position, highway-ribbed, low-profile tubeless radial tires of size and Load Range meeting Tire and Rim Association Standards for the required GAWRs.

SPARE DISC WHEEL

There shall be an option for a spare disc wheel, which must be same size, type, and color as the original rims.

TOW HOOKS OR TOW EYES

There shall be an option for two heavy-duty tow hooks or tow eyes, installed by manufacturer on each frame rail at the front of the bus in an approved manner. The manufacturer may also offer rear-mounted tow hooks or tow eyes meeting these requirements.

STRAIGHT FLOOR CHASSIS

There shall be an option for a chassis designed to accept straight floor bodies (i.e., bodies with no wheel wells). This type of chassis must have a combination of axles, suspension, tires, wheels, and axle stops that ensures that the maximum upward travel of the rear suspension in normal straight-ahead driving does not protrude above the top of the frame rails.

TIRES

There shall be an option for alternate brand, size, and tread designs of tires when available. Optional tires must meet GAWR requirements and Tire and Rim Association Standards.

SILICONE COOLANT HOSES

There shall be an option for radiator and coolant hoses manufactured using silicone rubber.

SECTION III

BODY SPECIFICATIONS

TYPES A1, A2, C, AND D BUSES

MINIMUM FLORIDA SCHOOL BUS BODY SPECIFICATIONS

The specifications set forth in this section apply to types A1 (19-29 capacity with dual rear wheels), A2 (30-47 capacity), C, and D school buses. Special exceptions for Type D bodies are listed at the end of this section. The design of school bus bodies is to provide for the safety and comfort of students and for economical transportation as required by Florida Statutes and Federal Motor Vehicle Safety Standards. **The completed school bus must meet all requirements of the State of Florida and, if not in conflict, requirements of the 2010 National School Transportation Specifications and Procedures, storage compartment and tow hooks excepted.** References to bus capacity within these specifications are for Maximum Design Capacity, as defined below under **BODY DATA PLATE.**

BATTERY DISCONNECT SWITCH

There must be a battery disconnect switch in the air conditioning (A/C) or battery compartment or within three feet of the battery box if no A/C box is available. This switch must be accessible and operable from the exterior of the bus.

BODY DATA PLATE

A durable body data plate must be mounted inside the body in a clearly visible location. The body data plate information must include (in part) a listing of the "Maximum Design Capacity" and the "Equipped Capacity" of the body. Maximum Design Capacity must be the maximum number of passengers the bus (body shell size) can carry, based on 12.8 inches minimum seat width per passenger, with the minimum knee room (seat spacing) required under **SEATING AND MODESTY PANELS**. Equipped Capacity must be the actual passenger capacity of the finished body, as equipped by the manufacturer, based on:

a. The number of total passengers the installed bench seats are designed to carry, and,

b. The number of wheelchair positions installed (based on wheelchair space dimensions contained in Section IV of these specifications).

An example of the format to be used for Equipped Capacity is "28 + 3 WC," meaning 28 regular passenger seating positions plus 3 wheelchair positions.

BODY FLUID CLEANUP KIT

a. Each bus must be equipped with a disposable, sealed body fluid cleanup kit in a disposable container with the following items:

    1) A U.S. Environmental Protection Agency (EPA) registered liquid germicide (tuberculicidal) disinfectant
    2) A fully disposable wiping cloth
    3) A water-resistant spatula
    4) Step-by-step directions
    5) Absorbent material with odor counteractant
    6) 2 pairs gloves (Nitrile)
    7) 1 package towelettes
    8) A discard bag (non-labeled paper bag with plastic liner and a twist tie). This bag must be approximately 4 inches x 6 inches x 14 inches, and of a non-safety color (i.e., not red, orange, or yellow).

b. The kit must be mounted by a method that will retain it under a load equivalent to 20 times the weight of the kit and must be removable without the use of tools. The kit must be accessible to the driver. The kit container must be sealed with a breakable, nonreusable seal.

BUMPER, REAR

The rear bumper must be of pressed steel channel at least 3/16 inch thick, 8 inches wide (vertically), and flanged 2 inches at the top and bottom or otherwise designed to furnish equal flexural strength. It must be of wraparound design and securely fastened to each chassis rail and braced from each end of bumper to chassis rail with heavy braces to permit the fully loaded bus to be pushed without permanent distortion to bumper, chassis, or body. The bumper must also have the structure and strength necessary to allow the unloaded vehicle to be lifted with a bumper jack without deformation or damage. The

contour of the bumper must fit the contour of the body in a manner to prevent hitching to or riding on the bumper. An appropriate seal must be applied between the bumper and the body panel, unless the gap between the bumper and the body panel is 1/8 inch or less.

DRIVER'S DOCUMENT COMPARTMENT

On Types C and D buses, a pouch on the front side of the driver's side crash barrier with minimum dimensions of 17 inches x 12 inches x 4 inches is required. This pouch must be located to the left side of the barrier for types B and C, and to the right side of the barrier for Type D, accessible to the driver from the seated position. It must be made of the same material as the covering on the barrier and have a lid or cover with a latching device such as Velcro™ or snaps.

DRIVER'S SEAT

a. All types A2, C, and D school buses must have a driver's seat equipped with a one-piece high back designed to minimize the potential for head and neck injuries in rear impacts, providing minimum obstruction to the driver's view of passengers. The height of the seat back must be sufficient to provide the specified protection for up to a 95th percentile adult male. The driver contact area of the cushion and seat back must be made of soil and wear-resistant cloth material, nylon, or equivalent. The remainder of the seat may be of a different material. The seat must be centered behind the steering wheel with the backrest a minimum distance of 11 inches behind the steering wheel. The seat must be securely mounted to ensure minimal flexing of the seat and the floor panel(s).

b. All school buses equipped with air brakes must also be equipped with an air suspension driver's seat meeting the following additional requirements:

    1) The air control for the height adjustment must be within easy reach of the driver in the seated position.
    2) The seat cushion must be a minimum of 19 1/2 inches wide, must be fully contoured for maximum comfort, and must have a minimum of 2 adjustment positions to allow adjustment of seat bottom angle.
    3) The backrest must include adjustable lumbar support.
    4) The seat must have a minimum of 7 inches fore and aft travel, adjustable with the driver in the seated position. This requirement applies to the seat mechanism.
    5) The seat must have a minimum 4 inches up and down travel.
    6) The seat back must include adjustability of tilt angle.
    7) All adjustments must be by fingertip controls not requiring the use of tools.
    8) Air suspension seats must be dampened by dual shock absorbers, acting independently.

c. All other buses must have a driver's seat equipped with a hydraulic and/or spring suspension base, and a minimum seat cushion width of 19 inches, and must meet the other requirements listed herein for air suspension seats.

d. The chassis manufacturer's standard driver's seat is acceptable for Type A1 buses.

e. The overall seat design must be approved by the Department of Education. Also, see **GENERAL INFORMATION AND WARRANTY PROVISIONS**.

DRIVER'S SEAT BELT

Buses must be equipped with a Type 2 lap belt/shoulder harness seat belt assembly for the driver. The design must incorporate a fixed female push-button latch on the right side at seat level, and a male locking bar tongue on the left, retracting side. The assembly must be equipped with a single, dual sensitive Emergency Locking Retractor (ELR) for the lap and shoulder belt. This system must be designed to minimize cinching down on suspension type seats. The lap portion of the belt must be anchored or guided at the seat frame by a metal loop or other means at the right side of the seat to prevent the driver from sliding sideways out of the seat. There must be a minimum of 7 inches of adjustment of the "D" loop of the driver's shoulder harness, designed to provide adequate adjustment for all sizes of drivers within the range of a 5th percentile female to a 95th percentile adult male. Shoulder belt tension must be no greater than is necessary to provide reliable retraction of the belt and removal of excess slack. Seat belt material must be bright orange or lime green in color, in order to provide maximum contrast with the driver's clothing.

NOTE: The driver's seat belt assembly for Type A1 buses must be the manufacturer's standard Type 2 driver seat belt, meeting applicable FMVSS for school buses of 10,000 pounds GVWR and less.

ELECTRICAL EQUIPMENT AND WIRING

All wiring must be coded by color and insulated. All joints must be soldered or joined by equally effective fasteners. All wires connected directly to the battery must have the end terminals protected with heat-shrink tubing. Body wiring and connectors, including any battery cables routed by the body manufacturer, must be routed so as to eliminate the possibility of wiring and connectors becoming abraded, pierced by fasteners, shorted, or otherwise damaged during manufacture and use. All chassis and body electrical wiring must be completely encased in convoluted loom or equivalent protective wrapping. In locations that prevent such looming, wires must be properly held in place by appropriate fasteners at intervals necessary to prevent possible damage to wire insulation. A complete body wiring diagram showing the location of wires and the code of circuits for buses meeting Florida Specifications must be installed in each body. Additionally, for all school bus body optional electronic components installed in the bus, the body manufacturer must provide each district with at least one comprehensive parts and repair manual. Buses using multiplexed electrical systems may meet the intent of these specifications without the use of specified equipment subject to approval by the Department. All requirements listed herein for Light Emitting Diode (LED) type lights must be for the latest generation LEDs available at the time of manufacture. Electrical components specified below must be provided and wiring must be in circuits as follows:

1. **ACCESS PANEL, ELECTRICAL**

   All Type C buses must be equipped with an exterior electrical access panel or must provide easy internal access to body electrical components and circuits.

   All Type D buses must be equipped with an exterior electrical access panel to provide easy access to body electrical components and circuits.

2. **AUXILIARY FAN**

   A 6 inch or header-mounted squirrel cage fan must be installed and mounted to the left side of the windshield, when possible, in a location approved by the Department. A body header mounted squirrel cage fan with louvers that can be adjusted directionally, or an integrated dash air-conditioning system, are approved by the Department in lieu of the 6 inch fan.

3. **BACKUP LIGHTS; BACKUP ALARM and STICKER**

   a. There must be two backup lights of 4 inches in diameter, or 12.5 square inches, on the rear of all bodies meeting the following requirements:

      1) They must be sealed incandescent or LED lights.
      2) They must use a plug connector.
      3) They must be inset into the bus body (flush-mounted).

   b. The body manufacturer must provide a backup alarm on each bus to provide audible warning that the bus is in reverse gear. The alarm must have a variable volume feature that allows the alarm to vary from 87 dBA to 112 dBA sound level, staying at least 5 dBA above the ambient noise level. All buses must have a sticker affixed to the dash in full view of the driver indicating that the bus is equipped with a backup alarm.

4. **BRAKE/TAIL LAMPS, LARGE**

   a. Buses must be equipped with two combination brake/tail lamps of a minimum of 7 inches in diameter or 38 square inches, mounted as high and spaced as far apart laterally as practical, below the window line, but not less than 3 feet measured from the center of the lamps.
   b. Brake/tail lamps must be LED lights.
   c. They must use a plug connector.

5. **BRAKE/TAIL LAMPS, SMALL**

Bus must be equipped with two combination brake/tail lamps of 4 inches in diameter or 12.5 square inches. Light intensity must at least equal Class A turn signal units. These lights must be LED lights with smooth exterior lens surfaces. They must use a plug connector and be inset into the bus body.

6. **CIRCUIT BREAKERS**

All body electrical circuits must be fused. The main body electrical circuit must be protected by a manually resettable circuit breaker or fusible link.

7. **CLEARANCE AND IDENTIFICATION LIGHTS**

All clearance and identification lights must:

a. Be sealed lights.
b. Be surface-mounted with Lexan™, polycarbonate, or other non-corrosive material guard to prevent breakage. Lights inset into the body do not require guards.
c. Use a plug connector.
d. Be activated by the headlight circuit.

8. **CONTROL PANEL LIGHTING**

The control panel or switches supplied by the body manufacturer must be illuminated, and must have a control for varying the illumination to the control panel or switches.

9. **EMERGENCY EXIT BUZZER**

Emergency door and emergency window buzzers must be connected to the accessory side of the ignition switch.

10. **HEATER/DEFROSTER**

There must be a heater mounted in the front of the bus. A supplemental heater, minimum 80,000 British Thermal Units (BTU) rating, may be installed in any bus. All heaters must meet the following requirements:

a. School bus heating systems must meet the following performance standards:

    1) Provide evenly distributed heat throughout the bus body.
    2) Provide defrosting for the windshield and entrance door.

b. Heaters must have capabilities of providing evenly distributed heat and creating a temperature rise to 50° F inside the body shell when soaked in an ambient temperature of 0° F for 15 hours.

c. Heater performance must be measured as follows:

    1) Temperature measurement must be taken 39 inches inward from side walls, 39 inches inward from windshield and rear door, and 36 inches above floor. Heat must be evenly distributed through the aisle area.
    2) Temperature must rise to 50° F inside (when soaked in ambient temperature of 0° F for 15 hours) in 20 minutes when 170° F hot water is applied at the rate of 3 gallons per minute at a maximum of 6 psi pressure.

Defrosters – Must meet the following criteria:

a. Must be able to defrost the total windshield area in a reasonable period of time under all normal driving conditions.
b. Must be directional to provide the driver capability of defrosting in the drive view area first.

c. Defroster system must have the capability of mixing a minimum of 50 percent outside fresh air with the defrosting air.

If silicone heater hoses are used, shoe design hose clamps must be used. Heater lines on the interior of the bus must be fully shielded to prevent scalding of the driver or passengers in the event of a hose or connection failure. The modesty panels must not obstruct heat flow from the driver's area to the passenger area of the bus; this may be accomplished by ducting or other means that retains, to the extent practical, the required full width aluminized steel panel extending down to the floor. Also see **SEATING AND MODESTY PANELS**.

A ¼ turn ballcock coolant flow regulating valve for the heater must be installed so that its control is accessible to the driver, but in such a location as to discourage tampering by students. This valve may be remotely located if a suitable remote control system is used. Also required are ¼ turn ballcock coolant flow regulating shut-off valves, installed in the pressure and return lines as close to the engine as possible.

The windshield defroster and defogging system must provide defogging of the entire windshield, driver's side window, and entrance door glasses by using hot air taken from the heater core. Bodies that do not have defrosters providing forced heated air by means of ducting across entire base of windshield must be equipped with an additional right-side mounted defroster fan that uses hot air from the heater. One electrical switch must be provided to simultaneously turn on or off any fan(s) providing hot air for defogging of the windshield, driver's side window, and entrance door glass.

NOTE: Type A1 buses must have a fresh air type heater and defroster system as installed by the chassis manufacturer.

11. INTERIOR LIGHTS

There must be installed at least four recessed flush-mounted interior lights in the passenger compartment of the bus, operated by one switch mounted on the control panel. If more than six lights are used, then an additional switch may be added to control these lights. There must also be two recessed flush-mounted interior lights mounted in the driver's area of the bus (to the left and right of the centerline of the bus), operated by a separate switch mounted on the control panel. Lenses for all interior lights must be Lexan™ or other polycarbonate material.

12. LICENSE PLATE LAMP

This lamp may be combined with one of the required combination brake/tail lamps.

13. MASTER SWITCH FOR BODY ELECTRICAL CIRCUITS AND OTHER SWITCHES

All bodies must be equipped with an electrical circuit master switch that will turn body circuits ON and OFF by means of a solenoid (relay) controlled by the ignition switch. There must also be a manual noise abatement switch installed in the control panel, labeled and alternately colored, and wired into the activation circuit for the master body circuit solenoid. This must be an on/off switch that deactivates all body equipment that produces noise, including, at least, the radio, heaters, air conditioners, fans, and defrosters. This switch must not deactivate safety systems such as windshield wipers or lighting systems. On types C and D buses there must also be a switch or plug connector, mounted in a location inaccessible to the driver, to manually start the diesel particulate filter regeneration process. This switch or plug connector must be appropriately labeled.

14. POST-TRIP PASSENGER CHECK SYSTEM

a. System Requirements:

1) The bus must be equipped with a system to require the driver to walk to the rearmost interior of the bus after each trip to deactivate the system via a push button and to ensure that no passengers are left on the bus. The system must interconnect with the entrance door (and the driver's door on Type A buses) and immediately activate if the door is opened when the system is armed.
2) The system must be armed any time the bus is in service transporting students. This may be accomplished through the use of any reasonable method, such as recording a speed above 20 MPH or exceeding 10 minutes of operation with the door closed. In all cases, the system must arm itself after 10 minutes of operation. The system should not normally arm during shop maintenance.

3) The system may not be disarmed until the vehicle ignition switch has been switched to the "off" position. The system must not be activated if the ignition switch is placed in the accessory position or if the bus is restarted.
4) The system must turn on the interior lights when the ignition switch is turned to the "off" position. The lights must remain on for 60 seconds after system deactivation.
5) The system must not have a bypass.
6) The system must sound the vehicle horn and flash the headlights if the driver fails to deactivate the system within 60 seconds of turning the ignition off. Type A1 buses may activate the red student warning lights in lieu of the headlights.
7) The system must be disarmed by the use of a heavy-duty push button placed on the left rear bulkhead or above the left rear passenger window for types A, C, and D front engine (FE) buses. The push button must be placed above the left rear passenger window for Type D rear engine (RE) buses. This button must be clearly marked.

b. System Definitions:

1) Armed = The system is functioning and is ready to alarm.
2) Disarmed = The system is off and inactive.
3) Activated = The horn is blowing and the lights are flashing.
4) Deactivated = The disarm switch at the rear of the bus has been operated by the driver.

c. System Functionality:

1) The system must be fully automatic in function and must not provide for manual bypass or override capability under any circumstances.
2) From the bus sitting still with ignition key in the "off" position:

   (a) With the ignition key switched to the "accessory" position, the system remains disarmed.
   (b) With the ignition key switched to the "on" position (engine remaining off), the system remains disarmed.
   (c) With the ignition key switched to the "on" position (engine running) and the bus operated under 20 MPH, the system remains disarmed.
   (d) With the ignition key switched to the "on" position (engine running) and the bus operated over 20 MPH or for more than 10 minutes of continuous operation (or other reasonable operational trigger mechanism), the system is armed.

3) From bus having been operated over 10 minutes, no longer moving, with the entrance door (and driver's door, if equipped) closed, the ignition key in the "on" position (engine running), and the system armed:

   (a) With the ignition key switched to "off" position (engine off), the interior dome lights are immediately illuminated.
   (b) With the ignition key switched to the "off" position (engine off) and the ignition key switched back to the "on" position (engine off or restarted) within 60 seconds, the interior dome lights are extinguished and the system remains armed, but flashing lights and horn alarms are not activated.
   (c) With the ignition key switched to the "off" position (engine off), interior dome lights illuminated and entrance door (or driver's door, if equipped) opened, flashing light and horn alarms are activated.
   (d) With the ignition key switched to the "off" position (engine off), interior dome lights illuminated, and the driver taking no action for 60 seconds, the flashing lights and horn alarms are activated.
   (e) With the ignition key switched to the "off" position (engine off), interior dome lights illuminated, and driver walking to the rear of the bus and disarming the system within 60 seconds, the system is disarmed and no flashing lights and horn alarms are activated.

4) Once the flashing lights and horn alarms are activated, they can be deactivated only by disarming the system at the rear of the bus.
5) The interior dome lights are extinguished 60 seconds after the system is disarmed.

15. **STUDENT WARNING LIGHTS, STOP ARMS, STUDENT CROSSING ARM, AND SYSTEM CONTROLS AND OPERATION**

a. Student Warning Lights Student warning lights must be dual-mounted side by side on all corners of bus roof caps. Mounting must be as high as practical on the top and as near the outer edge of the bus as curvature permits. The lamps must be securely mounted. There must be a black background that is 1¼ inches to 3 inches wide. The lamps installed in the outboard locations must be red; the lamps installed in the inboard locations must be amber. The lamps must be clearly visible in bright sunlight for a minimum of 500 feet. Additionally, student warning lights must:

1) Have light assemblies of a flat back design. Note: Cutouts in roof caps must be no larger than necessary to accommodate the student warning lights wires. A flush-mounted design is acceptable.
2) Use replaceable quartz halogen bulbs.
3) Be 7 inches in diameter or 38 square inches minimum.

b. System Controls – The system must be equipped with the following driver-actuated controls:

1) Master switch – provides means for deactivating the entire system, as would be required when opening the door at a railroad grade crossing.
2) Control switch – three positions: OFF, AMBER, and RED. The switch may be a rocker, pull-type, or other switch providing three positions. This switch must be separated from the master switch by at least one inch, and must be colored red.
3) Switch actuated by the service door.
4) Controls must provide for the combinations of switch positions and conditions of student warning lights, stop arm(s), stop arm lights, and audible alarm as indicated on the chart below.

NOTE: The system must not be designed in such a way that the operator is required to actuate the controls in a particular sequence to achieve the desired combination of conditions. For example, if the driver places the three-position switch in the AMBER position, with the master switch ON, it must not be required that the three-position switch be moved to RED or that the service door be opened in order to deactivate the AMBER lights. In this example, the driver must be able to deactivate the AMBER lights by going directly from the AMBER to the OFF position.

	With Master Switch, Control Switch, and Service Door In The Following Positions:				Condition of Stop Arm(s), Stop Arm Lights, Amber and Red Student Warning Lights and Audible Alarm Must Be:			
	MASTER SWITCH POSITION (ON or OFF)	CONTROL SWITCH POSITION (three positions: off, amber, or red)	SERVICE DOOR POSITION		STOP ARMS, STOP ARM LIGHTS	AMBER STUDENT WARNING and PILOT LIGHTS	RED STUDENT WARNING and PILOT LIGHTS	AUDIBLE ALARM
1	ON	OFF	CLOSED	1	RETRACTED, OFF	OFF	OFF	OFF
2	ON	OFF	OPEN	2	RETRACTED, OFF	OFF	ON	ON
3	ON	AMBER	CLOSED	3	RETRACTED, OFF	ON	OFF	OFF
4	ON	AMBER	OPEN	4	RETRACTED OFF	OFF	ON	ON
5	ON	RED	CLOSED	5	EXTENDED, ON	OFF	ON	OFF
6	ON	RED	OPEN	6	EXTENDED, ON	OFF	ON	OFF
7	OFF	ANY POSITION	ANY POSITION	7	RETRACTED, OFF	OFF	OFF	OFF

c. Student Crossing Arm- Required; the student crossing arm must be:

1) Air-operated on all air brake-equipped buses. It must be electrically operated on all hydraulic brake buses.
NOTE: An electrically operated crossing arm may be used on buses equipped with air brakes only if it is a behind-the-bumper design and no air-operated arm is available. This alternative requires prior approval of the Department.

2) Mounted to the far right side of the front bumper and must open to an angle perpendicular to the bus.
3) Designed so that all components and connections are weatherproofed.
4) Removable with hand tools for towing of the bus.
5) Constructed of noncorrosive or nonferrous material or treated consistent with the body sheet metal standard.
6) Designed so that it has no sharp edges or projections that could cause hazard or injury to students.
7) Designed and equipped with a four-point mounting to the front bumper.
8) Designed so that the arm extends approximately 72 inches from the front bumper when in the extended position; the arm must be constructed of a yellow polycarbonate material or noncorrosive tubing painted yellow; approximate dimensions of the arm must be 65 inches by 3 inches by 1 inch.
9) Designed and installed to extend simultaneously with the stop arms by means of the stop arm control and to retract within eight seconds of deactivation.
10) Equipped with a magnetic device or other assembly attached to the bumper at the end of the arm to provide a positive latch for the arm when not in use; this device must also reduce the tendency of the arm to rattle and vibrate when not in use.

d. Stop Arm Signals- For all buses, 47 capacity and larger, there must be installed on the left outside of the body two approved octagonal stop-signal arms, each equipped with two double-faced alternately flashing strobe lights for signaling a student stop. All buses of less than 47 capacity must be equipped with one stop arm as described. Bodies to be mounted on chassis with hydraulic brakes must be equipped with electrically actuated stop arm(s). Air-powered stop arms must be provided as standard equipment on all buses equipped with air brakes. The rear stop arm location on buses equipped with dual stop arms must be on the left side of the bus, as close as is practical to the left rear corner of the body. The light lenses of all stop arms must be RED. Air lines must not be readily accessible to students inside or outside the bus. Air lines must be made of copper, steel, or nonmetallic materials, and fittings must be brass. For controls, see the requirements above under System Controls. Stop arms must retract within six seconds of deactivation. For color, see **LETTERING AND TRIM**.

16. **STEP WELL LIGHT**

A step well light must illuminate the bus entrance and be adequately protected. The step well light must be activated automatically when the service door is opened and the clearance lights are on. See **SERVICE DOOR** for further operational requirements.

17. **STROBE LIGHT, WHITE FLASHING**

Each bus must be equipped with a white flashing strobe light meeting the following requirements:

a. Must have a self-contained power supply.

b. Construction: The base must be Lexan™ or other polycarbonate material or corrosion-resistant metal. The lens must be clear Lexan™ or other polycarbonate material of equal or better strength, resilience, and durability. The unit must be sealed to protect against intrusion of dust and moisture. All external fasteners, including mounting screws, must be stainless steel or coated using the dacromat or magnagard process. The unit must have a mounting gasket to isolate the light assembly from vibration.

c. Electrical characteristics: The light must have a flash energy of 8 joules minimum, must display 80 (plus or minus 10) single or double flashes per minute, must have integral fuse or circuit breaker protection and reverse polarity protection, and have a maximum current draw of 2 amperes at 12 volts.

d. Dimensions and location: The overall height of unit must be approximately 4 inches to 6 inches, with a lens diameter of approximately 4 inches to 6 inches. The mounting location is to be centered (laterally) on the roof of bus, approximately 48 inches (longitudinally) from the rear edge of the rear roof cap. Installed roof-mounted A/C components may require relocation of the light assembly so there is an unobstructed view of the light from the rear of the bus.

e. Body circuitry: The light must be controlled by a separate, clearly labeled driver's panel-mounted switch, with a clearly labeled pilot light.

18. **TURN SIGNAL LAMPS**

a. Front turn signal lamps on Type D bodies must be the same as the rear turn signals, unless the turn signals are incorporated as part of the headlight assemblies or otherwise incorporated into the front end design as approved by the Department. Lenses of rear turn signal lights must be amber in color, 7 inches in diameter or 38 square inches minimum, Class A, mounted as far apart laterally as practical on the same horizontal centerline as the large brake/tail lamps. All buses must also be equipped with an amber turn signal light in a protective rim on each side of the bus, mounted rearward of the service door on the right side and rearward of the front stop arm on the left side. All buses over 30 feet in length must have 2 turn signal lights mounted in protective rims on each side of the bus. The rearmost side turn signals on buses over 30 feet long must be mounted at or rearward of the centerline of the rear axle.

b. Rear turn signal lights must:

1) Be LED type lights.
2) Use a plug connector.
3) Be 7 inches diameter or at least 38 square inches.

19. **TWO-WAY RADIO**

Use of a two-way radio communications system approved by the school district is acceptable.

20. **VIDEO CAMERA MONITORING SYSTEMS**

Districts may install video cameras in buses provided the installed system:

1) Is mounted securely in the bus.
2) Is outside the head impact zone.
3) Is located in an area not likely to cause student injury.
4) Has no sharp edges or projections.

EMERGENCY EXITS

a. The emergency door on all types A, C, and front engine Type D buses must be located at the center of the rear of the bus and have a minimum horizontal opening of 24 inches and vertical opening of 48 inches. The emergency door must be hinged on the right-hand side using hinge(s) with a brass or rust-resistant rod.

b. The outside control must consist of a nondetachable opening device designed to prevent “hitching to.”

c. The emergency door must be equipped with a slide bar, cam-operated latching device, having a minimum stroke of one inch. The switch for the warning system must be enclosed in a metal case or durable case of other material, with rounded, protected edges. Wires leading from the switch must be concealed in the bus body. The switch must be installed so that the plunger contacts the farthest edge of the slide bar in such a manner that any movement of slide bar will immediately close the switch circuit and activate the buzzer. The door latch must be equipped with an interior handle that extends approximately to the center of the emergency door. It must lift up to release.

d. There must also be attached to the door, in such a way that it is visible inside and outside the bus, labeling as follows: “This door is equipped with a hold-open device. To release, open the door to its fully opened position.” This sticker must be red on a white background and the lettering must be a minimum height of ½ inch.

e. Each non-lift bus must also be equipped with push-out type emergency exit side windows of similar design to the standard side windows, except for the following:

1) The emergency window assemblies must be hinged on the forward side.
2) No emergency window may be placed next to any child safety seat.

3) Emergency windows must be installed in the following quantity on non-lift buses:

0 to 40 capacity	1 window per side
41 to 72 capacity	2 windows per side
73 to 90 capacity	3 windows per side

f. Buses 35 capacity and smaller must be equipped with one roof hatch emergency exit/ventilator. Buses over 35 capacity must be equipped with two roof hatch emergency exit/ventilators. Specifications for roof hatch(es) must be as follows (also see **GENERAL INFORMATION AND WARRANTY PROVISIONS**):

1) Hinge(s) must be located on forward and rearward side of hatch.
2) The design must provide a "partially open" position along the full width of the hatch, adequate to allow air to enter or exit and thereby ventilate the bus by opening either the front or rear of the hatch. The hatch must allow for partial opening on any of its four sides and on all four sides simultaneously.

g. Buses equipped with a lift are not required to be equipped with push-out emergency exit windows unless they are federally mandated. Lift buses may be equipped with push-out type emergency exit windows based on the capacity of a comparably sized non-lift bus.

EMERGENCY ROADSIDE REFLECTORS

There must be three reflector warning devices, mounted in a location accessible to driver in the front section of the bus, and stored in a container. The container must be sealed with a breakable, nonreusable seal.

FIRE EXTINGUISHER

a. A dry chemical fire extinguisher with a gauge and designed to restrain tampering must be mounted in a place accessible to the driver, preferably near the service door.

b. The fire extinguisher must bear the label of Underwriters' Laboratories, Inc., showing a rating of no less than 2A-10BC.

FIRST-AID KIT

a. The bus must carry a Grade A, moisture- and dust-proof first-aid kit with a clear cover, mounted in such a manner that it can be easily detached and made portable and in an accessible place in the driver's compartment. The container must be sealed with a breakable, nonreusable seal.

b. The contents must be as follows:

1 inch bandage compress (e.g., Band-Aids)	2 packages
40 inch triangular bandage with 2 safety pins	1 package
4 inch x 4 inch sterile gauze pads	2 packages of 6 each
Rolled curlex bandage each in length	2 inches x 6 yards
1 inch roll adhesive tape in length	1 roll 2½ yards
Eye dressing packet	2 packages

FLOOR AND FLOOR COVERING

a. The floor must be level from front to back and from side to side except for the wheel housings, the toeboard, and the driver's seat platform.

b. All sills must be permanently attached to the floor.

c. The driver's compartment plate on conventional bodies must be removable, installed level with the bus floor. All components requiring servicing must be readily accessible. Openings in the bus floor to meet this requirement must be reinforced to maintain the full strength of the unpunctured floor.

NOTE: Items a-c do not apply to Type A1. For Type A1 buses, the floor must provide adequate and firm support for seat legs and must have a minimum ½ inch marine grade or pressure-treated plywood, securely mounted to the floor. Basic floor construction of Type A1 buses must be the manufacturer's standard.

d. The floor covering must be resistant to ultraviolet light, ozone, and moisture and have a minimum tensile strength of 1,200 pounds per square inch (psi) and a minimum elongation of 100 percent. Floor covering must be abrasion-resistant and slip-resistant and have a minimum coefficient of friction of 0.85.

e. The floor covering from the top step landing area to the emergency door (or rear seat on Type D rear engine buses) must be ribbed aisle, non-skid, wear-resistant, fire-resistant elastomer.

f. The landing area at the top of the steps must be ribbed elastomer, which must extend to the ribbed aisle floor cover. The leading horizontal edge, or nosing, must be white or yellow ribbed elastomer or other contrasting color and must have an integral 90 degree turn-down with a square leading edge matching the step treads.

g. All joints or seams in the floor covering must be covered with non-ferrous metal, minimum 1 inch wide, and the driver's compartment, except at the cowl, must have a special, approved molding. Alternate materials may be used if they provide equivalent durability. The molding must be securely attached to prevent a tripping hazard.

h. Manufacturers may use seamless one-piece floor rubber with an integral ribbed aisle meeting the requirements in d. and e. Aisle molding is not required when the bus is equipped with one-piece floor rubber.

i. All holes in the chassis firewall and around the transmission cover and engine housing must be adequately sealed.

j. A commercially available truck bed liner material meeting the requirements in d. and e. may be substituted for the required flooring material.

FUEL FILLER OPENING

An opening of adequate size and design must be provided over fuel filler. Also see **LETTERING AND TRIM**.

GRAB HANDLE AT ENTRANCE

A suitable grab handle or rail must be provided at the front entrance, securely mounted inside of the body. Grab handles must be made of round stainless steel, 1 inch outside diameter (OD). The grab handle and mounting must be designed to minimize the possibility of students' clothing or personal items becoming lodged or caught upon exiting the bus, in order to reduce the risk of injury or fatality to passengers from being dragged outside the bus.

INSULATION AND SEALING OF JOINTS

The overlap of the edge of the exterior roof and side panels, and also the top edge of rub rails, must be sealed to prevent moisture, dust, and other contaminants from entering the joints and the bus.

LETTERING AND TRIM

Trim on the three rub rails below the beltline and all lettering must be black (except for stop signs). Entrance door frames, pilaster panels, and other trim panels may be painted black if approved by the Department. The letters of the words "SCHOOL BUS" on the top front and rear section of the bus body must be 8 inches high and correspond to the Series B, Standard Alphabet (see the National School Transportation Specifications and Procedures). "(Name of District) DISTRICT SCHOOLS," on each side of the bus body at the beltline must be in 6 inch minimum letters. Private and charter schools may alternately affix the name of the school in the aforementioned format and location. Bus numbers must be in 6 inch minimum height and on each side and on the front bumper and rear of the bus body. "EMERGENCY DOOR" must be in 2 inch letters at the top or directly above the door, visible inside and outside of bus. Lettering to indicate the fuel type must be located on the body adjacent to the fuel filler opening using minimum 1 inch letters. The words "STOP WHEN RED LIGHTS FLASH" must be displayed on the back of all buses in 6 inch black letters. Also see the lettering requirements for emergency exits, including roof hatches and push-out windows, under **EMERGENCY EXITS**. Districts may add an American flag decal to the exterior of the bus. If used, it must be no more than 6 inches by 10 inches and be located in front of the district name on the beltline of the bus. Also see United States Public Law 4USC7.

The front stop signal arm (both sides of arm) and rear stop arm (rear side only) must have a red background with a reflectorized white border; the letters "STOP" must be in 6 inch white reflectorized letters. Both sides of the front stop arm and the rear side of the rear stop arm must have reflectorized red sheeting of high intensity material. The front side of the rear stop arm must be painted red.

NOTE: Buses must include the lettering and trim specified above, and are limited to lettering, trim, symbols, markings, and coloration specified in the National School Transportation Specifications and Procedures, Revised 2010.

LICENSE HOLDER

A license holder must be included on the left rear outside of the body, with a suitable method for mounting the license tag.

LOCKUP DEVICES

Any emergency door equipped with a locking device must have an ignition interlock, which prevents starting the engine when the door is locked. Emergency exit windows must not be operable (under normal conditions) from outside the bus and must not be equipped with any locking device.

MIRROR SYSTEM

a. Interior Mirror: Must provide adequate viewing of the entire length and width of the interior of the bus and be at least 6 inches by 30 inches. The mirror must meet the following requirements:

1) Be bonded to the mirror housing.
2) Include a heavy-duty, single-piece mounting bracket that ensures stability.
3) Housing must be low-gloss black.
4) Incorporate a single knob (thumbwheel) adjustment to allow the driver to reposition the mirror without the use of tools.
5) Have a soft gasket type frame that is bonded to the housing.

NOTE: Interior mirror on Type A1 buses must be a minimum of 50 square inches and meet the above requirements.

b. Exterior Mirrors: Each school bus must be equipped with a system of exterior mirrors meeting the following requirements:

1) Cross/Side-View Mirror System: This mirror system must incorporate the following features and requirements:

a) Only one mirror is to be installed at each front corner of the bus.
b) Mirrors must not reflect excessive glare from the bus headlights or the sun into the driver's eyes. Mirrors must be a ¼ sphere or shaded ½ sphere design.
c) Stainless steel fasteners or fasteners coated using the dacromat or magnagard process must be used in the construction of the mirror assembly and to hold the brackets to the body.
d) Mirror stabilizer brackets on all Type C composite hoods must use through-the-fender rubber or nylon mounts with stainless steel caps to reduce mirror vibration and erosion of the hood material.

2) Rear Vision Mirror System: A rear vision mirror system must be provided that incorporates the following features and requirements:

a) The system must consist of one flat and one convex mirror lens per side. Each mirror set must be mounted on a single breakaway arm with a positive detent or lock.
b) Each of the four required mirrors in the rear vision mirror system must be electrically operated and remotely controlled from the driver's location.
c) For types A2, C, and D buses, the convex mirrors must have a minimum of 38 square inches and the flat rear view mirrors must have a minimum of 61 square inches of mirror surface. For Type A1 buses, the convex mirrors must have a minimum 28 square inches and flat rear view mirrors must have a minimum of 61 square inches of mirror surface.

d) Stainless steel fasteners or fasteners coated using the dacromat or magnagard process must be used in the construction of the mirror assembly and to hold the brackets to the body.

3) Overall exterior mirror system (cross/side-view and rear vision mirrors) must be isolated from vibration.

NOISE REDUCTION PACKAGE

A noise reduction package is required. The package must include full insulation of the ceiling, walls, and front and rear of the bus (including body bows), plus minimum ½ inch marine grade or pressure-treated plywood securely mounted to the floor. Insulation material must be fire-resistant and of a type that will not harbor dampness, and must be approved by Underwriters Laboratories, Inc. For all front engine units, this package must include full width perforated interior ceiling panels to deaden engine noise, extending from the front header panel to at least the first passenger seating position. For rear engine units, this package must include sound deadening insulation between the engine compartment and the passenger compartment and full width perforated interior ceiling panels extending from the rear header panel forward to at least the front of the engine compartment.

PAINT AND FINISH

All National School Bus Yellow paint must meet the National School Transportation Specifications and Procedures for color and have a finished gloss rating of at least 85 at 60°F and a distinctness of image (DOI) rating of an average of at least 50 measured using the same method specified for gloss under **GENERAL INFORMATION AND WARRANTY PROVISIONS**. Paint must be applied for a total dry thickness of at least 1.8 mils over all painted surfaces. School bus roofs must be painted white in color, and must meet the gloss and DOI ratings. White paint may extend to the leading and trailing edge of the roof caps, and may extend down to the drip rails. Trim, lettering, and bumpers must be black except that bumpers must be striped in accordance with National School Transportation Specifications and Procedures or these specifications. Also see **GENERAL INFORMATION AND WARRANTY PROVISIONS** for warranty requirements, **LETTERING AND TRIM**, and **REFLECTIVE MARKINGS**.

PANELING, INTERIOR

a. Interior panel fastenings must minimize vibrations and rumble. A cove molding, which may be an extension of the body panels, must be installed covering the wall-to-floor joint beginning at the windshield post on the left side of the bus and extending along the walls around the corners to the service door on the right side. Molding must be securely fastened so that dirt will not readily work under it.

b. The interior paneled area immediately below the window line must be aluminum-coated steel.

REFLECTIVE MARKING PACKAGE

There must be installed a reflective marking package as specified in the National School Transportation Specifications and Procedures, Revised 2010. Striping must be installed longitudinally the length of the body at the vertical location immediately below the seat level rub rails but high enough so as to clear wheel wells, whenever possible. Short breaks in the striping at rivet locations are acceptable. Reflective markings are also required for all emergency exits.

RUB RAILS

a. There must be a rub rail on each side of the bus approximately at seat level, which must extend from the entrance doorpost around the bus body (except for emergency door) to the point of curvature near the cowl on the left side.

b. There must be rub rails located approximately at the floor line, and the bottom of the outer skirt, which must cover the same longitudinal area as the upper rub rail, except at wheel housings, but extend only to the right and left corners.

c. Rub rails must be applied outside of body panels. Pressed-in or snap-in rub rails do not satisfy this requirement.

SEATING, MODESTY PANELS (CRASH BARRIERS), LAP BELTS, AND WEBBING CUTTERS

a. Passenger seats must be mounted facing forward and provide a minimum of 12.8 inches of seat width per passenger seating position. The aisle must be 12 inches minimum. This plan of body seating must be used to determine seating capacity. See **BODY DATA PLATE**.

b. The first three seats on each side of all types C and D buses, and the first seat on each side of all Type A buses, must be equipped with lower anchorage points for securing child safety seats. All such 39 inch passenger seats must be equipped with two sets of anchorage points per bench seat. All such passenger seats with a seat width of less than 36 inches must be equipped with one set of anchorage points per bench seat.

c. All passenger seats with lower anchorage points must be spaced to provide maximum knee room. The rest of the passenger seats must provide for a minimum of 25 inches of knee room. Seat measurements are to be made at the center of the reference point of the seat. In making this measurement from the front of the seat cushion to the back of the seat or barrier in front, the upholstery may be placed against the padding both forward and rear, but the padding may not be compressed.

NOTE: Nonstandard seating options may reduce knee room in the first three rows of seating. Types C and D buses over 39 feet in length may have a minimum of 24 inches of knee room behind the third row.

d. Seat padding must be secured to the frame so that it will not snag. Screws and bolts used in seat back construction must not be exposed.

e. Barriers and passenger seats, including the seat back and the entire bottom cushion (including underside), must be covered with vinyl-coated material. All passenger seat assemblies and barriers must meet the requirements of the 2010 National School Transportation Specifications and Procedures, School Bus Seat Upholstery Fire Block Test. Upholstery material for all passenger seats and barriers must meet the following color standard +/- four delta E:

	III/ob	X	Y	Z		x	y
1	D65 Daylight	7.21	7.92	12.52		2606	2963
2	2	7.51	7.30	4.07		3978	3865
3	Rom Light	7.33	7.37	8.15		3207	3226

f. Buses must have a padded barrier in front of the forwardmost passenger seat on each side of the bus. Also see Section V for barrier requirements for buses equipped with wheelchair lifts. Barriers at the entrance side and the driver's side must have a full-width, aluminized steel panel below the padded section extending down to the floor, except as specified under heater/defroster specifications (see **ELECTRICAL EQUIPMENT AND WIRING**).

g. All Type A school buses sold through the State of Florida school bus bid must be equipped with Type II, 3-point seat belts in all passenger seating positions. These belt systems must meet the requirements of National School Transportation Specifications and Procedures, Revised 2010.

h. All types C and D buses must be equipped with lap belts in all passenger seating positions, meeting the following requirements:

1) Belts must be manufacturer's standard style lap belts. The nonadjustable, buckle end of each belt must be the aisle-side connection point on each passenger seat.
2) Each two-part belt must be separately color-coded to aid in proper connection.
3) Any belt system with parts that can be manually disassembled without the use of tools and any system that is subject to easy vandalism shall not be approved for use in Florida school buses.
4) Retractable seat belts are permissible at the purchaser's option. If this system is specified, the retractors must be emergency locking type, and the retractors must be mounted below the seat bight.

5) School districts may install restraining systems that differ from these requirements as necessary to accommodate pre-school age children and children with special needs. Such systems must comply, federally, and must be approved by the body manufacturer.

i. All buses must also be equipped with a durable webbing cutter having a full width handgrip and a protected, replaceable blade. The required belt cutter must be mounted in a location accessible to the driver in the seated position, and be easily detachable.

SERVICE DOOR

a. The service door must be a split or jackknife type located at the right front of the bus. Doors must be securely hinged with approved heavy-duty hinges with a brass or rust-resistant rod adequately fastened to the adjoined member. Doors must have a 1 1/2 inch minimum safety gap sealed with a safety flap of approved quality. The door must extend to the bottom step and be fitted with suitable weather strip to keep water from entering the step well.

b. An air-operated entrance door must be provided on all buses equipped with air brakes. This system must have a manually operated override to enable the driver to manually open the door in the event of loss of power. Air-powered entrance doors must operate in accordance with the following table:

Ignition Switch Position	Door Switch Position	Emergency Dump Switch Position	Door Position / Status	Step Well Light Condition
Off	Any	On	Neutral	Off
Off	Any	Off	Neutral	Off
On	Closed	Off	Closed/Active	Off
On	Opened	Off	Open/Active	On
On	Closed	On	Neutral	Off
On	Opened	On	Neutral	On

c. When the key switch is in the "off" position, the air door system must not create a battery draw. All air door systems must provide a rebuildable air cylinder and must operate reliably in all weather and temperature conditions. All air-powered door systems must include a method of manually adjusting the opening and closing speed and force of the doors.

d. Hydraulic brake buses must have a manually controlled entrance door. A double-bearing, epoxy-coated, mechanical control must be mounted within comfortable reach of driver on a firm and substantial support and lock in the off-center position. On models with service doors opening outward, there must be installed an approved safety latch. The control must have a smooth machined handle and the rod to the door must be epoxy-coated.

e. The service door must have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches. Immediately above the door opening there must be secured to the body panel a high-density foam rubber pad, a minimum of 3 inches in width, or an approved equal safety cushion.

f. Doors must be designed and weather strips mounted so that there is no binding or tendency for stripping to dislodge during door operation. One or two glassed-in openings must be provided in each door half with glass of same grade as specified for side windows and mounted in rubber. The bottom of the lower glass panel must not be more than 30 inches from the ground when the bus is unloaded. The top of the upper glass panel must not be more than 6 inches from the top of the door.

SIZES OF BODIES

The height of the body from the top of the finished floor to the underside of the ceiling, at the center of the body, must be a minimum of 72 inches.

STEP WELL

A step well of at least three steps must be built in the right front assembly, enclosed with doors extending to the bottom step. Each step must be covered with abrasion-resistant "Pebble-Top" elastomer, the base of which must be at least 3/16 inches thick, with an overall thickness of 5/16 inch bonded to a durable polymer base and otherwise constructed to provide substantial support, including the leading horizontal edge, which must be "Pebble-Top" type, and white or a color that

contrasts with the step tread by at least 70 percent. The polymer backing must have an integral 90-degree turndown with a square leading edge for slip resistance. The lower (first) step height must be between 10 and 16 inches above the ground for all types A1, A2, C, and D buses. Each step must be the full width of the step well at the point where the step is located. Half steps or partial steps are not acceptable.

NOTE: Two steps are acceptable on Type A1 buses.

STRUCTURAL DESIGN and TESTING

a. All types A, C, and D bodies must meet the requirements of the 2010 National School Transportation Specifications and Procedures, Side Intrusion Test.

b. Each manufacturer of types A, C, or D bodies must certify that representative configurations of its buses produced to meet these specifications comply with the testing and requirements of the Colorado Racking Load Test. See **Colorado Racking Load Test** in Appendix C.

c. Each manufacturer of types A, C, or D bodies must certify that representative configurations of its buses produced to meet these specifications comply with the testing and requirements of the Kentucky Pole Test. See **Kentucky Pole Test** in Appendix C.

d. All bus bodies must be constructed to be in square, and level. There must be no more than 1 inch of difference from side to side at the front and rear of the bus body (not counting any chassis lean or twist). All bodies must be mounted such that all designed body contact points are in contact with the chassis frame. All bodies must be centered on the chassis within plus or minus ½ inch.

   NOTE: Type A1 buses may be constructed with exterior paneling and roof caps of material other than steel, meeting all body manufacturer requirements. Body structural design must comply with all other applicable requirements above.

SUN SHIELD

A dual sun shield system must be provided, consisting of two independently mounted sun shields. One must be mounted above the windshield and the other above the driver's window. Each visor must have a tinted Plexiglass sun shield, minimum 6 inches by 24 inches, and have rounded bull-nosed perimeter edges.

NOTE: The manufacturer's standard sun visor is acceptable on Type A1 buses.

VANDAL BOX, SIDE MOUNTED

There must be installed on all types C and D buses an equipment compartment on the ceiling above the driver's side window, measuring approximately 2,750 cubic inches. The compartment must have a door with a positive latch and a keyed-alike lock with warning buzzer to warn the driver that the door is locked if the ignition switch is turned on.

WINDOWS

a. All types A, C, and D buses must have tinted glass that provides the maximum compliant tinting of the windshield, the driver's side window(s), and the service door glass. Tinted glass in all windows rear of the driver's compartment must have a light transmission of approximately 28 percent.

b. An adjustable split sash window with safety glass must be mounted in the side of the bus body between each framing post. Permanent marks showing the grade of glass must be visible.

c. Movable windows must be controlled by an approved lock having a finger-touch opener, providing for ease of operation and with no sharp projections. Window latches must be replaceable or rebuildable without disassembling the complete window frame or removing the window from the body. In addition, individual window latches or repair parts must be available and part numbers included in the required body parts catalog. Window seals and visors or drip molding must be installed and provide ample protection from leakage.

d. For ventilation, the driver's window must be adjustable and must be equipped with a positive latch that can be secured from the inside of bus.

e. There must be installed in the rear door two windows, one upper and one lower, installed in a waterproof manner. The use of adhesives in place of the required rubber may be approved at the discretion of the Department. Total glass area in the emergency door must be a minimum of 750 square inches. Glass must be the same type as for side windows.

f. Rear side windows located at each side of the emergency door must be installed in a waterproof manner. The use of adhesives in place of the required rubber may be approved at the discretion of the Department. Glass area must be large enough to provide desirable vision to the rear and must be of the same quality and grade as side windows.

WINDSHIELD

The front body section in the area of the windshield must provide for corner vision. Glass must be laminated safety polished plate with dark tint at top, installed in a waterproof manner, and slanted to reduce glare. Light tint may be used in all Type D buses in lieu of dark tint at the top.

WINDSHIELD STEPS AND HANDLES

A step and appropriate grab handle must be installed on each front corner of the body to facilitate cleaning the windshield. The handle must be stainless steel, chrome plated, or non-ferrous metal, or may be made of non-metallic material of sufficient structural and mounting strength and resistant to weathering and deterioration and must provide for secure mounting and adequate hand hold.

NOTE: Steps and handles are not required on Type A1 buses.

WINDSHIELD WIPERS AND WASHERS

a. Electric windshield wipers must be standard on all buses. All wipers by design and installation must provide desirable vision for drivers. Blades and arms must be of sufficient length to clear the windshield glass in the driver's direct view. One switch must control both wipers, and the switch must be located within easy reach from driver's seat, preferably on the turn signal stalk. The system must incorporate a variable delay wipe feature to allow drivers to adjust the speed and frequency of the wipers. The wiper system must be designed to move the blades away from the driver’s direct view when in the parked position.

b. Windshield washers must be electrically operated. The washer reservoir must be made of hard plastic or other approved material and have a capacity of at least ½ gallon. Flexible plastic bags are not acceptable.

NOTE: The manufacturer’s standard windshield wipers are acceptable on Type A1 buses.

TYPE D FRONT ENGINE BODY EXCEPTIONS

a. The distance between the barrier at the rear of the entrance step well and the engine cover must be a minimum of 13 inches.

b. A step, in lieu of stirrup steps, is permitted in or on the front bumper on both sides.

c. The engine cover must provide an adequate seal to the bus floor area to keep engine fumes from entering the passenger compartment and must be insulated to retard transfer of heat and engine noise. The engine cover must be hinged and equipped with a prop rod or other device so that it can be held securely in the fully open position to allow access to the engine.

TYPE D REAR ENGINE BODY EXCEPTIONS

a. The engine compartment must be constructed to permit servicing of the engine, having one or two doors opening at the rear and louvered, with removable panels on each side of engine compartment. The engine compartment must be sealed at top and front to retard heat transfer and prevent engine fumes from entering the passenger compartment. Provisions must be made for easy removal of the engine through the rear compartment.

b. Mud flaps must be installed at the rear of the dual wheels.

c. A step, in lieu of stirrup steps, is permitted in or on the front bumper on both sides.

d. Type D Rear Engine buses are exempted from the requirement for an additional electrical compartment for air conditioner circuitry, provided the air conditioner control boards are installed in the rear package shelf area in a covered box.

e. There must be an engine access panel underneath the rear seat of all rear engine buses designed to provide access to the engine.

SPECIFICATIONS FOR OPTIONAL BODY EQUIPMENT TYPES A1, A2, C, AND D BUSES

3-POINT SEAT BELTS AND 3-POINT SEAT BELT SEATS

There shall be an approved option for 3-point seat belts in two and three passenger 3-point seat belt seats, as approved by the Department of Education.

AUTOMATIC VEHICLE LOCATION AND STUDENT TRACKING SYSTEM

There shall be an approved option for a system that uses the Global Positioning System (GPS) to determine and wirelessly report the location of the bus in approximately real time to the transportation administration. The system may also include an additional feature that will identify individual students as they board or disembark from the bus and report the locations and times.

BAGGAGE COMPARTMENTS

There shall be an approved option for baggage compartments on all bodies when available. This body option must include a lock and be keyed alike with any other body option requiring use of a key.

BATTERY DISCONNECT SWITCH LABELING

There shall be an approved option for a label to be placed on the exterior of the bus on the cover of the compartment housing the battery disconnect switch. The label background must be white with red one-inch letters with the wording "MAIN BATTERY DISCONNECT."

BUS LOCKUP SYSTEM

There shall be an approved optional whereby a bus can be locked at the emergency as well as the entrance door. An ignition interlock is required for the emergency door to prevent starting the bus if the emergency door or rear window (on RE units) is locked. This body option must be keyed alike with any other body option requiring use of a key.

DRIVER'S SEAT WITH INTEGRATED SEAT BELT

There shall be an approved option for a driver's seat with a seat belt integrated into the seat back, and meeting the requirements of **DRIVER'S SEAT AND SEAT BELT** in this section.

ELECTRIC POWERED DOOR FOR TYPE A

There shall be an approved option for an electric-powered entrance door, where available, on Type A school buses only.

EXTERIOR LIGHT MONITOR

A system of monitoring exterior lights on the front and rear of the bus from the driver's seated position is approved as an option. Such systems must include:

1) Student Warning Lamps, both RED and AMBER, front and rear.
2) Tail Lamps
3) Backup Lamps
4) Rear Turn Signal Lamps
5) Stop Lamps

A system that monitors only electrical circuits and does not indicate whether the bulb is operational is not acceptable.

FUEL SUPPLY LOCK

A lock with two keys may be installed in the fuel supply service door of the body skirt. This body option must be keyed alike with any other body option requiring use of a key.

HIGH HEADROOM BODIES

There shall be an approved option for bus bodies with approximately 77 inches of headroom.

INFANT SEATING

There shall be an approved option for passenger seating designed to safely transport newborns, infants, or toddlers as follows:

1) C.E. White Child Restraint Seat
2) Other systems as approved by the Department of Education

FULL BODY PERFORATED ROOF PANELS

There shall be an approved option for perforated sound deadening roof panels covering the full length of the bus.

POWDER-COATED WINDOW FRAMES

There shall be an approved option for electrostatically powder-coated black window frames on all types of buses to reduce friction and improve ease of operation of passenger side windows.

PUBLIC ADDRESS SYSTEM (P.A.), RADIO

There shall be an approved option for a public address system/AM/FM stereo radio with four speakers inside the bus and one heavy-duty weatherproof P.A. speaker outside the bus. This option must have controls to permit the driver to select inside or outside speakers, mounted in the driver's compartment so that all controls are readily accessible to the driver from the normal seated position. Interior speakers must be flush-mounted. Outside speaker must be mounted under the hood or in another protected location at the front of the bus. An AM/FM stereo radio with four speakers may be offered separately. No internal speakers other than those used for the driver's communication system may be installed within four feet of the back of the driver's seat when the seat is in its rearmost upright position.

REAR HEATER

There shall be an approved option for an additional heater mounted to provide heat in the rear of the body. This option must be installed under a passenger seat or must otherwise be protected to eliminate damage to the unit and injury to the students. This system must have a minimum 80,000 BTU rating for types C and D buses. On Type A buses, this system must have a minimum 50,000 BTU rating.

RED LIGHT ABOVE EMERGENCY DOOR

There shall be an approved option for a small red light to be mounted above the emergency door on the interior of the bus that is activated when the clearance lights are on.

STAINLESS STEEL MIRROR BRACKETS

There shall be an approved option for all exterior mirror mounting brackets and fasteners to be constructed of stainless steel.

STRAIGHT FLOOR / FLAT FLOOR

There shall be an approved option on any size bus when available for an unobstructed straight floor design (i.e., no wheel wells and no step-up at the rear of the driver's compartment). Minimum headroom of any bus equipped with this option must remain 72 inches as per standard body specifications.

There shall be an approved option on any size bus, when available, for an unobstructed flat floor design in the passenger compartment. If this option uses a raised floor that is stepped up behind the driver's area, the forward edge of the aisle must have a white stripe and be labeled "Step Up" as viewed upon entering the aisle and a "Step Down" label must be visible upon exiting the aisle. Minimum headroom of any bus equipped with this option must remain 72 inches as per standard body specifications. The bus must be equipped with 39-inch seats except for locations where lift bus specifications require a 30-inch aisle.

TRACK SEATING

There shall be an approved option for a track-mounted seating system using button track (L track), and a wheelchair securement system meeting Florida Specifications, but mounting into the track-seating track. The overhead track for the shoulder harness attachment must extend the full length of the passenger compartment on both sides. The bus must be equipped with 39-inch seats except when lift bus specifications require a 30-inch aisle. All floor tracking must be anodized aluminum or other material of equal strength that will resist corrosion in Florida's environment.

This option must include additional options as follows:

1) Purchase of individual track seating seats
2) Delete a seat, add a wheelchair position with wheelchair tie-downs
3) Delete a wheelchair position (tie-downs), and add a standard seat

SECTION IV

BODY SPECIFICATIONS

EXCEPTIONAL CHILD BUSES

TYPES A, C, AND D BUSES

MINIMUM BODY SPECIFICATIONS
EXCEPTIONAL CHILD BUSES
TYPES A, C, and D

1.0 GENERAL REQUIREMENTS FOR EXCEPTIONAL CHILD BUSES

Exceptional child bus body structure and equipment must conform to the regular bus body specifications in Section III and must meet the additional requirements of this section (listed below) regarding modifications necessary for installation of special equipment. Proper bracing must be added as specified in the body standards.

All school buses equipped with wheelchair lifts must meet the requirements of this section.

A power-up, gravity-down lift must be made available based on local district needs on all types of wheelchair-lift equipped bodies.

National School Transportation Specifications and Procedures, Revised 2010, are also applicable, including the dynamic testing requirements for mobile seating devices and occupant securement systems. Body manufacturer may be required to provide certification that exceptional child buses and equipment meet the additional requirements of the National Specifications pertaining to buses for students with special needs.

2.0 TECHNICAL REQUIREMENTS

The wheelchair lift must meet the technical requirements below.

2.1 GENERAL LIFT AND/OR BODY REQUIREMENTS

2.1.1 Weight

The weight of the lift must not adversely affect the legal axle loading, the maneuverability, structural integrity, or the safe operation of the vehicle in which it is installed.

2.1.2 Operation Constraints

2.1.2.1 The lift must operate when the bus is on level ground and on road grades up to 7 percent or 4 degrees.

2.1.2.2 The lift must operate when the bus is on level ground and when the bus is at an angle of plus or minus 8.7 percent or 5 degrees due to road crowns, depressions, or curbs.

2.1.3 Location of Lift and Door Requirements

2.1.3.1 Whenever possible, the option must be provided to the local purchaser to have the lift located either in front of or behind the rear wheels, on the right side of the bus.

2.1.3.2 If the lift is located forward of the rear wheels, it must be located away from the regular service entrance so any fully opened, forward-mounted door will not obstruct the conventional service entrance.

2.1.3.3 Door posts, headers, and floor sections around this special opening must be reinforced to provide strength and support equivalent to adjacent side wall and floor construction of an unaltered model.

2.1.3.4 A drip molding must be installed above the opening to effectively divert water away from entrance.

2.1.3.5 All doors must open outwardly.

2.1.3.6 All doors must be weather-sealed. The design must provide a positive means of holding the door, or doors, in open position during lift operation. Friction catches are not acceptable. This specification must not be achieved by means of a hinge-mounted pin or other device that would result in extra leverage on the door hinge point(s).

2.1.3.7 When manually operated dual doors are provided, the rear door must have at least a one-point fastening arrangement to the header. The forward-mounted door must be constructed so that a flange on the door overlaps the edge of the rear door when closed. This door must have at least a 3-point fastening device with one point to the header, one to the floor line of the body, and the other to the rear door. This locking device must afford maximum safety when doors are in the closed position. When a single door is used, the locking device must meet the requirements for the emergency door lock. Door hinge(s) must be adequately heavy-duty to prevent sagging of the door over the useful life of the bus. A single door may be used to enclose a clear door opening of no more than 50 inches in width. All lift entrances must have a clear, finished door opening height of at least 56 inches.

2.1.3.8. Door materials, panels, and structural strength must be equivalent to the conventional service and emergency doors. Color, rub rail extensions, lettering, and other exterior features must match adjacent sections of the body.

2.1.3.9. Each door must have a serviceable glass window set to the lower line of adjacent sash.

2.1.4. Padding and Protective Covering

2.1.4.1. Pinching movements, shear areas, or places where clothing or other objects could be caught or damaged must be covered or in other ways protected to prevent passenger injury when lift is in operation.

2.1.4.2. The outermost stationary frame structure of the lift exposed to the passenger compartment must be padded with high-density foam down to within 3 inches of the floor to minimize injury in normal use and in case of an accident.

2.2 Platform Requirements

2.2.1. Protrusions and Openings

2.2.1.1. The lift platform must not have any openings greater than 3/4 inch in width, except for a hand hold not exceeding 1½ inch by 4 inches located midway between the edge barriers.

2.2.2. Platform Lighting

2.2.2.1. There must be a flush-mounted, dome light located on the inside ceiling of the bus above the lift opening. The light must be controlled by a labeled switch located on or adjacent to the lift.

2.3 Structural Requirements

The structural elements of the wheelchair lift include those that support working loads and attach the lift to the bus. They do not include mechanical and hydraulic components associated with operation and control of the lift.

2.3.1. Lift Capacity

The wheelchair lift must have a lift capacity of 800 pounds uniform load.

2.3.2. Structural Safety Factor

The structural safety factor must be at least 3, based on the ultimate strength of the construction material.

2.3.3. Useful Life

When used and maintained in accordance with the manufacturer's recommended procedures, a wheelchair lift structure must be designed to have a useful life equal to the useful life of the vehicle in which it is used.

2.3.4. Interface with the Vehicle

2.3.4.1. Installation of the wheelchair lift must not reduce or in any way compromise the structural integrity of the vehicle and must have a structural safety factor as specified in Structural Safety Factor, Section 2.3.2.

2.3.4.2. Attachment of the wheelchair lift, including any modification of the vehicle, must not cause an imbalance of the vehicle that will adversely affect vehicle handling characteristics.

2.3.4.3. No part of the installed and stowed lift must extend laterally beyond the normal width of the vehicle.

2.3.4.4. The lift must not contact the door and/or door frame while in the stowed position or during deployment and normal operation.

2.3.4.5. When the drive motor and hydraulic pump are located inside the bus, they must be installed to avoid interference with the movement of wheelchairs through the bus aisle. The unit must be enclosed to prevent transported students from coming in contact with it and must be readily accessible to service personnel for routine service and for maintenance. When the hydraulic pump and drive motor are installed below the floor level, they must be enclosed in a box accessible through a door installed in the body skirt.

2.3.4.6. Fold-out lifts using full height stanchions must be installed so that a portion of main stanchion assembly(ies) or bracket(s) (if applicable) is secured to body sidewall by means of through-the-body, minimum 5/16 inches diameter, corrosion-resistant grade 8 steel bolts and self-locking, corrosion-resistant nuts (two bolts per stanchion assembly are required). Parallelogram lifts must provide for extra support or bracing under the floor where attached.

2.3.4.7. All lift mountings must be secured with nuts, bolts, and lock washers. Lag bolts must not be used in the mounting of the lift.

2.4 Mechanical and Hydraulic

Mechanical and hydraulic components include all parts of the lift drive or control systems that support the platform load during normal operation of the wheelchair lift.

2.4.1. Mechanical and Hydraulic Safety Factors

Mechanical and hydraulic components include all parts of the lift drive or control system that are subject to wear and degradation due to the operation of the lift, and include working parts, such as cables, pulleys, shafts, and chains that can be expected to wear and upon which the lift depends for support of the load.

2.4.1.1. The mechanical component safety factor must be at least 6 based on the ultimate strength of the material.

2.4.1.2. All components that contain working hydraulic fluid must have a minimum burst pressure of at least 3 times normal design working pressure.

3.0 WARRANTY

A statement of warranty must be provided with each lift assuring the quality of materials and workmanship of the product for at least 24 months from the date of acceptance by the final consumer. The warranty must provide 100 percent coverage for parts. Also see **GENERAL INFORMATION AND WARRANTY PROVISIONS**.

4.0 MAINTENANCE, TRAINING, AND SERVICE

4.1 Documents

A comprehensive operator's, maintenance, and parts manual(s) must be provided or available on the Internet from the manufacturer's website for the lift with each bus. Parts manuals must be designed so that all replaceable parts are illustrated by line drawings and such parts are numbered on the illustration, with a part description on a separate list under the corresponding part number. Part descriptions should be annotated appropriately with the part number, a proper description (part name), and the quantity required for the application listed in the drawings. A service manual or the manufacturer's website must also include an overall lift diagram with component plumbing, locations, and identities indicated for diagnostic purposes.

4.2 Maintenance and Inspection

Scheduled maintenance tasks must be related and must be grouped in maximum bus mileage intervals. Routine scheduled maintenance, such as lubrication and adjustments, must not be required at intervals of less than 6,000 bus miles or 1,000 up and down lift cycles, whichever comes first, except for routine servicing performed during monthly inspections. Higher levels of scheduled maintenance tasks must occur at even multiples of the lower level task schedules based on vehicle mileage.

4.3 Maintenance Accessibility

All systems or components serviced as part of the periodic maintenance of the lift, the failure of which may cause a safety hazard or a road call, must be readily accessible for service and inspection. To the extent practicable, removal or physical movement of components unrelated to the specific maintenance and/or repair tasks involved should be unnecessary. Relative accessibility of components, measured in time required to gain access, should be inversely proportional to frequency of maintenance and repair of the components.

4.4 Training

The successful body manufacturer must be responsible for providing or arranging wheelchair lift service training as needed. This training must include at a minimum one-day training seminars on overall features, operation, preventive maintenance, diagnosis, and rebuild of wheelchair lifts offered through the bid. The seminars are to be conducted free of charge at district garage locations, arranged by the Department of Education and the successful bidder. At least one seminar on each given lift model must be conducted per five school districts purchasing a bus or buses equipped with that lift.

5.0 WHEELCHAIR/OCCUPANT SECUREMENT SYSTEM

5.1 General Requirements for Wheelchair/Occupant Securement System

5.1.1 System must be designed to accommodate positioning and securement of wheelchairs or other passenger-carrying devices in a forward-facing orientation, and must be designed to allow maximum flexibility in front-to-rear positioning of different numbers and sizes of passenger carrying devices.

5.1.2 Each designated wheelchair space (for the purpose of determining seating plans and required space allowances) must be a minimum of 50 inches longitudinally by 30 inches laterally. Each 50 inch section of required tie-down track may consist of two sections of track with neither section less than 16 inches long, and must extend the full length of the wheelchair position with no gaps.

5.1.3 No stanchions or other obstructing devices may be installed on or above the floor in the wheelchair areas.

5.1.4 Reserved.

5.1.5 Occupant securement straps must be black or other dark color and wheelchair securement straps must be gray, beige, or other light color to distinguish the separate functions.

5.1.6 In addition to the webbing cutter required in Section III, each specially equipped school bus that is set up to accommodate wheelchairs or other assistive or restraint devices with webbing attached must contain an additional webbing cutter properly secured in a location to be determined by the purchaser.

5.2 Technical Requirements for Wheelchair/Occupant Securement System

5.2.1 Wheelchair securement system must have 4-point tie-downs, incorporating 4 flexible, adjustable straps to include the following: Tie-down straps and occupant securement must be Sure-Lok kit numbers FF612-4C-7, FF612S-4C-7, or AL712S-4C-7, or Q'Straint kit number Q-8106-L, Q-8206-L or Q-8306-L, or equal approved by the Department.

5.2.1.1 The 4 straps must each be retractor type and must be interchangeable.

5.2.1.2 Each strap must be equipped with a positive spring-lock type end fitting on floor end.

5.2.1.3 The system must have multiple floor-mounted attachment points (longitudinal) to the bus body or to attachment hardware for the wheelchair securement straps. Attachment point hardware must be equivalent to Sure-Lok or Q'Straint anodized flanged series L button track. To meet this requirement, four parallel sections of track must be longitudinally mounted to the bus floor. The sections must be installed in accordance with the wheelchair and occupant securement system manufacturer's requirements. This track spacing must be adjusted as necessary in order that a 30-inch and 39-inch track-mounted seat will fit into this track system. Each 50-inch section of required tie-down track may consist of two sections of track with neither section less than 16 inches long, and must extend the full length of the wheelchair position with no gaps. There may be a short break in the outer track to accommodate a fuel filler neck if required. This tracking system must be inset flush with the bus floor. Trim pieces must be added as necessary to cover all exposed flooring edges.

5.2.1.4 The specified wheelchair used to establish and test for wheelchair/occupant securement system strength requirements must be a Fortress 655 FS Standard Adult or equivalent (with batteries).

5.2.1.5 All floor tracking must be anodized aluminum or other material of equal or better strength that will resist corrosion.

5.2.2 The occupant securement system must meet the following requirements and must include the following equipment and features:

5.2.2.1 Occupant Securement System – See "Technical Requirements for Wheelchair/Occupant Securement System, Section 5.2.1."

5.2.2.2 The system must be equipped with a single-point, push-button quick disconnect for the lap belt sections and the lower end of the upper torso strap. The lap belt (if attached directly to the floor) and the upper end of the shoulder strap must have multiple attachment points (longitudinal) to the bus body or attachment hardware. Attachment points are to be spaced at increments not to exceed 4 inches center to center. The attachment point hardware for the lap belt (if applicable) must be equivalent to Sure-Lok or Q'Straint Series L button track. Floor track requirements in "Technical Requirements for Wheelchair/Occupant Securement System, Section 5.2.1.3" are also applicable to this section. Attachment point hardware for shoulder strap must be equivalent to Sure-Lok or Q'Straint Series L track (button track). Each 50 inch section of required tie-down track may consist of two sections of track with neither section less than 16 inches long, and must extend the full length of the wheelchair position with no gaps and must be positioned above the passenger windows.

5.2.2.3 Body attachment hardware on occupant straps must incorporate positive spring lock end fittings or other means of providing positive securement and quick attachment or release.

5.2.2.4 The upper torso belt and each portion of lap belt must be adjustable and must accommodate the required size and height range of occupants.

5.2.2.5 **Any reinforcement of the body header area necessary to meet these anchorage requirements for the occupant securement shoulder straps must be provided the entire length of the passenger area on both sides of the bus to facilitate retrofitting of occupant securement systems by districts as needs change**.

6.0 CRASH BARRIERS with MODESTY PANEL

6.1 There must be a padded modesty panel (crash barrier) located immediately rearward of the lift if there are wheelchair spaces or regular seating located rearward of the lift and on the same side of the bus.

6.2 There must be a padded crash barrier with a modesty panel meeting Florida spacing requirements located forward of all passenger seats that do not have another seat properly spaced in front of them. There must be a padded crash barrier or seat in front of any wheelchair position unless it is contiguous with and behind another wheelchair position. The forwardmost barrier on both sides of the bus must have a full width aluminized courtesy panel extending to the floor. If the right front of the passenger area immediately behind the stepwell is not equipped with a barrier due to placement of the wheelchair lift in that location, it must be equipped with a padded stanchion from floor to ceiling with an aluminized modesty panel.

7.0 AISLE

All school buses equipped with a power lift must provide a minimum 30-inch pathway leading from any wheelchair position to at least one 30-inch wide emergency exit door. A wheelchair securement position must never be located directly in front of (blocking) a power lift door location.

8.0 SERVICE DOOR (REGULAR) ENTRANCE

8.1 Stainless grab rails must be provided on each side of this entrance and must be placed in such a manner as to afford easy accessibility to small children entering or leaving the bus. The lower end of the rails must be no higher than 8 inches from the bottom step. Exception: Type A1 buses require only one grab rail.

8.2 When in the open position, service doors must not obscure any portion of the grab rails.

9.0 SEATING ARRANGEMENTS

Flexibility in seating and spacing to accommodate special devices is permitted due to the constant changing of passenger requirements.

NOTE: Because of the wide variation in type, size, construction, and design of wheelchair lifts and wheelchair locking positions, the Department of Education reserves the right to inspect any wheelchair lift bus offered for sale to Florida district school boards and to reject any unit found in the Department's discretion to be unsafe, inadequate, or not suitable for use in transporting students with disabilities.

10.0 UNIVERSAL HANDICAPPED SYMBOL FOR BUSES EQUIPPED WITH WHEELCHAIR LIFTS

All buses with wheelchair lifts must have two universal handicapped stickers. Each sticker must be reflective white on blue, at least 6 inches by 6 inches, displaying the universally recognized symbol for vehicles transporting persons with disabilities. One sticker must be located on the center of the front bumper and the other sticker at the right rear of the bus below the 4-inch brake/tail light. The rear sticker must be located below the emergency window on Type D rear engine buses.

11.0 WHEELCHAIR SECUREMENT AREA LIGHTING (OPTIONAL)

Additional floor-level lighting designed to fully illuminate the wheelchair securement areas may be provided. The lighting must be controlled by the dome light switch.

SECTION V

AIR CONDITIONER SPECIFICATIONS

TYPES A, C, AND D BUSES

SCHOOL BUS AIR CONDITIONER SPECIFICATIONS

TYPES A, C, AND D BUSES

The following specifications are applicable to all types of Florida school buses equipped with an air conditioner system and are in addition to all requirements for equipment in Sections I, II, III, and IV of this specifications document. This section is divided into three subsections. Subsection I covers Performance Specifications; Subsection II covers specific equipment requirements for Systems A and B; and Subsection III covers other requirements applicable to all buses equipped with air conditioners (A/C). This specification consists of requirements for two separate designs, System A and System B (containing lighter components designed for a lighter duty cycle). Both systems must meet the performance requirements listed below.

I. PERFORMANCE SPECIFICATIONS

A. TEST PROCEDURES and REQUIREMENTS

The installed air conditioner system must cool the interior of the bus as outlined below, measured at a minimum of three points, located 4 feet above the floor at the longitudinal centerline of the bus. The three points must be:

a. 2 feet rearward from the front bulkhead
b. At the midpoint of the body, and,
c. 2 feet forward of the emergency door, or, for Type D rear engine buses, 2 feet forward of the rearmost end of the aisle

There must be at least one Department representative and one manufacturer representative in the bus during the performance test. The test must be performed under actual summer conditions in Florida, which consist of temperatures above 85°F, humidity above 50 percent with normal sun loading of the bus and the engine operating at 1,250 ± 50 revolutions per minute (RPM). After a minimum of one hour of heat soaking, with the passenger windows open, the system must be turned on and must provide a minimum 20°F temperature drop in a 20 minute time limit and maintain that temperature for at least 10 more minutes. If the outside ambient temperature is below 90ºF, then the temperature inside the bus must be reduced to 70ºF. If the interior of the bus has been cooled prior to the start of the heat soak process, then the heat soak must be extended to 1½ hours. This testing method must be the required minimum testing protocol.

Exceptions:

a. Type D rear engine buses equipped with the System A transit duty compressors specified in item II.A.1.h. below must provide a minimum 25°F temperature drop in the 20 minute time limit and maintain that temperature for at least 10 more minutes. If the outside ambient temperature is below 95ºF, then the temperature inside the bus must be reduced to 70ºF.

b. Type D front engine buses ***not*** equipped with the System A transit duty compressors specified in item II.A.1.h. below must provide a minimum 15°F temperature drop in the 20-minute time limit and maintain that temperature for at least 10 more minutes. If the outside ambient temperature is below 90ºF, then the temperature inside the bus must be reduced to 75ºF.

Additionally, and at the Department's discretion, this test may be performed by: 1) placing the bus in a room (such as a paint booth) where ambient temperature can be maintained at 110°F; 2) heat soaking the bus, which is at ambient booth temperature of 110°F with windows open for at least 1 hour; and, 3) closing the windows, turning on the air conditioner with the engine operating at fast idle, and cooling the interior of the bus by 30 degrees or more within a maximum of 20 minutes and maintaining that temperature for at least 10 more minutes while maintaining 110°F outside temperature. If the interior of the bus has been cooled prior to the start of the heat soak process, then the heat soak must be extended to 1½ hours.

Exceptions:

a. For Type D rear engine buses equipped with the System A transit duty compressors specified in item II.A.1.h. below, *when testing using the paint booth method* (if approved by the Department), the test specification must be that the interior of the bus is cooled by 35 degrees or more within a maximum of 20 minutes and that temperature is maintained for at least 10 more minutes, while maintaining 110°F outside temperature.

b. For Type D front engine buses ***not*** equipped with the System A transit duty compressors specified in item II.A.1.h. below, *when testing using the paint booth method* (if approved by the Department), the test specification must be that the interior of the bus is cooled by 15 degrees or more within a maximum of 20 minutes and that temperature is maintained for at least 10 more minutes, while maintaining 110°F outside temperature.

The manufacturer must provide facilities for Department of Education personnel and/or a purchasing school district representative to confirm that a pilot model of each bus design meets the performance requirements.

B. A/C SYSTEM PERFORMANCE SPECIFICATIONS SUMMARY

APPLICABLE BUSES with AIR CONDITIONING	**PARKING LOT TEST**		**HOT BOX TEST**
	90ºF or above AMBIENT	**Below 90ºF AMBIENT**	
ALL TYPES (except Type D RE with full transit compressor; except Type D FE)	20ºF PULL DOWN	70ºF INSIDE	110ºF – 80ºF
TYPE D REAR ENGINE with FULL TRANSIT COMPRESSOR	25ºF PULL DOWN	70ºF INSIDE (if below 95ºF ambient)	110ºF – 75ºF
TYPE D FRONT ENGINE	15ºF PULL DOWN	75ºF INSIDE	110ºF – 95ºF

- FAST IDLE (1250 RPM ± 50)
- 1½ HOUR HEAT SOAK
- 20 MINUTES PULL DOWN / 10 MINUTES MAINTAIN

The manufacturer must provide facilities for Department of Education personnel and/or a purchasing school district representative to confirm that a pilot model of each bus design meets the performance requirements.

II. EQUIPMENT REQUIREMENTS

A. SYSTEM A EQUIPMENT REQUIREMENTS

1. Power Source and Compressor(s):

a. Types A2, C, and D front engine buses must have at least two compressors, two evaporators, and two condensers plumbed and wired separately in order to provide maximum redundancy. Type D rear engine buses must have only one compressor and may have one or two evaporators and condensers.

b. Compressor(s) must be chassis engine-driven or electric motor driven. All compressors must have the correct lubricating oil specified on a permanent tag attached to the compressor in a visible location.

c. Any engine-driven compressor used on 47 passenger and larger units must have a minimum design life of at least 8,000 hours and a minimum displacement of 13 cubic inches. For segregated dash air systems, a third compressor with a minimum displacement of 10 cubic inches (TM 16 or equivalent) is allowed. For buses

with a capacity of fewer than 47 passengers, a compressor minimum displacement of 10 cubic inches (TM 16 or equivalent) is allowed.

d. The system must be equipped with both a high pressure and a low-pressure switch to prevent compressor operation when system pressures are above or below recommended safe levels.

e. Compressor(s) must be mounted in the safest area possible. Compressors must not be mounted below the chassis frame rails.

f. Compressors with less than 23 cubic inches displacement must be driven by a multi-groove, poly-vee type belt and must include a self-tensioning idler pulley to maintain proper belt tension.

g. Electro-magnetic compressor clutches must have an anti-feedback device and must be wired to receive at least 12 volts at all times when engaged.

h. Type D rear engine buses must have a transit duty compressor of at least four cylinders, 24 cubic inches design and displacement, with at least a 30,000 hours design life. The compressor must be equipped with unloader valves to maximize efficiency. The compressor must be equipped with a sight glass to check oil levels, and manual refrigerant shut-off service valves for service. The transit compressor may be driven by a poly-vee or a double-vee belt.

i. Any system may use an electrically powered compressor in lieu of the aforementioned requirements.

j. All units must have an hour meter for each system attached to the rear system compressor clutch activation circuit to accurately record the hours of operation.

2. Condenser(s), Evaporator(s), and Blowers:

a. Condenser(s) must be equipped with copper coils and aluminum fins, or an aluminum-coiled microchannel design. Type A1 buses may use the standard equipment aluminum-coiled condenser provided by the chassis manufacturer.

b. Roof-mounted condenser(s) are required on types A2, C, and D buses. Condenser assembly(ies) must include permanent magnet, ball bearing, sealed motors for cooling fans, and the case must be constructed of aluminum, fiberglass, or other noncorrosive material as specified for standard body sheet metal. Cases must be impact-resistant.

c. Type D rear engine buses must be equipped with roof-mounted evaporators and condensers, in a single assembly, located and designed for ease of service. The single assembly system must be connected to full-length ducts on the left and right interior of the bus designed for even distribution of cooled air. Additionally, manufacturers may offer an option for a modular unit with roof-mounted condensers and inside ceiling-mounted evaporators. All service connections must be inside the bus for easy access by technicians.

d. The system must be equipped with a coated receiver tank, and high-pressure side (discharge) line check valves in order to prevent any oil return via slugging to the system's compressor. The unit's fans are to be constructed of high-impact grade material and are to be equipped with permanent magnet, weatherproof, sealed motors. All electrical connections are to be weatherproof.

e. Type A1 buses must be equipped as follows:

1) Minimum of two evaporators required (one front and one rear). The rear unit must be mounted to the ceiling or mounted to the bulkhead above the emergency exit.
2) The evaporator mounted to the rear ceiling or bulkhead must blow air forward; front evaporator must blow air toward the rear.
3) Evaporator cases and/or ducting systems must be equipped with diffusers that are adjustable.

f. Types A2, C, and Type D front engine buses must include three evaporator/blower assemblies. The front area evaporator must direct air to the passengers in the front of the bus. In addition, the main evaporator assembly must be mounted at the rear of the bus, designed to blow air forward. These buses must also be equipped with a driver’s in-dash evaporator/blower and ducting to channel cold air to the driver, or a

B. SYSTEM B EQUIPMENT REQUIREMENTS

1. Power Source and Compressor(s):

a. Types A2, C, and D buses must have at least two compressors, two evaporators, and two condensers plumbed and wired separately in order to provide maximum redundancy.

b. Compressor(s) must be chassis engine-driven. All compressors must have the correct lubricating oil, as specified on a permanent tag attached to the compressor in a visible location.

c. Any engine-driven compressor used on 47 passenger and larger units must have a minimum design life of at least 8,000 hours and a minimum displacement of 13 cubic inches. For buses with a capacity of fewer than 47 passengers, compressors with a minimum displacement of 10 cubic inches (TM 16 or equivalent) are allowed.

d. The system must be equipped with both a high-pressure and a low-pressure switch to prevent compressor operation when system pressures are above or below recommended and safe levels.

e. Compressor(s) must be mounted in the safest area possible. Compressors must not be mounted below the chassis frame rails.

2. Condenser(s), Evaporator(s), and Blowers:

a. Condenser(s) must be equipped with copper coils and aluminum fins, or an aluminum-coiled microchannel design. Type A1 buses may use the standard equipment aluminum-coiled condenser provided by the chassis manufacturer.

b. Body skirt-mounted condenser(s) are acceptable on types A2, C, and D buses. Condenser assembly(ies) must include permanent magnet, ball bearing sealed motors for cooling fans, and the case must be constructed of aluminum or other noncorrosive material as specified for standard body sheet metal. All condensers mounted under the bus body must have ventilation from the exterior of the bus body via a grate in the body side skirt. Condensers must have ducting or shrouding from the condenser to the grating at the body side to ensure the condensers do not recirculate the hot air leaving the condenser.

c. The system must be equipped with a sight glass (at least one for each part of a split system) that is accessible and directly visible for checking the level of the refrigerant.

d. Condensers must be mounted to isolate them from vibration and excessive road shock. If condensers are skirt-mounted, then they must be located forward of rear wheels on the left side of the bus whenever possible.

e. Condensers must be protected by splash shields. Buses with body-skirt-mounted condensers are required to have mud flaps on all wheels and extra protection as necessary to ensure mud and road debris are directed away from the condensers.

f. Types A1, A2 and C buses with a capacity of 47 passengers or fewer must be equipped as follows:

   1) Minimum of two evaporators required (one front and one rear). Rear unit must be ceiling or bulkhead-mounted above emergency exit.
   2) Rear ceiling or bulkhead-mounted evaporator must be designed and installed to ensure that air blows forward. The front evaporator must blow toward the rear.
   3) Evaporator cases and/or ducting systems must be equipped with adjustable diffusers.

g. Types C and D 65-passenger and larger bus systems must include three evaporator/blower assemblies. The front area evaporator must direct air to the passengers in the front of the bus. In addition, the main evaporator assembly must be mounted at the rear of the bus designed to blow air forward. These buses must also be equipped with a driver's in-dash evaporator/blower and ducting to channel cold air to the driver, or a

separate evaporator/blower system in the driver's area to channel air to the driver only. Side-mounted evaporator assemblies and/or ducting may be used on any unit.

III. SYSTEM REQUIREMENTS FOR ALL BUSES

1. Evaporators and Ducting:

a. Evaporator cases, lines, and ducting (as equipped) must be designed such that all condensation is effectively drained to the exterior of the bus below floor level under all conditions of vehicle movement without leakage on any interior portion of bus.

b. Any evaporator or ducting system must be designed and installed to be free of dangerous projections or sharp edges. Installation must not reduce compliance applicable to the standard bus. Any ductwork must be installed so that exposed edges face the front of the bus and do not present sharp edges.

c. Any evaporators used must be copper-cored; aluminum fins are acceptable, except that the front evaporator, if provided by the Type A1 chassis manufacturer, may be aluminum-cored.

d. Air intake for any evaporator assembly(ies), except for the front evaporator of Type A1 buses, must be equipped with replaceable air filter(s) accessible without disassembly of evaporator case. If the evaporator case must be removed to service the filter, then the cover must be removable without the use of tools.

e. On buses equipped with wheelchair lifts, evaporators and ducting (if used) must be placed high enough that they will not obstruct existing or potential occupant securement shoulder strap upper attachment points. This clearance must be provided along entire length of the passenger area on both sides of the bus interior to allow for potential retrofitting of new wheelchair positions and occupant securement devices throughout the bus.

f. No portion of the air conditioner system may block the driver's view through any window except that vertical covering in the rear corners of the bus interior for hoses and/or wiring may intrude on the rear quarter window by no more than two inches.

2. Controls, Wiring, Hoses, and Miscellaneous Hardware:

a. All system operating controls, including on-off switch(es), blower switch(es), and thermostat control(s) must be accessible to the driver in a seated position.

b. Blowers must be a minimum of two speeds or may be variable speed.

c. No driver control switch or variable potentiometer may have an operating amperage above three amperes (amps). Manufacturers must use relays, transistors, or other load switching devices to ensure that control switches do not exceed three amps draw. When necessary, manufacturers must include feedback protection in circuits that may cause feedback to another system.

d. The system must be equipped with at least one manually resettable circuit breaker per side to provide overload protection for the main power circuit feeding the evaporator blowers, condenser fans, and other components. The system control circuits must also have overload protection, consisting of manually resettable circuit breakers. All wiring must be copper, coded by color or be hot stamped every three inches, and be insulated. All joints must be soldered or joined by equally effective fasteners. All wires of 4 gauge or thicker and any accessory wire connected directly to the battery must have soldered ends, and the ends must be protected with heat-shrink tubing. Air conditioner wiring and connectors, including any battery cables routed by the body manufacturer or A/C installer, must be routed and protected to eliminate the possibility of wiring and connectors becoming abraded, pierced by fasteners, shorted, or otherwise damaged during manufacture and use.

e. All wiring, hoses, and lines must be grommeted, routed, loomed with convoluted loom, and supported to reduce wear resulting from heat, chafing, vibration, and other factors. All holes through the body for routing of A/C hoses or electrical connections must be sealed in a permanent and airtight manner.

f. All types C and D buses equipped with air conditioners must also be equipped with a fast idle system that will increase the engine idle speed while the engine and air conditioner are operating and the transmission is in neutral. This system must provide a fast idle speed of 1,250 plus or minus 50 RPM.

g. All flexible refrigerant hoses and fittings must be the Quick Click or E-Z Clip or approved equal system of hoses and end fittings. All refrigerant hoses must meet SAE J2064 (D, E, or F) requirements for refrigerant hoses.

h. The total system must be thermostatically controlled, with thermostats located at the evaporator assembly wired to the remote thermostat control at the driver's location.

i. Refrigerant must be R 134a.

3. Body:

a. All Type C and Type D front-engine buses equipped with air conditioners must also be equipped with a compartment mounted next to the battery box with external access for mounting circuit breakers and control circuitry for the air conditioner.

b. Type D rear-engine buses are exempted from the requirement for an additional electrical compartment for air conditioner circuitry provided the air conditioner control boards are installed in the rear package shelf area in a covered box.

4. Warranty and Serviceability:

a. Warranty - Air conditioner compressor applications must be approved in writing by the chassis engine manufacturer, stating that the installation will not void or reduce the engine manufacturer's warranty or extended service coverage liabilities in any way. **Also see GENERAL INFORMATION AND WARRANTY PROVISIONS and Appendix B.**

b. Serviceability – All components requiring periodic servicing must be readily accessible for servicing including, but not limited to, the following:

1) Refrigerant service ports (high and low pressure).
2) Sight glass(es), which must be directly visible.
3) Filter/drier and/or accumulator, which must be on all systems and be a minimum of 16 cubic inches. The drier is to be comprised of a bead-type desiccant compatible with R134a, and must have a screen filter.
4) Expansion device(s).
5) Drive belts - for replacement and adjustment.
6) Any manually resettable circuit breakers.
7) Evaporator air filters – removable and serviceable without the use of tools.
8) All major component serial numbers - must be readily visible.

c. Parts and Service Manuals - A comprehensive operator's, maintenance, and parts manual(s) must be provided for the entire system, or available via Internet access from the manufacturer's website for each A/C system purchased. Parts manuals must be designed so that all replaceable parts are illustrated by line drawings and such parts are numbered on the illustration, with a part description on a separate list under the corresponding part number. Part descriptions should be annotated appropriately with the part number, a proper description (part name), and the quantity required for the application listed in the drawings. The service manual or manufacturer's website must also include an overall A/C system diagram with component plumbing, locations, and identities indicated for diagnostic purposes.

d. Parts and Tools Availability - All system parts and required special service tools must be readily available, and a list of suppliers must be provided to each school district shop purchasing that brand of air conditioner.

e. Suspension Capacity and Ground Clearance - Ground clearance at the lowest point of the air-conditioning system must be no less than the ground clearance of the bus at the step well. Any special chassis gross axle weight rating (GAWR) requirements to maintain ground clearance or to ensure adequate suspension capacity must be indicated by the body manufacturer for each configuration of air-conditioned bus. Standard

GAWRs are included in the chassis sections of this document; any of the aforementioned special GAWR requirements for air-conditioned buses must be provided to the Department of Education before bids on those buses will be considered.

f. Installed air conditioner system must not reduce compliance of the finished bus with other requirements applicable to school buses.

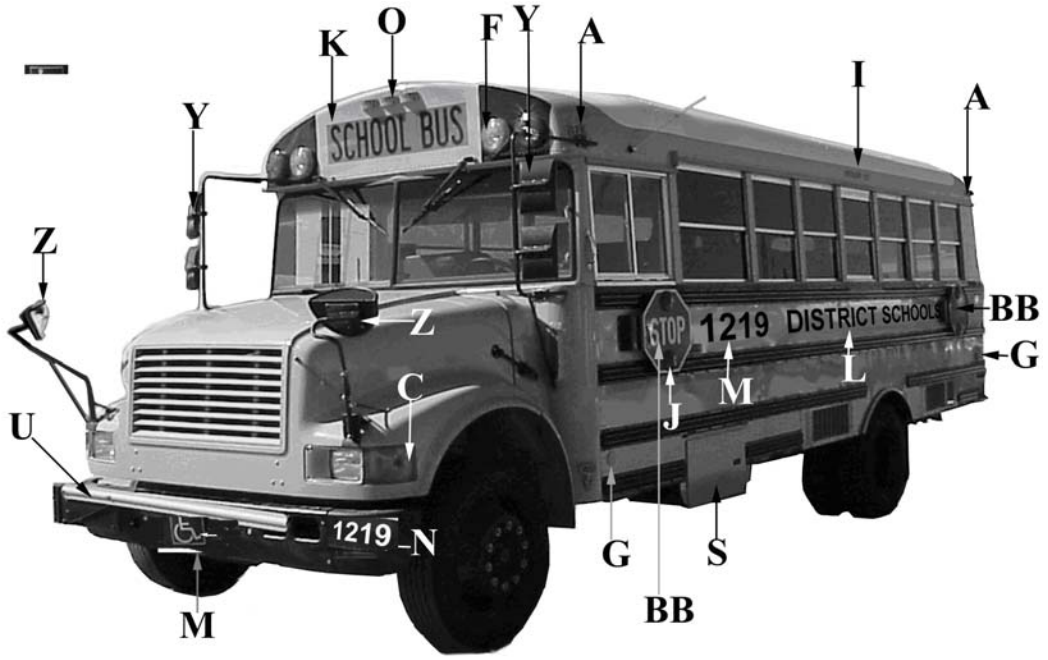
g. Air conditioner system manufacturer must provide information and data as needed to assist the Department of Education in establishing chassis engine performance requirements and in determining chassis electrical components or specifications that may be needed to accommodate the additional electrical demands imposed by the air-conditioning system.

h. All air conditioner systems used on types A2, C, and D school buses must be rated in BTUs using the International Mobile Air Conditioning Association (IMACA), Incorporated Recommended Procedure 250 for vehicle air conditioner systems. Ratings must be based on the procedures and conditions listed in Procedure 250 for rating condition "CITY." The following types A2, C, and D school bus sizes must have the following <u>minimum</u> BTU ratings for installed air conditioner systems:

1) 29 – 47 capacity - 78,000 BTUs
2) 48 – 66 capacity - 106,000 BTUs
3) 67 – 89 capacity - 120,000 BTUs
4) These ratings must not be construed to be recommended ratings, nor do these ratings relieve the manufacturer of the responsibility to meet the air conditioner performance requirements previously listed in this section.

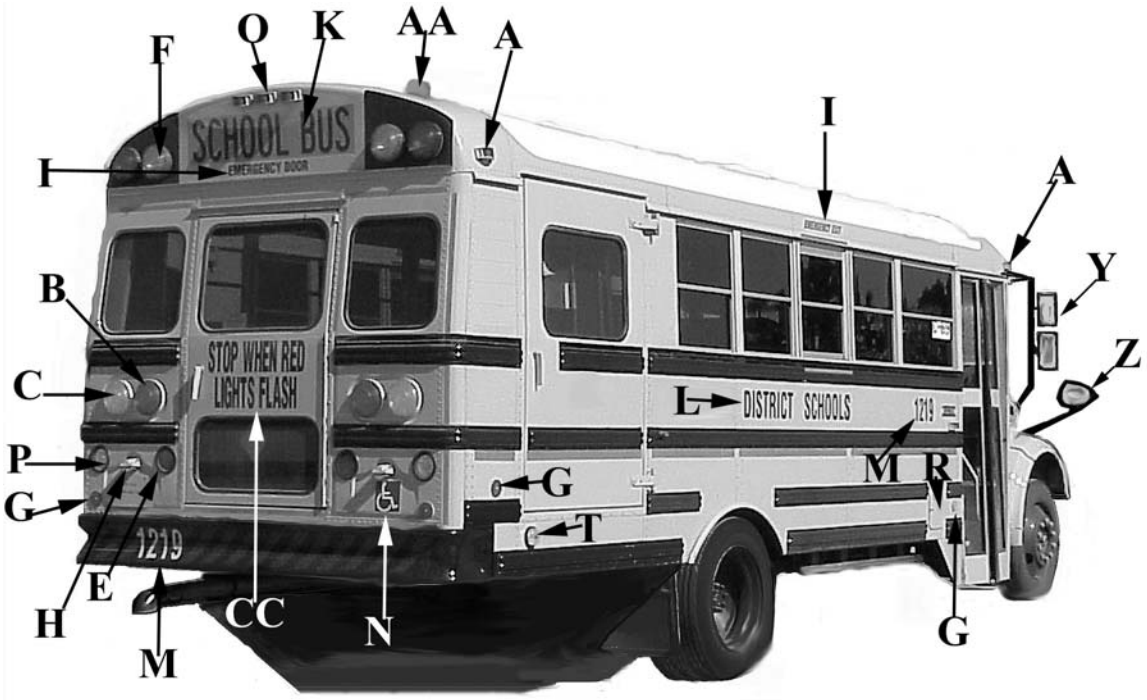
APPENDIX A

MINIMUM LETTERING AND LIGHTING



MINIMUM LETTERING AND LIGHTING REQUIREMENTS

A	Clearance Lights	L	(Name of District) District Schools, Each Side, Belt Line
BB	Octagonal Stop Arm	M	Universal Handicapped Symbol, Wheelchair Lift Equipped Buses
C	Front Turn Signals, (amber lenses)	N	Bus Numbers
F	Pupil Warning Lights, Side By Side Amber and Red, Flat Back Design Quartz Halogen Bulb	O	Identification Lamps
G	Reflectors	S	Battery Box
I	Emergency Exit	U	Pupil Crossing Arm
J	Double-Faced Flashing Red Lights	Y	"Euro-Style" Rear View Mirror System (not as pictured)
K	SCHOOL BUS, Front And Rear, 8 inch letters on retroflective yellow background	Z	Cross/Side View Mirror System



MINIMUM LETTERING AND LIGHTING REQUIREMENTS

A	Clearance Lights	M	Bus Numbers
B	Seven-inch LED Brake/Tail Lights	N	Universal Handicapped Symbol, Wheelchair Lift Equipped Buses
C	Seven-inch LED Turn Signals (amber lenses)	O	Identification Lamps
E	Four-inch LED Stop / Tail Lights	P	LED Back-up Lights
F	Pupil Warning Lights, Side By Side Amber and Red, Flat Back Design Quartz Halogen Bulb	R	Fuel Door
G	Reflectors	T	Wheelchair Lift Landing Light
H	License Plate Lamp	Y	"Euro-Style" Rear View Mirror System (not as pictured)
I	Emergency Exit Signs	Z	Cross/Side View Mirror System
K	SCHOOL BUS, Front and Rear, 8 inch letters on retroflective yellow background	AA	Roof-mounted White Flashing Strobe Light
L	(Name of District) District Schools (each side, belt line)	CC	Rear Door Lettering

APPENDIX B

WARRANTABLE AIR CONDITIONER SYSTEM COMPONENTS

Warrantable Air-Conditioner System Components

Control System(s)	Air-Conditioning System Control Assembly(ies)
	Air-Conditioning System Control: Switch(es), Wiring, Relay(s), Resistor(s), Rheostat(s), Cable(s), Lever(s), Knob(s), and Illumination Components
Refrigerant Compressor	Assembly
	Refrigerant Compressor Mounting Bracket(s) and Hardware
	Refrigerant Compressor Pulley/Clutch Plate Assembly
	Refrigerant Compressor Clutch Coil Assembly
	Refrigerant Compressor Clutch Coil Control Wiring and Connector(s)
	Refrigerant Compressor Drive Belt(s), Pulley(s), and Hardware
	Refrigerant Compressor Drive Belt Tensioner Assembly and Hardware
	Refrigerant Compressor Drive Belt Idler Assembly and Hardware
Expansion Valve	Assembly
	Expansion Valve O-Ring(s)
	Expansion Valve Inlet Screen
Orifice Tube	Assembly
	Orifice Valve O-Ring(s)
Refrigerant Line Filter	Assembly
	Refrigerant Line Filter O-Ring(s)
Evaporator Assembly	Assembly
	Evaporator Air Duct Assembly(ies)
	Evaporator Air Duct Register Assembly(ies)
	Evaporator Fan Motor Assembly(ies)
	Evaporator Fan Motor(s) Wiring, Connectors, and Switch(es)
	Evaporator Electrical/Electronic Components and Wiring
	Evaporator Fan Mount(s) Brackets and Hardware
	Evaporator Core Assembly
	Evaporator O-Rings
	Evaporator Drain Assembly
Condenser	Assembly
	Condenser Housing Assembly and Mounting Hardware
	Condenser Fan Motor(s)
	Condenser Fan Motor(s) Wiring, Connectors, and Switch(es)
	Condenser Electrical/Electronic Components and Wiring
	Condenser Fan Mount(s) Brackets and Hardware
	Condenser Core Assembly
	Condenser O-Ring(s)
Receiver	Assembly
	Receiver Dryer O-Ring(s)
Accumulator	Assembly
	Accumulator O-Ring(s)
Switch, Refrigerant, Low Pressure	Assembly
	Switch, Low Pressure, O-Rings
	Switch, Mounting Port, Schrader Valve
	Switch, Low Pressure, Wiring, and Connectors

Switch, Refrigerant, High Pressure	Assembly
	Switch, High Pressure, O-Rings
	Switch, Mounting Port, Schrader Valve
	Switch, High Pressure, Wiring, and Connectors
Service Port(s)	Schrader Valve(s)
	Cap(s)
	Cap Seal(s)
A/C System Wiring Harness	Assembly
	A/C System Wiring Harness, Wiring, Terminals, Connector(s), Electrical Overload Protection Component(s), Securement Components, and Anti-Chafing Components.
Refrigerant Hoses	Assemblies
	Refrigerant Hose
	Refrigerant Hose Fittings
	Refrigerant Hose Fitting O-Rings
	Refrigerant Hose Securement Components and Anti-Chafing Components
	Refrigerant Hose Heat Shield(s)
	Refrigerant Hose Fitting Clamp(s)

APPENDIX C

COLORADO RACKING LOAD TEST
and
KENTUCKY POLE TEST PROCEDURES

COLORADO RACKING LOAD TEST

The Colorado Racking Test shall be required on or before the acceptance date of the first bus of the respective configuration.

TEST PROCEDURE

The body manufacturers shall record and report the downward vertical movement of the force at 0, 25, 50, 75, and 100% of the maximum force (both loading and unloading). The expected force deflection curve is illustrated schematically in Figure 1a. Low load nonlinearities may indicate joint deformation; high load nonlinearities may indicate yielding in structural members.

A second load cycle shall be performed following the procedure given in the first paragraph. The expected force-deflection curve is illustrated schematically in Figure 1b. Any hysteresis following the initial shakedown will be revealed by this second cycle.

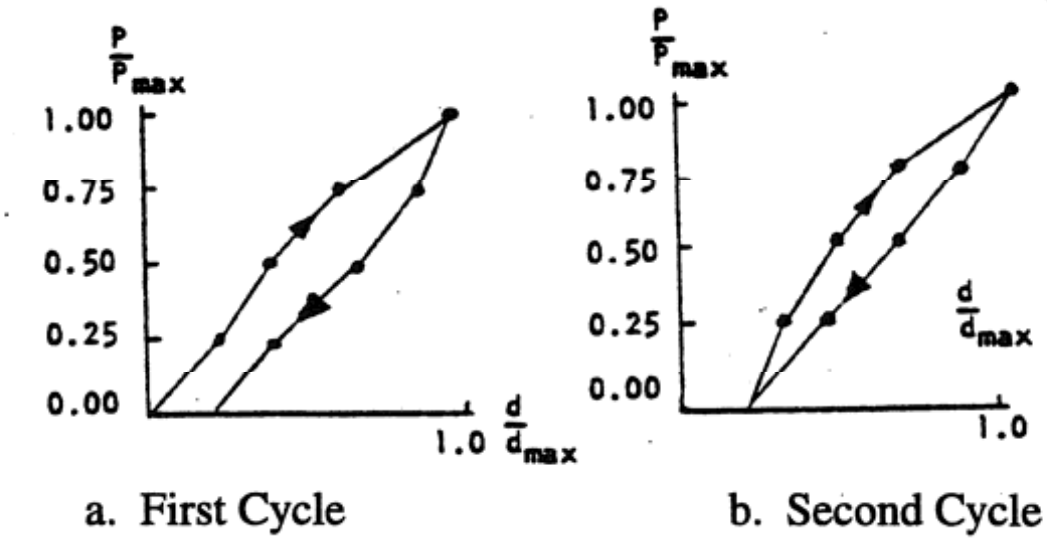


Figure 1. Static Load Test Load-Deflection Curves

A diagonal (racking) load test must be performed on types A, B, C, and D school buses to assure adequate shear stiffness and strength of the bus body. Details of the test are provided below:

A two cycle loading sequence shall be conducted following the described procedure.

(a) Requirements: When a force equal to 1½ times the gross vehicle weight (GVW) is applied to the edge of the roof of the vehicle's body structure through a force application plate as specified in (b), Test Procedures:

(1) The diagonal movement of the force at any point on the application plate shall not exceed 5 1/8 inches; and

(2) Each emergency exit of the vehicle must be operable as designed during the full application of the force and after release of the force.

(b) Test Procedures: Each vehicle shall be capable of meeting the requirements of (1) and (2) when tested in accordance with the procedures set forth below.

(1) The vehicle shall be supported on a rigid surface along the lower edge of the frame or along the body sills in the absence of a frame.

(2) The load shall be applied through a force application plate that is flat and rigid. The dimensions of the plate shall be chosen to assure that the plate edges never make contact with the vehicle skin during testing. A typical width is 18 inches, and a typical length is 20 inches less that the length of the vehicle's roof measured along its longitudinal centerline.

(3) Place the force application plate in contact with the edge of the vehicle roof. Orient the plate so that its flat, rigid surface is perpendicular to a diagonal line connecting the most distant points on an interior cross section of the vehicle. The rear edge of the plate shall be positioned approximately 20 inches from the rear edge of the vehicle roof. A temporary stand may be used to support the plate until a force is applied.

(4) Apply an evenly distributed force in a diagonally downward direction through the force application plate at any rate not more than 0.5 inch per second, until a force of 500 pounds has been applied.

(5) Apply additional force in a diagonally downward direction through the force application plate at a rate of not more than 0.5 inch per second until the force specified in (a) has been applied, and maintain this application of force.

(6) Measure the diagonal movement of any point on the force application plate that occurred during the application of force in accordance with (b)(5) and open the emergency exits as specified in (a)(2).

(7) Release all diagonal force applied through the force application plate and operate the emergency exits as specified in (a)(2).

(c) Test Conditions: The following conditions apply to the requirements specified in (3).

(1) Temperature: The ambient temperature is between 32 degrees F and 90 degrees F.

(2) Windows and Doors: Vehicle windows, doors, and emergency exits are in the fully-closed position, and latched but not locked.

(d) An alternative method of testing for the racking load test shall be as follows:
The racking load shall be applied along a line connecting the most distant points on a transverse cross section of the bus interior. It produces a shear distortion of the cross section as shown in figure 2.

A representative method of loading that employs a hydraulic jack to load a two-frame test assembly is illustrated in figure 2.

The maximum jack load for the two-frame assembly is determined by the following formula:

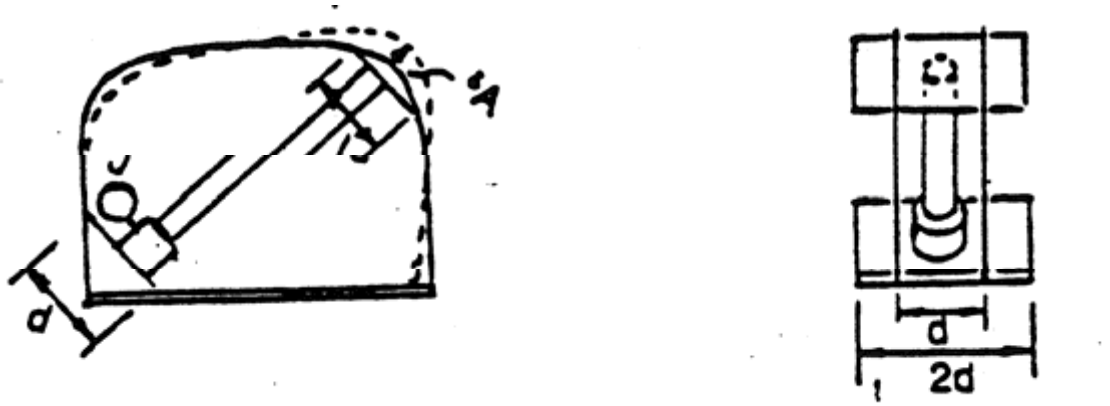
$J = 2P$ J - maximum jack load for two-frame test assembly
P = load/frame

where P = DVW divided by N
DVW - dynamic vehicle weight
N - total number of bus body frames

and DVW = DF x GVW
DF - dynamic factor, not less than 1.5
GVW - gross vehicle weight

Thus, for a DF = 1.5, a GVW = 22,000 pounds-force (lbf) and N= 11, the dynamic vehicle weight is DVW = 33,000 lbf, the load/frame is P = 3000 lbf and the maximum jack load is J = 6000 lbf.

When a complete bus body is rack-loaded, the total load DVW must be distributed uniformly along the bus body. This may be accomplished by mounting a series of hydraulic jacks along the length of the bus interior. Seats may be removed to facilitate jack mounting. The rack load will be considered to be uniformly distributed when the variation in the hydraulic jack readings is less than 10 percent. A maximum load is the sum of all jack readings and shall equal DVW.



Transverse Cross Section **Side View**

Figure 2. Arrangement of Hydraulic Jack for Rack-Loading of Two-Frame Assembly

The test may be performed on a complete bus body or on a representative section composed of at least two complete frames (body posts plus roof bows) and floor. Standard seats may be installed in the test section in a manner identical to that of the full bus body. Fabrication procedures for the test assembly shall be identical to those used in normal bus body production.

A two-cycle loading sequence shall be conducted, with intermediate and final load and deflection readings recorded according to the procedure described.

The maximum deflection in line with the jack (A, maximum) shall not exceed 4 inches.

Manufacturer shall specify which testing method was used and submit appropriate certification information.

KENTUCKY POLE TEST

The Kentucky Pole Test shall be required on or before the acceptance date of the first bus of the respective configuration.

TEST PROCEDURE

The body shall be impacted at any point along the roof line on the outside surface, using an 8 inch diameter cylinder, 48 inches long, at a 30 to 45 degree angle, 1 to 3 inches above the top window line. The cylinder shall impact the roofline with the 48 inches dimension in a vertical plane with a force not to exceed 10 inches maximum to 8 inches minimum penetration of the body panels into the passenger compartment after impact.

The manufacturer shall submit appropriate certification information.