



INTRODUCTION

TO THE

MINNESOTA STATE SCHOOL BUS PURCHASING PROGRAM

INTRODUCTION

This program may be used by Minnesota school districts for evaluating school bus purchases. If allowed by its district, the program may be used to replace the process of writing specifications and soliciting bids for each district when purchasing school buses. This document includes instructions for placing orders.

INSTRUCTIONS FOR USING THE STATE SCHOOL BUS PURCHASING PROGRAM

VEHICLES COVERED. This process is for Conventional (Type C) school buses with a passenger capacity from 35 to 77 passengers, and Transit (Type D) school buses with a passenger capacity from 47 to 84 passengers. This program also includes the handicap-equipped bus and allows for the disposal of the currently owned buses through the trade-in process.

PURPOSE. The purpose of this process is to save time and money for school districts when purchasing school buses. The system of writing specifications, advertising for bids, and the evaluation of the bids now has an alternative. The State issued a Request for Proposals to the chassis and body dealers. After careful evaluation of the proposals, the State made multiple awards to all dealers that participated in the process. This replaces the requirement for the bid process at the district level and allows the districts to evaluate school bus purchases on known competitive prices.

If allowed, a School District may eliminate the bid process and purchase from the vendors that provide the best overall value for that district. A district may determine value in a number of ways. This includes, but is not limited to, initial purchase price, options offered, condition of delivered vehicle, trade in price of existing used school bus, reliability of the product, inventory required to maintain the product, serviceability of the product, warranty and product support, dealer service support, location of supporting dealer, resale value, and vehicle life for that fleet.

Due to the number of options offered, each district can easily price the bus with the options they commonly purchase or desire to purchase for each brand of chassis and body.

REQUIREMENTS. This process is open to all school districts in the State of Minnesota. All districts desiring to purchase from this program must be members of the Cooperative Purchasing Venture (CPV), through the Minnesota Department of Administration, Materials Management Division (MMD). Membership in the CPV covers contracts managed by the MMD. Qualifications for participation are found in Minnesota Statutes 471.59, Subd. 1. Additional program information is available at: <http://www.mmd.admin.state.mn.us/coop.htm>.

DOCUMENT CONTENTS. The documents have two major sections. One is a specification in written form (in Microsoft Word format) that describes the school bus that is specified and includes the majority of options available on the school bus. This document is not to be skipped over, since it has a description of each option and describes the standard specified items.

The second portion is a spreadsheet (in Microsoft Excel format) that coordinates with the written specification. There is a spreadsheet of pricing from each of the participating dealers in this program. The price of the general specified bus is listed, along with prices for the options. The price of options added and deleted are calculated into your bus price by copying the cell with the price into the right column that is labeled "Your Bus." **IF OPTIONAL EQUIPMENT IS DEALER INSTALLED OR AFTERMARKET, VENDOR MUST INDICATE SAME ON PRICE SCHEDULE.**

INTRODUCTION

AREAS. The State is divided into five (5) geographical areas. Dealers are given the option to propose sales in any or all of the five areas. The top of each evaluation form (spreadsheet) indicates the areas in which that particular dealer elected to sell at these prices. At the end of this document, there is a page showing the five areas with the included counties listed in alphabetical order.

FILENAMES. The evaluation forms have a footer that lists the name of the Contract Vendor. The word documents that include the written specification are titled with the year (12), dealer name, conventional (Conv), or transit (Transit).

FILE FORMATS. The spreadsheet documents are in Microsoft Excel®, Version 2010. The Word documents are in Microsoft Word®, Version 2010.

AREA EVALUATIONS. When you evaluate a bus, first check the file name or check the top of the first page of the evaluation form, to assure that the Contract Vendor has chosen to sell in your area. The State is completely covered for each brand bus.

PLACING AN ORDER. The Buyer is encouraged to review its order with the Contract Vendor to assure there are no conflicts in the combination of options. Dealers may present problems with options too numerous to present in the proposal. Engineering and production problems may limit combinations of options. Options may affect delivery schedules. Always check with the dealer when placing the order. After you have reviewed your desired purchase with the dealer, and you have your School Board's approval, you place the purchase order with the desired dealer(s).

Before an order can be placed with this system, the school district must be listed as a member of the Cooperative Purchasing Venture (CPV) as registered by the Minnesota Department of Administration, Materials Management Division (MMD). The CPV program information can be found at: <http://www.mmd.admin.state.mn.us/coop.htm>

The CPV permit number is to be shown on the purchase order issued to the dealer. Without the CPV number, the order will not be processed. Please include the Contract numbers listed at the bottom of the spreadsheet with the written purchase order.

TRADE-INS. The process for handling the disposal of old buses has many options. If allowed by the School District, this program allows for the trade-in with the Contract Vendor of the old bus against the purchase of the new bus. The spread sheets are designed to calculate the trade in values, if its decided to trade them against a new school bus. If allowed by the School District, the buyer may also negotiate a price with another government entity, or offer them to the general public in a variety of ways. It is the buyer's responsibility to dispose of the bus per the requirements of its District.

TIME LIMITATIONS. In most cases, this proposal will be effective until about September, 2013, or upon notification from the Contract Vendor that the equipment is no longer available. A new program is expected approximately September of each year.

INTRODUCTION

SCHOOL DISTRICT SERVICE AREAS

AREA 1	AREA 2	AREA 3	AREA 4	AREA 5
Anoka	Blue Earth	Benton	Becker	Aitkin
Carver	Brown	Big Stone	Beltrami	Carlton
Dakota	Cottonwood	Chippewa	Cass	Cook
Hennepin	Dodge	Chisago	Clay	Itasca
Ramsey	Faribault	Douglas	Clearwater	Koochiching
Scott	Fillmore	Grant	Crow Wing	Lake
Washington	Freeborn	Isanti	Hubbard	Lake of the Woods
	Goodhue	Kanabec	Kittson	Pine
	Houston	Kandiyohi	Mahnomen	St. Louis
	Jackson	Lac Qui Parle	Marshall	
	LeSueur	McLeod	Norman	
	Lincoln	Meeker	Ottertail	
	Lyon	Mille Lacs	Pennington	
	Martin	Morrison	Polk	
	Mower	Pope	Red Lake	
	Murray	Renville	Roseau	
	Nicollet	Sherburne	Wadena	
	Nobles	Stearns	Wilkin	
	Olmsted	Stevens		
	Pipestone	Swift		
	Redwood	Todd		
	Rice	Traverse		
	Rock	Wright		
	Sibley	Yellow Medicine		
	Steele			
	Wabasha			
	Waseca			
	Watonwan			
	Winona			

Any questions regarding the program may be directed to one of the following:

Mr. Ken Kraft
Ind. School District 196
Phone: 651.423.7688 Fax: 651.423.7666
E-mail: kenneth.kraft@district196.org

Jackie Finger
Acquisitions – Materials Management
State of Minnesota
Jackie.finger@state.mn.us

Mr. B.J. Ison
Transportation Data Coordinator
Saint Paul Public Schools ISD #625
Direct: 651-744-8108
Cell: 651-334-8419
Fax: 651-265-0910
Email: bj.ison@spps.org

SPECIFICATIONS

for

**SCHOOL BUS
CONVENTIONAL BODY AND CHASSIS**

for

**SCHOOL DISTRICTS IN MINNESOTA
PURCHASING SCHOOL BUSES**

CONVENTIONAL TYPE C

It is the intent of these specifications that complete units shall be supplied with all items required by the state of Minnesota, and in conformity with all federal and state codes and laws governing the construction of and relating to school transportation equipment. Any specifications that vary from these specifications shall be requested at the pre-proposal meeting. The bus shall be proposed with all attachments and auxiliary equipment necessary to place it in operation and ready for service upon delivery.

The 2005 National Standards and Minnesota Laws and Regulations shall be used as the specification if not otherwise specified.

Areas:

The state is divided into 5 regions. Each proposer has the option of proposing in any and all regions they wish. Please indicate the regions in which you are offering proposals. If your pricing is different in different regions, please submit another set of pricing sheets.

All non-shaded lines on the spread sheet shall be filled in with a number, **STD**, indicating it is standard on the bus, or **NA**, indicating it is not available.

Indicate negative numbers with a "-" (minus) preceding the number.

Body sizes available:

Proposer is to list the body lengths available for the 35 to 77 passenger buses.

Passenger Capacity:

Proposer is to list the passenger capacity for the body proposed.

Seat Spacing:

Proposer is to list the factory rated seat spacing for the body and passenger capacity proposed.

Wheel Bases Available:

Proposer is to state all available or required wheel bases for the body proposed.

Aisle:

The aisles are to be covered with a 3/16" ribbed rubber-flooring material of a color that matches the remainder of the flooring material. The seams shall be flush fit and sealed with a silicone-like material. The intent is to prevent moisture from contacting the plywood.

Attention shall be given to assure the sealing material is not beaded to allow the material to be peeled off due to extended traffic. Silicone shall match floor color, if available.

Aisle Options:

Aluminum strips: The aluminum strip shall be fastened with a non-corrosive fastener.

Stainless Steel Strips: The strips shall be made of stainless steel and fastened to the floor with stainless steel screws.

Plastic strips: The strips shall be made of a plastic material that is tough enough to withstand the life expectancy of the bus. Non-corrosive fasteners should be used.

Galvalume strips: Galvalume strips shall be used to cover the seams.

Seamless aisle, one piece floor: The floor shall be a one-piece mat from front to back and side to side.

CONVENTIONAL TYPE C

Body Panels:

The exterior body panels shall be a metal-treated 20-gauge metal material, treated to resist rust and bond to paint. All rivets shall be treated similarly after installation for the same reason. The body panels shall extend to be approximately even with the center of the wheel hubs between the front and rear axles. The skirt may taper higher behind the rear axle. Internal body panels shall be 22-gauge material.

Body Panel Options, Exterior:

16 gauge: 16-gauge smooth material in lieu of 20 gauge side panels.

20 gauge reeded sides: A ribbed corrugated material, 20-gauge, in lieu of smooth side panels. This material is usually installed between the rub rails at approximately floor height.

16 gauge reeded sides: A ribbed corrugated material, 16-gauge, in lieu of smooth side panels. This material is usually installed between the rub rails at approximately floor height.

Ceiling:

The ceiling shall be insulated with at least 1-1/2" of insulation. Insulation shall fill all cavities of the roof area, including inside the roof bows. The ceiling panels shall be at least 22-gauge steel, with acoustical (perforated holes) panels the full length of the bus to deaden sound in the passenger compartment.

Ceiling Options:

Acoustical panels, front two panels only: The bus shall be provided with acoustical (perforated) panels in the front two ceiling panels, only.

Solid panels, full length: The elimination of all acoustical panels, providing smooth ceiling panels the full length of the bus.

2" Insulation in roof: The roof shall have installed a full 2" of insulation in a 2" space, the full length of the bus.

Floor:

Standard "rubber" flooring, including step treads, to be manufacturers' standard color.

There shall be an access panel in the floor or cowl area to allow access to upper bell housing bolts.

Rubber flooring shall be used in the driver's area, and over the wheel housings. The color of the wheel housing shall be stated.

5/8" exterior plywood: All floors shall be covered with exterior grade plywood or like material that will not separate due to moisture or age.

Floor Options:

Color option: Indicate color options with pricing.

Rubber flooring full length of the bus: The flooring shall be a rubber product the full length of the bus.

Vinyl flooring full length of the bus: The flooring shall be a vinyl product the full length of the bus.

Plywood, marine grade: Marine grade plywood to be provided in place of the exterior grade plywood in all portions of the floor.

Interior Options:

Padded shoulder rails: The area below the windows shall have a padded area of approximately 4", covered with seat covering type material.

CONVENTIONAL TYPE C

Seats:

42-oz. material: All seat coverings shall be 42-oz. vinyl fire retardant material of the color designated. There shall be no welting at the seams.

Color: The proposer shall indicate the standard color proposed.

Without welting: The seats cover seams shall not specify a welting in the seams as standard.

Seat Options:

52-oz. material, complete bus: The complete bus, excluding driver's seat, shall be equipped with 52 oz. vinyl fire retardant material.

Fire Block material: The complete bus, excluding driver's seat, shall be equipped with a fire block, (similar to Kevlar) material.

Double stitching on seams: All seams on the passenger seats shall be double stitched as they are sewed.

Welting on seams: All sewn seams shall have a welting between the material at the seams.

Color options: This shall offer a color other than manufacturer's standard.

High Back Seats, 28": The seats shall be 28" from the seat cushion to the top of the seat back.

Windows:

Tempered, clear: All glass is to be clear, tempered glass, on all side and rear windows.

Window Options:

Tempered, tint: All glass is to be tinted, tempered glass, on all side and rear windows.

Laminated, clear: All glass is to be clear, laminated glass, on all side and rear windows.

Laminated, tinted: All glass is to be tinted, laminated glass, on all side and rear windows.

Black sashes (complete bus): Black sash and frames shall be provided throughout the bus.

Black sashes (complete bus) with posts black: Black sash and frames shall be provided throughout the bus with the area between the window frames black.

12" Tempered clear side window with high headroom: This shall allow the top portion of the window to drop to a 12" opening. This may require a higher head room than standard.

12" Tempered tinted side window with high headroom: This shall allow the top portion of the window to drop to a 12" opening. This may require a higher head room than standard.

12" Laminated clear side window with high headroom: This shall allow the top portion of the window to drop to a 12" opening. This may require a higher head room than standard.

12" Laminated tinted side window with high headroom: This shall allow the top portion of the window to drop to a 12" opening. This may require a higher head room than standard.

Air Foil, Rear Option:

A rear air foil shall be installed to direct air down the rear of the bus to help keep the rear of the bus clear from road dirt. This shall be a factory designed addition that is tested and proven to be effective at speeds 20 mph. and above.

Back-up Warning Alarm Options:

Back-up Warning Alarm, 87 to 112 decibels variable output: A back-up alarm of approximately 87 to 112 variable-decibel output shall be mounted under the rear of the body. The unit shall be mounted above the rear axle area between the frame rails. All exposed wiring connections shall be soldered and weather-proof protected, and a plastic loom shall protect exposed wiring (outside the body) and protected and fastened so ice and snow will not pull on wiring.

Back-up Warning Alarm, 112 decibels: Same as above with 112 decibel level.

CONVENTIONAL TYPE C

Spring loaded off switch provided with Back-up Warning Alarm: The option of a spring loaded switch located in the driver's area, so the back-up alarm may be temporarily turned off for operations in shop areas and other sensitive areas.

Battery:

The battery shall be mounted in an exterior skirt compartment in a battery box located below the driver's seat (vestibule) area. The compartment shall include a door with a latch that can be opened without the use of tools, a slide out tray with a release catch, and a tray stop. The release catch shall be obvious or clearly marked so emergency personnel can easily slide out the tray if necessary.

Battery Options:

Key Lock on battery door: The battery door shall have a tumbler key type lock to secure the door. The lock shall be of a non-corrosive material.

Nylon rollers for tray: The tray shall slide on nylon rollers for easier movement of the tray.

Ball bearing rollers for tray: The tray shall slide on sealed ball bearing rollers for easier movement of the tray.

Stainless steel slide tray with roller bearings: The tray (only) shall be stainless steel, and provided with sealed roller bearings.

Box for two 8D batteries: The box shall be large enough in size and strong enough to support two 8D batteries.

Auxiliary battery box: An additional battery box with a slide-out tray shall be provided for use as the district requires.

Bumper (Rear):

The standard manufacturer's bumper is required.

Certification:

The bus shall be certified by the selling body dealer that the complete bus meets all Minnesota and federal standards. This shall be marked with the approved certification sticker properly placed in the windshield.

Color, Exterior:

The school bus shall be painted National School Bus Chrome Yellow according to federal and state specifications.

Color (Exterior) Options:

White Roofs: The roofs may be painted white from the front cap to the rear cap, with no white showing from the front or rear, and on the sides down to approximately 3" above the side windows.

Color, Interior:

Walls coloring: The color for walls shall be manufacturer's standard, indicated.

Wall panel material: The standard material of the inner wall panels shall be indicated.

Color (Interior) Options:

Optional wall colors: Other colors offered may be listed and priced.

Crossing Arm Options:

Specialty Electric w/plastic rod: The plastic rod shall be provided (58600).

Specialty Electric w/metal rod: The plastic rod shall be replaced with the metal loop (58105).

CONVENTIONAL TYPE C

Specialty Solid State Upgrade, w/plastic rod: Specialty electric upgrade to solid state electronics. (No heater required)

Specialty Air w/plastic rod: The electric unit shall be replaced with an air-operated unit (28500).

Specialty Air w/ metal rod: The air unit shall have a metal loop in lieu of plastic rod (28100).

Transpec electric w/plastic rod: Transpec brand electric operated with plastic rod.

Add electromagnet: The electromagnet installed on the bumper to prevent vibration when in the parked position, for either air or electric crossing arm, may be added.

Deactivation switch: There shall be a deactivation switch conveniently located to the driver to temporarily deactivate the crossing arm.

Electric heater in mechanism: An electric powered heater installed in the crossing arm assembly to aid in winter time operation. Available in electric powered units only.

Other: Other options provided, that are not listed.

Defroster:

90,000 Btu, full width defroster/heater:

Must maintain clear view of windshields: The defroster system for the bus must be designed to maintain a clear view of the windshield at an operating temperature of minus 30 degrees.

Two auxiliary fans: Two, approximately 6", defroster fans to be provided. A single switch for each fan shall be provided that is two-speed. The switches shall be mounted on the switch panel next to the fan switches for the heaters. The fans shall be located in the upper left corner of the windshield, and the upper center portion of the windshield. The fans shall not obstruct the view to the mirrors.

Defroster Options:

Additional fan: Additional two speed fan mounted in the upper right corner of the windshield, with a separate switch mounted in the switch panel.

Track mounted fan, passenger side: A track mounted fan that can be positioned anywhere on the track on the passenger's side of the bus.

Doors, entrance:

Electric operated, outward opening: The entrance doors shall be electrically operated, outward opening, with the front door overlapping the rear door at the sealing surface. The nose gasket shall be a soft rubber where the two doors come together. The door linkages shall be adjustable so each door may be independently adjusted. The door frames shall be such that the average driver can see the road surface $\frac{1}{4}$ mile from the bus on level terrain without lowering his/her head. The top windows shall be thermopane glass. The door opening linkage shall have an access panel that will allow access to all linkage for easy adjustment and repair. There must be an emergency release to open the door without using the switch.

Door (entrance) Options:

Air powered: (Air supplied by vehicle) Air powered controls in lieu of manually operated. Controls must be positioned in a location agreeable with state inspectors.

Air powered, if no air supply: This option will require the addition of an air supply system, along with the air controls. This is to include an engine driven compressor and a comparable air dryer.

Manual operated: There shall be a manually operated door control. The linkage shall be designed to require a minimal amount of effort through the complete travel of the door.

Hinged access panel to door controls: The access panel that covers the door linkage shall be easily opened and one side of the panel shall be hinged for faster opening.

CONVENTIONAL TYPE C

Exterior door release, Mechanical: There shall be a means to release the manually operated front entrance door from the exterior of the bus.

Exterior door release, Electrical: There shall be a means to release the electrically operated front entrance door from the exterior of the bus.

Exterior door release, Air: There shall be a means to release the air-operated front entrance door from the exterior of the bus.

Vandal locks, front: The unit shall be equipped with a tumbler type locking handle to secure the front door from the outside of the bus.

Vandal lock for electric doors: There shall be a key-operated switch located outside the bus that allows the bus entrance door to open and close electrically. This shall allow the bus to be secured from the front door.

Vandal lock for air doors: There shall be a key-operated switch located outside the bus that allows the bus entrance door to open and close electrical/air. This shall allow the bus to be secured from the front door.

Three position door control, Air: There shall be a three-position switch for the driver to activate the eight way lights without opening the door, which may be convenient for cold weather operations.

8-way override switch for air doors: An override switch shall be provided for the air door operation so the eight-way lights can be activated without fully opening the entrance door. (The state school bus inspectors must approve this option before the order is placed.)

Doors, emergency:

Lube able hinges: The hinge pins for the emergency door must have a means to lubricate the inner portion of the hinge wraps. It is preferred this be accomplished through means of a hollow pin lubrication port, and grease zerk. Whatever the means used, it must be a positive lubrication system with a grease zerk.

Emergency door glass: There shall be an upper and lower glass in the emergency door.

Doors (emergency) Options:

Hidden emergency door hinges: The lubeable emergency door hinges shall not be exposed to the elements of the weather. All components shall be on the inside of the body from the sealing gasket of the rear door.

Stainless Steel hinges: The hinges for the rear door shall be made of stainless steel to minimize rust.

Rear emergency door thermopane glass, top: The rear door shall provide a thermopane in the top window of the rear emergency door.

Rear emergency door thermopane glass, bottom: The rear door shall provide a thermopane in the bottom window of the rear emergency door.

Rear emergency door thermopane glass, top and bottom: The rear door shall provide a thermopane in the top and bottom window of the rear emergency door.

Rear emergency door thermopane laminated glass, top: The rear door shall provide a laminated thermopane in the top window of the rear emergency door.

Rear emergency door thermopane laminated glass, bottom: The rear door shall provide a laminated thermopane in the bottom window of the rear emergency door.

Rear emergency door thermopane laminated glass, top and bottom: The rear door shall provide a laminated thermopane in the top and bottom window of the rear emergency door.

Lower door glass guard: There shall be a lower door glass guard installed that covers the window from the inside. This is to protect the glass from breakage from the inside.

Vandal locks, rear: The unit shall be equipped with rear door vandal locks so the bus may be secured. The lock at the rear doors shall be connected into an ignition interlock system so the bus may not be operated with the door locked with this system.

CONVENTIONAL TYPE C

Emergency Equipment:

state and federal specifications as they pertain to school bus equipment.

Fire Extinguisher:

Heavy-duty commercial type rechargeable: The fire extinguisher, 5 lb.-2A10BC, shall meet state and federal specifications, and shall be rechargeable.

Fire Extinguisher Options:

List optional fire extinguisher sizes offered.

Emergency Exits:

Per state specifications.

Roof Hatch:

Minimum required: The roof hatches must meet the minimum specifications as required by law for quantity and design. All roof hatches must be able to open from the bottom and topside. The roof hatch must have multi-position vent capabilities. Indicate standard hatch proposed.

Roof Hatch Options:

Roof hatches: An additional roof hatch installed equivalent to standard proposed model.

Prices quoted are for the difference from the standard proposed roof hatch to the specified hatch below, for two units (not each).

Transpec 1100 Triple Value: Transpec 1100 Triple Value in place of the standard specification.

Transpec 1900 Economy: Transpec 1900 Economy in place of the standard specification.

Transpec 1600 w/power vent: Transpec 1600 with Power Vent, in place of the standard specification.

Specialty 9245 ProLo w/o vent: Specialty 9245 Low Profile without vent.

Side Window Exits:

Minimum required: The minimum number of exit windows required by law to meet FMVSS 217. The windows shall be hinged at the front.

Side Window Exit Options:

Top mounted hinges on emergency windows: This option shall provide top-mounted hinges in lieu of front-mounted hinges on all emergency windows.

Extra windows per set, top-mounted: This shall require an additional top mounted hinged window on each side of the bus to be used as an emergency exit. The price shall include a window on each side, or for two windows.

Extra windows per set, front-mounted: This shall require an additional front-mounted hinged window on each side of the bus to be used as an emergency exit. The price shall include a window on each side, or for two windows.

Heaters:

50k heater in entrance door.

90k for drivers heater/defroster, full width.

50k under seat heater, mid ship.

80k under seat heater, rear.

Ball cock shut off valve in driver's area.

CONVENTIONAL TYPE C

Ball cock shut off valve in engine compartment.

Air inlet filters shall be installed on all heaters to filter the air prior to air entering the heater core.

The air filters shall be accessible and removable for cleaning.

Heater Options:

Mid-ship heater, 80k: in lieu of 50k heater.

Radiant heat, installed on the left and right side of the bus, full length: Cores must be protected from being damaged or tampered by students.

Additional 50k rear heater.

Additional 80k rear heater.

Booster pump. A booster pump shall be installed in the heater line for better circulation when running.

Silicone heater hose with constant torque clamps: Silicone hoses and constant torque clamps are to be used on all body heater lines, starting at the engine.

Goodyear 'Hi-Miler' hose: Goodyear Hi-Miler hose is to be used on all body heater lines, starting at the engine.

Goodyear 'Blue Stripe' hose: Goodyear Blue Stripe hose is to be used on all body heater lines, starting at the engine.

Constant Torque clamps: To be used on all heater lines.

Parallel heater circuit: The front left and right heaters shall be plumbed in parallel.

Series heater circuit: The front left and right heaters shall be plumbed in series.

Delete mid-ship heater: The mid ship heater shall be eliminated.

Cable control to water shut off to heaters for driver: There shall be a cable shut off for the water flow located in the driver's area that is convenient for the driver to operate. This shall be a reliable long life system isolated from the elements of corrosion.

Thermostatically controlled water shut off: There shall be an automatically controlled thermostatically regulated water shut-off located in the driver's area.

Factory installed integrated driver A/C: Dash air conditioning for the driver area shall be factory installed with the chassis manufacturer.

Factory installed A/C: Complete bus air conditioning system shall be factory installed.

Aftermarket A/C system: An aftermarket complete bus air conditioning system installed after the bus is manufactured. The brand and BTU output shall be indicated.

Auxiliary Heater Options: In box-mounted.

Wabasto heater: The bus shall be equipped with a standard sized Wabasto auxiliary heater mounted in a skirt compartment to the rear of the battery box. All installation shall be according to manufacturer's recommendations.

Espar heater: The bus shall be equipped with a standard sized Espar auxiliary heater mounted in a skirt compartment to the rear of the battery box. All installation shall be according to manufacturer's recommendations.

Pro-Heat heater: The bus shall be equipped with a standard sized Pro-Heat auxiliary heater mounted in a skirt compartment to the rear of the battery box. All installation shall be according to manufacturer's recommendations.

24-hour timer for auxiliary heater: A 24-hour timer shall be installed to activate the auxiliary heater at a preset time. The timer shall be an approved option, authorized for use by the heater's manufacturer.

7-day timer for auxiliary heater: A 7-day timer shall be installed to activate the auxiliary heater at a preset time. The timer shall be an approved option, authorized for use by the heater's manufacturer.

CONVENTIONAL TYPE C

Skirt mounted box with slide out tray: An additional skirt mounted box, mounted to the rear of the original battery box, with a slide out tray. This shall be a box that may be used for an auxiliary heater.

Identification:

Per state specifications: All identifying markings shall be according to state law. Complete bus belt-line lettering and numbers per district specifications and all lettering required by law including passenger capacity and fuel capacity are to be included in the proposed price, with vinyl-cut letters and numbers.

Identification Options:

Lettering, vinyl, per character 6": This is a pricing of each 6" character in addition to the required lettering.

Lettering, vinyl, per character 2": This is a pricing of lettering to be used inside or out that requires 2" lettering, in addition to the required lettering.

Black beltline: The belt line shall be painted black with yellow lettering.

Flip sign front and rear: A flip type sign indicating school bus/charter that is easily changed by the driver.

Transpec emergency door sign: A Transpec 7500 emergency door sign shall be installed.

Transpec emergency door sign with monitor: A Transpec 7500 emergency door sign with monitor shall be installed.

Inside Height:

73" at aisle, minimum: The ceiling height at the center of the bus, above the center aisle shall be a minimum of 73". Indicate standard height.

Inside Height Options:

Optional height: The vendor shall state the optional height offered. This dimension shall be measured at the minimum dimension from the front of the center aisle to one foot from the emergency door in the rear. The measurement shall be taken at the center of the aisle, from the top of the ribbing to the bottom of the ceiling panel. The maximum window opening with the top panel lowered completely shall be indicated.

Insulation:

1-1/2" fiberglass: All side panels, and rear panels shall be insulated with 1-1/2" insulation. The insulation shall be fastened or constructed of a material that will not sag or compact over a 12-year life cycle of the bus. Insulation above a perforated roof liner shall not allow fibers to penetrate through the perforations. All roof and body bows are to be insulated, assuring insulation through the complete body, no voids.

Insulation Options:

2" insulation: This provision shall require 2" of insulation in place of 1-1/2". (This may not increase the insulating factor.)

Foam insulation under floor: The vendor shall state the thickness of sprayed insulation, and the percentage of the floor that is realistically covered.

Noise reduction spray on all panels, roof and sides, inner and outer: This option shall require a material be sprayed on the inner (insulation) side of the inner panels to deaden the resonance of the panels due to noise and road vibration.

Foam insulation under floor perimeter: The outer perimeter of the under-floor area shall be sprayed with a foam insulation to seal the intersection of the floor and side panels.

CONVENTIONAL TYPE C

Sound abatement/insulation on firewall: The firewall shall be factory insulated or sprayed to dampen noise in the driver's area.

Interior:

Dome lights: Dome lights shall be ceiling-mounted, spread (approximately) evenly from front to rear in pairs, one on each side.

Drivers dome, on separate switch: The driver's dome light shall be a standard light, mounted either in the center of the bus over the driver, or on the driver's side of the bus in the headliner panel. This light shall be powered by a separate switch.

Rear two dome lights on separate switch: The rear two dome lights shall be powered by a separate switch.

Interior mirror and visor: The inside (student view) mirror shall be a standard 6" x 30" adjustable mirror. There shall be a fold down visor, darkened transparent, that is fully adjustable, approximately the same size as the mirror.

Interior Options:

Oversize driver's dome light: The drivers dome light shall be an oversized light versus the standard dome light.

8" x 30" overhead mirror: This shall provide a 8" x 30" mirror in place of the 6" x 30" mirror.

10" x 30" overhead mirror: This shall provide a 10" x 30" mirror in place of the 6" x 30" mirror.

Additional dome switch and circuit: An additional dome light switch and circuit shall be provided to split the dome light load.

Dome lights, additional per pair: Dome lights may be added, in sets of two.

Rear scope lens for rear door: This requires the rear scope for better visibility outside the rear of the bus. The lens shall be attached to the bottom portion of the emergency door upper glass.

Window stop line painted black: There shall be a black line painted on each window post to mark approximately a 3" opening of the window.

Auxiliary power plug: A 12 volt power plug shall be provided in the drivers area for auxiliary power. The plug shall be located so a cord does not interfere with the steering wheel area or other basic functions of the driver.

Video camera power supply: There shall be a power source in the bulkhead area with the purpose of supplying power to a video camera system.

Video camera system, color: A video camera system that can record in color shall be installed.

Digital video camera system, color: A digital video camera system that can record in color shall be installed.

Digital video camera system, black and white: A digital video camera system that can record in black and white shall be installed.

Additional camera: An additional camera installed in the bus recording on the same media system shall be installed.

Child check system: A child check system as a reminder for the driver to walk the interior of the bus shall be installed. The type of system shall be indicated.

Bulk head door with glass for camera: The bulk-head door shall have a glass that is intended to protect the camera lens. It may be clear or mirrored.

Lamps and Signals:

Side turn signals: Turn signals on the side of the bus, located behind the stop sign on the left, and behind the entrance door on the right shall be mounted and operational with the regular signals. The intent is providing warning to traffic beside the bus, vehicles that cannot see the front or rear signals.

CONVENTIONAL TYPE C

Circuit breakers: All body circuits shall be circuit breaker protected with solid state circuit protectors.

8 light flasher unit: 8-light flasher unit shall be indicated.

Light assembly brand used: The brand of clearance and rear lights shall be stated.

Clearance lights connected to tail lights. This option shall assure the clearance lights are on anytime the tail lights are lit. This eliminates a separate switch for the clearance lights.

Lamps and Signals Options:

Cowl mounted front signal, w/ arrow: A signal light assembly, with an arrow in the lens, is to be cowl-mounted, just below the windshield, one on each side.

Cowl mounted front signal, w/o arrow: A signal light assembly, without an arrow in the lens, is to be cowl-mounted, just below the windshield, one on each side.

Roof mounted low profile strobe light: A roof mounted low profile strobe light is to be mounted according to state specification, towards the rear of the bus, on the centerline. Maximum height is to be 2-3/4".

Self Contained Strobe light: A self contained strobe light mounted according to state specifications may be quoted. The brand, model, and height are to be stated.

Strobe light with remote power supply: The strobe light may have a remote mounted power supply, providing a lower profile. Indicate brand, model, and height.

Metal protective shields for all marker lights: Metal protective shields shall be installed on all roof line marker lights. This is to protect the lenses from damage in tree line areas.

Dome lights activated by emergency door: This option shall turn on all dome lights anytime the emergency door buzzer is activated, to provide a lighted interior for a safer exit.

Red light above emergency door: A red light shall be installed above the emergency door in accordance to regulations for a charter bus.

Back-up lights activated by emergency door: This option shall turn on the back-up lights anytime the emergency door is opened. This is to provide light at the rear of the bus for a better exit.

Back-up lights, 7": 7" back up lights shall be provided in lieu of the standard smaller diameter lights.

LED back up lights: The back up lights shall be LED type in lieu of the standard back up lights. The size of the light shall be indicated.

Entrance door outside light connected to step well light: An additional light shall be mounted just behind the entrance door, with a hood over the top half of the light. The intent is to light the ground area when the door is open, without causing a distraction into the mirrors or to the motoring public.

All lights LED: All exterior lights on the bus shall be LED design.

LED signal lights, tail lights, and BU lights: LED style signal lights, tail lights, and BU lights are to be provided on the rear of the bus.

LED signal lights and tail lights: LED style signal lights and tail lights are to be provided on the rear of the bus.

LED tail lights: LED style tail lights are to be provided on the rear of the bus.

LED clearance lights: LED style clearance lights are to be provided on all clearance lights on the roofline of the bus. Connections shall be protected with di-electric grease, and grounds shall be protected from corrosion.

LED rear turn lights only: The rear turn lights only shall be LED design.

LED front turn lights only: The front turn lights only shall be LED design.

LED stop/tail 4", and back upon only: The 4" stop/tail lights and the two back up lights only shall be LED design.

LED back up lights: LED style back up lights are to be provided on the rear of the bus.

CONVENTIONAL TYPE C

8-Light monitor: A driver compartment light monitor is to be installed that indicates to the driver when designated lights are on. 8-light monitor.

16-Light monitor: A driver compartment light monitor is to be installed that indicates to the driver when designated lights are on. 16-light monitor minimum.

Other 8-light flasher unit offered: Another flasher unit (not Weldon 7000) may be offered, indicate brand and model.

8-light hoods: Metal hoods over the 8-way lights are to be installed in all 4 locations. The hoods shall be of a color that conforms to the color requirements for that area.

Delete 8-light hoods: This allows for the elimination of the 8-light hoods if they are provided as standard.

8-way lights with strobes: The 8-way lights are to be strobe type lights. Must be approved by state inspectors.

8-way LED lights: The 8-way LED lights must be approved by state inspectors.

Weldon light assemblies: All light assemblies on the exterior of the bus must be Weldon brand light assemblies and lenses.

Fender mounted LED light: The front fenders shall have LED signal lights mounted either on the fender or molded into the fender.

Two side signal lights per side: Two side turn signals mounted on each side of the body, one near the front and one over the rear axle area. Lights shall be mounted just below the rub rail at the bottom of the beltline.

Other brand light assemblies: Indicate brand.

Metal treatment:

Per state specification

Mirrors:

To meet federal regulations

Mirrors Options:

Heated mirrors: Heating elements mounted in the mirror head that heats the head to prevent icing and frosting of the glass. All mirror, rear view, and crossover mirrors shall be heated.

6-1/2" x 10" flat and 6-1/2" x 10" convex (black): in lieu of 6" x 16" mirror.

6-1/2" x 10" flat and 6-1/2" x 10" convex (stainless): in lieu of 6" x 16" mirror.

7" x 16" mirror heads:

Crossover mirrors and brackets: This shall be priced in black.

Crossover mirrors and brackets: This shall be priced in stainless steel.

Rosco, black:

Rosco, stainless:

Busboy, black:

Busboy, stainless:

Other mirror offerings: Any other brand of mirrors that are offered may be quoted.

Remote operated mirrors: The rear view mirrors only shall be adjusted by a control box in the driver's compartment.

Remote operated heated mirrors: The rear view mirrors only shall be heated, and adjusted by a control box in the driver's compartment.

Heated mirror timer: There shall be a timer for the heated mirrors so they will shut off after a determined time frame.

Mounting of body:

Cushion material between chassis and body: The proposer is to state the material that is used between the body cross members and the chassis frame.

CONVENTIONAL TYPE C

Flat clamp, # of bolts per clamp: Proposer is to indicate the number of bolts per clamp.

Mounting (Body) Options:

U-Bolt mounting system addition: A series of 'U-Bolts' shall be added to the mounting system. U-Bolts shall be added at least one on each side installed approximately every 10 feet. They may be installed closer.

Sunshield:

6" x 30" fully adjustable, green: A sunshield shall be provided that is 6" x 30" for the driver. The shield shall be fully adjustable with friction washers and wing nuts so the driver can adjust the visor and hold it in any reasonable position without the use of tools.

Sunshield Options:

10" x 30" driver's side shield: a 10" x 30" visor shall be provided in place of the 6" x 30" visor.

6" x 24" driver's side shield: a 6" x 24" visor shall be provided in place of the 6" x 30" visor.

6" x 30" right side shield: A sunshield, equal to the one on the driver's side, shall be installed on the passenger side of the windshield.

10" x 30" right side shield: An oversized sunshield, equal to the one on the driver's side, shall be installed on the passenger side of the windshield.

Opaque black: An opaque black shield shall be used in place of the 6" x 30" green shield.

Additional side visor: This is to provide an additional visor for the driver's side sliding window, with all requirements of the driver's visor.

Track mounted visor, driver side: The driver side visor shall be track mounted for additional adjustment.

Track mounted visor, passenger side: The passenger side visor shall be track mounted for additional adjustment.

Radios:

AM/FM with digital clock, integral PA, and 4 speakers: An AM/FM radio with digital clock and integral PA system shall be provided. The internal/external PA system shall have a speaker mounted externally above the drivers sliding window. The radio shall have 4 speakers roof (flush) mounted, evenly distributed throughout the bus. The system shall be set up such that when the internal speakers are on for the PA, the radio is blocked out. Clock is lit with the radio switch in the "off" position, and the ignition switch in the "on" position. The external PA speaker shall be roof mounted.

Radio Options:

AM/FM with cassette and PA system, 4 speakers: An AM/FM radio complete with cassette player and internal/external PA system with 4 speakers. The PA system shall kill the internal radio system for the internal PA address.

AM/FM with cassette and PA system, 8 speakers: An AM/FM radio complete with cassette player and internal/external PA system with 8 speakers. The PA system shall kill the internal radio system for the internal PA address.

AM/FM with CD and PA system, 4 speakers: An AM/FM radio complete with CD and internal/external PA system, 4 speakers. The PA system shall kill the internal radio system for the internal PA address.

AM/FM with cassette player: An AM/FM radio complete with cassette player.

AM/FM with CD: An AM/FM radio complete with CD.

AM/FM with digital clock w/o PA: An AM/FM radio with digital clock shall be provided, without a PA system.

Radio delete: The radio option is totally deleted.

CONVENTIONAL TYPE C

6 speakers: 6 speakers, flush mounted shall be installed and wired in place of 4 speakers.

8 speakers: 8 speakers, flush mounted shall be installed and wired in place of 4 speakers.

Tamper-proof screws for speakers: Tamper proof screws are to be used on all speakers to prevent the possibility of students removing speaker screws.

PA System: A PA system, without radio, including 4 inside speakers, and one outside speaker.

Delete External PA Horn: The total elimination of a PA horn.

External PA speaker mounted in engine compartment: The PA speaker shall be mounted in the engine compartment instead of externally mounted.

Momentary noise suppression switch: There shall be a conveniently located temporary switch so the driver can eliminate the radio noise while at a railroad crossing, or other event where the elimination of the radio is only temporary.

Rubrails:

4 required: One rubrail required just below the windows, one at seat cushion height, one at approximately floor line, and one at the bottom of the skirt.

16-gauge steel: All rubrails are to be constructed of 16-gauge steel, and have two corrugations. Any variances from this design shall be stated in comments.

One wrap around to rear of bus: The rubrail that is at seat cushion height shall wrap around the rear of the bus to near the emergency doorframe.

Rubrails Options:

Additional rubrail: An additional rubrail may be installed at the floor line area.

Additional wrap around rubrail: An additional rear wrap around rub rail is to be used on each side.

Caulking top of exterior rubrails: The top of all exterior side rub rails shall have a bead of caulking to eliminate moisture from entering the rear area of the rubrail from the top.

Seat Belt for Driver:

3 point retractable: The driver's seat belt shall be a 3-point attachment, with lap belt and shoulder belt. The system shall be accommodating to a floating seat, so if the seat settles in rough terrain, it does not tighten permanently on the driver's lap.

Seat Belt for Driver Options:

Vertical adjustment for shoulder belt anchor: This shall provide a means to easily change the anchor pivot for the top of the shoulder belt. This is to accommodate different size drivers for positioning of the shoulder strap contact point. This is considered for safety and comfort.

Seat-integrated shoulder strap: The driver seat shall have the shoulder strap integrated within the seat back.

Drivers Seat:

High back on solid mount: The seat shall be a high-back seat that extends to approximately the middle of the head on an average driver (85% adult equivalent). The solid mount shall have a means to adjust the height of the base.

5" min. slide adjustment: The minimum slide adjustment for the seat shall be 5".

Fabric insert upholstery: The flat portion of the seat cushion and the front vertical area of the seat back shall be a fabric material that will be more comfortable for the driver than standard vinyl.

CONVENTIONAL TYPE C

Drivers Seat Options:

Bostrom Routemaster, air, high back, chassis air: Air ride seat suspension. This option is with a chassis that has an air supply available for options.

Bostrom Routemaster, spring suspension, high back: Spring ride seat suspension.

Magnum 200: Spring suspension.

Magnum 222: Air suspension.

National seat: Air ride seat suspension with chassis air.

National seat, adj. back rest: Seat frame with the ability to adjust the angle of the back rest.

National suspension seat with integrated belt: Seat with integrated shoulder and seat belt.

Seats Inc.: Air ride suspension type seat with chassis air.

Armrest: An armrest on one side of the seat is to be provided.

Two arm rests: An armrest on each side of the seat shall be provided.

Self-contained air ride pedestal (for hydraulic brakes): For the use of the air seat, a small 12 volt compressor with air lines and permanent electrical connections shall be installed in an area that is concealed, and serviceable.

Storage pouch: The drivers seating area shall have a storage pouch for placing documents or route maps.

Seat and Crash Barriers:

42 oz.: All seat materials shall be constructed of 42 oz. vinyl, fire retardant material.

39" crash barriers on each side: Each side of the bus, in front of the front seat, shall have a crash barrier that is 39" wide. This shall be floor mounted and padded equivalent to the seat back padding.

Seat and Crash Barriers Options:

Modesty panel below one crash barrier, left: One modesty panel shall have a metal panel from the bottom of the left panel to the floor.

Modesty panel below one crash barrier, right: One modesty panel shall have a metal panel from the bottom of the right panel to the floor.

Barrier storage pouch, each: A storage pouch shall be sewn into the front of the cover for storage of soft items. Priced each.

C. E. White child restraint seats, each, 30": Price per seat, for a C. E. White child restraint seat, that has the fold down seat back panel and straps to convert a regular bus seat to a child seat. (This seat may alter knee room spacing and maximum capacity of the bus.)

C. E. White child restraint seats, each, 39": Price per seat, for a C. E. White child restraint seat, that has the fold down seat back panel and straps to convert a regular bus seat to a child seat. (This seat may alter knee room spacing and maximum capacity of the bus.)

Seat belt ready seats with seat belts, each: Each seat, priced separately, shall be a seat manufactured, installed and equipped with seat belts.

Seat with belts, each 39":

Seat with belts, each 26":

Seat with belts, each 30":

Seat with belts, each 36":

Seat belt ready seats without seat belts, each: Each seat, priced separately, shall be a seat manufactured, installed but equipped **without** seat belts.

Seat without belts, each 39":

Seat without belts, each 26":

Seat without belts, each 30":

Seat without belts, each 36":

Standard seat: The seats shall be quoted separately for standard construction seats, other than 39" seats.

CONVENTIONAL TYPE C

Seat, each 26":

Seat, each 30":

Seat, each 36":

IMMI Safeguard brand seats with shoulder and lap belts:

Seat, each 30":

Seat, each 37.5":

Seat, each 45":

Child restraint system for IMMI seat:

IMMI child restraint system with lap/shoulder belt for one system per seat.

IMMI child restraint system with lap/shoulder belt for two systems per seat.

Delete standard seat: 39"

Delete standard seat: 36"

Delete standard seat: 30"

Delete standard seat: 26"

Seat/barrier combination: 30" seat with a 39" barrier.

Universal ISO latch for baby carrier: Priced per latch. Belts are required for each position.

High Back Seats: 39" each.

High Back Barrier: 39" each.

High Back Barrier: 39" track mounted.

IMMI Safeguard Flex Seat:

Steps:

3-step stepwell: All step wells shall be a 3-step design.

Steps Options:

Forward handrail (Right side): There shall be a handrail installed on the front side of the step well.

Step well sound abatement: The step well shall be insulated by a means to decrease road noise transferred through this area.

Stainless steel step well: The complete step well insert attached to the floor shall be made of stainless steel.

Step Treads:

16 gauge backing metal: The step treads shall have a metal backing that is a minimum of 16-gauge metal. The metal must have a process to retard deterioration due to rust.

White nosing on treads: The first portion (approximately 2") of the step tread shall be white, so it contrasts with the rest of the step tread color.

Matching step treads: The step treads are to match the flooring color.

Non-skid material on nose area: The white nosing area must consist of a non-skid material that is not slippery, to help prevent slips and falls on the steps.

Step Treads Options:

Black treads: The color of the step treads, less the nosing area, may be black.

Premium non-skid nosing material: A premium non-skid material that is rougher and more durable than the standard non-skid nosing material.

Korseal Pebble step tread: A Korseal pebble step tread shall be used on the bottom two steps.

Heated bottom step tread: The bottom step tread shall be heated to help remove snow and ice from building on the step.

Heated bottom two step treads: Two step treads shall be heated to help remove snow and ice from building on the bottom two steps.

CONVENTIONAL TYPE C

Stirrup Steps:

There shall be a fold down stirrup step on the lower portion of the cowl posts ("A" posts) to aid the drivers in cleaning the windshield.

Stirrup Steps Options:

Grab handle, Black/Chrome: A grab handle located above the stirrup step, at approximately lower windshield height shall be installed on each side to assist the driver when using the steps. The handles shall be priced in chrome and/or black finish.

Rubber kick backing on cowl: The area behind the stirrup steps shall have a rubber backing firmly and permanently attached to the post area. The area covered shall be determined by performance purpose, and aesthetically blend.

Stop Signal Arm:

Electric operated w/lights, manufacturer's standard with reflective signs.

Stop Signal Arm Options:

Specialty electric w/lighted stop: 5500

Specialty electric w/lights: 5500C

Specialty electric w/strobe stop: 5560

Specialty electric w/LED cluster:

Specialty air powered w/lights: 2500

Specialty air powered w/led: 2200

Specialty electric w/LED strobe lights: 2380C

Specialty air powered w/strobe: 2560

Specialty air w/LED lights: 2970C

Specialty electric w/LED strobe lights: 5980C

Specialty solid state mechanism: 6500

Specialty solid state mechanism w/strobe: 6500

Transpec electric w/lights: 6000-100-E11

Transpec electric w/LED: 7000-100-E31

Transpec: 6000-11-E11 electric

Transpec: 6000-11-E31 electric

Transpec: 7000-11-E31 electric

Transpec: 7000-11-E31 electric, LED dual

Strobe lights vs. regular lights:

Additional specified stop arm on rear: (Requires approval from the Department of Public Safety.)

High intensity Scotch Lite blades:

Stainless Steel Fasteners:

Other:

Storage Compartment:

Bulkhead storage compartment with top hinge door: There shall be a bulkhead storage compartment with a latch and a top mounted hinge.

Storage Compartment Options:

Lockable door: The bulkhead storage compartment shall have a key lock to secure valuables. (No emergency equipment can be stored in this area with this option.)

Auxiliary storage compartment: There shall be an additional storage compartment for personal items located above the driver's area.

CONVENTIONAL TYPE C

Left side compartment, above driver, non-lockable:

Left side compartment, above driver, lockable:

Luggage compartment: An under floor luggage compartment shall be installed in the skirt area. The common sizes available and the location shall be stated.

Undercoating:

Complete underside, prior to mounting on chassis: The complete underside of the bus shall be factory undercoated to prevent rust, seal all lower parts of the bus from dust, and help sound proof the floor. This is to include hard-to-reach places, above frame rails, above flanges, etc. during the undercoating process. The selling dealer, at the district location shall repair any area found not covered by the receiving district.

Undercoating/rust proofing Options:

Undercoating/rust proofing of inside of emergency door: The inside of the emergency door shall be undercoated, across the full width of the door, from the bottom of the door to approximately 12" from the bottom.

Undercoat/rust proofing inside of rear panels, just above floor line: Both sides of the bus, from the emergency door frame to the corner, shall have the inner panels, inner liner and outside panel, undercoated. The undercoating shall be full width, and start as low as possible, approximately floor line, and extend upward approximately 12". This should be done at the factory before the insulation is installed.

Ventilation:

Roof center mounted non-closing vent located near front: There shall be a non closing roof vent located near the front of the roof, located on the center line of the bus.

Wheel Housing:

Color-coded to the floor material: The covering on the wheel housings shall be manufacturer's standard, indicated on the proposal form.

Wheel Housing Option:

Black covering: If the manufacturer does not provide color-coded flooring over wheel housings, they may provide manufacturers standard black floor covering. Proposer may also offer an option of black floor covering if it's available.

Metal fender (wheel housing) extensions on rear wheels only: Externally mounted metal wheel housing fenderettes shall be installed at rear wheel locations.

Rubber fender (wheel housing) extensions on rear wheels only: Externally mounted rubber wheel housing fenderettes shall be installed at rear wheel locations.

Mud flaps: Mud flaps of standard rubber shall be installed behind the rear axle.

Mud flaps: Mud flaps of standard rubber shall be installed behind the front axle.

Mud flaps: Mud flap installed the full width of the bus behind the rear axle.

Windows, Thermopane:

Driver's side sliding window: The sliding to the left of the driver shall be thermopane.

Upper entrance door glass: The upper portion of the entrance door glass shall be thermopane.

First right window: The first windows, both upper and lower, on the right side, just rear of the entrance door shall be thermopane.

CONVENTIONAL TYPE C

Window Options:

Thermo side window, each complete: The addition of thermopane windows, both top and bottom, in a location determined by the district.

Thermo lower entrance door glass: The lower entrance door glass shall be thermopane glass.

Lower right side vision window, ahead of entrance door: There shall be a vision window installed above the floor line, in front of the driver's door.

Front thermopane stationary glass, left and right side: The front side windows on both sides shall be thermopane both top and bottom.

Window stops for side windows, 3", 5", & 8.5" available: There shall be stops placed on the posts to indicate the maximum opening the window should be lowered.

Windshield:

Tint only: The windshield shall be tinted throughout.

One, Two, Three, or Four piece windshield: The windshield of the bus may be One, Two, Three, or Four piece glass. Indicate configuration.

Windshield Options:

Tinted w/shaded top: The windshield shall be tinted and provide a shaded strip from the top of the windshield to approximately 6" down from the top of the windshield.

One piece curved, with tinted glass: A one piece curved windshield extending from post to post.

Two piece curved, with tint: Two-piece curved windshield with tint throughout.

Three piece windshield, tinted: A three piece tinted combination shall make up the windshield.

Four piece windshield, tinted: A four piece tinted combination shall make up the windshield.

Windshield Washers:

Wiper mounted, wet arm: This requires the washer nozzles to be mounted on the wiper arm, approximately at the center of the arm. A nozzle shall be aimed each way from the center to wet the complete area of wiper travel.

Electric washer pump: The washer system shall move the fluid with an electric pump. All connections shall be soldered and weatherproofed against moisture and salt.

3-4 quart capacity: The washer system shall provide a reservoir with a capacity of three to four quarts of washer fluid.

Windshield Wipers:

Heavy duty bottom mounted: The wipers shall be bottom pivot mounted.

Single or Dual switch: One or two switches may be provided. Switch configuration shall be indicated.

Two-speed with intermittent feature: All wiper switches shall be dual speed with an intermittent feature.

Windshield Wiper Options:

Non-glare arms: A dull, non-glare wiper arm and blade shall be provided.

Winter or All-Season wiper blades: All-season wiper blades shall be provided to help prevent snow build-up on the blade.

Heated wiper blades: The wiper blades shall be electrically heated to remove a buildup of snow and ice in cold weather conditions.

CONVENTIONAL TYPE C

Wiring:

Color-coded and numbered wiring: All wiring circuits shall be color-coded and numbered to aid the mechanic in tracing wires. All wiring diagrams provided with the bus shall indicate both circuit number and color used.

All circuits protected by circuit breakers, manual or automatic: All circuits used in the school bus body shall be protected by circuit breakers. The breakers shall be a manual or automatic resetting type.

Master switch for body functions, electric operated: This shall be an electrically operated solenoid that disconnects all body circuits. This is convenient to protect the electrical system while the bus is shut down, and to temporarily quiet the bus at railroad crossings. This shall not affect the tail, brake and signal lights.

Wiring Options:

Manual reset circuit breakers: The circuits shall be protected with manual reset circuit breakers in lieu of automatic reset breakers.

Automatic reset circuit breakers: The circuits shall be protected with automatic reset circuit breakers in lieu of manual reset breakers.

Solid State Protectors:

Purpose specific labeled wiring: Each wire shall be labeled with the purpose of the wire, in place of the circuit number. The circuit shall also be color coded. ie. Tail light, heater, clearance light.

Additional Options:

If there are any items that were missed that you feel should be added, please indicate the option and the corresponding price.

Disability Bus Additions:

Disability bus: A padded header panel located on the inside above the lift door is required.

Door opening: The proposed door opening shall have the dimensions specified.

Remote control: The wheel chair lift shall be equipped with a corded remote control so the operator can operate the lift from inside the bus, standing on the lift, or standing on the ground beside the lift.

Continuous tracking in header: The header above the windows in the area of the wheel chair tie downs shall have a continuous track for adjusting the shoulder strap.

Front handrail on step well: The front portion of the step well shall have a handrail with the lower part fastened to the side of the step well and the upper part securely fastened in an area below the windshield.

Disability bus option base price addition: The base price for the handicap option shall be listed.

Disability Bus, Options:

Optional door sizes: Any additional optional door size offerings are to be specified.

Lift area outside light: There shall be an outside mounted light that is activated with the opening of the lift door.

Lift area inside and outside light: There shall be an inside and outside mounted light that is activated with the opening of the lift door.

Safety rail on wheel chair lift: The lift shall have a safety rail permanently mounted.

Full length shield for lift mechanism: The wheel chair lift shall have a full height shield that encompasses the lift supports so individuals are protected from the mechanical workings of the lift assembly.

CONVENTIONAL TYPE C

Lift structure padding: This option would supply a padding material to the vertical structures of the lift mechanism.

Removable padded cover for wheel chair lift: The lift shall be equipped with a removable padded cover that will protect student from the lift. This is required to be easily removed and installed. This may be installed when there are extended periods of time the lift is not used.

Driver's areas, lift enable switch: There shall be a switch mounted in the driver's area that must be activated before the lift has power to operate.

Door lift interlock switch, automatic: When the lift door is opened, the bus shall be rendered inoperable in moving from the spot.

Door lift interlock switch, manual: There shall be a means of rendering the vehicle from moving. This activation shall be the results of an intentional change of a switch position by the driver in the lift area.

Lift area inside light: There shall be a light mounted above the lift area inside the bus that is activated by a switch in the driver's area.

Lift area inside lights, 2-3": There shall be two 3" lights mounted above the lift area that is activated by a switch in the driver's area.

Lift area inside lights, 2-5": There shall be two 5" lights mounted above the lift area that is activated by a switch in the driver's area.

Thermo pane glass in lift door: The glass that is mounted in the lift door shall be a thermo pane. This may be required if the door is in the front body section, immediately behind the entrance door.

Delete front handrail: The front handrail, mounted on the right side of the step well when entering the bus, may be deleted.

Lift Door Control Buzzer:

Activated between latch open and door open: The door buzzer shall sound in the driver's area when the lift door latch is opened, and will continue to sound until the door is opened.

Heater Options for Flat Floor:

Wall heater: The bus shall be equipped with a radiant heat wall mounted heater. Proposer is to specify the BTU rating.

Additional heater installed: The bus shall be equipped with an additional floor mount or under-the-seat mounted heater. Proposer shall indicate the BTU rating and the mounting location of the heater.

Right side mounted heater: Right side mounted heater to allow clear floor in the left side of the bus with flat floor and track seating. Specify BTU size.

Deletion of the mid ship heater: If the bus is equipped with a mid ship heater, this option would delete the heater.

Deletion of the rear heater: This option will delete a rear heater.

Radiant heat, both sides of bus, full length: Radiant heat shall be provided on both sides of the bus, extending approximately 90 percent of the length of the passenger compartment. Cores and lines must be protected from tampering or damage by students.

Door Location:

Front: The lift door shall be mounted in the front portion of the bus. The exact location shall be coordinated with the selling dealer.

Door Location, Options:

Mid-ship: The lift door shall be located just in front of the rear wheels.

CONVENTIONAL TYPE C

Rear: The lift door shall be mounted to the rear of the rear wheels. The exact location shall be coordinated with the selling dealer.

Verify location of door: The district and the dealer shall verify the exact location and body section where the door is installed.

Type of Lift:

The proposer shall indicate the brand of lift, the model, the door opening that is required (minimum), and the platform dimensions of the lift.

Tie downs:

The proposer shall indicate the brand, model, and the type of latch (tightener, i.e.: over center, ratchet) used on the wheel chair end of the strap. "L" track is required. These units shall be priced on a per position bases.

Tracking, Options:

The tracking shall be priced on a per position basis, either flush-mounted or above-the- floor mounted.

Barriers:

It is the responsibility of the selling dealer to assure each bus is manufactured according to federal and state regulations. The standard bus shall be equipped with two (2) barriers.

Barrier, Options: Bolt mounted

39" barrier: This requires the addition of one 39" barrier.

36" barrier: This requires the addition of one 36" barrier.

30" barrier: This requires the addition of one 30" barrier.

Delete Barrier: The price for deleting a provided barrier is requested. Any deletion of barriers must keep the bus us full compliance with state and federal regulations.

Barrier, Options: Track Mounted

Two track mounted barriers in lieu of bolt mounted barriers:

39" barrier: This requires the addition of one 39" track mounted barrier.

36" barrier: This requires the addition of one 36" track mounted barrier.

30" barrier: This requires the addition of one 30" track mounted barrier.

Seats, Track Mounted:

Seats Each, Track Mounted vs. Bolted:

Proposer is to state the price per seat to supply track mounted seating in lieu of the standard bolted seats.

C.E.White brand 39" track mounted seat with built in child restraint system and seat belts.

C.E.White brand 30" track mounted seat with built in child restraint system and seat belts.

IMMI Safeguard brand seats with shoulder and lap belts:

Seat, each 30":

Seat, each 37.5":

Seat, each 45":

Child restraint system for IMMI seat:

Seats, Standard Mounted, each:

Delete standard seat, 39":

Delete standard seat, 36":

CONVENTIONAL TYPE C

Delete standard seat, 30":

Delete standard seat, 26":

Flat Floor Option:

Flat floor option: Proposer is to state additions or deductions for providing a flat floor from the driver's area to the rear of the bus body.

Tire size required: Proposer shall state the tire size required for the flat floor option, and the brand that is offered.

Tire options: Additional tires sizes and brands may be offered.

Other options: Any additional options may be listed with the flat floor.

Wheel Base and Body Length:

The proposer shall list the various wheel bases and body lengths available.

CHASSIS

Air Cleaner:

Dry type, to match engine design.

A restrictor indicator shall be mounted at the air cleaner.

Air Cleaner, Options:

A heavy duty dual element filter shall be used with a pre-cleaning system to remove heavy particles before they reach the air cleaner elements.

A restrictor indicator shall be dash mounted.

A restrictor indicator with a warning light, dash mounted.

Air Intake, Option:

Warm air intake: Ability to draw air from around the exhaust manifold and turbo area to allow for faster warm-up in cold weather.

Axles, Front:

Proposer to designate model, weight capacity, and hub type.

Axles, Front, Options:

8,000 lb. capacity.

10,000 lb. capacity.

12,000 lb. capacity.

A wet type oil seal shall be used with a heavy oil to lubricate the front wheel bearings. The brand of the seal shall be stated.

A grease type seal shall be used in conjunction with wheel bearing grease to lubricate the front wheel bearings. The brand of the seal shall be stated.

Synthetic lube shall be used for the wet type hubs. The brand of the oil shall be stated.

Axles, Rear:

The proposer is to designate the model and the weight capacity of the axle furnished, and indicate the oil seal brand used. Axle ratio will be determined by district at the time of order.

A magnetic oil level plug shall be provided to catch metal particles.

Axles, Rear, Options:

13,000 lb. capacity.

15,000 lb. capacity.

17,500 lb. capacity.

CONVENTIONAL TYPE C

19,000 lb. capacity.

19,800 lb. capacity.

21,000 lb. capacity.

23,000 lb. capacity.

No spin differential.

Synthetic lubrication in the differential in lieu of the standard rear end oil. Indicate brand.

Indicate other oil seal brands offered.

Brakes:

The standard brake assist system shall be split hydraulic disc brakes on both axles, with four channel ABS. Emergency brake system to be manual application.

State brand and model of ABS system.

State brand and model of hydraulic brake system.

Dust shields at all brake positions.

Brakes, Options:

(Air drum brakes shall have dust shields provided on both axles.)

Standard air system shall be 15 X 4 "Q" Plus on front and 16.5 X 7 "Q" Plus on the rear, with outboard drums.

Front, air: (with outboard drums.)

15 X 5 "Q" Plus

16.5 X 5 "Q" Plus

16.5 X 6 "Q" Plus

Adjustable brake and accelerator pedals.

Automatic Slack Adjusters:

Slack adjusters are to have an easy and effective means of backing off the adjustment without total removal of the adjusting pahl.

Haldex

Meritor

Emergency Brake, Options:

Air powered application of emergency brake, (air already supplied).

Anchorlok, rear parking brake chamber.

MGM, rear parking brake chamber.

Air Dryers and Tanks:

Manual drain valve.

Bendix AD-9 air dryer, with heater.

Air Dryers and Tanks, Options:

Pull chain for drain valve.

Pull chain for all reservoirs.

Pull chain extended to body wall.

Automatic drain valve with heater.

Bendix AD 9 air dryer with heater: with out brakes

Bendix AD1P dryer with heater.

BW DV-2 auto drain valve, with heater, on the wet tank only.

BW DV-2 auto drain valve, on all tank drains, without heaters.

BW DV-2 auto drain valve, with heater, on the wet tank only.

BW DV-2 auto drain valve, with heaters, on all tank drains.

CONVENTIONAL TYPE C

Compressor:

State manufacturers standard brand and CFM.
Specify tank capacity in volume to match accessories.

Compressor, Options:

Bendix 13.2 CFM
Wabco 15.2 CFM.

Bumper, Front:

Heavy duty steel, per manufacturers standard.

Color:

Paint brand and type used shall be indicated.

Color, Options:

Black grille.
Yellow grille.
Chrome grille.
Flat black on hood top.
Flat yellow on hood top.
Black fenders.

Electrical System:

All circuits shall be protected with fuses, or manual reset, or solid state circuit breakers. Specify type.

State manufacturers standard alternator, 130 amp. 22 SI brand.
2-1031 Batteries. Proposer to indicate CCA provided, between 1300 and 1500.
Daytime running lights, partial power.
Heavy duty mechanical turn signal flasher.

Electrical System, Options:

Manual Reset circuit breakers in lieu of fuses.
Automatic Reset circuit breakers in lieu of fuses.
Daytime running lights high power, in lieu of partial power.
Headlight circuit relay installed in the headlight system.
Headlight, ignition off alarm.
Top fender mounted turn lamps.
Fuse block, with 8 positions, in multiplexed systems only.
Trailer wiring harness and plug

Alternators:

170 amp. 8LHP Leece-Neville
185 amp. 4939 Leece-Neville
190 amp. 4939 Leece-Neville
200 amp. 4860 Leece-Neville
200 amp. 4940 Leece-Neville
270 amp. 4870 Leece-Neville
270 amp. 4949 Leece-Neville
270 amp. 4944 Leece-Neville
320 amp. Leece-Neville

CONVENTIONAL TYPE C

Batteries:

Qty	Group	CCA	
2	1031	1100	
2	1031	1300	
2	1031	1500	
2	1231	2200	
3	GRP. 31		1950
3	31	3375	
2	1131	1900	
3	1031	2280	
2	8D		2270
2	8D		2800 includes a larger battery compartment
1	8D		1135
1	8D		1375

Starters:

Delco 29 MT 12 Volt
 Delco 37 MT 12 Volt
 MT37 type 350 with over crank protection.
 Delco 38 MT 12 Volt
 Leece Neville M100R 12 volt
 Delco M42T 450
 Denso 1610

Engines:

Manufacturers standard 200 H.P. Parent Bore engine.
 Indicate the engine provided.
 Anti-freeze protection to -34 degrees prior to shipping.
 Pre-charged coolant filter.
 An electronic fast idle for cold warm-ups, dash mounted.
 Magnetic oil drain plug.
 Engine must meet 2010 emissions.

Engines, Options:

Cummins	ISB	200 H.P.	Parent Bore design	520lb
Cummins	ISB	220 H.P.	Parent Bore design	520lb
Cummins	ISB	240 H.P.	Parent Bore design	620lb
Cummins	ISB	260 H.P.	Parent Bore design	620lb w/PTS2500
International	VT-365	175 H.P.	Parent Bore design	
International	VT-365	200 H.P.	Parent Bore – Maxxforce7	
International	VT-365	215 H.P.	Parent Bore – Maxxforce7	
International	VT-365	230 H.P.	Parent Bore – Maxxforce7	
International	DT-466E	210 H.P.	Wet Sleeve – Maxxforce DT	
International	DT-466E	220 H.P.	Wet Sleeve – Maxxforce DT	
International	DT-466E	225 H.P.	Wet Sleeve – Maxxforce DT	
International	DT-466E	245 H.P.	Wet Sleeve – Maxxforce DT	
International	DT-466E	255 H.P.	Wet Sleeve – Maxxforce DT	

Dash mounted cruise control: Electronic speed control that will maintain a constant engine RPM, but will deactivate with the brake pedal, or by turning off the speed control switch.

CONVENTIONAL TYPE C

Exhaust brake, engine mounted. State brand and model.
Exhaust brake designed for use with hydraulic brakes. State brand and model.
Engine shut down and alarm that will shut down the engine and warn the driver if oil pressure or water temperature go beyond preset limits.
Low coolant level warning light.
Long life extended coolant. State brand
Block heater; of 110 volts shall be installed in the water jacket of the engine. The wattage shall be stated.
Electric oil pan heater, threaded through the bottom of the pan. Element is immersed in oil.
State wattage of each heater.
Bumper mounted plug-in receptacle.
Gates Blue stripe hoses.
Silicone hoses.
Constant torque hose clamps.
Fuel heater, in line.
Fuel heater, mounted in the fuel tank.
Delete pre charged coolant filter.
Electric manifold grid heater to heat the air.
High capacity oil pan. Indicate quart capacity.
Fuel primer pump.

Radiators:

The vendor shall specify if internal or external cooler is provided. Please specify basic material used in radiator construction.

Radiator Options:

Hydraulic operated shutters.
Air operated shutters, with air source already available.
Winter fronts, snap on. Indicate color.
Bug screen to assist in keeping the fins clean.

Fan Clutch:

Horton electric operated fan clutch. Model EC 450.
Horton electric operated fan clutch. Model HT 650.
Horton drive master 2 speed.
CAT electromatic 22" blade.

Fuel-water separators:

Racor 490R30 fuel water separator, with heater.
Racor 490 with primer pump
Racor 790R with electric pump
Racor 690R30
Fleetgard with heater and light
Alliance with heater, light and pump
Indicate other fuel water separators offered.

Exhaust System:

Left discharge on the left (driver) side of the frame below the bumper.

Exhaust System, Options:

Left side of the frame discharge, rear, through the bumper.

CONVENTIONAL TYPE C

Left side discharge, in front of the rear duals.
90 Degree turn down on tail pipe.
Heat shield between muffler and fuel tank.

Fenders/Hood:

Easy lift hood, approximately 15 lbs. of push or pull.
State maximum lbs. of pull/push to open/close. _____ lbs.

Frame:

Manufacturers' standard frame, approximately 254" wheelbase.
Front and rear mounted tow hooks.
Indicate frame PSI strength.

Frame, Options:

Wheel Base, 158". Designate the body length(s) for this wheel base.
Wheel Base, 170". Designate the body length(s) for this wheel base.
Wheel Base, 179". Designate the body length(s) for this wheel base.
Wheel Base, 189". Designate the body length(s) for this wheel base.
Wheel Base, 193". Designate the body length(s) for this wheel base.
Wheel Base, 199". Designate the body length(s) for this wheel base.
Wheel Base, 217". Designate the body length(s) for this wheel base.
Wheel Base, 218". Designate the body length(s) for this wheel base.
Wheel Base, 219". Designate the body length(s) for this wheel base.
Wheel Base, 236". Designate the body length(s) for this wheel base.
Wheel Base, 238". Designate the body length(s) for this wheel base.
Wheel Base, 252". Designate the body length(s) for this wheel base.
Wheel Base, 254". Designate the body length(s) for this wheel base.
Wheel Base, 259". Designate the body length(s) for this wheel base.
Wheel Base, 273". Designate the body length(s) for this wheel base.
Wheel Base, 276". Designate the body length(s) for this wheel base.
Wheel Base, 279". Designate the body length(s) for this wheel base.
Designate additional wheel bases available that are not listed.
Delete the front tow hooks on the frame.
Delete the rear tow hooks on the frame.

Fuel Tank:

Approximately 60-65 gallon, right side mounted.
There shall be an access plate in the floor of the bus for access to the fuel sending unit.
Fuel door included.

Fuel Tank, Options:

60-65 gallon, mounted between the frame rails.
100 gallon, mounted between the frame rails.
Right side fill for between frame rail tanks.
Left side fill for between frame rail tanks.
Key lock on fuel door.
Thumb latch on fuel door.
Locking fuel cap.

Horn:

Dual electric horns.

CONVENTIONAL TYPE C

Horn, Options:

Dual air horns with air already supplied.

Instruments and Panel:

Per National Standards.

Must include tachometer and hourmeter.

Instruments and Panel, Options:

Glove box, without a door provided.

Glove box with locking door.

Digital clock, dash mounted.

Digital clock, dash mounted with alarm.

Transmission temperature gauge.

Ammeter.

Boost pressure gauge.

All ignitions are keyed alike, either for this order or to match existing fleet ignitions. This pertains only to same brand chassis.

Air pressure gauge for air suspension, dash mounted.

Cup holder, dash mounted.

Power and Grade ability:

Per National Standards.

Shock Absorbers:

Heavy duty shocks required front and rear.

Springs:

Front springs shall be a Parabolic Type leaf spring.

Rear springs shall be single stage, vari-rate multi leaf springs. Weight capacity is to match or exceed the axle weight rating.

Springs, Options:

Front:

Front air suspension.

Softtek leaf springs.

Maintenance free spring pins.

Rear:

Parabolic tapered leaf spring.

Air suspension system for the rear axle with hydraulic brakes. Must include compressor, dryer and related parts.

Air suspension system for the rear axle with air brakes.

Steering:

Power steering assist. State brand and model. State steering wheel diameter.

Steering, Options:

TRW Ross, TAS model.

Stationary Steering Column

Tilt wheel.

Tilt and telescoping wheel.

CONVENTIONAL TYPE C

Tires and Rims:

One-piece, radial rim, 22.5 X 8.25
Hub piloted, 10 hole disc.
Tires to be minimum, 11R X 22.5 14 ply. Indicate brand and model.
Highway tread on front axle, traction tire on rear axle. Indicate tires provided.
All buses must have lead-free weights. May use non-lead, powder, fluid, or other means to balance tires.

Wheel, Options:

10 hole Budd disc wheel.
8-hole hub piloted disc wheel.
Spare tire carrier, mounted under the floor.
Spare hub piloted disc wheel, with 10 bolt holes.
Spare hub piloted disc wheel, with 8 bolt holes.
19.5 hub piloted rims (6).
Wheel alignment, Front only.
Wheel alignment, Rear only.
Wheel balance, front only using a powder product. No lead weights are allowed.
Wheel balance, rear only using a powder product. No lead weights are allowed.
Other balance products offered. Indicate product, priced per wheel.

Tire, Options:

Indicate tire size and brand, and model options offered, with relative pricing **PER AXLE**.
Indicate front and rear tire combinations if offering front and rear.

Transmission:

Allison PTS2500 series.
Shift tower with cable.
The transmission shall have an external spin on transmission filter.

Transmission, Options:

PTS 2200 Allison Transmission with park pall, for vehicles less than 26,000 lbs. GVW.
PTS 3000 (3060) Allison Transmission
Transynd transmission fluid.
Magnet drain plug (Automatics only).
Push button shift for PT 3000 (MD 3060).
Manual transmissions offered shall be stated.

Turning Radius:

State curb-to-curb turning radius for each wheelbase offered.
_____ W.B. _____ radius.

State bumper-to-bumper turning radius for each wheelbase offered.
_____ W.B. _____ radius.

Additional Options:

If there are any items that were missed that you feel should be added, please indicate the option and the corresponding price.

Quantity Discount:

The Proposer shall state quantity discounts offered.

CONVENTIONAL TYPE C

Delivery from factory to dealer:

The dealer shall state the delivery charges from the manufacturing plant to the dealership.

Delivery:

Proposer shall indicate the location of the dealership.

The district shall concur with the dealer the distance from the dealership to the district delivery point. That number of miles shall be used in calculating the delivery cost.

Proposer shall indicate a **cost per mile** for delivery of the completed unit to the purchasing district.

Proposer may state a **minimum delivery charge** for districts that are close in location.

The district is to tally the **larger** of the two calculations, mileage or minimum charge.

The minimum delivery charge (if used) shall **not** be added to a cost per mile calculation.

Manuals:

Proposer is to list manuals that are available for the chassis quoted. Please indicate if the manuals are in book form, disk, or CD, and the prices for each.

Caution: If you are buying multiple buses, you may not want to purchase a manual for each bus. This can easily be done if you add in this cost for all buses.

Engine Warranty:

Proposer is to state the engine proposed, the standard warranty included, and warranties offered on price sheet.

Engine _____ Brand _____
_____years, _____miles. Standard Warranty included.
_____years, _____miles.

Engine Electrical Warranty:

Proposer is to state the engine proposed, and electrical warranties offered on price sheet.

Engine _____ Brand _____
_____years, _____miles. Standard Warranty included.
_____years, _____miles.

Transmission Warranty:

Proposer is to state the transmission proposed, and warranties offered on price sheet.

Brand _____ Model _____
_____years, _____miles. Standard Warranty included.
_____years, _____miles.

Chassis Warranty:

Proposer is to state the chassis proposed, and warranties offered on price sheet.

Chassis _____ Model _____
_____years, _____miles. Standard Warranty included.
_____years, _____miles.

Trade-ins:

This area is to be used by the district to calculate any trade-ins.

Delivery:

The dealer shall state the expected days for delivery, calculated from the time of receiving a Purchase Order, to delivery to the completed bus to the customer.

SPECIFICATIONS

for

**SCHOOL BUS
TRANSIT STYLE**

for

**SCHOOL DISTRICTS IN MINNESOTA
PURCHASING SCHOOL BUSES**

TRANSIT - TYPE D

It is the intent of these specifications that complete units shall be supplied with all items required by the state of Minnesota, and in conformity with all federal and state codes and laws governing the construction of and relating to school transportation equipment. Any specifications that vary from these body specifications shall be requested at the pre-proposal meeting. The bus shall be proposed with all attachments and auxiliary equipment necessary to place it in operation and ready for service upon delivery.

Indicate negative numbers with a "-" (minus) preceding the number.

The 2005 National Standards and Minnesota Laws and Regulations shall be used as the specification if not otherwise specified.

Areas:

The state is divided into five regions. Each proposer has the option of proposing in any and all regions they wish. The top of the price sheets indicate the regions in which you are applying to the proposals.

All non-shaded lines on the spread sheet shall be filled in with a number, **STD**, indicating it is standard on the bus, or **NA**, indicating it is not available.

Body sizes available:

Proposer is to list the body lengths available for the 53 to 84 passenger buses.

Passenger Capacity:

Proposer is to list the passenger capacity for the body proposed.

Seat Spacing:

Proposer is to list the factory rated seat spacing for the body and passenger capacity proposed.

Wheel Bases Available:

Proposer is to state all available or required wheel bases for the body proposed.

Aisle:

The aisles are to be covered with a 3/16" ribbed rubber-flooring material of a color that matches the remainder of the flooring material. The seams shall be flush fit and sealed with a silicone-like material. The intent is to prevent moisture from contacting the plywood. Attention shall be given to assure the sealing material is not beaded to allow the material to be peeled off due to extended traffic.

Aisle Options:

Aluminum strips: The aluminum strip shall be installed over the seam on both sides, with attaching screws of similar material.

Stainless Steel Strips: The strips shall be made of stainless steel and fastened to the floor with stainless steel screws.

Plastic strips: The strips shall be made of a plastic material that is tough enough to withstand the life expectancy of the bus. Non-corrosive fasteners should be used.

Galvanized strips: The strips shall be made of galvanized metal and fastened with a screw of a material that will outlast the strip.

TRANSIT - TYPE D

Body Panels:

The exterior body panels shall be a metal-treated 20-gauge metal material, treated to resist rust and bond to paint. All rivets shall be treated similarly after installation for the same reason.

The body panels shall extend to be approximately even with the center of the wheel hubs between the front and rear axles. The skirt may taper higher behind the rear axle.

Internal body panels shall be 22-gauge material.

Body Panel Options, Exterior:

16 gauge: 16-gauge smooth material in lieu of 20 gauge side panels.

20 gauge reeded sides: A ribbed corrugated material, 20-gauge, in lieu of smooth side panels. This material is usually installed between the rub rails at approximately floor height.

16 gauge reeded sides: A ribbed corrugated material, 16-gauge, in lieu of smooth side panels. This material is usually installed between the rub rails at approximately floor height.

Ceiling:

The ceiling shall be insulated with at least 1-1/2" of insulation. Insulation shall fill all cavities of the roof area, including inside the roof bows. The ceiling panels shall be at least 22-gauge steel, with acoustical (perforated holes) panels the full length of the bus to deaden sound in the passenger compartment.

Ceiling Options:

Acoustical panels, front two panels only: The bus shall be provided with acoustical (perforated) panels in the front two ceiling panels, only.

Solid panels, full length: The elimination of all acoustical panels, providing smooth ceiling panels the full length of the bus.

2" Insulation in roof: The roof shall have installed a full 2" of insulation in a 2" space, the full length of the bus.

Floor:

Standard "rubber" flooring, including step treads, to be manufacturers' standard color. Rubber flooring to bus used in driver's area, and over the wheel housings.

There shall be an access panel in the floor or cowl area to allow access to upper bell housing bolts.

5/8" exterior plywood: All floors shall be covered with exterior grade plywood or like material that will not separate due to moisture or age.

Floor Options:

Color option: Indicate color option and price.

Plywood, marine grade: Marine grade plywood to be provided in place of the exterior grade plywood in all portions of the floor.

Interior Options:

Padded shoulder rails: The area below the windows shall have a padded area of approximately 4", covered with seat covering type material.

TRANSIT - TYPE D

Seats:

42-oz. material: All seat coverings shall be 42-oz. vinyl fire retardant material of the color designated, without welting in the seams.

Color: The proposer shall indicate the standard color proposed.

Seat Options:

52-oz. material, complete bus: The complete bus, excluding driver's seat, shall be equipped with 52 oz. vinyl fire retardant material.

Fire Block material: The complete bus, excluding driver's seat, shall be equipped with a fire block material.

Double stitching on seams: All seams on the passenger seats shall be double-stitched as they are sewed.

Welting on seams: All sewn seams shall have a welting between the material at the seams.

Color options: This shall require a color other than manufacturer's standard.

Windows:

Tempered, clear: All glass is to be clear, tempered glass, on all side and rear windows.

Window Options:

Tempered, tint: All glass is to be tinted, tempered glass, on all side and rear windows.

Laminated, clear: All glass is to be clear, laminated glass, on all side and rear windows.

Laminated, tinted: All glass is to be tinted, laminated glass, on all side and rear windows.

Black sashes (complete bus): Black sash and frames shall be provided throughout the bus.

12" Side window opening: This shall allow the top portion of the window to drop to a 12" opening. This may require a higher head room than standard.

Air Foil, Rear. Option:

A rear air foil shall be installed to direct air down the rear of the bus to help keep the rear of the bus clear from road dirt. This shall be a factory designed addition that is tested and proven to be effective at speeds 20 mph. and above.

Back-up Warning Alarm Options:

Back-up Warning Alarm, 87 to 112 decibels variable output: A back-up alarm of approximately 87 to 112 variable-decibel output shall be mounted under the rear of the body. The unit shall be mounted above the rear axle area between the frame rails. All exposed wiring connections shall be soldered and weather-proof protected, and a plastic loom shall protect exposed wiring (outside the body) and protected and fastened so ice and snow will not pull on wiring.

Back-up Warning Alarm, 112 decibels: Same as above with 112 decibel level.

Spring loaded off switch provided with Back-up Warning Alarm: The option of a spring loaded switch located in the driver's area, so the back-up alarm may be temporarily turned off for operations in shop areas and other sensitive areas.

Battery:

The battery shall be mounted in an exterior skirt compartment in a battery box located approximately below the driver's seat (vestibule) area. The compartment shall include a door with a latch that can be opened without the use of tools, and a slide

TRANSIT - TYPE D

out tray with a release catch, and a tray stop. The release catch shall be obvious or clearly marked so emergency personnel can easily slide out the tray if necessary.

Battery Options:

Key Lock on battery door: The battery door shall have a tumbler key type lock to secure the door. The lock shall be of a non-corrosive material.

Nylon rollers for tray: The tray shall slide on nylon rollers for easier movement of the tray.

Ball bearing rollers for tray: The tray shall slide on sealed ball bearing rollers for easier movement of the tray.

Box for two 8D batteries: The box shall be large enough in size and strong enough to support two 8D batteries.

Auxiliary battery box: An additional battery box with a slide-out tray shall be provided for use as the district requires.

Stainless steel slide tray with roller bearings: The tray (only) shall be stainless steel, and provided with sealed roller bearings.

Battery box relocation: This cost shall represent the relocation of the battery box to a location different than standard. It shall remain on the left side of the bus, with access in the skirt area.

Bumper (Rear):

The standard manufacturer's bumper is required.

Certification:

The bus shall be certified by the selling body dealer that the complete bus meets all Minnesota and federal standards. This shall be marked with the approved certification sticker properly placed in the windshield.

Color, Exterior:

The School Bus shall be painted National School Bus Chrome Yellow according to federal and state specifications.

Color (Exterior) Options:

White Roofs: The roofs may be painted white from the front cap to the rear cap, with no white showing from the front or rear, and on the sides down to approximately 6" above the side windows.

Color, Interior:

Seats coloring: The standard color for seats and walls shall be manufacturers standard.

Color (Interior) Options:

Optional wall colors: Other colors offered may be listed and priced.

Crossing Arm Options:

Specialty Electric w/plastic rod: The plastic rod shall be provided (58600).

Specialty Electric w/metal rod: The plastic rod shall be replaced with the metal loop (58105).

Specialty Solid State Upgrade, w/plastic rod: Specialty electric upgrade to solid state electronics. (No heater required)

TRANSIT - TYPE D

Specialty Solid State Upgrade, w/metal rod: Specialty electric upgrade to solid state electronics. (No heater required)

Specialty Air w/plastic rod: The electric unit shall be replaced with an air-operated unit (28500).

Specialty Air w/ metal rod: The air unit shall have a metal loop in lieu of plastic rod (28100).

Transpec electric w/plastic rod: Transpec brand with plastic rod.

Add electromagnet: The electromagnet installed on the bumper to prevent vibration when in the parked position, for either air or electric crossing arm, may be added.

Electric heater in mechanism: An electric powered heater installed in the crossing arm assembly to aid in winter time operation. Available in electric powered units only.

Other: Other options provided, that are not listed.

Defroster:

90,000 Btu, full width defroster/heater:

Must maintain clear view of windshields: The defroster system for the bus must be designed to maintain a clear view of the windshield at an operating temperature of minus 30 degrees.

Two auxiliary fans: Two approximately 6" defroster fans (2-speed) to be provided. A single switch for each fan shall be provided that is two-speed. The switches shall be mounted on the switch panel next to the fan switches for the heaters. The fans shall be located in the upper left corner of the windshield, and the upper center portion of the windshield.

Defroster Options:

Additional fan: Additional two speed fan, like above fans, mounted in the upper right corner of the windshield, with a separate switch mounted in the switch panel.

Doors, entrance:

Electric operated: There shall be electrically activated controls. Controls must be positioned in a location agreeable with state inspectors. The doors shall be outward opening, with the front door overlapping the rear door at the sealing surface. The nose gasket shall be a soft rubber where the two doors come together. The door linkages shall be adjustable so each door may be independently adjusted. The doorframes shall be such that the average driver can see the road surface ¼ mile from the bus on level terrain without lowering his/her head. The top windows shall be thermopane glass. The door opening linkage shall have an access panel that will allow access to all linkage for easy adjustment and repair.

Door (entrance) Options:

Jack knife door: A jack knife door shall be used in lieu of outward opening. Visibility requirements still pertain.

Air powered: Air powered controls in lieu of manually operated. Controls must be positioned in a location agreeable with state inspectors. Air supply is already installed in the bus.

Manually operated: The door controls shall be a manually operated in place of the electric operator.

Hinged access panel to door controls: The access panel that covers the door linkage shall be easily opened and one side of the panel shall be hinged for faster opening.

Exterior Door Release, Mechanical: There shall be a front door release mechanism so the door can be opened from the outside.

TRANSIT - TYPE D

Exterior Door Release, Electric: There shall be a front door release mechanism so the door can be opened from the outside.

Exterior Door Release, Air: There shall be a front door release mechanism so the door can be opened from the outside.

Vandal locks, front: The unit shall be equipped with a tumbler type locking handle to secure the front door from the outside of the bus.

Vandal lock for electric doors: There shall be a key operated switch located outside the bus that allows the bus entrance door to open and close electrically. This shall allow the bus to be secured from the front door.

Vandal lock for air doors: There shall be a key operated switch located outside the bus that allows the bus entrance door to open and close electrical/air. This shall allow the bus to be secured from the front door.

3 position switch for air doors: An override switch shall be provided for the air door operation so the eight-way lights can be activated without fully opening the entrance door. (The state school bus inspectors must approve this option before the order is placed.)

8-way override switch for air doors: An override switch shall be provided for the air door operation so the eight-way lights can be activated without fully opening the entrance door. (The state school bus inspectors must approve this option before the order is placed.)

Doors, emergency:

Lubeable hinges: The hinge pins for the emergency door must have a means to lubricate the inner portion of the hinge wraps. It is preferred this be accomplished through means of a hollow pin lubrication port, and grease zerk. Whatever the means used, it must be a positive lubrication system with a grease zerk.

Emergency door glass: There shall be an upper and lower glass in the emergency door.

Doors (emergency) Options:

Hidden emergency door hinges: The lubeable emergency door hinges shall not be exposed to the elements of the weather. All components shall be on the inside of the body from the sealing gasket of the rear door.

Left side emergency door: The bus shall be equipped with a driver's side emergency door approximately in the mid portion of the bus. A flip up seat shall be installed at the side door.

Rear emergency door thermopane glass, top: The rear door shall provide a thermopane in the top window of the rear emergency door.

Rear emergency door thermopane glass, bottom: The rear door shall provide a thermopane in the bottom window of the rear emergency door.

Rear emergency door thermopane glass, top and bottom: Both top and bottom glass shall be thermopane.

Rear emergency door thermopane laminated glass, top: The rear door shall provide a laminated thermopane in the top window of the rear emergency door.

Rear emergency door thermopane laminated glass, bottom: The rear door shall provide a laminated thermopane in the bottom window of the rear emergency door.

Rear emergency door thermopane laminated glass, top and bottom: Both top and bottom glass shall be laminated thermopane.

TRANSIT - TYPE D

Lower door glass guard: There shall be a lower door glass guard installed that covers the window from the inside. This is to protect the glass from breakage from the inside.

Vandal locks, rear: The unit shall be equipped with rear door vandal locks so the bus may be secured. The lock at the rear doors shall be connected into an ignition interlock system so the bus may not be operated with the door locked with this system.

Emergency Equipment:

State and federal specifications as they pertain to school bus equipment.

Fire Extinguisher:

Heavy-duty commercial type rechargeable: The fire extinguisher, 5 lb.-2A10BC, shall meet state and federal specifications, and shall be rechargeable.

Fire Extinguisher Options:

List optional fire extinguisher size offered.

Emergency Exits:

Per state specifications.

Roof Hatch:

Minimum required: The roof hatch must meet the minimum specifications as required by law for quantity and design. All roof hatches must be able to open from the topside. The standard to be included in the bid price shall have a multi-position vent capability. Indicate standard hatch proposed.

Roof Hatch Options:

Roof hatches: An additional roof hatch installed equivalent to standard proposed model.

Prices quoted are for the difference from the standard proposed roof hatch to the specified hatch below, for two units (not each).

Transpec 1100 Triple Value: Transpec 1100 Triple Value in place of the standard specification.

Transpec 1900 Economy: Transpec 1900 Economy in place of the standard specification.

Transpec 1600 w/power vent: Transpec 1600 with Power Vent, in place of the standard specification.

Transpec 1975 Standard: Transpec 1975 in place of the standard specification.

Specialty 8640 w/vent : Specialty 8640 in place of the standard specification.

Specialty 8645 w/o vent : Specialty 8645 in place of the standard specification.

Specialty 9245 w/o vent: Specialty 9245 without vent Lo Profile in place of the standard specification.

Specialty 8915 4-position opening: Specialty 8915...4-position opening with static vent.

Specialty 8940 5-position vent: Specialty 8940...5-position vent in place of the standard specification.

Specialty 8945 w/o vent: Specialty 8945...5-position vent in place of the standard specification.

Specialty 9245 ProLo w/o vent: Specialty 9245 Low Profile without vent.

TRANSIT - TYPE D

Side Window Exits:

Minimum required: The minimum number of exit windows required by law to meet FMVSS 217. The windows shall be hinged at the front.

Side Window Exit Options:

Extra window per set: This shall require an additional window on each side of the bus to be used as an emergency exit. The price shall include a window on each side, or for two windows.

Top hinged emergency windows: The emergency windows shall be hinged at the top in lieu of front hinged. Price shall be for all windows.

Heaters:

90k for front heater/defroster, full width.

12k to 14k driver's heater.

50k under seat heater, mid ship.

80k under seat heater, rear .

Ball cock shut off valves (2) in the engine compartment.

Cable controlled water shut off for the driver.

Air inlet filters shall be installed on all heaters to filter the air prior to air entering the heater core. The air filters shall be accessible for removal and cleaning.

Heater Options:

Mid ship heater, 80k, in lieu of 50k heater.

Radiant heat, installed on both sides of the bus. Cores must be protected from being damaged or tampered by students.

Booster pump.

Silicone heater hose is to be used on all body heater lines, starting at the engine. All connections shall use constant torque clamps.

Goodyear "Hi-Miler" hose is to be used on all body heater lines, starting at the engine.

Gates Blue Stripe hose is to be used on all body heater lines, starting at the engine.

Constant Torque clamps on all heater lines.

Parallel heater circuit.

Series heater circuit.

Delete mid-ship heater.

Factory installed integrated driver air conditioning

Factory installed A/C system.

After market A/C system. Indicate brand and BTU rating.

Auxiliary Heater Options: In-box mounted.

Wabasto heater: The bus shall be equipped with a standard sized Wabasto auxiliary heater mounted in a skirt compartment to the rear of the battery box. All installation shall be according to manufacturer's recommendations.

Espar heater: The bus shall be equipped with a standard sized Espar auxiliary heater mounted in a skirt compartment to the rear of the battery box. All installation shall be according to manufacturer's recommendations.

Pro-Heat heater: The bus shall be equipped with a standard sized Pro-Heat auxiliary heater mounted in a skirt compartment to the rear of the battery box. All installation shall be according to manufacturer's recommendations.

Others offered: Any other auxiliary heater may be offered, mounted similar to Espar, Wabasto, or Pro-Heat.

TRANSIT - TYPE D

7 Day Timer for auxiliary heater: A 7-day timer shall be installed to activate the auxiliary heater at a preset time. The timer shall be an approved option, authorized for use by the heater's manufacturer.

Skirt mounted box with slide out tray: An additional skirt mounted box, mounted to the rear of the original battery box, with a slide out tray. This shall be a box that may be used for an auxiliary heater.

Identification:

Per state specifications: All identifying markings shall be according to state law. Complete bus belt-line lettering and numbers per district specifications and all lettering required by law, including bus number, passenger capacity, fuel type and capacity, are to be included in the proposed price, with vinyl cut letters and numbers.

Identification Options:

Lettering, vinyl, per character 6": This is a pricing of each 6" character in addition to the required lettering.

Lettering, vinyl, per character 2": This is a pricing of lettering to be used inside or out that requires 2" lettering, in addition to the required lettering.

Black beltline: The belt line shall be painted black with yellow lettering.

Flip Sign front and rear; school bus/charter: The front and rear caps shall have a flip sign to change from "school bus" to "charter".

Transpec 7500, Emergency door sign: Transpec 7500 attached to the rear of the emergency door.

Inside Height:

73" at aisle: The ceiling height at the center of the bus, above the center aisle shall be a minimum of 73".

Inside Height Options:

Optional height: The vendor shall state the optional height offered. This dimension shall be measured at the minimum dimension from the front of the center aisle to one foot from the emergency door in the rear. The measurement shall be taken at the center of the aisle, from the top of the ribbing to the bottom of the ceiling panel.

Insulation:

1-1/2" fiberglass: All ceiling panels, side panels, and rear panels shall be insulated with 1-1/2" insulation. The insulation shall be fastened or constructed of a material that will not sag or compact over a 12-year life cycle of the bus. Insulation above a perforated roof liner shall not allow fibers to penetrate through the perforations. All roof and body bows are to be insulated, assuring insulation through the complete body, no voids.

Insulation Options:

2" insulation: This provision shall require 2" of insulation in place of 1-1/2". (This may not increase the insulating factor.)

Foam insulation under floor: The vendor shall state the thickness of sprayed insulation, and the percentage of the floor that is realistically covered.

Noise reduction spray on all panels, roof and sides, inner and outer: This option shall require a material be sprayed on the inner (insulation) side of the inner panels to deaden the resonance of the panels due to noise and road vibration.

TRANSIT - TYPE D

Foam insulation under floor perimeter: The outer perimeter of the under floor area shall be sprayed with a foam insulation to seal the intersection of the floor and side panels.

Sound abatement/insulation on firewall: The firewall shall be factory insulated or sprayed to dampen noise in the driver's area.

Interior:

Dome lights, 8 minimum: At least eight dome lights shall be mounted above the windows, spread approximately even from front to rear in pairs, one on each side.

Drivers dome, on separate switch: The drivers dome light shall be a standard light, mounted either in the center of the bus over the driver, or on the driver's side of the bus in the headliner panel. This light shall be powered on a separate switch.

Rear two dome lights on separate switch: The rear two dome lights shall be powered on a separate switch.

Interior mirror and visor: The inside (student view) mirror shall be a standard 6" x 30" adjustable mirror. There shall be a fold down visor, darkened transparent, that is fully adjustable, approximately the same size as the mirror.

Interior Options:

Oversize driver's dome light: The drivers dome light shall be an oversized light versus the standard dome light.

10" x 30" overhead mirror: This shall provide a 10" x 30" mirror in place of the 6" x 30" mirror.

Additional dome switch and circuit: There shall be an additional circuit above the standard system provided.

Dome lights, additional per pair: Dome lights may be added, in sets of two.

Rear scope lens for rear door: This requires the rear scope for better visibility outside the rear of the bus. The lens shall be attached to the bottom portion of the emergency door upper glass.

Window stop line painted black: There shall be a black line painted on each window post to mark approximately a 3" opening of the window.

Video camera power supply: There shall be a power supply with sufficient wire size and amperage wired into the system with the intent a camera system will be used.

Video camera system, color: There shall be a color video system supplied with the bus according to manufacturer's standards.

Digital video camera system, color: There shall be a digital color video system supplied with the bus according to manufacturer's standards.

Digital video camera system, black and white: There shall be a digital black and white video system supplied with the bus according to manufacturer's standards.

Additional camera: If an additional camera is supplied for a system, indicate which system it applies to.

Child check system: An electronic child check system shall be wired into the bus to require the driver to walk the bus inside when shutting the bus off.

Bulk head door with glass for camera: The bulk head door shall have a provision for a glass area that will allow a camera to be installed in the bulk head.

Lamps and Signals:

Side turn signals: Turn signals on the side of the bus, located behind the stop sign on the left, and behind the entrance door on the right shall be mounted and operational with the regular signals. The intent is providing warning to traffic that is beside the bus, that cannot see the front or rear signals.

TRANSIT - TYPE D

Circuit breakers: All circuits shall be circuit breaker protected in the body circuits.

8 light flasher unit: The flasher unit used shall be indicated.

Light assembly brand used: The brand of clearance and rear lights shall be stated.

Clearance lights connected to tail lights. This shall assure the clearance lights are on anytime the tail lights are lit. This eliminates a separate switch for the clearance lights.

Lamps and Signals Options:

Roof mounted low profile strobe light: A roof mounted low profile strobe light is to be mounted according to state specification, towards the rear of the bus, on the centerline. Maximum height is to be 2-3/4".

Self Contained Strobe light: A self contained strobe light mounted according to state specifications may be quoted. The brand, model, and height are to be stated.

Strobe light with remote power supply: The strobe light may have a remote mounted power supply, providing a lower profile. Indicate brand, model, and height.

Metal protective shields for all marker lights: Metal protective shields shall be installed on all roof line marker lights. This is to protect the lenses from damage in tree line areas.

Dome lights activated by emergency door: This option shall turn on all dome lights anytime the emergency door buzzer is activated, to provide a lighted interior for a safer exit.

Red light above emergency door: A red light shall be installed above the emergency door in accordance to regulations for a charter bus.

Back-up lights activated by emergency door: This option shall turn on the back-up lights anytime the emergency door is opened. This is to provide light at the rear of the bus for a better exit.

Back-up lights, 7": 7" back up lights shall be provided in lieu of the standard smaller diameter lights.

LED backup lights in lieu of standard BU lights: Indicate the size of the light.

Entrance door outside light connected to step well light: An additional light shall be mounted just behind the entrance door, with a hood over the top half of the light. The intent is to light the ground area when the door is open, without causing a distraction into the mirrors or to the motoring public.

Tamper proof screws for dome lights: Tamper proof screws are to be used on all dome lights to prevent the possibility of students removing dome light screws.

All lights LED: All exterior lights on the bus, excluding head lights shall be LED.

LED signal lights, tail lights, and BU: LED style signal lights, tail lights, and BU are to be provided on the rear of the bus.

LED signal and tail lights: LED style signal and tail lights are to be provided on the rear of the bus.

LED clearance lights: LED style clearance lights are to be provided on all clearance lights on the roofline of the bus. Connections shall be protected with di-electric grease, and grounds shall be protected from corrosion.

LED rear turn lights only: The rear turn lights only shall be LED design.

LED front turn lights only: The front turn lights only shall be LED design.

LED stop/tail 4", and back upon only: The 4" stop/tail lights and the two back up lights only shall be LED design.

8 Light monitor: A driver compartment light monitor is to be installed that indicates to the driver when designated lights are on. 8 light monitor.

16 Light monitor: A driver compartment light monitor is to be installed that indicates to the driver when designated lights are on. 16 light monitor minimum.

TRANSIT - TYPE D

Other 8 light flasher unit offered: Another flasher unit (not Weldon 7000) may be offered, indicate brand and model.

8 light hoods: Metal hoods over the 8-way lights are to be installed in all 4 locations. The hoods shall be of a color that conforms to the color requirements for that area.

Delete 8 light hoods: This allows for the elimination of the 8 light hoods if they are provided as standard.

8-way lights with strobes: The 8-way lights are to be strobe type lights. Must be approved by state inspectors.

8-way lights with strobes: The 8-way lights shall be strobe lights instead of flashing incandescent.

Weldon light assemblies: All light assemblies on the exterior of the bus must be Weldon brand light assemblies and lenses.

Two-side signal lights per side: Two side turn signals mounted on each side of the body, one near the front and one over the rear axle area. Lights shall be mounted either just above or below the rub rail at the bottom of the beltline.

Other brand light assemblies: Indicate brand.

Cell phone power point: A plug in power source is available in the driver's area for the intention of supplying power to a cell phone.

2-Way radio power lead: A plug in power source is available in the driver's area for the intention of supplying power to a 2-way radio.

Metal treatment:

Per state specification.

Mirrors:

To meet federal regulations.

Mirrors Options:

Heated mirrors: Heating elements mounted in the mirror head that heats the head to prevent icing and frosting of the glass. All mirrors, outside rear view, and crossover mirrors shall be heated.

6-1/2" x 10" flat and 6-1/2" x 10" convex (black): in lieu of 6" x 16" mirror.

6-1/2" x 10" flat and 6-1/2" x 10" convex (stainless): in lieu of 6" x 16" mirror.

7" x 16" mirror heads:

Crossover mirrors and brackets, black: This shall be priced in black.

Crossover mirrors and brackets, stainless: This shall be priced in stainless steel.

Rosco, black:

Rosco, stainless:

Busboy, black:

Busboy, stainless:

Other mirror offerings: Any other brand of mirrors that are offered may be quoted.

Remote operated mirrors: The rear view mirrors only shall be adjusted by a control box in the driver's compartment.

Remote operated heated mirrors: The rear view mirrors only shall be heated, and adjusted by a control box in the driver's compartment.

Mounting of body:

Cushion material between chassis and body: The proposer is to state the material that is used between the body cross members and the chassis frame.

Flat clamp, # of bolts per clamp: Proposer is to indicate the number of bolts per clamp.

TRANSIT - TYPE D

Mounting (Body) Options:

U-Bolt mounting system addition: A series of 'U-Bolts' shall be added to the mounting system. U-Bolts shall be added at least one on each side installed approximately every 10 feet. They may be installed closer.

Sunshield:

6" x 30" fully adjustable, green: A sunshield shall be provided that is 6" x 30" for the driver. The shield shall be fully adjustable with friction washers and wing nuts so the driver can adjust the visor and hold it in any reasonable position with out the use of tools.

Sunshield Options:

6" x 18" driver's side shield: a 6" x 18" visor shall be provided in place of the 6" x 30" visor.

6" x 24" driver's side shield: a 6" x 24" visor shall be provided in place of the 6" x 30" visor.

6" x 30" right side shield: A sunshield, equal to the one on the driver's side, shall be installed on the passenger side of the windshield.

10" x 30" right side shield: An oversized sunshield, equal to the one on the driver's side, shall be installed on the passenger side of the windshield.

Opaque black: An opaque black shield shall be used in place of the 6" x 30" green shield.

Additional side visor: This is to provide an additional visor for the driver's side sliding window, with all requirements of the driver's visor.

Radios:

AM/FM with digital clock and integral PA: An AM/FM radio with digital clock and integral PA system shall be provided. The internal/external PA system shall have a speaker mounted externally above the drivers sliding window. The radio shall have 4 speakers roof (flush) mounted, evenly distributed throughout the bus. The system shall be set up such that when the internal speakers are on for the PA, the radio is blocked out. Clock is lit with the radio switch in the "off" position, and the ignition switch in the "on" position. The external PA speaker shall be roof mounted.

Radio Options:

AM/FM with cassette and PA system: An AM/FM radio complete with cassette player and internal/external PA system. The PA system shall kill the internal radio system for the internal PA address. 4 speakers.

AM/FM with cassette and PA system: An AM/FM radio complete with cassette player and internal/external PA system. The PA system shall kill the internal radio system for the internal PA address. 8 speakers.

AM/FM with CD and PA system: An AM/FM radio complete with CD and internal/external PA system. The PA system shall kill the internal radio system for the internal PA address. 4 speakers.

AM/FM with CD and PA system: An AM/FM radio complete with CD and internal/external PA system. The PA system shall kill the internal radio system for the internal PA address. 8 speakers.

AM/FM with cassette player: An AM/FM radio complete with cassette player.

AM/FM with CD: An AM/FM radio complete with CD.

AM/FM with digital clock w/o PA: An AM/FM radio with digital clock shall be provided, without a PA system.

TRANSIT - TYPE D

Radio delete: The radio option is totally deleted.

Radio wiring option: The factory shall install the wiring for a radio and 4 speakers, the factory or dealer does not install the equipment. This gives the district the option to add a radio if desired.

6 speakers: 6 speakers, flush mounted shall be installed and wired in place of 4 speakers.

8 speakers: 8 speakers, flush mounted shall be installed and wired in place of 4 speakers.

Delete external PA horn: The PA horn shall not be provided.

External PA speaker mounted below floor: The PA speaker shall be mounted under the floor area instead of externally mounted.

Noise suppression switch, momentary: There shall be a momentary switch to kill the radio system at rail road crossings or when desired.

Rubrails:

4 required: One rubrail required just below the windows, one at seat cushion height, one at approximately floor line, and one at the bottom of the skirt.

16-gauge steel: All rubrails are to be constructed of 16-gauge steel, and have two corrugations. Any variances from this design shall be stated in comments.

One wrap around to rear of bus: The rubrail that is at seat cushion height shall wrap around the rear of the bus to near the emergency doorframe.

Rubrails Options:

Additional rubrail: An additional rubrail may be installed at the floor line area.

Additional wrap around rubrail: An additional rear wrap around rubrail is to be used on each side.

Caulking top of exterior rubrails: The top of all exterior side rub rails shall be caulked to prevent water from entering behind the rubrail from the top.

Seat Belt for Driver:

3-point retractable: The driver's seat belt shall be a 3-point attachment, with lap belt and shoulder belt. The system shall be accommodating to a floating seat, so if the seat settles in rough terrain, it does not tighten permanently on the driver's lap.

Seat Belt for Driver Options:

Vertical adjustment for shoulder belt anchor: This shall provide a means to easily change the anchor pivot for the top of the shoulder belt. This is to accommodate different size drivers for positioning of the shoulder strap contact point. This is considered for safety and comfort.

Driver's Seat:

High back on solid mount: The seat shall be a high back seat that extends to approximately the middle of the head on an average driver (85% adult equivalent). The solid mount shall have a means to adjust the height of the base.

5" min. Slide adjustment: The minimum slide adjustment for the seat shall be 5".

Fabric insert upholstery: The driver's seat shall have an insert of fabric material for the top portion of the seat cushion and the front portion of the back rest area of the cover.

Driver's Seat Options:

Bostrom Routemaster, air suspension, high back: Air ride seat suspension.

TRANSIT - TYPE D

Bostrom Routemaster, spring suspension, high back: Spring type seat suspension.

Magnum 200: Spring suspension.

Magnum 222: Air suspension.

National seat: Air ride seat suspension.

National seat, air suspension with hand pump: Air ride seat suspension with a manual hand pump for air seat operation only.

National seat, adj. back rest: Seat frame with the ability to adjust the angle of the back rest.

National seat with integrated belt: The seat shall have the belt and shoulder strap integrated into the seat system.

Seats Inc.: Air ride suspension type seat.

Armrest: An armrest on one side of the seat is to be provided.

Two arm rests: An armrest on each side of the seat shall be provided.

Self-contained air ride pedestal (for hydraulic brakes): For the use of the air seat, a small 12 volt compressor with air lines and permanent electrical connections shall be installed in an area that is concealed, and serviceable.

Storage pouch: The drivers seating area shall have a storage pouch for placing documents or route maps.

Seat and Crash Barriers:

42 oz.: All seat materials shall be constructed of 42 oz. vinyl, fire retardant.

39" crash barriers on each side: Each side of the bus, in front of the front seat, shall have a crash barrier that is 39" wide. This shall be floor mounted and padded equivalent to the seat back padding.

Non-beaded seams: The seat material stitching shall not have a beaded material sewn into the seam.

Seat and Crash Barriers Options:

Modesty panel below crash barrier, left: One modesty panel shall have a metal panel from the bottom of the panel to the floor on the left side.

Modesty panel below crash barrier, right: One modesty panel shall have a metal panel from the bottom of the panel to the floor on the right side.

Barrier storage pouch, each: There shall be a storage pouch on the front of the barrier.

C. E. White child restraint seats, each: Price per seat, for a C. E. White child restraint seat, that has the fold down seat back panel and straps to convert a regular bus seat to a child seat. (This seat may alter knee room spacing and maximum capacity of the bus.) Price both 30" and 39" seat.

IMMI Safeguard child restraint seat: Price each for 30" and 39".

Seat belt ready seats with seat belts, each: Each seat, priced separately, shall be a seat manufactured, installed and equipped with seat belts.

Seat with belts, each 39":

Seat with belts, each 26":

Seat with belts, each 30":

Seat with belts, each 36":

Seat belt ready seats without seat belts, each: Each seat, priced separately, shall be a seat manufactured, installed but equipped **without** seat belts.

Seat without belts, each 39":

Seat without belts, each 26":

Seat without belts, each 30":

Seat without belts, each 36":

TRANSIT - TYPE D

Standard seat: The seats shall be quoted separately for standard construction seats, other than 39" seats.

Seat, each 26":

Seat, each 30":

Seat, each 36":

Retractable seat belts: Price per seat, two or three per seat.

IMMI Safeguard brand seats with shoulder and lap belts:

Seat, each 30":

Seat, each 37.5":

Seat, each 45":

Child restraint system for IMMI seat: IMMI child restraint system with IMMI shoulder strap and belt seats. Priced single and double per seat.

Delete standard seats: 39"

Delete standard seats: 36"

Delete standard seats: 30"

Delete standard seats: 26"

Seat/barrier combination: 30" seat with a 39" barrier.

Universal ISO latch for baby carrier: Priced per latch. Belts are required for each position.

High Back Seats: 39" each.

High Back Barrier: 39" each.

High Back Barrier: 39" track mounted.

Steps:

3-step stepwell: All step wells shall be a 3-step design.

Steps Options:

Forward handrail (Right side): There shall be a handrail installed on the front side of the stepwell.

Step well sound abatement: The step well shall be insulated by a means to decrease road noise transferred through this area.

Stainless steel step well: The complete step well insert attached to the floor shall be made of stainless steel.

Galvanized steel step well: The complete step well insert attached to the floor shall be made of galvanized steel.

Step Treads:

16-gauge backing metal: The step treads shall have a metal backing that is a minimum of 16-gauge metal. The metal must have a process to retard deterioration due to rust.

White nosing on treads: The first portion (approximately 2") of the step tread shall be white, so it contrasts with the rest of the step tread color.

Matching step treads: The step treads are to match the flooring color.

Non-skid material on nose area: The white nosing area must consist of a non-skid material that is not slippery, to help prevent slips and falls on the steps.

Step Treads Options:

Black treads: The color of the step treads, less the nosing area, may be black.

Premium non-skid nosing material: A premium non-skid material that is rougher and more durable than the standard non-skid nosing material.

TRANSIT - TYPE D

Korseal Pebble step tread: A Korseal pebble step tread shall be used on the bottom two steps.

Heated bottom step tread: The bottom step tread shall be heated to help remove snow and ice from building on the step.

Heated bottom two step treads: Two step treads shall be heated to help remove snow and ice from building on the bottom two steps.

Colored treads with a black floor: The step treads shall be colored with a requested approved color, with a black floor option.

Bumper Steps:

There shall be a step at the front bumper area to aid the drivers in cleaning the windshield.

Bumper Steps, Options:

Grab handle: A grab handle located above the step to assist the driver when using the steps. The grab handles shall be a chrome or black finish.

Stirrup Steps: A fold down stirrup step shall be provided above the bumper, or beside the bumper on the corner on each side.

Stop Signal Arm:

Electric operated w/lights, manufacturer's standard with reflective signs.

Stop Signal Arm Options:

Specialty electric w/lighted stop: 5500

Specialty electric w/strobe stop: 5560

Specialty electric w/LED cluster:

Specialty air powered w/lights: 2500

Specialty air powered w/led: 2200

Specialty air powered w/strobe: 2560

Specialty solid state mechanism: 6500

Transpec electric w/lights: 6000-100-E11

Transpec electric w/led: 7000-100-E31

Strobe lights vs. regular lights:

Heated electric element in unit:

Additional specified stop arm on rear, electric or air: (Requires approval from the Department of Public Safety.)

Stainless steel fasteners: All external fasteners for the stop arm assembly shall be stainless steel to prevent corrosion.

Other:

Storage Compartment:

Bulkhead storage compartment with top hinge door: There shall be a bulkhead storage compartment with a latch and a top mounted hinge.

Storage Compartment Options:

Lockable door: The bulkhead storage compartment shall have a key lock to secure valuables. (No emergency equipment can be stored in this area with this option.)

Glass see-through panel: The door shall provide a see through panel. This shall allow storage of emergency equipment.

Auxiliary storage compartment: There shall be an additional storage compartment for personal items located above the driver's area.

TRANSIT - TYPE D

Left side compartment, above driver, non-lockable:

Left side compartment, above driver, lockable:

Floor mounted compartment: A glove compartment type storage area shall be floor mounted near the driver's seat.

Driver console, including trash container:

Luggage compartment: An under floor luggage compartment shall be installed in the skirt area. The common sizes available and the location shall be stated.

Undercoating:

Complete underside, prior to mounting on chassis: The complete underside of the bus shall be factory undercoated to prevent rust, seal all lower parts of the bus from dust, and help sound proof the floor. This is to include hard to reach places, above frame rails, above flanges, etc. during the undercoating process. The selling dealer, at the district location shall repair any area found not covered by the receiving district.

Undercoating/rustproofing Options:

Undercoating/rustproofing of inside of emergency door: The inside of the emergency door shall be undercoated, across the full width of the door, from the bottom of the door to approximately 12" from the bottom.

Undercoat/rustproofing inside of rear panels, just above floor line: Both sides of the bus, from the emergency door frame to the corner, shall have the inner panels, inner liner and outside panel, undercoated. The undercoating shall be full width, and start as low as possible, approximately floor line, and extend upward approximately 12". This should be done at the factory before the insulation is installed.

Ventilation:

Roof center mounted non-closing vent located near front: There shall be a non closing roof vent located near the front of the roof, located on the center line of the bus.

Wheel housing:

Color-coded to the floor material: The covering on the wheel housings shall be manufacturer's standard, indicated on the proposal form.

Wheel housing Option:

Black covering: If the manufacturer does not provide color coded flooring over wheel housings, they may provide manufacturers standard black floor covering. Proposer may also offer an option of black floor covering if it's available.

Metal fender (wheel housing) extensions on rear wheels only: Externally mounted metal wheel housing fenderettes shall be installed at rear wheel locations.

Rubber fender (wheel housing) extensions on all 4 wheels: Externally mounted rubber wheel housing fenderettes shall be installed at all four wheel locations.

Rubber fender(wheel housing) extensions on front wheels only: Externally mounted rubber wheel housing fenderettes shall be installed at front wheel locations.

Rubber fender(wheel housing) extensions on rear wheels only: Externally mounted rubber wheel housing fenderettes shall be installed at rear wheel locations.

Mud flaps: Mud flaps of standard rubber shall be installed behind the rear axle.

Mud flaps: Mud flaps of standard rubber shall be installed behind the front axle.

Mud flaps: Mud flap installed the full width of the bus behind the rear axle.

TRANSIT - TYPE D

Windows, Thermopane:

Driver's side sliding window: The sliding to the left of the driver shall be thermo pane.

Upper entrance door glass: The upper portion of the entrance door glass shall be thermopane.

First right window: The first windows, both upper and lower, on the right side, just rear of the entrance door shall be thermopane.

Window Options:

Thermo side window, each complete: The addition of thermopane windows, both top and bottom, in a location determined by the district.

Thermo lower entrance door glass: The lower entrance door glass shall be thermopane glass.

Windshield:

Tint only: The windshield shall be tinted throughout.

1, 2, 3, or 4 piece windshield: The windshield of the bus may be 1, 2, 3, or 4 piece glass. Indicate configuration.

Windshield Options:

Tinted w/shaded top: The windshield shall be tinted and provide a shaded strip from the top of the windshield to approximately 6" down from the top of the windshield.

2 piece curved, tinted: 2-piece curved windshield with tint throughout.

4 piece windshield, tinted: A 4 piece tinted combination shall make up the windshield.

Windshield washers:

Wiper mounted, wet arm: This requires the washer nozzles to be mounted on the wiper arm, approximately at the center of the arm. A nozzle shall be aimed each way from the center to wet the complete area of wiper travel.

Electric washer pump: The washer system shall move the fluid with an electric pump. All connections shall be soldered and weatherproofed against moisture and salt.

3 to 4-quart capacity: The washer system shall provide a reservoir with a capacity of 3 to 4-quarts of washer fluid.

Windshield washer Options:

Approximately 8-quart capacity: This shall provide for an oversized washer bottle. The bottle must be constructed and mounted so it will withstand the weight of the contents under severe road conditions for an expected 10 years.

Windshield wipers:

Heavy Duty Bottom mounted: The wipers shall be bottom pivot mounted.

Single or Dual switch: One or two switches shall be provided.

2-speed with intermittent feature: All wiper switches shall be dual speed with an intermittent feature.

Non-glare arms: A dull, non-glare wiper arm and blade shall be provided.

Windshield Wiper Options:

Single switch: This shall allow for a single heavy duty switch to control both wipers. To include intermittent feature.

Dual switch: This shall allow for two single heavy duty switches to control wiper motors. To include intermittent feature.

TRANSIT - TYPE D

Winter or All-Season wiper blades: All season wiper blades shall be provided to help prevent snow build-up on the blade.

Heated wiper arms: The wiper blades shall be electrically heated to remove a buildup of snow and ice in cold weather conditions.

Wiring:

Color-coded and numbered wiring: All wiring circuits shall be color coded and numbered to aid the mechanic in tracing wires. All wiring diagrams provided with the bus shall indicate both circuit number and color used.

All circuits protected by circuit breakers, manual or automatic: All circuits used in the school bus body shall be protected by circuit breakers. The breakers shall be a manual or automatic resetting type.

Body solenoid: 160 amp, installed to cut power to all body functions with the ignition key in the off position.

Wiring Options:

Manual reset circuit breakers: The provision of manual reset circuit breakers in lieu of automatic reset breakers.

Automatic reset circuit breakers: The provision of automatic circuit breakers in lieu of manual reset breakers.

Solid state circuit protectors: The provision of solid state circuit protectors in lieu of manual reset breakers.

Purpose specific labeled wiring: Each wire shall be labeled with the purpose of the wire, in place of the circuit number. The circuit shall also be color coded. i.e. Tail light, heater, clearance light.

Other Options:

This is an opportunity to list other options we have not included that the proposer feels is a common option that may warrant consideration.

Disability Bus Additions:

Padded header panel above lift door: A padded header panel located on the inside above the lift door is required.

Door opening: The proposed door opening shall have the dimensions specified.

Remote control: The wheel chair lift shall be equipped with a corded remote control so the operator can operate the lift from inside the bus, standing on the lift, or standing on the ground beside the lift.

Continuous tracking in header: The header above the windows in the area of the wheel chair tie downs shall have a continuous track for adjusting the shoulder strap.

Front handrail on step well: The front portion of the step well shall have a handrail with the lower part fastened to the side of the step well and the upper part securely fastened in an area below the windshield.

Handicap bus option base price addition: The base price for the handicap option shall be listed.

Disability Bus, Options:

Optional door sizes: Any additional optional door size offerings are to be specified.

Lift area outside light: There shall be an outside mounted light that is activated with the opening of the lift door.

Lift area inside and outside light: There shall be an inside and outside mounted light that is activated with the opening of the lift door.

TRANSIT - TYPE D

Safety rail on wheel chair lift: The lift shall have a safety rail permanently mounted.

Full length shield for lift mechanism: The wheel chair lift shall have a full height shield that encompasses the lift supports so individuals are protected from the mechanical workings of the lift assembly.

Lift structure padding: This option would supply a padding material to the vertical structures or the lift mechanism.

Removable padded cover for wheel chair lift: The lift shall be equipped with a removable padded cover that will protect student from the lift. This is required to be easily removed and installed. This may be installed when there are extended periods of time the lift is not used.

Driver's areas, lift enable switch: There shall be a switch mounted in the drivers area that must be activated before the lift has power to operate.

Door lift interlock switch, automatic: When the lift door is opened, the bus shall be rendered inoperable in moving from the spot.

Door lift interlock switch, manual: There shall be a means of rendering the vehicle from moving. This activation shall be the results of an intentional change of a switch position by the driver in the lift area.

Lift area inside light: There shall be a light mounted above the lift area that is activated by a switch in the driver's area.

Lift area inside lights, 2-5": There shall be two 5" lights mounted above the lift area that is activated by a switch in the driver's area.

Thermopane glass in lift door: The glass that is mounted in the lift door shall be a thermo pane. This may be required if the door is in the front body section, immediately behind the entrance door.

Delete front handrail: The front handrail in the step well must be deleted.

Chassis brake interlock for hydraulic brakes:

Chassis brake interlock for air brakes:

Lift Door Control Buzzer:

Activated between latch open and door open: The door buzzer shall sound in the driver's area when the lift door latch is opened, and will continue to sound until the door is opened.

Heater Options for Flat Floor:

Wall heater: The bus shall be equipped with a radiant heat wall mounted heater. Proposer is to specify the BTU rating.

Additional heater installed: The bus shall be equipped with an additional floor mount or under the seat mounted heater. Proposer shall indicate the BTU rating and the mounting location of the heater.

Right side mounted heater: Right side mounted heater to allow clear floor in the left side of the bus with flat floor and track seating. Specify BTU size.

Deletion of the mid ship heater: If the bus is equipped with a mid ship heater, this option would delete the heater.

Deletion of the rear heater: This option will delete a rear heater.

Door Location:

Front: The lift door shall be mounted in the front portion of the bus. The exact location shall be coordinated with the selling dealer.

Door Location, Options:

Midship: The lift door shall be located just in front of the rear wheels.

TRANSIT - TYPE D

Rear: The lift door shall be mounted to the rear of the rear wheels. The exact location shall be coordinated with the selling dealer.

Verify location of door: The district and the dealer shall verify the exact location and body section where the door is installed.

Type of Lift:

The proposer shall indicate the brand of lift, the model, the door opening that is required (minimum), and the platform dimensions of the lift.

Tie downs:

The proposer shall indicate the brand, model, type of track, and the type of latch (tightener, ie: over center, ratchet) used on the wheel chair end of the strap. These units shall be priced on a per position bases.

Tracking:

The "L" tracking shall be priced on a per position basis, either flush mounted or above the floor mounted.

Barriers:

It is the responsibility of the selling dealer to assure each bus is manufactured according to federal and state regulations. The standard bus shall be equipped with two (2) barriers.

Barrier, Options:

39" barrier: This requires the addition of one 39" barrier.

36" barrier: This requires the addition of one 36" barrier.

30" barrier: This requires the addition of one 30" barrier.

Delete Barrier: The price for deleting a provided barrier is requested. Any deletion of barriers must keep the bus us full compliance with state and federal regulations.

Barriers, Track Mounted Options:

39" barrier: This requires the addition of one 39" track mounted barrier.

36" barrier: This requires the addition of one 36" track mounted barrier.

30" barrier: This requires the addition of one 30" track mounted barrier.

Seats, Track Mounted:

Seats Each, Track Mounted vs. Bolted:

Proposer is to state the price per seat to supply track mounted seating in lieu of the standard bolted seats.

C.E.White brand 39" track mounted seat with built in child restraint system and seat belts.

C.E.White brand 30" track mounted seat with built in child restraint system and seat belts.

Other Seats: Proposer may state other configurations or options offered.

IMMI Safeguard brand seats with shoulder and lap belts:

Seat, each 30":

Seat, each 37.5":

Seat, each 45":

Child restraint system for IMMI seat, single and double:

TRANSIT - TYPE D

Seats, Standard Mounted, each:

Delete standard seat, 39":

Delete standard seat, 36":

Delete standard seat, 30":

Delete standard seat, 26":

Flat Floor Option:

Flat floor option: Proposer is to state additions or deductions for providing a flat floor from the driver's area to the rear of the bus body.

Tire size required: Proposer shall state the tire size required for the flat floor option, and the brand that is offered.

Tire options: Additional tires sizes and brands may be offered.

Other requirements: Any additional options may be listed with the flat floor.

CHASSIS

Air Cleaner:

Dry type, to match engine design.

A restrictor indicator shall be mounted at the air cleaner.

Air Cleaner, Options:

A heavy duty dual element filter shall be used with a pre-cleaning system to remove heavy particles before they reach the air cleaner elements.

A restrictor indicator shall be dash mounted.

Air Intake, Option:

Ability to draw air from around the exhaust manifold and turbo area to allow for faster warm-up in cold weather.

Axles, Front:

Proposer to designate model, weight capacity, and hub type.

Axles, Front Options:

12,000 lb. capacity.

13,000 lb. capacity.

14,000 lb. capacity.

14,600 lb. capacity.

A wet type oil seal shall be used with a heavy oil to lubricate the front wheel bearings.

The brand of the seal shall be stated.

A grease type seal shall be used in conjunction with wheel bearing grease to lubricate the front wheel bearings. The brand of the seal shall be stated.

Wet type hub with synthetic lube, state brand.

Axles, Rear:

The standard axle shall be minimum 19,000 lbs., if that is sufficient for the load capacity.

The proposer is to designate the model and the weight capacity of the axle furnished, and indicate the oil seal brand used. Axle ratio will be determined by district at the time of order.

Axles, Rear Options:

17,500 lb. capacity.

TRANSIT - TYPE D

19,000 lb. capacity.

21,000 lb. capacity.

23,000 lb. capacity.

A magnetic oil level plug shall be provided to catch metal particles.

No spin differential.

Synthetic lubrication in the differential in lieu of the standard rear end oil. Indicate brand of oil.

Indicate other oil seal brands offered.

Brakes:

The standard brake assist system shall be split hydraulic disc brakes on both axles, with four channel ABS. Emergency brake system to be manual application.

State brand and model of ABS brake system.

Dust shields at all brake positions.

Brakes, Options:

(Air drum brakes on both axles shall have dust shields provided.)

Standard air system shall be 16.5" x 5" "Q" Plus on front and 16.5" x 7" "Q" Plus on the rear, with outboard drums.

Front, air: (with outboard drums.)

16.5" x 6" "Q" Plus

Rear, air: (with outboard drums.)

16.5" x 8" "Q" Plus

16.5" x 8-5/8" "Q" Plus

Eaton 'ES' Extended Service lining material.

Adjustable brake and accelerator pedals.

Automatic Slack Adjusters: Slack adjusters are to have an easy and effective means of backing off the adjustment without total removal of the adjusting pahl.

Haldex

Meritor

Emergency Brake, Options:

Air powered application of emergency brake, (air already supplied).

MGM, rear parking brake chamber.

Air Dryers and Tanks:

Manual drain valve.

Bendix AD-9 air dryer, with heater.

Air Dryers and Tanks, Options:

Pull chain for drain valve, wet tank.

Pull chain for all reservoirs.

Pull chain extended to body wall.

Automatic drain valve with heater.

Bendix AD 9 air dryer with heater: without air brakes

Bendix AD1P dryer with heater.

Bendix AD-SP dryer with heater.

BW DV-2 auto drain valve, with heater, on the wet tank only.

BW DV-2 auto drain valve, on all tank drains, without heaters.

BW DV-2 auto drain valve, with heater, on the wet tank only.

TRANSIT - TYPE D

BW DV-2 auto drain valve, with heaters, on all tank drains.

Compressor:

State manufacturers standard brand and CFM.
Specify tank capacity in volume to match accessories.

Compressor, Options:

Bendix 13.2 CFM

Bumper, Front:

Heavy duty steel, per manufacturer's standard.

Bumper, Front Options:

Fold down bumper.

Color, Paint:

Indicate brand and type of paint used.

Color, Options:

Optional paint offered from standard provided.

Electrical System:

All circuits shall be protected, with manual/automatic reset circuit breakers. Specify type. State manufacturer's standard alternator, 160 amp. Specify brand.
2-Group 31 Batteries. Proposer to indicate CCA provided, between 1300 and 1500.
Daytime running lights, partial power.

Electrical System, Options:

Manual reset circuit breakers in lieu of standard reset circuit breakers.
Automatic reset circuit breakers in lieu of standard reset circuit breakers.
Daytime running lights, high power.
Headlight circuit relay system.
Headlight, ignition off alarm.
Heavy Duty Mechanical turn signal flasher. Indicate model.
Cell phone power point

Alternators:

- 185mp. 4939 Leece-Neville
- 190 amp. 4939 Leece-Neville
- 200 amp. 4800 Leece-Neville
- 200 amp. 4951 Leece-Neville
- 200 amp. Bosch
- 270 amp. 4870 Leece-Neville
- 270 amp. 4949 Leece-Neville
- 270 amp. 4944 Leece-Neville
- 320 amp. Leece-Neville

Batteries:

Qty	Group	CCA
2	31	1300
2	31	1900

TRANSIT - TYPE D

3	31	1950
3	31	2100
2	8D	2250
2	8D	2300
2	8D	2600
2	8D	2800
3	8D	3000

Starters:
Nippen-Denzo

Engines:

Manufacturer's standard 205-215 H.P.

Indicate the engine provided.

Anti-freeze protection to -34 degrees prior to shipping.

An electronic idling device to maintain a fast idle for cold warm-ups, dash mounted.

Engine alarm, that will warn the driver if oil pressure and water temperature go beyond preset limits.

Magnetic drain plug.

2010 emissions standard.

Engines, Options:

Cummins	ISB	200 H.P.
Cummins	ISB	220 H.P.
Cummins	ISB	240 H.P.
Cummins	ISB	260 H.P.
Cummins	ISB	280 H.P.

International	DT-466E	210 H.P.
International	DT-466E	220 H.P.
International	DT-466E	225 H.P.
International	DT-466E	245 H.P. High Torque

Dash mounted cruise control: Electronic speed control that will maintain a constant engine RPM, but will deactivate with the brake pedal, or by turning off the speed control switch.

Engine shut down and alarm that will shut down the engine and warn the driver if oil pressure or water temperature go beyond preset limits.

Low coolant level warning light, dash mounted.

Exhaust brake: Designed for use with hydraulic brakes. Indicate brand and model.

Block heater; of 110 volts shall be installed in the water jacket of the engine. The wattage shall be stated.

Double block heaters; in place of one heater shall be installed for additional warm up capacity. State wattage of each heater.

Bumper mounted plug-in receptacle.

Gates Blue Stripe hoses.

Silicone hoses.

Constant torque hose clamps.

Long Life coolant. Indicate brand of coolant.

Fuel heater, in line.

Fuel heater, in-fuel tank.

TRANSIT - TYPE D

Delete pre-charged coolant filter.

Quick warm-up device, achieved by altering the routing of intake air.

Electric manifold grid heater for easier starting and faster warm ups.

Radiators:

The vendor shall specify if internal or external cooler is provided. Please specify basic material used in radiator construction.

Radiators, options:

Shutters, hydraulic.

Shutters, air.

Winter fronts, snap on. Indicate color(s) offered.

Hinge out radiator, not requiring hose disconnects.

Fan Clutch: Specify brand and type provided standard.

22" nylon blades, electric activated. State brand.

24" nylon blades, electric activated. State brand.

Fuel-water separators:

Racor 490 with primer pump

Racor 490R30 fuel water separator, with heater.

Racor 790 with electric pump

Fleetgard with heater and light

Indicate other fuel water separators offered.

Exhaust System:

Left side rear discharge required.

Exhaust System, Options:

Left side discharge, in front of the rear duals.

90 degree turn down exhaust end.

Through bumper, left side.

Frame:

Manufacturer's standard frame, approximately 50,000 psi.

Indicate standard wheel base for each size bus proposed.

Front and rear tow hooks.

Heavy Duty frame, indicate PSI strength.

Frame, Options:

Wheel Base lengths and related body lengths:

141"

169"

180"

190"

198"

211"

216"

232"

234"

Delete front tow hooks.

Delete rear tow hooks.

TRANSIT - TYPE D

Fuel Tank:

Approximately 60-65 gallon, with fuel door, right mount.
Access plate for sender unit replacement.
Fuel door included.

Fuel Tank, Options:

60-65 gallon, mounted between the frame rails.
100 gallon, mounted between the frame rails.
Left side filler neck for between frame rails tank.
Key lock on fuel door.
Thumb latch on fuel door

Horn:

Dual electric horns.

Horn, Options:

Dual air horns (with air supply provided, ie: air brake equipped.) roof mounted.
Dual air horns (with air supply provided, ie: air brake equipped.) under floor mounted.

Instruments and Panel:

Per National Standards.

Instruments and Panel, Options:

Dash mounted digital clock.
Tachometer.
Hour meter
Transmission temperature gauge, dash mounted.
Ammeter
All ignitions are keyed alike, either for this order or to match existing fleet ignitions. This pertains only to same brand chassis.
Air pressure gauge for air suspension.

Oil Filter:

Per National Standards. Spin-on type.

Power and Grade ability:

Per National Standards.

Shock Absorbers:

Heavy duty shocks required front and rear.

Shock Absorbers, Options:

Dual shock system, front axle.

Springs:

The front springs shall be a Parabolic Type tapered leaf spring. Rear springs shall be single stage, vari-rate multi leaf springs.

Springs, Options:

Front:

TRANSIT - TYPE D

Air suspension, front.

2 leaf parabolic, 13,200 lb.

2 leaf parabolic, 14,000 lb.

3 leaf parabolic, 14,600 lb.

Maintenance free spring pins.

Rear:

Vari-rate multi-leaf 18,500 lb.

Vari-rate multi-leaf 19,000 lb.

Vari-rate multi-leaf 20,000 lb.

Vari-rate multi-leaf 21,000 lb.

Vari-rate multi-leaf 23,000 lb.

Vari-rate multi-leaf 23,500 lb.

Air Suspension: A chassis manufacturer's air suspension is to be provided on the rear axle. Air brake bus, only.

Air suspension system for the rear axle with hydraulic brakes. This shall include the installation of a compressor, air dryer and related parts.

Air suspension capacities:

20,000 lb.

21,000 lb.

Stabilizer bar with rear air suspension

Steering:

Power steering assist. State brand and model. State steering wheel diameter.

Steering, Options:

TRW Ross, TAS model, specify

Stationary steering column

Tilt wheel.

Tilt and telescoping wheel.

Tires and Rims:

One-piece radial rims, hub piloted disc, with 10 bolt holes, 22.5 X 8.25.

Tires to be manufacturer's standard, 11R x 22.5 Front. Traction type rear.

All buses must have lead-free weights. May use non-lead, powder, fluid, or other means to balance tires.

Wheel, Options:

10 hole Budd disc wheel.

Spare tire carrier, mounted under the floor.

Spare Hub piloted disc wheel, with 10 bolt holes.

Wheel alignment and balance, front only.

Wheel alignment and balance, rear only.

Wheel balance, front only using a powder product. No lead weights are allowed.

Wheel balance, rear only using a powder product. No lead weights are allowed.

Other balance products offered. Indicate product, priced per wheel.

Tire, Options:

Indicate tire size and brand, and model options offered, with relative pricing **PER AXLE**.

TRANSIT - TYPE D

Transmission:

Allison PTS 2500 model automatic transmission.
Shift tower with cable.
Magnetic drain plug.

Transmission, Options:

Allison MD 3060 P
Push button shift for MD 3060 P.
Transynd fluid

Turning Radius:

State curb-to-curb turning radius for each wheelbase offered.
_____ W.B. _____ radius.

State bumper-to-bumper turning radius for each wheelbase offered.
_____ W.B. _____ radius.

Additional Options:

If there are any items that were missed that you feel should be added, please indicate the option and the corresponding price.

Quantity Discount:

The Proposer shall state quantity discounts offered.

Freight delivery charges: The dealer shall state the delivery charges from the manufacturing plant to the dealership.

Delivery:

Proposer shall indicate location of dealership.
The district shall concur with the dealer the distance from the dealership to the district delivery point. That number of miles shall be used in calculating the delivery cost. Proposer shall indicate **cost per mile** for delivery of completed unit to purchasing district.

Proposer may state a minimum delivery charge for districts that are close in location. The district is to tally the **larger** of the two calculations, mileage or minimum charge. The minimum delivery charge (if used) shall **not** be added to a cost per mile calculation.

Manuals:

Proposer is to list manuals that are available for the chassis quoted. Please indicate if the manuals are in book form, disk, or CD, and the prices for each. For multiple bus orders, you may want to order one set only, separate from this proposal

Engine Warranty:

Proposer is to state the engine proposed, and warranties offered on price sheet.
Engine _____ Brand _____
_____years, _____miles. Standard Warranty
_____years, _____miles.

Engine Electrical Warranty:

TRANSIT - TYPE D

Proposer is to state the engine proposed, and warranties offered on price sheet.

Engine _____ Brand _____
_____years, _____miles. Standard Warranty
_____years, _____miles.

Chassis Warranty:

Proposer is to state the chassis proposed, and warranties offered on price sheet.

Chassis _____ Model _____
_____years, _____miles. Standard Warranty
_____years, _____miles.

Transmission Warranty:

Proposer is to state the warranties offered on price sheet.

Transmission _____ Model _____
_____years, _____miles. Standard Warranty
_____years, _____miles.

Certification:

The bus shall be certified by the selling body dealer that the complete bus meets all Minnesota and federal standards. This shall be marked with the approved certification sticker properly placed in the windshield.

Trade-ins: This area is used for districts to calculate trade in amounts if they are considered.