



State of New Jersey

PHILIP D. MURPHY
Governor

Department of Environmental Protection

CATHERINE R. McCABE
Commissioner

SHEILA Y. OLIVER
Lt. Governor

PROJECT SOLICITATION

OVERALL GOAL

The State of New Jersey, as a beneficiary of the Trust established pursuant to the national Volkswagen settlement, intends to use its allocation from the mitigation trust to efficiently implement projects that reduce oxides of nitrogen (NOx) emissions in a cost effective and technically feasible manner. The implemented projects must meet the criteria of the Consent Decree. New Jersey is issuing this solicitation for project ideas to ensure a broad range of project ideas are considered.

Submissions must contain all the information outlined in the “Project Proposals” section of this document.

ELIGIBLE PROJECTS

A general summary is below. [Click here for comprehensive list and associated definitions.](#)

Source Category	Emission Reduction Strategy	Allowed Expenditure Amount
1. Class 8 local freight trucks & port drayage trucks	Repower and replacement	Up to 40% for repower with diesel or alternative fuel or up to 75% (up to 100% if government owned) for repower with electric. Electric charging infrastructure costs are eligible expense. Up to 25% for replacement with diesel or alternative fuel or up to 75% (up to 100% if government owned) for electric replacement. Electric charging infrastructure costs are eligible expense.
2. Class 4-8 school bus, shuttle bus or transit bus	Repower and replacement	Same as row 1
3. Freight switching locomotives	Repower and replacement	Same as row 1
4. Ferries/Tugs	Repower	Same as row 1
5. Oceangoing vessels	Shorepower	Up to 25% for shore side infrastructure if non-government owned (up to 100% if government owned)

6. Class 4-7 local freight trucks	Repower and replacement	Same as row 1.
7. Airport ground support equipment	Repower and replacement	Up to 75% to repower or replace with electric (up to 100% if government owned). Electric charging infrastructure costs are eligible expense.
8. Forklifts and Port Cargo Handling Equipment	Repower and replacement	Up to 75% to repower or replace with electric (up to 100% if government owned). Electric charging infrastructure costs are eligible expense.
9. Electric vehicle charging stations or hydrogen fueling stations for light duty vehicles only		Up to 100% to purchase, install and maintain infrastructure if available to public at <i>government owned</i> property. Up to 80% to purchase, install and maintain infrastructure if available to public at <i>non-government owned</i> property. Up to 60% to purchase, install and maintain infrastructure at a workplace or multi-unit dwelling that is not available to the general public. Up to 33% to purchase, install and maintain infrastructure for publicly available hydrogen dispensing that is high volume or up to 25% for lower volume.

PROJECT PROPOSALS (Open with Adobe Reader)

Electronic submittals are preferred and should be sent to VWComments@dep.nj.gov however paper submittals will also be accepted and should be sent to:

NJDEP
 Division of Air Quality
 Mail code 401-02E
 Trenton, NJ 08625-0420
 Attn: VW Settlement

All proposals must contain the following information; incomplete applications will not be considered. If your project is selected, you may be contacted for additional detailed information. Send questions to VWComments@dep.nj.gov

To enter information electronically use Adobe Reader

CONTACT INFORMATION

Organization Name	
Organization Address	
City, State Zip Code	
Contact Person	
Title/Position	
Phone	
E-mail	

PROJECT NAME	
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PROJECT CATEGORY OR CATEGORIES (choose from 1-9 in "Eligible Projects" section above)								
1	2	3	4	5	6	7	8	9

PROJECT PRIORITY Priority # of proposals
If submitting more than one proposal, what is the sponsor's priority of this proposal?

PROJECT BUDGET
Provide total estimated project budget, include source and amount of cost share if applicable. Durham School Services LP (Durham) is asking for \$983,428 or 20% of the project cost for the replacement of 55 diesel school buses. Durham cost share is \$3,933,712.

PROJECT DESCRIPTION (Briefly describe the project by completing the following questions)
Geographic area where emissions reductions will occur? Ocean, Passaic and Union Counties
Estimated size of population benefitting from the emission reductions? 1.6 million county-wide
Estimated useful life of the project? 15 years
Number of engines/vehicles/vessels/equipment included in the project? 55
Estimated emission benefits should be expressed in tons per year (TPY) of emission reduced for NOx and for PM 2.5 over the lifetime of the project. Identify methodology used. Estimated NOx benefits? 7.08 TPY Methodology Used? EPA Diesel Emissions Quantifier Particulate matter (PM 2.5) benefits? 0.96 TPY Methodology Used? EPA Diesel Emissions Quantifier
Will the project benefit one or more communities that are disproportionately impacted by air pollution? If so, please describe. Yes, the project will result in a combined NOx and PM 2.5 reduction of 8.04 tons per year across the three counties which are all deemed nonattainment areas. See Supplemental Page 1.

<p>Project partners, if any?</p> <p>Durham will not have any project partners. Durham owns and operates the school buses, and is under contract with school districts.</p>
<p>Explain how the project will provide cost effective and technically feasible emission reductions. Cost effectiveness should be expressed in dollars per ton per year of emissions reduced for NOx and for PM 2.5.</p> <p>This project would replace 55 school buses (model year 2001-2005) in Ocean, Passaic and Union Counties. It would reduce NOx by 7.08 tons per year and PM 2.5 by 0.96 tons per year for a total emission reduction of 8.04 tons per year. Durham is requesting \$1,229,285 in funding. Which equates to a \$8,309.76 per ton of NOx and \$70,043.21 per ton of PM 2.5 emissions reduced annually. The total cost effectiveness is \$9,428.40 per ton of emissions reduction annually.</p>
<p>Estimated timeframe for implementation? Include a project timeline that identifies start and end dates, as well as the timeframe for key milestones.</p> <p>Durham evaluates their fleet in the fall, places purchase orders of new buses in the spring and takes possession of new units each summer, in time for the start of each new school year. If Durham receives grant funding they plan to purchase the replacement school buses under this schedule in one to two years depending upon when funding is announced. Durham understands the requirements to complete the project in a timely manner and will follow any terms under the award contract.</p>
<p>Demonstrated success in implementing similar projects?</p> <p>Durham has success in implementing similar diesel emission reduction projects. See Supplemental Page 2.</p>
<p>If your proposed project involves alternative fuels, provide a demonstration of current or future plans to provide adequate refueling infrastructure.</p> <p>The proposed project does not involve alternative fuels.</p>
<p>Has your organization been approved to receive and expend any other grant funds related to this project? If so, please provide details.</p> <p>Durham has not been approved to receive or expend any other grant funds related to this project.</p>
<p>Please provide any additional information that supports this project.</p> <p>See Supplemental Pages</p>

Two additional pages have been provided as supplemental space to answer any of the questions above.

Supplemental Page 1

Benefit of communities disproportionately impacted:

The project includes school districts located throughout the the cities of 1) Hawthorne, 2) Roselle and 3) Little Egg Harbor.

Durham runs school bus routes for school districts located in Hawthorne which is part of Passaic County and Roselle which is part of Union County. As of October 31, 2018, Passaic and Union Counties and are listed as a moderate nonattainment area for 8-Hr Ozone (2015) as part of the New York-N, New Jersey-Long Island, NY-NJ-CT area. This nonattainment area had a census population of over 20 million people in 2010.

Durham also runs school bus routes for the school district located in Little Egg Harbor, which is part of Ocean County. As of October 31, 2018, Ocean County was listed as a marginal nonattainment area for 8-Hr Ozone (2015) as part of the Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE area. This nonattainment area had a census population of over 7 million people in 2010.

The State has previously identified school buses as a priority sector for emissions reduction with the Diesel Retrofit Law in 2005. The replacement of existing older diesel school bus with new lower emissions diesel school buses will have a direct impact on the children who ride them daily to and from school, as well as the air quality in the broader community. There is a continual need to protect our children from harmful diesel exhaust on their trips to and from school. The grant funding helps Durham to purchase new school buses at a faster rate which will allow the health benefits of a new school bus to impact more children sooner rather than later.

While Durham does all it can do to replace older school buses and has implemented a motor-vehicle anti-idling education program for all of its employees idling is sometimes unavoidable. The new lower emission buses will result in less harmful air when unavoidable idling occurs. The anti-idling education programs and new diesel buses provide the students with a better quality ride to school as the buses they are riding are cleaner and also reduces the pollution around the schools when the buses do need to idle at school for drop off and pick up.

Supplemental Page 2

Success in implementing similar projects:

Durham makes the health and safety of the students they transport the number one priority. As part of this priority, Durham evaluates its fleet annually to determine the needs for the following school year. During this evaluation a key criteria Durham looks at is the age of the school buses for selecting which school buses to replace.

As funding permits, Durham is continually investing in cleaner diesel technology to replace the existing older buses. In addition to the regular evaluation of the fleet, Durham looks for funding opportunities such as this to accelerate its fleet replacement. This funding opportunity would allow Durham to replace school buses that are at or past the useful life as well as retire a number of school buses early in New Jersey.

As a result of completing similar diesel emission reduction programs in the past in other states, Durham is familiar with the reimbursement and scraping processes that these programs require. Durham has people in place to work with salvage dealers to ensure timely disposition, to organize required photographs and any other steps required to successfully complete the program for which they have or will obtain funding.



INTEGRATED CE S BUS

**Sales Proposal For:
NEC 1 1550-661 NJ 54 CE**

**Presented By:
IC BUS, LLC**

Vehicle Specifications
2020 INTEGRATED CE S BUS (PB105)

November 05, 2018

<u>Code</u>	<u>Description</u>
PB10500	Base Chassis, Model INTEGRATED CE S BUS with 254.00 Wheelbase, N/A CA, and 143.00 Axle to Frame.
1570	TOW HOOK, FRONT (2) Frame Mounted
1CAC	FRAME RAILS High Strength Low Alloy Steel (50,000 PSI Yield); 10.125" x 3.062" x 0.312" (257.2mm x 77.8mm x 8.0mm); 480.1" (12195mm) Maximum OAL <u>Includes</u> : CHASSIS PAINT Chassis Painted Prior to Body Mounting : FRAME RAILS All holes Laser Aligned and Machine Punched, Powder Coated Prior to Full Assembly, Assembled in Fixture using "Grade 8" Bolts : FRAME REINFORCEMENT, SPECIAL 3.30" x 1.80" x 0.312" x 31.50" Inverted "L" in Front Shock Absorber Mounting Area
1LLE	BUMPER, FRONT Full Width, Aerodynamic, Heavy Duty, Steel <u>Includes</u> : BUMPER, FRONT THICKNESS 1/4 Inch
1LMW	CROSSING GATE, FRONT Electric, Yellow Blade, Bumper Mounted <u>Includes</u> : CONTROL ASSEMBLY Solid State, Located Rear of Front Bumper, Heater not Required : CROSSING GATE, FRONT Matches Contour of Bumper
1SAM	CROSSMEMBER, REAR, AF (2)
1WHU	WHEELBASE RANGE 254" (645cm) Only
1WRP	TOW HOOK, REAR (2) Mounted on Lower Rail Flange
2ASH	AXLE, FRONT NON-DRIVING {Meritor MFS-10-122A} I-Beam Type, 10,000-lb Capacity <u>Includes</u> : AXLE, FRONT SQUARING to Plus or Minus .015 Inch, using a Special Fixture to Assure Parallelism of Springs <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
3ADB	SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 10,000-lb Capacity, with Shock Absorbers <u>Includes</u> : SPRING PINS Bolt and Nut Type : SPRING PINS Rubber Bushings, Maintenance-Free <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
4100	BRAKE SYSTEM, HYDRAULIC {Wabco} Split System, with Automatic Adjustment and Four Channel ABS
4GBJ	BRAKE, PARKING {Bosch} DSSA Type, 12" x 3"; for Hydraulic Brake Chassis; Foot Operated in Cab; Differential Mounted <u>Includes</u> : BRAKE, PARKING Foot Activated Parking Brake
4JNP	BRAKES, FRONT, HYDRAULIC DISC Quadraulic; Four 70mm Diameter Pistons
4JNU	TRACTION CONTROL, HYDRAULIC Automatic; Hydraulic Brake System
4NNL	BRAKES, REAR, HYDRAULIC DISC Quadraulic; Four 70mm Diameter Pistons

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<u>Code</u>	<u>Description</u>
4WGT	PARKING BRAKE INTERLOCK Parking Brake Cannot be Released until Ignition Switch is in the "ON" Position and the Service Brake Pedal is Applied, Use with Hydraulic Brake Chassis Only
4WXP	GVWR LIMITATION FOR BUS with Hydraulic Brakes, Limited to 29,800-lbs Maximum to meet FMVSS 105 Requirements, for Conventional Bus
5AAA	STEERING COLUMN Stationary
5CAL	STEERING WHEEL 2-Spoke, 18" Dia., Black
5PRR	STEERING GEAR {TRW (Ross) TAS66} Power
7BLA	EXHAUST SYSTEM Single, Horizontal Aftertreatment Device, Frame Mounted Under Right Rail, for Long Horizontal Tail Pipe <u>Includes</u> : NOTE: The Horizontal Tailpipe Includes a Temperature Control Device
7WBK	TAIL PIPE Long Horizontal, Exits Right Side Through Bumper
7WZV	SWITCH, FOR EXHAUST Manual Regen Switch Relocated to Flasher Plate
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment <u>Includes</u> : FUSES, ELECTRICAL SAE Blade-Type : HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever : MISCELLANEOUS FEATURES Modular, Loom Protected, Grommets in all Applicable Body Openings, Assembled in Computer Assisted Fixture which Verifies Continuity and Correct Assembly Prior to Installation : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : TURN SIGNAL FLASHER : TURN SIGNAL SWITCH Self-Cancelling with Lane Change Feature : TURN SIGNALS, FRONT Includes Reflectors; Flush Mounted : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever : WIRING, CHASSIS Color Coded and Continuously Numbered
8GXK	ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt 325 Amp. Capacity, Pad Mount, with Remote Sense
8MSG	BATTERY SYSTEM {Fleetrite} Maintenance-Free, (3) 12-Volt 1980CCA Total
8TTK	BATTERY BOX Steel, with Sliding Tray, 25.25" Wide, for Standard Batteries, Mounted Left Side Behind Front Axle Perpendicular to Frame Rail
8TTN	BATTERY BOX COVER Plastic, Front Cover for Frame Mounted Battery Box Compartment
8TUT	COLLISION MITIGATION SYSTEM Omit
8VAZ	HORN, ELECTRIC (2) Trumpet Style, Mounted on Top of Mega-Bracket
8WPB	HEADLIGHTS Halogen; Composite Aero Design for Two Light System; Includes Daytime Running Lights
8WTK	STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; less Thermal Over-Crank Protection
8WWJ	INDICATOR, LOW COOLANT LEVEL with Audible Alarm
8WXB	HEADLIGHT WARNING BUZZER Sounds When Head Light Switch is on and Ignition Switch is in "Off" Position
8WXC	BRAKE WARNING INDICATOR Light and Audible Alarm; Parking Brake/Motion Warning System for Engaged Parking Brake
8XDX	BK WARN IND,PARK BK NOT SET , Visual and Audible Alarm; Active Upon Ignition Off and Parking Brake Not Set, Reminder to Set Parking Brake

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<u>Code</u>	<u>Description</u>
9AAE	LOGOS EXTERIOR, ENGINE Badges
9WAB	HOOD TILT ASSIST {EASY TILT} Mechanical
9WAY	FRONT END Tilting, Fiberglass, with Three Piece Construction <u>Includes</u> : AIR INTAKE SYSTEM Integrated Pre-Cleaning System to Enhance Air Filter Life : GRILLE Removable; Fiberglass Painted Hood Color : SPLASH SHIELD Integral with Front End Assembly
10020	CHASSIS PAINT Full Chassis
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100 <u>Includes</u> : PAINT SCHEMATIC ID LETTERS "NB"
10788	PAINT TYPE Urethane, One or Two Colors, Other than Imron or International.
10AA Y	OVER THE AIR PROGRAMMING {Navistar} for Cummins Engines
10WHJ	SPECIAL ROUTING CONTROL To Bus Vehicle Modification Center
10XAK	PROMOTIONAL PACKAGE 7 Year Unlimited Miles/km Warranty, Limited Time Program for Allison 2000 Series Transmission on School and Commercial Buses (Supplied directly through Allison)
11001	CLUTCH Omit Item (Clutch & Control)
12703	ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection
12EJ J	ENGINE, DIESEL {Cummins B6.7 220} EPA 2017, 220HP @ 2400 RPM, 520 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 220 Peak HP (Max), School Bus Only <u>Includes</u> : FUEL FILTER Included with Cummins B6.7 Engines Engine Mounted : FUEL/WATER SEPARATOR Fuel/Water Separator; Heated; with Water-in-Fuel Sensor. Engine Mounted
12TJA	FAN DRIVE {Warner Electric FC-550} Electronically Activated and Controlled
12UGN	THROTTLE, HAND CONTROL Electronic <u>Notes</u> : Cruise Control Switches Mounted on Steering Wheel are Non-Illuminated.
12UYE	RADIATOR Aluminum; 2-Row, Cross Flow, Over Under System, 717 SqIn Louvered, with 313 SqIn Charge Air Cooler. with In-Tank Transmission Cooler <u>Includes</u> : DEAERATION SYSTEM with Surge Tank : HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps : RADIATOR HOSES Premium, Rubber
12VBR	AIR CLEANER with Service Protection Element <u>Includes</u> : GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted
12VGM	FEDERAL EMISSIONS {Cummins B6.7} EPA, OBD and GHG Certified for Calendar Year 2018
12VWH	GOVERNOR Electronic Road Speed Type; for Electronic Engines and Bus Models; with 55 MPH Default
12VYV	IDLE MANAGEMENT SYSTEM Ramp Engine Speed with Air Condition On, in Neutral and Parking Brake Set, Accommodation Package
12WSY	BLOCK HEATER, ENGINE {Phillips} 120 Volt/750 Watt, for Cummins ISB/B6.7 Engines

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Code	Description
12WZD	EMISSION COMPLIANCE Engine Shutdown System Exempt Vehicles, Complies with California Clean Air Regulations
13ARV	TRANSMISSION, AUTOMATIC {Allison 2500 PTS} 5th Generation Controls, Wide Ratio, 6-Speed with Double Overdrive, Less PTO Provision, Less Retarder, with 33,000-lb GVW and GCW Max, School Bus <u>Includes</u> : OIL FILTER, TRANSMISSION Mounted on Transmission : TRANSMISSION OIL PAN Magnet in Oil Pan
13WLN	TRANSMISSION OIL Synthetic; 20 thru 28 Pints
13XBA	SHIFT CONTROL PARAMETERS Allison 1000 or 2000 Series Transmissions, 5th Generation Controls, with DynActive and Dynamic Shift Sensing (FuelSense 2.0 Basic)
14AGG	AXLE, REAR, SINGLE {Dana Spicer 21060S} Single Reduction, 21,000-lb Capacity, 190 Wheel Ends . Gear Ratio: 5.57 <u>Includes</u> : REAR AXLE DRAIN PLUG (1) Magnetic, For Single Rear Axle <u>Notes</u> : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires. : When Specifying Axle Ratio, Check Performance Guidelines and TCAPE for Startability and Performance
14SBV	SUSPENSION, RR, SPRING, SINGLE 21,000-lb Capacity, Vari-Rate Springs
14WAP	SHOCK ABSORBERS, REAR (2)
14WMN	AXLE, REAR, LUBE {EmGard FE-75W-90} Synthetic Oil; 1 thru 29.99 Pints
15SBZ	FUEL TANK Top Draw, Steel, Rectangular, 65 US Gal (246L), Includes Protective Cage, with Fuel Filler Assembly and Vent Hosing, Mounted Between Frame Rails and Behind Rear Axle <u>Notes</u> : Requires 217" WB Minimum
15WDT	DEF TANK 12 U.S. Gal. 45.4L Capacity, Frame Mounted Outside Right Rail, Behind 0 Bow
16010	COWL Flat Back
16HBA	GAUGE CLUSTER English with English Electronic Speedometer <u>Includes</u> : GAUGE CLUSTER (5) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter : ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout : WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)
16HKT	IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster
16HLJ	GAUGE, DEF FLUID LEVEL
27DUW	WHEELS, FRONT {Accuride 51408} DISC; 22.5x8.25 Rims, Powder Coat Steel, 2-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
28DUW	WHEELS, REAR {Accuride 51408} DUAL DISC; 22.5x8.25 Rims, Powder Coat Steel, 2-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
29580	WHEEL SEALS, FRONT {International} Oil-Lubricated Wheel Bearings
29WLK	WHEEL BEARING, FRONT, LUBE {EmGard FE-75W-90} Synthetic Oil

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<u>Code</u>	<u>Description</u>
47AGC	BODY, BUS Conventional; 78" Headroom, 31'2" Body Length, +9 Section Front and Rear, 66 Passenger, 254 WB
47AJC	BODY TAG, METAL Capacity to Include the Total Number of Passengers
47AJW	STEP, FRONT ENTRANCE DOOR 27 1/4" Depth; 14ga Steel <u>Includes</u> : STEP, FRONT ENTRANCE DOOR OPENING, 35 Inch Width; Continuous Bottom to Top
47AMM	SUB FLOOR, PLYWOOD Conventional; B-C Exterior Grade, with Sealed Edges, 5/8", 5 Ply, for for 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Lengths
47APR	HEADLINER, BODY Conventional; 25'11"-34'11" Body Length, Perforated Full Length with Sound Insulation Full Length
47APW	FASTENERS, HEADLINER Rivets
47ARH	BOWS, ROOF 14 ga., One Piece Construction <u>Includes</u> : BOWS, ROOF Positioned Floor Line to Floor Line, Threaded Through Roof Strainers and Drip Rail
47ARP	LIGHT BARS Plastic
47ATB	SKIRT, BODY Conventional, 20", 16ga., 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length <u>Includes</u> : SKIRT, BODY Extra Smooth Steel Supported by Floor Gussets
47AUR	TIE DOWNS, BODY Grade 8 Bolts, Every Body Section <u>Includes</u> : TIE DOWNS, BODY with Formed Tab that Fits into Floor Structure to Prevent Turning
47AXT	RUB RAILS, BODY (4) Conventional; Steel, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length, Includes Snow Rail <u>Includes</u> : RUB RAILS Full Length, Primer Coated (Both Sides), Attached to Body without Cuts or Splices
47AYB	BODY, REAR Includes Emergency Door <u>Includes</u> : DOOR, REAR EMERGENCY with Concealed Hinges : HEADER BUMPER Padded, Mounted Over Rear Door; Upholstered to Match Passenger Seat Color
47AZE	SIDE SHEET, BODY, EXTERIOR Conventional, 16ga., Smooth, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length
47AZL	FLOOR, BODY with Wheel Wells
47BAR	SUPPORTS, REAR BUMPER Bolted to Frame
47BBH	LINING, SIDE INTERIOR, LOWER Embossed Steel, Clear Coated
47BBZ	SEALER Extra; Sidewall to Floor, In Wheel Pocket Area, and Rear Wall to Floor
47BDA	FLOOR, COATING , Chemguard Metal Coating, Applied to Main Floor and Intermediate Sills
47BKK	LETTERS, SCHOOL BUS FRONT/REAR Decal; "SCHOOL BUS"; with 8" Black Reflective Letters, 3M Fluorescent Diamond Grade, Yellow On Front and Rear Cap
47BLK	BODY CERTIFICATION TAG Mylar Label, Located Above Driver Window, with Actual Tire Load Rating
47DAE	FASTENERS, REAR DOOR Lag Screws, Rear Door To Body

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<u>Code</u>	<u>Description</u>
47DAJ	COVER, REAR DOOR INSIDE HANDLE Partial Coverage
47DDE	HANDLE, ASSIST, ENTRANCE DOOR Outside Entrance
47DDH	HOLD BACK, REAR DOOR Stationary, No Cables, with Plastic Cover
47DDU	LATCH, REAR DOOR One Point Slide Bar, Cam Operated, with One Inch Stroke
47DEK	LOCK, VANDAL, REAR DOOR with Ignition Starter Interlock
47DEY	HANDLE, EXTERIOR, REAR Emergency Door; Yellow
47DNB	DOOR, ENTRANCE, FRONT Electric, Outward Opening, with Split Pane Glass
	<u>Includes</u> : DOOR, ENTRANCE, FRONT Aluminum Frame with Pin Style Hinges, Ball Bearing Assisted, Interchangeable Top and Bottom Glass Vandal Lock : LOCK, VANDAL, ENTRANCE DOOR With Key Switch
47DNK	SWITCH, LOCATION Steering Wheel; Includes Master Flasher, Flasher On/Off, Red Override, and Door Control
	<u>Includes</u> : SWITCH, STEERING WHEEL, LIGHT Includes Illuminated Switches
47DXZ	PAINT, RUB RAIL Flange to Flange, Including Top Flange of Window Line Rub Rail
47EBM	HOLD DOWN, BATTERY For (2) Standard Size Batteries
47KDC	MONITOR, POST TRIP INSPECTION (Leave No Student Behind) Accessory Controlled, with Push Button Alarm Disable at Rear of Bus Prompts Driver to Walk to Back of Bus and Push Button in Light Bar to Deactivate System
47LAT	NOISE REDUCTION, ROOF BOW Conventional; Insulation, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Lengths
47LAU	INSULATION, ROOF AND SIDES 1.50", All Models
47MBA	UNDERCOAT, BODY Fire Resistant, Water Based, TT-C-730 Spec
	<u>Includes</u> : UNDERCOATING Performed Before and After Mounting on Chassis
47MBC	INSULATION, STEPWELL
47MBM	BUMPER, REAR Painted; 12" High, 3/16" Thick, with 6.5" Hole for Exhaust
47MKM	LETTERS, BATTERY COMPARTMENT (01) Decal; "Battery"; 1" Black Letters, Centered on Standard Battery Box
47MNV	ARROW, RR DOOR, OUTSIDE Decal; Black .75" Stroke, Indicating Handle Direction
47MRN	STRIPING, E/E WINDOW, LEFT (02) Perimeter, Reflexite V82
47MRU	LETTERS, E/E WINDOW, LEFT (2) Decal Sets, "EMERGENCY EXIT", Black Inside and Outside
47MSA	STRIPING, PERIMETER, REAR Emergency Door; Reflective, Yellow
47MTY	WIRING DIAGRAM Schematic, Electrical
	<u>Includes</u> : ACCESS PANEL for Wiring Diagram Schematic Located on Body Exterior; Below Driver Window
47MUP	STRIPING, E/E WINDOW, RIGHT (02) Perimeter, Reflexite V82
47MVA	LETTERS, HEADER Decal; "WATCH YOUR STEP", 1" Black, Above Windshield
47MVC	LETTERS, STEPWELL Decal, "WATCH YOUR STEP", 2.5" Black, Behind Door on Step Riser

Vehicle Specifications
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<u>Code</u>	<u>Description</u>
47NAB	PAINT COLOR, RUB RAILS 0001 Canyon Black
47NBG	LETTERS, DOOR, REAR Decals; "EMERGENCY DOOR", 2" Red Reflective Letters Inside and Outside
47NGW	SEAL, RUB RAILS Top Edge, All Rails
47NHL	LETTERS, E/E WINDOW, RIGHT (2) Decal Sets, "EMERGENCY EXIT", Black, Inside and Outside
47NJA	PAINT COLOR, BODY EXTERIOR 4421 School Bus Yellow
47NJM	PAINT FLASHER BACKGRD 0001 Canyon Black
47NJS	PAINT COLOR, BUMPER Rear; 0001 Canyon Black
47NKE	PAINT COLOR, ROOF 9219 Winter White, (Does Not Include Lift Door) Beginning 5" Above Drip Rail, Rounded Corners
47NKM	PAINT COLOR, BODY INTERIOR 9384 Spring White
47NKZ	LETTERS, FUEL I.D. Decal; "DIESEL FUEL", 2" Black, Adjacent to Fuel Filler Door
47NMG	OPERATING INSTR, REAR Decal, Inside Rear Emergency Door
47NTE	LOGO, ROOF LINE Decal; Wing and Shield, First Body Section, Above Driver Window and Entrance Door Over Driver Window and Entrance Door
47NTY	PAINT HOOD AND FENDER To Match Body Exterior
47PBZ	HANDLE, ASSIST Windshield Side Mounted, Left and Right, Body Color
47PGN	BODY RATING TAG Mylar Label; for the State of New Jersey, Located Above Driver Window
47PLX	LETTERS, DEF, I.D. Decal; "DEF ONLY", 1" Black, on DEF Filler Door
47SPA	ALPHA/NUMERIC DECAL GUIDE Quantity 01-20
48ACN	SEAT BELT, DRIVER, COLOR with Blaze Orange Seat Belt Webbing
48ANT	WINDOW, DRIVER Laminated, Clear
48APL	WINDOW, STOPS 12" Opening, Only with 78" Headroom
48ARK	WINDOW, SASH (14) 27" Sections, 9"x 23" Opening
48AST	WINDOW, SASH +9 SECTIONS (4) 9" x 32 1/4" Opening
48BAH	WINDOW, E/E, LEFT (2) Vertical Hinge
48BJA	COLOR, WINDOW FRAME, PASS Passenger Window, Natural Aluminum Finish
48BKP	WINDOW, E/E, RIGHT (2) Vertical Hinge
48BUB	WINDOW, PASSENGER, TINT Conventional; 28% Light, Tempered Glass, 78" Headroom, with 34'11", 31'2", 31'11", 32'8", 33'5", 34'2" Body Lengths
48CXB	AIR CONDITIONER, BODY IC Air, 120,000 BTU, Evaporators, Condensers & Compressors, with Dual 13 CID Compressors, Front & Rear Flush Mounted Evaporators, Skirt Mounted Condensers, EC4.0 Control System
48GHC	HEATER, DRIVER 90,000 BTU, with Defroster and without Rear Heat Duct
	<u>Includes</u> : AIR FILTER : HEATER HOSES Premium : HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps
48PAM	WINDSHIELD 3 Flat Pieces, 73% Light, with Band
48PAV	WHEEL POCKET COVER Plastic, ABS

Vehicle Specifications
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<u>Code</u>	<u>Description</u>
48PAW	AISLE POSITION for 45" Left and 30" Right (15" aisle)
48PBB	FLOOR COVERING, COLOR Black
48PHN	UPHOLSTERY, PASS SEATS, TYPE Prevaill, 42 oz.; for (21-22) Seats
48PKC	HOSE CLAMPS, HEATER HOSE Constant Torque for Heater System
48PKN	FAN, DEFOG FAR RIGHT (01) Black, Mounted Right Above Windshield, Forward Entrance Door, 2-Speed Switch in Panel
48PKR	FAN, DEFOG LEFT CENTER 6.50" Diameter, Black, Mounted Left of Center Post, 2-Speed Switch in Panel
48PMD	HEATER, PASS, LT MIDSHIP 1ST 84,500 BTU <u>Includes</u> : AIR FILTER
48PMJ	HEATER, PASS, LT REAR 84,500 BTU <u>Includes</u> : AIR FILTER
48PMS	HEATER, STEPWELL 50,000 BTU <u>Includes</u> : AIR FILTER
48PNW	HEATER, WATER PUMP {2 MPU 12} Self Priming, with Plastic Housing
48PPM	HEATER CUT OFF, VALVE Ball, with Butterfly Handle
48PPS	ROOF VENT, FRONT Static
48PSH	SEAT, DRIVER {Magnum 200} Mechanical Suspension <u>Includes</u> : SEAT BELT, DRIVER Adjustable D-Loop Seat Belt, Single Locking Retractor
48PUP	FLOOR COVERING, TRIM Omit
48PUT	NUTS, BELT MOUNTING Standard Nuts For Seat Belt Mounting
48PVB	UPHOLSTERY, DRIVER SEAT, STYLE Plain
48PVN	UPHOLSTERY, DRIVER SEAT, COLOR Drivers Seat, Gray
48PWD	UPHOLSTERY, PASS SEATS, COLOR Gray, for Seats, Barriers and Head Bumpers
48PWR	UPHOLSTERY, DRIVER SEAT, TYPE Prevail, 42 oz.
48PXP	UPHOLSTERY, BARRIER, TYPE (1-2) Prevaill, 42 oz.
48RAA	BARRIER, CRASH, AFT ENTRY DOOR 30", 1 Leg
48RAM	BARRIER, CRASH, AFT DRIVER 45", 1 Leg
48REP	PANEL, MODESTY, AFT OF DRIVER Mounted Under Barrier
48RET	PANEL, MODESTY, AFT ENTR DOOR Mounted Under Barrier
48RGD	HAND RAIL, ENTRANCE DOOR, FWD 1" OD, Painted Gloss Black
48RGP	HAND RAIL, ENTRANCE DOOR, AFT 1" OD, Gloss Black, 4", Above Step
48RLX	CUSHION, SEAT 15" Depth <u>Includes</u> : WARRANTY Four Years

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<u>Code</u>	<u>Description</u>
48RRA	UPHOLSTERY, SEAT, STITCHING Single <u>Includes</u> : WARRANTY Two Years
48RZJ	STEP TREADS {Koroseal} Pebble Top with White Nosing, with Non-Metal Backing
48SAX	SEAT,PASS,LT,30",2 LEG (01)
48SEP	SEAT,PASS,LT,45",2 LEG (10)
48SGM	SEAT,PASS,RT,30",2 LEG (11)
48UCP	ROOF HATCH, FRONT {Transpec 1975-028-121-03} with Outside Release, with English Decals
48UCR	ROOF HATCH, REAR {Transpec 1975-028-121-03} with Outside Release, with English Decals
48USV	SEAT BACK, PASSENGER High Back
48UWV	FLOOR COVERING, TYPE Koroseal, One Piece, Vinyl, All Body Lengths, Black
48VLG	SEAT BELT, DUAL Non-Retractable, Maroon/Brown, 12 Seats
48VPL	SEAT BELT, TRIPLE Non-Retractable, Maroon/Blue/Brown, 10 Sets
49009	BODY PLAN, APPROVED VARIATION Number 009
49ABB	LIGHTS, BACK UP (2) 7" Diameter, Clear
49ABE	WIRING MOD, BACK UP LIGHTS (2) Lights Connected to Rear Emergency Door Switch
49ACU	LIGHTS, DIRECTIONAL, REAR (2) 7" Amber, without Arrow
49ADA	LIGHTS, DIRECTIONAL, SIDE (2) {Weldon} Armor Type, Amber, One Each Side First Section Behind Entrance Door
49ADC	LIGHTS, WARNING (8) Quartz Halogen Beams, 7", 2 Front, 2 Rear, Red and Amber Lights
49ADX	LIGHTS, TAIL, LICENSE PLATE (2) 4" Red with Light Window
49AEG	LIGHTS, MARKER, FRONT, REAR (4) Two Amber Front and Two Red Rear, Single 1500 Hour 3cp Bulb Each Light
49AEU	LIGHTS, STOP (2) and Tail, 7" dia., Red
49AMD	SWITCH, DRIVER PANEL, TYPE Rocker
49AMR	CIRCUIT, PROTECTION Fuse, Electrical System <u>Includes</u> : ACCESS PANEL for Body and Chassis Fuses/Circuit Breakers Located on Body Exterior; Below Driver Window
49AMY	SWITCH, REAR DOOR BUZZER for Emergency Door
49ANH	SWITCH, MAGNETIC, DISCONNECT Master, Ignition Operated, All Body Circuits
49ANU	SOURCE, POWER 12 VDC, Mounted On Dash
49APB	LIGHTS, DOME Rectangular Recessed Type; Stagger Mounted in Light Bars <u>Includes</u> : WIRING HARNESS Main Body Wiring Harness Accessed by Removing Dome Light
49ARN	LIGHT, STEP Wired to Clearance Lights
49ATR	MONITOR, LIGHT SYSTEM 16 Incandescent Indicator Lights
49ATV	LIGHT, INDIC, WARNING LIGHTS Red and Amber

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<u>Code</u>	<u>Description</u>
	<u>Includes</u> : LIGHTS, WARNING Indicator Located in Instrument Cluster
49AWT	SPEAKERS AND WIRING (4) Flush Mounted in Light Bar
49BCN	FLASHER SYSTEM (8) Warning Lights, 8-Lamp System, Electronic Relay Flasher, Non-Sequential Operation, Red Lights Activate with Door Open
49BCR	LIGHT, EXTERIOR, CHECK Automatically Activates Lights for Pre Trip Inspection
49BDT	ALARM, BACKING {Ecco #SA-917-87} 112 db, Self Adjusting 5db Above Ambient Noise Level
49BLL	WIRING, VIDEO SYSTEM Power and Ground Connection Only; Connection in Flasher Plate Area with 20 Amp Fuse Protection
49BLM	WIRING, TWO WAY RADIO Power and Ground Connection Only; Connection in Flasher Plate Area with 20 Amp Fuse Protection
49BRE	LIGHTS, MARKER, SIDE Intermediate, Single Bulb, Centered, 3cp, 1500 HR Bulb, Required for Units 30 Foot or Longer
49BVG	MIRROR, CROSS VIEW, EXTERIOR {Mirror Lite High Definition Busboy} for Left & Right Side; Black, Heated
49BZU	RADIO, ENTERTAINMENT {Custom Radio} AM/FM Stereo/USB Input, Includes Antenna and Cable, with Public Address System
49DBR	HOOD, WARNING LAMP (4) Black, 8-Lamp System, One Hood Above Two Lights
49DDC	LIGHTS, CLUSTER {Truck Lite 07045A & 07045R} LED; Amber Front and Red Rear
49EGC	MIRROR, INSIDE 6" x 30", Clear Safety Glass, Metal Back, Round Corners
49EKR	STOP ARM, FRONT Electric, Metal Blade, 18" Octagon, Double Sided, 1/2" White Border, Engineering Grade, Flashing Red Incandescent Lights
49ENK	VISOR, INTERIOR, LEFT FRONT 6" x 30", Transparent, For Left Windshield
49EUU	KIT, FIRST AID with Pencil and Small Paper Pad, New Jersey
49EVL	SWITCH, NOISE SUPPRESSION Actuator Legend States, "NOISE SUPP ", for Separate Solenoid, with Red Switch in Panel
49EXD	MIRROR, REAR VIEW, EXTERIOR {Rosco} Open View, Black, Heated, Motorized, Non-Detent
49GBV	WINDSHIELD WIPERS (2) Cowl Mounted
	<u>Includes</u> : WINDSHIELD WIPERS CONTROL Single Motor, Overlapping Wipe Pattern
49GED	SAFETY TRIANGLES Warning Reflectors, Mounted on Floor Between Driver Seat and Drivers Crash Barrier/ Stanchion/Partition
49GGE	FIRE EXTINGUISHER, DRIVER AREA 5 lb 2A-40BC Minimum with Flexible Hose and Metal Nozzle
49GHN	REFLECTORS, REAR (2) 3", Red, Adhesive Back
49GHR	REFLECTORS, SIDE, REAR (2) 3", Red, Adhesive Back
49GHV	REFLECTORS, SIDE, FRONT (2) 3", Amber; Adhesive Back, 1 Aft Drivers Window Left, 1 Aft Entrance Door Right
49GHX	REFLECTORS, SIDE, INTERMEDIATE (2) 3" Amber, 1 Each Side, Below The Third Rub Rail From the Top, Adhesive Back
49GKZ	FUEL FILLER DOOR with Non-Locking Latch
49GUB	CUTTER, SEAT BELT {TIE TECH Safecut} for Cutting Seat Belts

Vehicle Specifications
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<u>Code</u>	<u>Description</u>
49GUK	FENDERS, RUBBER, REAR (2)
49GUX	MUD FLAPS, FRONT WHEELS (2) Rubber
49GVC	MUD FLAPS, REAR WHEELS (2) Rubber; Behind Rear Wheels
49GWW	WINDSHIELD WASHER Kit; 6 Quart Capacity, Bottle <u>Includes</u> : WINDSHIELD WASHER ELECTRICAL CONNECTIONS Sealed and Locking Type
49GWZ	INSPECTION PLATE Fuel Sending Unit 8" x 8" Aluminum Diamond Tread Mounted Flush with Floor Mat
49GZX	FUEL FILLER PIPE Neck Cap and Vent Hosing for Use with Right Side Fill 65 Gal. Between the Rails Fuel Tanks
49JAC	DEF FILLER DOOR with Non-Locking Latch
49MSX	LIGHT, STROBE Wiring Only Routed to Last Bow Section
49MZT	INSULATION, FUEL FILLER Rubber Isolator for Fuel Filler when Exhaust are on Same Side
49UBK	STATE OF OPERATION New Jersey
50TWT	BODY PLAN, NON-SPECIAL NEEDS Conventional; 31' 02" Body Length, +9 Section Front & Rear, 54 Passenger, 254" WB, DX9278A000
7482133264	(4) TIRE, REAR 11R22.5 Load Range H XDN2 (MICHELIN), 497 rev/mile, 75 MPH, Drive
7482133269	(2) TIRE, FRONT 11R22.5 Load Range H XZE2 (MICHELIN), 501 rev/mile, 75 MPH, All-Position
Services Section:	
40126	WARRANTY Standard for CE, RE, BE School Bus Models, Effective with Vehicles Built March 1, 2017 or Later, CTS-3304H
49GVN	WARRANTY 5-Year, Limited BSC QUOTE 661-180301-01 ROSCO SAFE-T SCOPE 270 CAMERA SYSTEM WITH 7" MOR-VISION ULTRA BRIGHT MONITOR IN 6"X30" MIRROR WITH LEVER LOCK; SYSTEM WILL CONSIST OF 3 CAMERAS: 1 FRONT, 1 REAR, AND 1 RH SIDE BUS FLEET RATIONALIZATION

Financial Summary
2020 INTEGRATED CE S BUS (PB105)

November 05, 2018

<u>Description</u>	(US DOLLAR)	<u>Price</u>
Net Sales Price:		\$89,402.56

PROPOSAL INCLUDES:
54 PASSENGER CAPACITY
NJ STATE SPECS
NEC BASE SPECIFICATIONS
WINTER PACKAGE
AIR CONDITIONING
BASE DELIVERY CHARGE

THIS PROPOSAL IS FOR A QUANTITY OF 1. IF ADDITIONAL QUANTITIES ARE NEEDED FOR ORDERING PURPOSES, PLEASE NOTE IN THE AREA BELOW.

QUANTITY ORDERED: _____

DELIVERY ADDRESS:

INVOICE ADDRESS (IF DIFFERENT THAN DELIVERY):

MCO/NVIS INSTRUCTIONS, INCLUDING NAME & ADDRESS

Approved by Seller:

Accepted by Purchaser:

Official Title and Date

Firm or Business Name

Authorized Signature

Authorized Signature and Date

This proposal is not binding upon the seller without Seller's Authorized Signature

Official Title and Date

The TOPS FET calculation is an estimate for reference purposes only. The seller or retailer is responsible for calculating and reporting/paying appropriate FET to the IRS.