CER 10 Vehicle Technical Information

This form must be completed and included in the Technical Proposal.

GENERAL COACH DATA SHEET
[bus type]

Bus manufacturer:	
Bus model:	
Understructure manufacturer:	
Model number:	

Basic Body Construction

Type:	
Tubing or frame member thickness and dimensions	
Overstructure	
Understructure	
Skin thickness and material	
Roof	
Sidewall	
Skirt panel	
Front end	
Rear end	

Dimensions

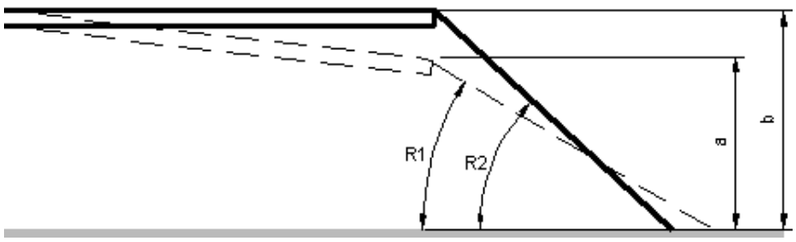
Overall length	Over bumpers		ft		in.
	Over body		ft		in.
Overall width	Over body excluding mirrors		ft		in.
	Over body including mirrors–driving position		ft		in.
	Over tires front axles		ft		in.
	Over tires center axle		ft		in.
	Over tires rear axles		ft		in.

Overall height (maximum)		ft	in.
Overall height (main roof line)		ft	in.

Angle of approach		deg
Breakover angle		deg
Breakover angle (rear)		deg
Angle of departure		deg

Doorway Dimensions	**Front**		**Rear**	
Width between door posts		in.		in.
Door width between panels		in.		in.
Clear door width		in.		in.
Doorway height		in.		in.
Knuckle clearance		in.		in.

Step height from ground measured at center of doorway



	Front doorway, empty		Ramp angle		Rear Doorway, empty	
Kneeled	a.	in.	R1	deg	a.	in.
Unkneeled	b.	in.	R2	deg	b.	in.

Interior headroom (center of aisle)

Front axle location		in.
Center axle location		in.
Rear axle location		in.

Aisle width between transverse seats _____ in.

Floor height above ground (centerline of bus)

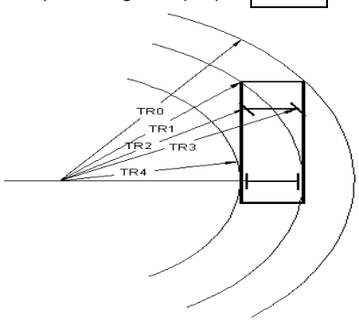
At front door		in.
At front axle		in.
At drive axle		in.
At rear door		in.

Minimum ground clearance (between bus and ground, with bus unkneeled)

Excluding axles		in.
Including axles		in.

Horizontal turning envelope (see diagram below)

Outside body turning radius, TR0 (including bumper)		ft		in.
Front inner corner radius, TR1		ft		in.
Front wheel inner turning radius, TR2		ft		in.
Front wheel outer turning radius, TR3		ft		in.
Inside Body Turning Radius innermost point, TR4 (including bumper)		ft		in.



Wheel base

Front		in.
Rear		in.

Overhang, centerline of axle over bumper

Front		in.
Rear		in.

Floor

Interior length		ft		in.
Interior width (excluding coving)		ft		in.

Total standee area (approximately)		ft^2	
Minimum distance between wheelhouses:	Front		in.
	Rear		in.
	Center		in.
Maximum interior floor slope (from horizontal)		deg	

Passenger capacity provided

Total maximum seating		
Standee capacity		
Minimum hip to knee room		in.
Minimum foot room		in.

Weight

	No. of people	Front axle			Center axle			Rear axle			Total bus
		Left	Right	Total	Left	Right	Total	Left	Right	Total	
Empty bus, full fuel and farebox											
Fully seated, full fuel and farebox											
Fully loaded standee and fully seated, full fuel and farebox											
Crush load (1.5x fully loaded)											
GVWR											
GAWR											

Engine, main

Manufacturer				
Type and weight rating				
Model number				
Bore		in.		
Stroke		in.		
Displacement		$in.^3$		
Compression ratio				
Injector type and size				
Net SAE horsepower		hp	at	RPM
Net SAE torque		lb/ft	at	RPM
Crankcase oil capacity				
New engine, dry		gal		
New engine, wet		gal		
Turbocharger make and model				
Maximum speed, no load		RPM		
Maximum speed, full load		RPM		
Speed at idle		RPM		
Speed at fast idle		RPM		

Engine information/graphs to be attached with this form:

Engine speed vs. road speed ☐
Torque vs. engine speed ☐
Horsepower vs. engine speed ☐

Fuel consumption vs. engine speed ☐
Vehicle speed vs. time (both loaded and unloaded) ☐
Vehicle speed vs. grade (both loaded and unloaded) ☐
Acceleration vs. time ☐
Change of acceleration vs. time ☐

Traction Motor

Manufacturer		
Model number		
Type		
Max power at speed		kW @ rpm
Max torque at speed		N-m @ rpm
Continuous rated power		kW
Average efficiency		%
Max motor speed		rpm
Cooling type		

Attach torque-speed curve and efficiency maps

Hybrid drive or transmission

Manufacturer				
Type				
Speeds				
Gear ratios	Forward:		Reverse:	
Shift speeds				
1st–2nd		mph		
2nd–3rd		mph		
3rd–4th		mph		
4th–5th (if applicable)		mph		
5th–6th (if applicable)		mph		
Fuel capacity (including heat exchanger and filters)				

Voltage regulator

Manufacturer	
Model	

Voltage equalizer

Manufacturer	
Model	

Alternator

Manufacturer		
Type		
Model		
Output at idle		amps
Output at maximum speed		amps
Maximum warranted speed		rpm
Speed at idle (approximately)		rpm
Drive type		

Auxiliary Inverter(s)

Manufacturer(s)	
Model Number(s)	
Output voltage(s)	

DC-DC Converter(s)

Manufacturer(s)	
Model Number(s)	
Output voltage(s)	

Auxiliary (Hotel) Loads as Installed

List of Accessories, excluding HVAC

Accessory	Average Power Consumption on Agency Design Operating Profile (kW)	Max Power Consumption (kW)

Starter motor

Manufacturer	
Type	
Model	

Air compressor

Manufacturer		
Type		
Rated capacity		CFM
Capacity at idle (approximately)		CFM
Capacity at maximum speed (engine)		CFM
Maximum warranted speed		rpm
Speed idle		rpm
Drive type		

Governor:

Cut-in pressure		psi
Cut-out pressure		psi

Axles

First

Manufacturer		
Type		
Model number		
Gross axle weight rating		lb
Axle load		lb

Second

Manufacturer	
Type	
Model number	

Gross axle weight rating		lb
Axle load		lb

Third

Manufacturer		
Type		
Model number		
Gross axle weight rating		lb
Axle load		lb
Axle ratio		

Suspension system

Manufacturer		
Type:	First:	
	Second:	
	Third:	
Springs:	First:	
	Second:	
	Third:	

Joint

Manufacturer	
Type	
Model number	

Wheels and tires

Wheels

Make	
Size	
Capacity	
Material	

Tires

Manufacturer		
Type		
Size		
Load range/air pressure		psi

Steering, power

Pump

Manufacturer and model number		
Type		
Relief pressure		psi

Booster/gear box

Manufacturer and model number	
Type	
Ratio	

Power steering fluid capacity		gal
Maximum effort at steering wheel		lb (unloaded stationary coach on dry asphalt pavement)
Steering wheel diameter		in.

Brakes

Make of fundamental brake system		
Brake chambers vendor size and part number:	First:	

	Second:	
	Third:	
Brake operation effort		

Slack adjuster's vendor's type and part numbers

First:	Right:	
	Left:	
Second:	Right:	
	Left:	
Third:	Right:	
	Left:	
Length:	First take-up:	
	Second take-up:	
	Third take-up:	

Brake drums/discs

First:	Manufacturer		
	Part number		
	Diameter		in.
Second:	Manufacturer		
	Part number		
	Diameter		in.
Third:	Manufacturer		
	Part number		
	Diameter		in.

Brake lining manufacturer	
Type	

Brake lining identification

First:	Forward	
	Reverse	
Second:	Forward	
	Reverse	
Third:	Forward	
	Reverse	

Brake linings per shoe

First	
Second	
Third	

Brake lining widths

First		in.
Second		in.
Third		in.

Brake lining lengths

First		in.
Second		in.
Third		in.

Brake lining thickness _____ in.

Brake lining per axle

First		$in.^2$
Second		$in.^2$
Third		$in.^2$

Cooling system

Radiator/charge air cooler

Manufacturer				
Type				
Model number				
Number of tubes				
Tubes outer diameter		in.		in.
Fins per inch		fins		
Fin thickness		in.		
Total cooling and heating system capacity		gal		
Radiator fan speed control				
Surge tank capacity		qt		
Engine thermostat temperature setting: Initial opening (fully closed)		°F		
Fully open		°F		
Overheat alarm temperature sending unit setting		°F		
Shutdown temperature setting		°F		

Air reservoir capacity

Supply reservoir		$in.^3$
Primary reservoir		$in.^3$
Secondary reservoir		$in.^3$
Packing reservoir		$in.^3$
Accessory reservoir		$in.^3$
Other reservoir type		$in.^3$

Heating, ventilation and air conditioning equipment

Heating system capacity		BTU/hr
Electrical load at maximum heating capacity		kW
Air conditioning capacity		BTU
Electrical load at maximum cooling capacity		kW
Ventilating capacity		CFM

Compressor

Manufacturer				
Model				
Number of cylinders				
Drive ratio				
Maximum warranted speed		rpm		
Operating speed		rpm (recommended)		
Weight		lb		
Oil capacity	Dry		gal	
	Wet		gal	
Refrigerant:	Type			lb

Condenser

Manufacturer		
Model		
Number of fins/in.		
Outer diameter of tube		in.
Fin thickness		in.

Condenser fan

Manufacturer		
Model		
Fan diameter		in.
Speed maximum		rpm
Flow rate (maximum)		CFM

Receiver

Manufacturer		
Model		
Capacity		lb

Condenser fan drive motors

Manufacturer		
Model		
Type		
Horsepower		hp
Operating speed		rpm

Evaporator fan drive motors

Manufacturer		
Model		
Type		
Horsepower		hp
Operating speed		rpm

Evaporator(s)

Manufacturer		
Model		
Number of rows		
Number of fins/in.		
Outer diameter of tube		in.
Fin thickness		in.
Number of evaporators		

Expansion valve

Manufacturer	
Model	

Filter-drier

Manufacturer	
Model	

Heater cores

Manufacturer	

Request for Proposal
Due November 20, 2025 @ 5:00 PM
01-Rolling Stock-2025

Model		
Capacity		Btu/hr
Number of rows		
Number of fins/in.		
Outer diameter of tube		in.
Fin thickness		in.
Number of heater cores		

Floor heater blowers

Front	
Rear	

Controls

Manufacturer	
Model	

Driver's heater

Manufacturer		
Model		
Capacity		Btu/hr

Ventilation system

Type	

Coolant heater

Make		
Model		
Capacity		Btu

Interior lighting

Manufacturer		
Type		
Number of fixtures		
Size of fixtures		
Power pack		

Doors

Front

Manufacturer of operating equipment	
Type of door	
Type of operating equipment	

Rear

Manufacturer of operating equipment	
Type of door	
Type of operating equipment	

Passenger windows

Front

Manufacturer	

Request for Proposal
Due November 20, 2025 @ 5:00 PM
01-Rolling Stock-2025

Model					
Type					
Number:	Side				
	Rear				
Sizes:					
Glazing:	Type				
	Thickness				
	Color of tint				
	Light transmission				

Mirrors

	Size	Type	Manufacturer	Part no.	Model no.
Right side exterior					
Left side exterior					
Center rearview					
Front entrance area					
Upper-right corner					
Rear exit area					

Seats

Passenger

Manufacturer	
Model	
Type	

Operator

Manufacturer	
Model and part number	
Type	

Paint

Manufacturer	
Type	

Wheeled mobility device ramp equipment

Manufacturer			
Model number			
Capacity		lb	
Width of platform		in.	
Length of platform		in.	
System fluid capacity		qt	
Type of fluid used			
Operating hydraulic pressure		psi	
Hydraulic cylinders:	Size		
	Number		

Wheeled mobility device securement equipment

Manufacturer	
Model number	

Destination signs

Manufacturer	
Type	

Character length

Front destination		in.
Front route		in.
Curbside destination		in.
Rear route		in.

Character height

Front destination		in.
Front route		in.
Curbside destination		in.
Rear route		in.

Number of characters

Front destination	
Front route	
Curbside destination	
Rear route	

Message width

Front destination		in.
Front route		in.
Curbside destination		in.
Rear route		in.

Electrical

Multiplex system

Manufacturer	
Model number	

Energy Storage

Low Voltage

Manufacturer	
Model number	
Type	
Cold cranking amps	

High Voltage

Type/chemistry	
Manufacturer (cell)	
Model (cell)	
Nominal cell voltage	
Minimum cell voltage	
Maximum cell voltage	
Cell capacity (Ah)	
Manufacturer/supplier (pack or smallest removable unit)	
Model name (pack or smallest removable unit)	

Weight of pack (smallest removable unit)		lb
Gross energy capacity of each pack (smallest removable unit)		kWh
Total number of packs in ESS		
Gross energy capacity of ESS when new		kWh
Usable energy capacity of ESS when new		kWh
Gross energy capacity of ESS at warrantable end of life		kWh
Usable energy capacity of ESS at warrantable end of life		kWh
Nominal voltage of ESS		V
Minimum allowable operating SoC		%

Maximum allowable operating SoC		%
Tested cycle until warrantable end of life		
Average ESS operating efficiency		%
Operating temperature range		°F

Energy storage cooling system		
Manufacturer		
Model number		
Type (e.g., forced air, liquid)		
Average power consumption		kW
Max power consumption		kW
Battery management system		
Manufacturer		
Model number		

Charging Compatibility

Charger inlet type	
Charging standards/compatibility	

Communication System

GPS

Manufacturer	
Model number	

PA system

	Manufacturer	Model number	Number
Amplifier			
Microphone			
Internal speakers			
External speaker			

Security camera system

Manufacturer	
Model number	
Number of cameras	
Storage capacity	

Bike racks

Manufacturer	
Model number	

Fire detection system

Manufacturer	
Model number	
Fire detectors	
Type (thermal or optical)	
Number of detectors	

Automatic voice annunciator system

Manufacturer	
Model and part number	

Annunciator LED sign

Number of signs		
Housing dimensions		
Character length		in.
Character height		in.
Character width		in.

GPS antenna

Manufacturer	
Model and part number	

Automatic passenger counter

Manufacturer		
Model and part number	a.	
	b.	
	c.	
Sensor type		

Real-time bus arrival prediction system

	Manufacturer	Model number
Router		
Cellular modem		
Charge protection		

Electronic tire pressure monitoring system

Manufacturer	
Model number	

Electronic brake stroke/wear indicator system

Manufacturer	
Model number	

All information above is accurate to the time frame upon submission. The Agency reserves the right to update above data if changes occur, upon consultation with the customer.