GSA *Smarter Solutions*

GSA

GSA Federal Supply Service

Drive Green With BARB On Planet GSA

Alternate fuel buses that operate on natural gas or propane are included in GSA Automotive's DAVE (**D**rive **A**lternative Fuel **V**ehicles **E**asily) program. Alternative fuel vehicles (AFVs) reduce harmful emissions in the air, while reducing our nation's dependence on foreign oil. For a complete listing of available AFV buses, contact Customer CARE at (703) 308-CARS.

Standard Items under the BARB program are also included under GSA Automotive's on-line **AutoChoice** program. You can view the various types of buses and available options, configure your vehicle, compare prices and place an order.

Visit our web site at fss.gsa.gov/vehicles/buying and then click on:

AutoChoice

www.gsa.gov
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GSA Automotive Customer CARE
(703) 308-CARS
fss.gsa.gov/vehicles/buying

Federal Recycling Program
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Office of Vehicle Acquisition
and Leasing Services

Buses
All
Ready To
Buy

GSA Automotive's **BARB** program

has Indefinite Delivery/Indefinite Quantity (IDIQ) contracts for buses and trolleys available at substantial savings. These contracts have been awarded to multiple vendors (manufacturers and/or distributors). These multi-vendor contracts allow for broader contract coverage, enabling customers to satisfy mission requirements using the "Best Value" method while affording all contractors a fair opportunity in the selection process.

Selecting the proper bus involves major decisions that directly impact functionality, reliability, safety, and liability. This brochure will present important information concerning your bus acquisition decisions.

Contact us early in your planning stages. GSA's Engineering Division can greatly simplify the technical aspects of determining your requirements, and our Contracting Division can simplify the procurement process.

BUSES PROCURED BY GSA MUST MEET THE FOLLOWING STANDARDS AND TESTING CRITERIA:

GSA Standards for Buses
All buses are built to GSA standards including option upgrades. Many configurations are available, including alternative fuels.

Standards for School/Activity Buses
All school/activity buses purchased through GSA will be certified to the National Standards for School Transportation in addition to the GSA standards. Types "A", "B", "C", and "D" can be configured for adult or child seating requirements.

Altoona Tested
Includes buses ranging from small shuttle type to large heavy-duty urban transit, including intercity coaches.

With the exception of school buses, these buses have been tested at the Bus Testing and Research Center located in Altoona, PA, as part of the Federal Transit Administration's (FTA) requirement. The FTA has established year/mileage classifications, based on actual bus testing, that are an indication of anticipated service life.

These are accelerated tests that include: safety, structural integrity and durability, reliability, performance, maintainability, noise, braking, emissions, and fuel economy.

Buses with higher Altoona year/mileage classifications incorporate superior construction techniques, materials, chassis components, engines, and transmissions. (See Adult Buses and Intercity Coach/City Transit Bus charts.)

HOW TO SELECT THE RIGHT BUS FOR YOUR APPLICATION

Choosing the correct type of bus can be one of the most important decisions a bus buyer can make, since more than one type may appear to serve your needs. Also, consider the advantages/shortcomings of your present bus and your anticipated future requirements.

To start, complete **Part I** to determine your specific operational criteria. Compare these with the characteristics of the available bus types in **Part II** and the charts to select a bus type: school bus, shuttle transit, trolley, city transit or intercity coach. This data, along with the available options, will permit you to select a bus model within each type.

PART 1
YOU MUST CONSIDER THE FOLLOWING TO SELECT A SAFE, FUNCTIONAL, RELIABLE AND ECONOMICAL BUS.

A. What are the maximum number of adult or child seats, wheelchair positions, and standees to be accommodated?

Wheelchair Positions
All buses are available with wheelchair positions complying with the Americans with Disabilities Act (ADA). Remember that each wheelchair position deletes a minimum of four seating positions, but optional flip down seats can be specified. Additional wheelchair positions are also available.

Standees
The use of standees is not recommended except for heavy-duty city transit models. The additional weight of standees usually exceeds the capacity of the bus.

B. What is your budget?

Cheaper is not always better. The longer life of a premium bus might be the better value when life cycle costing is considered. Remember, the true cost of owning your bus is the initial cost plus all maintenance and repair costs and the residual value.

Functionality, reliability, safety, liability *and* maintenance costs are affected by underpowered or overloaded buses.

C. What is your type of bus operation?

1. Application
- Does your service include: elementary or high school children, short distance stop/go, shuttles, sightseeing, city transit, or intercity (long distance) transport?
- Special interior applications include prisoner transport, troop transport, patient transport, and stripped interiors.

2. Duty Cycle
- How many stops per mile, miles per day, and the average distance between stops?
- Increased duty cycles require buses specifically engineered for repeated stop and go operations.
- Sightseeing and longer travel distances generally require air suspension, upgraded seating, lavatories and larger windows.

3. Seating Type
- Low or high back, fiberglass, deluxe cloth, VIP, vinyl, reclining, armrests?

4. Interior Seating Configurations
- Configurations available: prisoner transport, troop transport, stripped interiors or custom designs.
- Do you require forward facing, perimeter or a combination seating configuration?

5. Type of Windows
- School, transit, sightseeing or specialty type?

6. Type, Number and Location of Doors
- Many types, number (single or multiple) and location options are available. Multiple doors generally facilitate loading/unloading and are standard on city transit buses.

7. Amount and Location of Baggage and Equipment Storage?
- Interior: front or rear, overhead, or floor to ceiling storage rack?
- Exterior: skirt or pass-thru?

D. What are your environmental and operating conditions?

1. What are the average and maximum road speeds required?
- Sustained long distance, high-speed operations require the premium engines and transmissions available on larger buses to provide long service life.

2. Are your roads flat, hilly or mountainous? What are the maximum grades?
- Many smaller shuttle type buses are inadequate for high speed, severe grade applications. Larger buses with higher HP/torque engines, heavier duty transmissions, and axle ratios suitable for mountainous terrain are available.

3. Are the road surfaces smooth, gravel, dirt, mud or snow, or do you have severe off-road conditions?
- Mud and snow tires, traction type differentials, automatic traction control, all-wheel-drive, and severe service options (reinforced bodies, frames and upgraded suspensions) are available on selected models.

4. Do you have physical size limitations?
- Bridges, garage door openings or road obstructions may limit bus weight, underbody/overall height, width or turning radius.
- Wheelbase, width and rear overhang also affect turning radius.

5. What are the lowest/highest operational temperatures?
- Low temperature engine starting options may be required.
- Cold weather options include engine fuel heaters, additional insulation and additional passenger compartment heaters, etc.
- Air conditioning is standard on all buses but may be deleted or upgraded.
- White roofs may be specified to reduce heat load on the air conditioning system.

E. Do you have special needs and considerations?

1. Alternative Fuel Types, or Additional Fuel Capacity
- Diesel engines are standard and provide greater fuel economy and less maintenance.
- LPG and CNG power is available on selected buses.
- JP8 compatibility varies per diesel engine manufacturer.
- Gasoline engines are available on smaller buses but are usually not recommended for bus applications.
- While the maximum available fuel capacity is standard, capacities will vary.

2. Does the bus manufacturer you are considering have dealer, warranty or maintenance facilities close to your facility?

3. Special Options — Contact GSA Automotive for a list of all available options.

4. Delivery times will vary according to the type of bus. Contact GSA Automotive for details.

To place an order, or for contract information, or for professional engineering services, including technical or application assistance and bus design, please call::
Customer CARE at (703) 308-CARS

PART II
TYPES OF BUSES AVAILABLE UNDER THE BARB PROGRAM

ADULT, SCHOOL/ACTIVITY BUSES
(Available in three configurations)

SMALL CUTAWAY AND STRIPPED CHASSIS

CONVENTIONAL

FORWARD CONTROL STYLE WITH FRONT OR REAR ENGINES


CUTAWAY


CONVENTIONAL


FORWARD CONTROL

Characteristics
- Adult buses are standard. Specify Option BSC for school/activity bus packages. Buses transporting school children must meet all marking, paint, equipment, and seating requirements for school buses. Adult buses do not meet these requirements. (See School Buses chart.)
- School children must be transported in certified school buses. (Federal law prohibits sales/use of 15-passenger vans to transport students.)

Advantages
- Forward Control style has better front visibility.
- Severe Service Options (SS & SS1) are available for off-road, and extreme service applications on conventional models.
- VIP option (upgraded seats and windows) available.
- High seating capacity at relatively low cost.

Disadvantages
- Engines/transmissions and basic construction are generally not suitable for sustained high speeds.
- Single entrance door can inhibit rapid boarding and unloading of passengers.
- Smaller passenger windows limit viewing for sightseeing.
- Low floor option not available.

ADULT BUSES

SMALL, CUTAWAY VAN/STRIPPED CHASSIS

MID-SIZE (MEDIUM-DUTY) CUTAWAY/ STRIPPED CHASSIS FORWARD CONTROL

MID-SIZE (HEAVY-DUTY) CUTAWAY/ STRIPPED CHASSIS FORWARD CONTROL

Characteristics
- Short trip shuttles used around urban areas, airports, activity centers and for local para-transit service for the elderly or disabled.

Advantages
- Low cost alternative to city transit/coaches, but lower durability (life span) levels.
- Perimeter and side facing seats, and VIP packages are available.
- Additional doors for easier entry/egress are available on larger buses.


MID-SIZE

- Larger buses have bigger windows.
- Many baggage compartment configurations are available.


CUTAWAY

Disadvantages
- Chassis selection critical. Smaller buses are not suitable for severe grade/high-speed operation.

HEAVY-DUTY CITY TRANSIT BUSES
(Standard and Low Floor)


STANDARD FLOOR


LOW FLOOR

Characteristics
- Designed for frequent stops with high-volume loads operating in urban conditions.

Advantages
- Multiple doors for easy entry/egress.
- Standee grab rail option.
- Low floor option.
- Perimeter and side facing seats.
- VIP option.
- Large windows.
- Long life span of 12 to 15 years.
- Heavy-duty engines, transmissions, axles, suspensions and construction.
- Upgraded interior seating and engines/transmissions are available for longer distance suburban commuting applications.

Disadvantages
- Not ergonomically designed for sustained long distance, high-speed operations.
- High initial cost is not cost-effective for low to moderate passenger loads.
- Large size not suited for narrow roads.
- High axle loads require sound roadways.
- Limited baggage storage.

MOTOR COACHES

Characteristics
- Long distance, high-speed travel with highest level of passenger comfort.

Advantages
- Large luggage/equipment storage capacity.
- High floors and large windows.
- Wider seats and narrow aisles limit standee capacity.
- Maximum baggage capacity.
- Lavatories available.

Disadvantages
- High relative initial cost.
- Large size not suited for narrow roads or tight turning, and high axle loads require sound roadways.
- Not designed for frequent stops since single front service door limits entry/egress speed.

HISTORICAL TROLLEY REPLICAS

Advantages
- Old time trolley/streetcar appearance and historic wood-type seating.
- Based on 7 yr/200K and 10 yr/350K Altoona tested chassis.
- Large windows, and open air versions available.

Disadvantages
- More expensive on per-passenger basis than larger adult type bus.
- Not designed for high-speed operation.
- More expensive than standard 7 yr or 10 yr Altoona tested bus.

Cost is always important, but selecting the right bus for your specific operational requirements, whether school, shuttle, city transit, or intercity coach, is essential. Most complaints arise from buses used in applications for which they were not intended.

Study your current bus's performance and maintenance costs. More importantly, what do you like or dislike about your current bus?

SPECIAL ORDERING INSTRUCTIONS

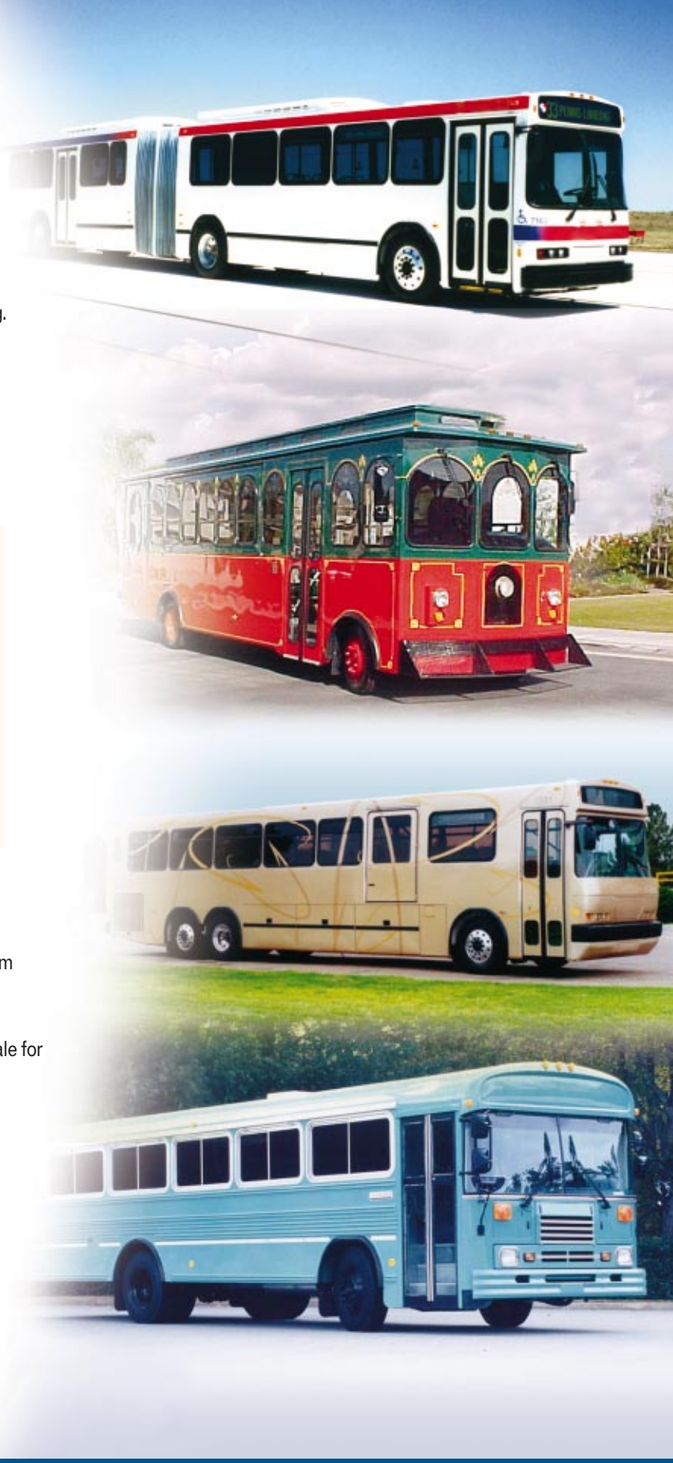
In accordance with FAR 16.505 (a) and (b), each ordering agency must compare prices for each and every contractor that can meet the minimum order requirements when selecting the vehicle(s) which will meet their agency's mission.

Ordering agencies must also document the contract file with the rationale for placement and price of each order.

The following should be considered when determining the "Best Value" when ordering under the BARB program:

- Optional Equipment
- Price
- Delivery Time
- Life Cycle Cost
- Past Performance
- Dealer/Maintenance Locations

Each order submitted to GSA must provide a statement affirming that all contractors were provided a fair opportunity to compete, in accordance with FAR 16.505 (a) and (b).



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(703) 308-CARS
fss.gsa.gov/vehicles/buying

Adult, School/Activity Buses

Adult, School/ Activity Buses	Small School Buses					Conventional School Buses				
Contract Item	A11	A12	A13	B12	B13	C08	C09	C10	C11	C12
Standard Item	301	302	303	312	313	318	319	320	321	322
Seating Adult/Child	12/15	16/20	20/30	16/24	20/30	20/30	24/36	28/48	36/60	44/72
ALT Fuels	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GVWR (lbs.)	9500	12,500	14,050	14,450	14,450	18,000	19,000	20,000	22,000	24,000
Length	14'	15'	17'	19'	21'	17'	19'	21'	26'	31'
Width	86"	96"	96"	96"	96"	96"	96"	96"	96"	96"
Interior Height	73"	73"	77"	77"	77"	76"	76"	76"	76"	76"

Adult, School/ Activity Buses	Forward Control/Front Engine				Forward Control/Rear Engine			
Contract Item	D10	D11	D12	D13	D20	D21	D22	D23
Standard Item	330	331	332	333	336	337	338	339
Seating Adult/Child	28/42	36/54	44/66	52/78	32/48	40/60	44/66	48/72
ALT Fuels	N/A	N/A	CNG	CNG	CNG	CNG	CNG	CNG
GVWR (lbs.)	24,000	26,000	28,000	30,000	26,000	28,000	30,000	32,000
Length	25'	27'	33'	37'	27'	33'	35'	37'
Width	96"	96"	96"	96"	96"	96"	96"	96"
Interior Height	76"	76"	76"	76"	76"	76"	76"	76"

GLOSSARY

Automatic Traction Control: Automatically transfers power to the driving wheel with traction by applying service brakes to the spinning wheel, and at the same time reduces engine power due to mud, snow, etc.

BARB: Buses All Ready to Buy

Contract Item: GSA's contract designation for each bus e.g. A12, L24

CNG: Compressed Natural Gas

Conventional Bus: Traditional hood and fenders with driver located behind the engine and front wheels

Curb Weight: Weight of bus (without driver or load), including fuel, coolant, oil, body and all items of standard and optional equipment

Cutaway Chassis Bus: Van type front end with bus body

Forward Control: Driver's position located ahead of front wheels

GAWR-Gross Axle Weight Rating: Load carrying capacity of axle, suspension and tires measured at ground. Capacity must not be exceeded.

GVW-Gross Vehicle Weight: Total weight of fully equipped bus and payload

GVWR-Gross Vehicle Weight Rating: Manufacturers' rating for maximum allowable weight of the bus and payload

Interior Height: Floor to ceiling in center of bus

JP8: Military designation for type of jet fuel

Length: Overall length of bus

LPG: Liquefied Petroleum Gas

Payload: Actual weight of passengers, luggage and cargo carried by vehicle (GVWR minus curb weight.)

Standard Item: Internal GSA listing of Federal Standard items

Stripped Chassis: A basic chassis with engine, transmission, axles, suspension and tires, but without a driver's compartment or any sheet metal

Traction Type Differential: Provides traction under slippery conditions by mechanically transferring power away from the spinning wheel to the wheel with better traction

Width: Overall width of bus excluding mirrors

Adult Buses

Adult Buses	Small (Cutaway/Stripped)		Mid-Size/Light-Duty (Cutaway/Stripped)		Mid-Size/Medium-Duty Front Engine (Cutaway/Stripped)				
Contract Item	J12	J13	K11	K12	L11	L12	L13	L14	L15
Standard Item	342	343	346	347	351	352	353	354	355
Seating	17	21	25	29	21	25	29	33	37
ALT Fuels	CNG	CNG	CNG/LPG	CNG/LPG	CNG/LPG	CNG/LPG	CNG/LPG	CNG/LPG	CNG/LPG
Altoona Test Yr/Mi.	4 yr 100,000	4 yr 100,000	5 yr 150,000	5 yr 150,000	7 yr 200,000	7 yr 200,000	7 yr 200,000	7 yr 200,000	7 yr 200,000
GVWR (lbs.)	12,300	14,000	14,000	16,000	19,000	20,000	21,000	22,000	23,000
Length	22'	23'	28'	30'	26'	26'	30'	35'	37'
Width	96"	96"	96"	96"	96"	96"	96"	96"	96"
Interior Height	76"	76"	76"	76"	76"	76"	76"	76"	76"

Adult Buses	Mid-Size/Medium-Duty Forward Control Rear Engine			Mid-Size/Heavy-Duty Forward Control Front Engine			Mid-Size/Heavy-Duty Forward Control Rear Engine		
Contract Item	L23	L24	L25	M11	M13	M15	M31	M33	M34
Standard Item	356	357	358	371	373	375	381	383	381
Seating	29	33	37	33	41	49	33	41	45
ALT Fuels	CNG	CNG	CNG	CNG	CNG	CNG	CNG	CNG	CNG
Altoona Test Yr/Mi	7 yr 200,000	7 yr 200,000	7 yr 200,000	10 yr 350,000	10 yr 350,000	10 yr 350,000	10 yr 350,000	10 yr 350,000	10 yr 350,000
GVWR (lbs.)	24,000	25,000	26,000	29,000	29,000	29,000	29,000	29,000	31,000
Length	30'	32'	32'	27'	33'	38'	32'	35'	37'
Width	96"	96"	96"	96"	96"	96"	96"	96"	96"
Interior Height	76"	76"	76"	76"	76"	76"	76"	76"	76"

Intercity Coach

City Transit

Intercity Coach/ CityTransit	6x2 Large/ Heavy-Duty Intercity Coach		Large Urban/ Heavy-Duty Low Floor City Transit		Large Urban/ Heavy-Duty Standard Floor City Transit	Large Urban/ Heavy-Duty Articulated City Transit	
Contract Item	N23	N25	N13	N15	N14	N16	N16A
Standard Item	396	397	393	395	394	398	398A
Seating	47	55	30	37	47	59	63
ALT Fuels	N/A	N/A	CNG	CNG	CNG	CNG	CNG
Altoona Test Yr/Mi	12 yr 500,000	12 yr 500,000	12 yr 500,000	12 yr 500,000	12 yr 500,000	12 yr 500,000	12 yr 500,000
GVWR (lbs.)	46,000	48,000	40,600	40,600	40,600	66,600	66,600
Length	40'	45'	35'	40'	40'	60'	60'
Width	102"	102"	102"	102"	102"	102"	102"
Interior Height	82"	82"	78"	78"	78"	78"	78"