



Request For Information

Future W-Series Pick up/Delivery Vehicle

February 2, 2001

Responses due April 2, 2001

■ Sample Cover Letter – “Future Vehicle Project”

February 2, 2001

Supplier Name
Address

Dear _____ :

FedEx Express would like to extend to your company an invitation to submit a response to the attached Request For Information (RFI). The project we are undertaking is to develop an environmentally improved, fuel efficient, cost effective commercial pickup/delivery (PUD) vehicle. The purpose of this RFI is to pre-screen and identify potential suppliers that have the products, services, technology, desire, capacity and capability to deliver the type vehicle we are looking for.

FedEx and the Alliance for Environmental Innovation have formed a project team in an effort to speed the production and use of environmentally improved PUD vehicles that meet FedEx's criteria for functionality and cost-effectiveness. The Alliance for Environmental Innovation, a national environmental group, works cooperatively with companies to incorporate environmental considerations into business decisions. The FedEx/Alliance team has been working together on this project since the Spring of 2000.

The project team seeks a commercial PUD vehicle that will replace the present FedEx Express W-Series PUD vehicle (approximately 30,000 in our current domestic fleet). The proposed vehicle should offer at least equivalent utility and lifetime cost competitiveness while providing significant reductions in fuel consumption and operating emissions. The project team will consider any and all technologies that meet the project Functional Specification.

The attached Exhibits provide more specific details of this project and the type vehicle we are looking for plus additional requirements for any company desiring to do business with FedEx. Suppliers who receive and provide responses to this RFI may or may not receive the Request For Proposal which is the next step in this process.

Please provide three (3) paper copies of your response and one (1) copy on diskette to James Steffen at the address below. All RFI's must be received on or before **April 2, 2001**.

All questions regarding this project and RFI should be submitted in writing to:

James Steffen
FedEx Express
2655 Dividend Dr., Suite 101
Memphis, TN 38132

Questions and responses will be circulated to all suppliers who respond to the RFI.

James Steffen
Chief Engineer
Vehicle/GSE Engineering

Doug Werts
Program Management Advisor
VEH/GSE/AGFS SCM

EXHIBIT “A”

Project Goals

The FedEx-Alliance project has the following goals:

- A. Develop vehicle designs that achieve at least a 50 percent improvement in fuel economy, and a 90 percent reduction in exhaust emissions as compared to the baseline vehicle by the end of 2001.
- B. Construct, conduct durability testing, and refine prototypes of those designs by the middle of 2002.
- C. Select the best design for further improvement and in-service testing of pre-production vehicles by late 2002.
- D. Build and evaluate 10 to 50 pre-production PUD vehicles in FedEx Express revenue service by the middle of 2003.
- E. Purchase production-level vehicles by late 2004.

EXHIBIT “B”

Baseline Vehicle Specification

General description of present W-series vehicle

The baseline PUD vehicle will be the FedEx model year 1999 W700. This is a walk-in PUD truck with a cargo capacity of approximately 670 cubic feet, and 6,000 pounds. It is built using a Freightliner Custom Chassis model MT45 chassis and a Utilimaster 14' Aeromaster body. The vehicle is certified to meet all applicable US DOT, FMVSS, and Federal Motor Carrier requirements.

The chassis is powered by an EPA-certified Cummins 175HP 6BT5.9 diesel engine and an Allison AT542 NFE 4-speed automatic transmission. Brakes are 4-wheel hydraulic discs with power boost and ABS. The rear axle is rated at 12,000 lbs. with a 3.31:1 drive ratio, and 10,000 lbs. leaf springs. The front axle is rated at 8,000 lbs. with 6,000 lbs. leaf springs. Tires are 225/70R x 19.5 with dual rears, and the GVWR is 16,000 lbs.

The aluminum body has overall dimensions of 266”L x 89”W x 120”H with interior cargo area dimensions of 168”L x 86”W x 81”H. With the vehicle empty the height of the cargo bed is 33” from the ground. The vehicle has an SAE and FMVSS compliant cab HVAC system.

Detailed specifications of the baseline vehicle are available upon request.

EXHIBIT “C”

Future Vehicle Functional Specification and Requirements

Overall vehicle requirements

Size: Overall vehicle dimensions can not exceed the same overall dimensions of the baseline vehicle, see above.

Payload capacity:

Weight: Not less than 95% of baseline vehicle, see above.

Volume: Not less than 95% of baseline vehicle, see above.

Performance (at GVWR):

Top cruise speed: not less than 65 miles per hour.

Maximum speed: not more than 72 miles per hour.

Acceleration: not less than 6.0 ft/sec/sec; not greater than 7.0 ft/sec/sec.

Braking: Must exceed FMVSS requirements. Must include antilock and traction control features.

Range: not less than 400 miles.

Turning radius: Must not exceed turning radius of baseline vehicle, approximately 25 feet.

Startability: not less than 25%.

Gradeability: not less than 5.0% at 40 MPH.

Ergonomics: Equivalent or better than baseline vehicle.

Reliability and Durability: Equivalent or better than baseline vehicle.

Maintainability and Repairability: Equivalent or better than baseline vehicle.

Data collection and Diagnostics: Must incorporate an SAE J1939 data bus.

As a minimum data bus must be connected to all engine, motor, driveline, brake, and energy storage control systems.

Fueling ease and safety: Equivalent or better than baseline vehicle.

EXHIBIT “D”

Specific vehicle requirements

- A. Vehicle Fuel Economy: Fuel economy must be a minimum of 50% better than the baseline vehicle. Baseline and Future Vehicle fuel economy will be measured using a test cycle representative of FedEx Express PUD service. The project team will define the test cycle, which is expected to closely follow the Federal Test Procedure (FTP) as defined in SAE Information Report J1506.
- B. Vehicle Emissions: Exhaust emissions, as a minimum, must be 90% less than the baseline vehicle for total exhaust emissions. Additionally, NOx and PM10 emissions must each be at least 90% less than baseline vehicle, and HC emissions must be no greater than the baseline vehicle. Baseline and Future Vehicle emissions will be measured using a test cycle representative of FedEx Express PUD service. The test cycle will be defined by the project team prior to baseline vehicle testing. It is expected that the test cycle will closely follow the Federal Test Procedure (FTP) as defined in SAE Information Report J1506.
- C. Safety: Must meet or exceed FMVSS requirements.
- D. Crashworthiness: Must meet or exceed FMVSS requirements.
- E. Visibility: Must meet or exceed all SAE standards and FMVSS requirements.

EXHIBIT “E”

Other requirements

- A. There should be no major changes in truck operation from the driver’s standpoint.
- B. Components must not interfere with ingress or egress of courier and should not be mounted in the cargo area.
- C. Positive “Park” position in the driveline that holds the truck on a grade without the parking brake to prevent runaways.
- D. Batteries or other energy storage devices must be able to be returned to the manufacturer for re-manufacturing, recycling or disposal.
- E. There should be no signal interference with FedEx tracking and scanning systems.

EXHIBIT “F”

Proposal Evaluation

Proposals will be evaluated according to the degree to which they meet and exceed the above listed requirements while maintaining the vehicle’s lifetime cost-competitiveness. Innovation and creativity are encouraged.

Additional consideration will be given to proposals that:

- a) Minimize the use of heavy metal in the battery, engine, and the entire vehicle.
- b) Use off-the-shelf and readily available components.
- c) Do not rely on centralized fueling or fuels that are not widely available.
- d) Minimize vehicle noise.
- e) Maximize the ability of the vehicle parts and components to be reused, remanufactured or recycled; minimize the number of different materials used; and facilitate disassembly at the end of the vehicle’s lifecycle.
- f) Maximize use of recycled materials in the vehicle.
- g) Maintain the same tire and wheel size and configuration.
- h) Eliminate the use of mercury.

EXHIBIT “G”

Additional Procurement Requirements

In preparation for any future agreement with a supplier(s) for this project, FedEx will require the supplier(s) to agree to the following: (at this time, for this RFI, a response is required for number 2 only).

1. Pre-Negotiation Letter (sample attached, does not have to be signed at this time)
2. Non-Disclosure Agreement. The copy attached **MUST** be signed and returned with your response to this RFI.
3. Diverse Supplier Development reporting. FedEx supports minority supplier development and asks suppliers to report their use of minority suppliers.
4. Disaster Recovery Plan. This is a summary of how a supplier would continue operations in case of a major interruption in their capability to produce products and services caused by a natural disaster (flood, fire, etc).
5. Publicity/News Releases. FedEx requires all suppliers to forward any publicity articles or news releases pertaining to this project and/or any future business relationship with FedEx to FedEx Vehicle Administration for approval prior to any release to the public.
6. Financial Reports. FedEx must review financial statements or the latest annual report of suppliers during the final negotiation phase prior to any contractual agreement.
7. Right To Audit. FedEx may request the right to periodically audit product invoices from first tier suppliers to verify costs.
8. EDI Capabilities. FedEx is currently implementing electronic order, invoicing and payment processes and must align with suppliers who have the same capabilities and goals.