

RTAP

BULLETIN

FLORIDA RURAL TRANSIT ASSISTANCE PROGRAM

FALL 2007—VOL.5, No.4

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Florida Vehicle Procurement Program

The Florida Vehicle Procurement Program (FVPP) has been in existence for over 12 years. The program is managed by the Florida Department of Transportation (FDOT) and administered by the Center for Urban Transportation Research (CUTR) at the University of South Florida and provides Florida's public transit agencies with the opportunity to purchase safe, quality and dependable transit vehicles with extended life at the lowest possible price. The program promotes increased cooperation among vehicle manufacturers, Florida dealers and public transit agencies. This cooperation is evident in the program's unique contractual arrangement requirement that good customer service is as important as low price and quality workmanship.

Prior to the establishment of FVPP, public transit agencies would purchase vehicles individually, relying on dealers to provide a good bus for little cost or trying to develop an agency vehicle specification, which can be a long and challenging process, even for the few agencies that could provide trained, experienced staff for this purpose. The result was a wide variety of vehicles with questionable levels of quality, low life expectancy and a wide range of costs. FDOT's Bob Westbrook, Manager of Bus Fleet and Maintenance Programs, decided that the public tax dollars being utilized to subsidize the agency vehicle purchases could be better spent so he set out to develop a program to improve the purchasing process for each agency, while at the same time improving the safety,

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FDOT Springhill Bus Inspection Facility

The Florida Department of Transportation (FDOT) collaborates with Florida Agricultural & Mechanical University (FAMU), Florida State University (FSU), the University of South Florida (USF), and other research groups to develop tests to ensure the safety and reliability of the bus components purchased through Florida Vehicle Procurement Program (FVPP) contracts. FDOT has funded a state-of-the-art Bus Inspection, Testing and Research Facility in Tallahassee, which performs all the tests required for each vehicle.

The tests are conducted in an environment that simulates severe duty transit operation. If buses fail to meet the performance test/standards, FDOT reserves the right to suspend placement of further orders and/or terminate the vendor's contract. FDOT also reserves

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quality, cost and customer service for vehicles delivered to the State. Westbrook has been assisted in his efforts by Paul Johnson, FDOT Manager of the program.

Program development and implementation has been a long process that has had its bumps and disappointments, but after many years of developing all aspects of the process, the program is now receiving well-deserved national recognition. While other state DOT's have programs to provide cutaway paratransit vehicles to public transit agencies, none come close to meeting the established goals of the FVPP.

Following are the major steps involved with purchasing a vehicle through the FVPP.

FDOT and FVPP officials receive feedback on existing vehicles in service and gauge the demand for new types of vehicles from a variety of sources, including the users of the program. This information, coupled with research and testing conducted in Tallahassee at the FVPP's Bus Inspection facility, leads to the development of performance-based vehicle specifications by FVPP staff and FDOT managers. A "Request for Proposal" (RFP) is then received and evaluated by a six-member committee to determine the best contract(s), not necessarily the lowest cost contract. The proposals are from Florida cutaway dealers who partner with a major vehicle manufacturer. Components of the contract evaluation process are weighted and scored individually by each committee member. A negotiation process with one or more of the preferred dealer(s) is conducted to resolve issues and meet the identified needs of the RFP.

Once an agreement is reached, the specific contract and related order forms and certification documents are posted to the FVPP website (<http://www.cutr.usf.edu/fvpp>). This website and a related database are maintained by CUTR. Other related information is also available on this website. Agencies select the dealer/manufacturer and specific bus with options and then complete the order forms, all of which

can be downloaded from the website. The dealer will assist the agency in determining a floor plan and other options desired. On behalf of the agency, dealers can request the FVPP Administrator, CUTR Senior Research Associate Hank Cusack, for a waiver-from-contract for specific specifications not reflected in the contract. If the agency is using 5310 Grant funds to finance the purchase, the order form is reviewed by Cindy Wooten, CUTR's FVPP 5310 Administrator. Once issues are resolved, the dealer then places the order with the bus manufacturer. Once a chassis is identified for building the vehicle, the delivery time to the agency normally is less than four months.

Prior to delivery to the agency, each vehicle must visit the FVPP Bus Inspection, Testing and Research facility on Springhill Road in Tallahassee. Here, the vehicle is closely inspected for production deficiencies by CUTR's FVPP Supervisor Technicians Cecil Carter and Leroy Edwards. Results of this inspection are provided to the agency and to the dealer. The dealer is required to resolve all the deficiencies prior to the agency placing the vehicle in service. Carter and Edwards are available to assist agencies in resolving technical and service issues related to any agency fleet vehicle. They can be contacted in Tallahassee at the Springhill FVPP facility at sbitf@cutr.usf.edu.

FDOT also provides support for paratransit agencies through other programs to improve maintenance management, maintenance technician skills, and on-going safety research to improve vehicle crash-worthiness. Through the FVPP, Florida's DOT is taking serious steps to assisting public transit agencies to improve their fleets that serve the state's citizens. For further information or assistance on the Florida Vehicle Procurement Program, send an email to sbitf@cutr.usf.edu or contact Hank Cusack, cusack@cutr.usf.edu.



Vol. 5, No. 4, Fall 2007

The **RTAP BULLETIN** is produced by the USF Center for Urban Transportation Research.

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RTAP BULLETIN

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OUR MISSION

The Florida RTAP provides training, continuing education, and technical assistance to those who provide or assist in the provision of public transportation services in rural and small urban communities in order to promote the coordinated delivery of safe, efficient, and effective transit services.

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Florida Vehicle Procurement Program Data Center

The Florida Department of Transportation's (FDOT), Florida Vehicle Procurement Program (FVPP) has a centralized process for purchasing paratransit vehicles using Federal Transit Administration (FTA) 5310 and non-5310 funding. Because of the extensive amount of information regarding the procurement process, CUTR and FDOT is developing the FVPP Data Center to allow easy access to information and processes.

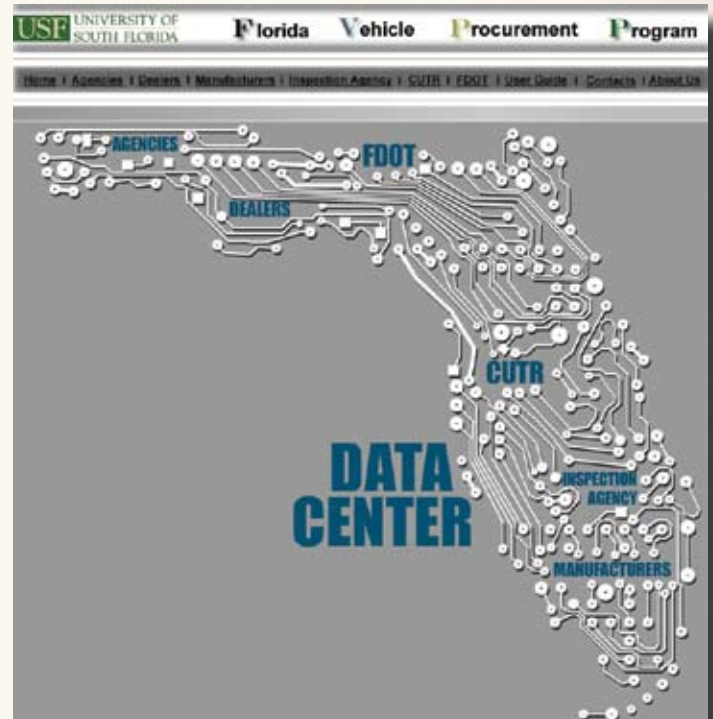
The FVPP Data Center will serve as a common platform for all who interact with the program. Available information will include purchase orders, vehicle descriptions, vehicle status, inspection detail, manufacturing defects reported during inspection, actions taken, and delivery status. Transit agencies or customers will be able to view and download information regarding their orders without wait time or delay.

Features of the FVPP Data Center:

- Username and password protection for limited access
- User-friendly forms for data entry
- Customized reports for extracting and viewing information
- Real-time information with nearly no delay
- Access irrespective of geographic location

Benefits of the FVPP Data Center:

- Improved Communication—The data for each vehicle procured will be entered by CUTR, vendors, manufacturers, and inspectors. This information can be viewed by the transit agencies or customers at any time, allowing customers to view order status and other related information.
- Cost and Time Saving—The information maintained in the Data Center can be downloaded and printed from the internet. This eliminates the need for customers to request information and alleviates the responsibility of FVPP staff to pull data from different resources, compile it, and then fax it to the customers.
- Continuous Quality Improvement—Parameters that are useful for the evaluation of bus components will be monitored using the FVPP Data Center. Summary



reports will be generated using the data, and vendors/manufacturers will be notified of any frequently occurring problems.

- Post-Delivery Modules—FVPP inspectors inspect all newly-procured vehicles at the time of delivery and randomly inspect vehicles after they are in service to check performance or determine issues arising due to a manufacturing/operating defect. This information will be compiled and communicated to the manufacturers and included in current or new contracts as needed.

The FVPP Data Center will be maintained with extensive support and feedback from FDOT. Transit agencies throughout Florida, vendors, and manufacturers have contributed extensively to its development. The FVPP Data Center is currently in the testing phase and will be made available to the public soon. A username and password will be required to access the information, which will be provided to qualified users by CUTR.

For more information, visit <http://www.cutr.usf.edu/fvpp2> or contact CUTR's FVPP Administrator Hank Cusack at (813) 974-7834, cusack@cutr.usf.edu, or Manisha Amdiyala, amdiyala@cutr.usf.edu.

the right to randomly test new buses at any time during the contract period, to ensure compliance.

Six performance tests/standards comprise the Florida Performance Standard and are used to evaluate the safety, effectiveness, and performance of various bus components. The standards are as follows:

Crashworthiness Research and Testing

FDOT collaborates with FAMU and FSU to develop crash and safety testing standards for crashworthiness and impact analyses of buses. Safety standards are developed for chassis and body construction. Actual impact events are conducted to understand the dynamics of incidents and the impact on passengers, including penetration in the passenger compartment. A comprehensive evaluation is also done for rollovers and other impacts. The test results are communicated to the manufacturers to constantly improve the body design for safety.

Air Conditioning Pull-Down Test

AC performance is tested by raising the temperature inside the bus to a minimum of 95°F and 60% relative humidity to simulate Florida conditions. A functional AC system should lower the interior temperature to 70°F or lower within 30 minutes, with the voltage readings of the batteries not over 12.9 volts at any time during the test. The time taken to attain 70°F and corresponding amperage draw is also noted for each test to give a rating to the AC system. Additional data are also collected

for informational purposes for future evaluations and comparisons of different AC systems.

Alternator Output Test

This test is performed on all transit equipment purchased through FVPP contracts and on all after-market alternators that are recommended by bus manufacturers to replace the OEM alternators. The test conditions simulate “under hood” operating conditions by encasing an alternator in an aluminum heat shroud. During testing, a 12-volt battery is used to maintain the charging system. DC on/off switches control two 12” DC condenser fan motors to prevent the battery from overcharging. During the test period, the temperature inside the heat shroud will be between 120-150°F. The alternator is made to run at minimum idle speed (600 rpm) for 30 minutes and at maximum rpm speed (2000 rpm) for 30 minutes. The alternator amperage output, minimum battery voltage, and temperature condition of the alternator is continuously monitored during the test. The amperage output of the alternator is evaluated based on its ability to remain at or above the maximum amperage draw for the type of bus it will be used on. It is also evaluated based on the ability to remain at or above the advertised output curve on a “hot” rating based on RPM increments.

Emergency/Park Brake Test

This test evaluates the emergency/park brake performance standard for all transit equipment purchased through FVPP contracts. The test is performed on a 150 inclined ramp in dry conditions, 150 pounds in each seat position and 250 pounds in each wheelchair position, to simulate a bus loaded to maximum passenger capacity. The brakes are also



Air conditioning testing equipment



Bus used in crash testing



Cecil Carter testing an alternator



Cecil Carter testing a wheel chair lift

tested by parking the bus in the reverse direction on the incline tested earlier. During the test, a bus should not move more than 1” in a 30-minute time period in both positions, and the brakes should not display any signs of slippage during the test.

Gross Vehicle Weight Rating (GVWR) Test

In this test, each bus is weighed at each wheel, instead of each axle, with simulated passenger load under various seating arrangements. The test helps in keeping below the GVWR, reducing brake wear, suspension failure, tire wear, and pre-mature transmission failures.

Brake/Acceleration Test

To maintain bus stability, body weight distribution plays a vital role in accelerating and braking. This test evaluates the effects of

similar chassis with differing body construction. In addition, the test also accesses the impact on individual second stage body builders while accelerating and braking.

FDOT is taking all necessary steps to ensure the safety of passengers traveling in the buses purchased through the FVPP contracts. With the cur-

rent tests and additional tests under development, FDOT’s Florida Vehicle Procurement Program is clearly a national leader in improving the safety and quality of paratransit vehicles.

For more information, contact CUTR’s FVPP Administrator Hank Cusack, (813) 974-7834, cusack@cutr.usf.edu.



New bus inspection and water testing bays

Florida’s Route for 5310

Did your agency recently receive a Notice of Section 5310 grant award? Do you know what the next step is? Have you received a CD with all the active Florida Vehicle Procurement Program (FVPP) contract order forms and DMS/State contract information? The Florida Department of Transportation Public Transit Office in Tallahassee has provided a person to contact to get 5310 vehicle orders in place or to gain further insight about the process.

CUTR Senior Research Associate and FVPP 5310 Administrator Cindy Wooten has been coordinating 5310 awards for the State of Florida since 2001. In conjunction with FDOT, a process has been developed to centralize communication and documentation, as outlined below.

(1) Upon notification and acceptance of a 5310 grant award, agencies should contact Cindy by telephone (813/974-9771) or email wooten@cutr.usf.edu to determine which vendor(s) can be contacted to obtain further details about their vehicle purchase. The appropriate vendor is determined by active contracts at the time you are ready to make the purchase. You can also consult the FVPP website at <http://www.cutr.usf.edu/research/fvpp/fvpp3>

[.htm](http://www.cutr.usf.edu/research/fvpp/fvpp3) and the DMS/State website at <http://dms.myflorida.com/business-operations/state-purchasing> for information on vehicles available to meet grant award specifications. Contact Cindy for a CD with current FVPP contract order forms and DMS/State contract information.

- (2) Once the vendor is determined, a completed order form for purchases on Florida Vehicle Procurement Program (FVPP) contracts, or commodity specifications for DMS/State contracts, should be completed, which will include vehicle specifications. This form and a purchase order for the agency portion of the purchase must be faxed to Cindy Wooten. At this time, it is recommended that the agency contact Cindy to confirm that it is proceeding within the award limitations and that the purchase order is for the appropriate amount.
- (3) Cindy will confirm that the vehicle can be constructed according to the agency’s order. She will then record the order information and forward the documents to FDOT

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2007 & 2008 UPCOMING EVENTS

The classes and conferences listed below are sponsored by the Florida Department of Transportation and the Center for Urban Transportation at the University of South Florida in Tampa. If you would like to attend any of the courses, you may find a brochure and registration form for each course at www.cutr.usf.edu in the Upcoming Events and Training section. If you have any questions, please contact Molly Buffington at (813) 974-7810.

November 27-30, 2007

TSI Transit Industrial Safety Management
—PSTA, St. Petersburg

January 14-18, 2008

Transit System Security—
South Daytona, FL

January 28-31, 2008

Instructor's Course in Bus Operator
Training—Orlando, FL

February 1, 2008

1-Day Paratransit Operator Training
Certification—CUTR

February 4-7, 2008

TSI Transit Industrial Safety Management
—PSTA, St. Petersburg

February 18-22, 2008

Fundamentals of Bus Collision
Investigation—PSTA, St. Petersburg

March 18-20, 2008

Substance Abuse Management &
Program Compliance—CUTR

March 24-27, 2008

Instructor's Course in Paratransit
Operator Training—CUTR

March 28, 2008

1-Day Bus Operator Training
Certification—CUTR

May 5-9, 2008

TSI Transit Supervisors Course—CUTR

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Central Office in Tallahassee to issue an FDOT purchase order.

- (4) The FDOT purchase order will be sent directly to the vendor, with notification to Cindy that the purchase order has been issued. Delivery of a vehicle generally takes place within 90-120 days from the date of order for passenger vans and sedans on DMS/State contracts, and 90 days from the date of the order or receipt of chassis, whichever is later, for FVPP contracts.
- (5) When the vehicle is delivered and accepted, the agency must contact Cindy for an FDOT control number that must be affixed to the vehicle. The number must be placed on the vehicle by paint or decal above the license plate area.
- (6) Upon acceptance of the vehicle, the agency should issue payment to the vendor for the agency's portion of the

cost. If the vehicle was purchased on a DMS/State contract, all documents must be faxed to Cindy at (813) 396-9345 so FDOT has the required documentation to remit its portion of the payment to the vendor. If the vehicle was purchased via an FVPP contract, the vendor is responsible for providing all required documentation to Cindy.

If the agency is awarded a piece of equipment other than a vehicle, contact Cindy for the process that will best meet agency needs and those of the 5310 program.

By following these steps, agency requests can be processed efficiently and the new vehicles can get on the road to serve the TD population!

For further information, contact CUTR Senior Research Associate and FVPP 5310 Administrator Cindy Wooten at (813) 974-9771, wooten@cutr.usf.edu.

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