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Florida Vehicle Procurement Program Economic Benefits Report

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Florida Vehicle Procurement Program
Economic Benefits Report

Prepared for:
Florida Department of Transportation (FDOT)

by:
Center for Urban Transportation Research
College of Engineering
University of South Florida

April 26, 1999
Overview of Program and Purpose of Report

Established in 1996 through the Florida Department of Transportation (FDOT), the Florida Vehicle Procurement Program (FVPP) provides Florida’s public transportation agencies with the opportunity to procure well-equipped, well-built vehicles at a lower cost. In addition to organizing and administering statewide contracts for procurement, the FVPP has assisted in the development of technical specifications and provided technical assistance to agencies throughout the procurement process. The program also has established a resource center that houses technical specifications, inspection and procurement records, Altoona bus test reports, and a vendor database.

All of these activities have improved the efficiency of vehicle procurement and the quality of vehicles built for that procurement. The most striking benefit of the FVPP has been the direct cost savings it has provided public transportation agencies. The purpose of this report is to document actual cost savings that are directly attributed to the program. To demonstrate this cost savings, data on cutaway type vehicles and modified vans purchased through the FVPP for 1996, 1997, and 1998 model production years were assessed.

Overall, Florida public transportation agencies purchased 440 vehicles through the FVPP procurement process from 1996 to 1998, at a total cost of $17,263,742.00. As a result of purchasing these vehicles through the FVPP rather than by individual properties, a total minimum cost savings of $4,052,569.00 occurred. (See attached data table and bar graph) This amount includes only those savings that can be documented. Additional savings due to streamlining the administration of the procurement process statewide, increasing quality control during vehicle production, and using group leverage for warranty enforcement are discussed in this report, but due to their qualitative nature, they are not included in the above stated savings. They are discussed in a later section of the report.

Determining Cost Savings

Savings on MSRP

To determine cost savings through the FVPP, the contract price agencies paid through the program were compared to the manufacturer’s suggested retail price (MSRP) in 1996, 1997 and 1998 for each vehicle type. These prices were provided by Getaway Marketing, through whom these vehicles were purchased. Individual agencies can receive small discounts from the MSRP when purchasing, depending on the size of their vehicle order and their relationship with the vendor. According to Getaway, the potential discounts on MSRP to individual agencies could have totaled as much as 25% of the total cost savings. Thus, if all participating agencies had received a maximum potential discount, the total cost savings that can be attributed to the FVPP for the 1996-1998 model years would be $4,052,569.00. Therefore, even after calculating the
standard discounts on MSRP an agency might have received from the vendor, the FVPP has provided enormous cost savings to taxpayers.

The 1996 cost savings were calculated using a modified methodology. In this, the first year of the statewide procurement, base vans for the modified vans were purchased from the Florida Department of Management Service (DMS) contract. The conversion of these vehicles to meet paratransit requirements was done through Getaway Marketing/Evergreen Industries. The contract price is therefore a combination of the average chassis price and the average conversion price. Because the finished vehicle came from two sources, an accurate MSRP comparison is not available through Getaway Marketing. To determine cost savings, the estimated contract price is compared to the average price for the same vehicle type, as found in the American Public Transit Association (APTA) 1996 Transit Vehicle Data Book.

Several factors help to contribute to the FVPP's ability to secure a lower price for transit agencies. One such factor is volume discounts from original equipment manufacturers (OEMs). These OEMs, such as Ford, GMC, and manufacturers of seating, wheelchair lift and air conditioning components, offer significant savings when large quantities of their products are purchased. The cost of components used in vehicle construction is reflected in the final price of the vehicle. Therefore, without these high volume discounts, individual agencies pay more for their vehicles.

Savings on Production Costs

A second important factor also affects the FVPP's ability to lower costs to agencies through multi-year contracts. If the cost of building the vehicle increases during the life of the contract awarded, those costs cannot be passed onto agencies. Once the contract is in place with the vendor, the price stated in the contract remains in effect for the life of the contract. If an agency buys off the contract in succeeding years of a multi-year contract, for example, and production costs of the vehicle have increased, that price increase is not passed on to the agency (with the exception of verifiable OEM chassis increases). An agency buying outside of the FVPP contract would incur this price increase.

Other Benefits Provided by the FVPP

In addition to the documented quantitative savings, the FVPP has provided qualitative benefits in several areas. In issues of vehicle construction quality assurance, warranty enforcement, improved communication between FDOT Public Transit Office, FDOT District Offices, and transit agencies, and the bid administration process, the FVPP has increased efficiency and service, lessening many of the burdens associated with vehicle procurement and new vehicle maintenance for FDOT district offices and agencies alike.
Improved Warranty Enforcement

The issue of warranty enforcement and vehicle construction quality assurance are directly influenced by the existence of a consortium buying program. If agencies experience repeated mechanical or structural problems with vehicles purchased through the program, these problems can be addressed through their FDOT district representatives or by the agency themselves to the FVPP staff. Manufacturers are then approached by a group of customers (represented by FVPP) to resolve outstanding warranty issues. This has resulted in positive, fast resolutions to warranty related issues. This also has allowed the FVPP to identify problems that might be common to several agencies, indicating possible issues of vehicle component or construction quality. In addition to this, the FVPP has lengthened warranty periods on some vehicle components, such as A/C systems and wheelchair lifts.

Improved Production Oversight and Quality Assurance

The concept of vehicle construction quality assurance is central to the goals of the FVPP. Obtaining lower-priced vehicles is important, but ensuring that those vehicles are of the highest possible quality for reasons of safety and durability is essential. The FVPP allocates a large percentage of its budget to in-plant line inspections, as well as pre- and post-delivery inspections. These line inspectors, who are employed by the FVPP, randomly inspect vehicles ordered by Florida agencies as they proceed down the assembly line. The inspectors are authorized to stop production when they feel that vehicle quality is not acceptable. These inspectors fax daily reports to the FVPP staff, ensuring close communication during all phases of vehicle production. The importance of having an independent in-plant inspector cannot be overstated. Without this, agencies are dependent solely on each manufacturer’s quality assurance procedures or must incur the expense of sending an inspector from their agency. This leaves agencies buying vehicles independently more susceptible to variations in vehicle quality.

Although documentation of cost savings associated with increased vehicle quality would extend far beyond the scope of this report, feedback from FDOT district representatives and maintenance managers in FVPP participating agencies indicates that this increased focus on quality assurance has resulted in vehicles with fewer mechanical problems, fewer warranty repairs, and reduction of out-of-service time. Most participating agencies and district representatives attribute this cost decrease to the strengthening of technical specifications developed under the FVPP. Improved vehicle construction quality also increases the likelihood of longer vehicle service life. In addition, use of construction materials such as Altro flooring and features like rear exit doors on cutaway buses have improved vehicle safety and lessened maintenance needs.

Improved State-wide Communication

The FVPP also has provided a channel for improved communication between Florida’s public transit agencies, the FDOT Public Transit Office, and the seven FDOT District Offices.
Procurement Advisory Committee was created at the inception of the program and includes FDOT district representatives and members from the FDOT Public Transit Office. This body allows the concerns of all agencies to be voiced through their district representatives to FVPP program management and the CUTR program administrative staff. Individual agencies also have direct contact with FVPP staff, further promoting clear and open communication.

**Increased Efficiency in Bid Process**

The process to procure vehicles includes a multi-step bid process. Prior to the establishment of the FVPP, each agency wishing to procure vehicles had to undergo this process individually. By establishing a statewide contract from which all agencies can purchase, the FVPP eliminates the repetition and cost of individual bid process administration.

Individual bid administration is less efficient than consortium administration and is comprised of many costs. The most expensive of these costs is labor hours. An agency employee or employees must develop technical specifications for the vehicles they wish to procure, develop a boiler plate, produce a bid document including those items to be sent to vendors, arrange for advertisement of the bid as required by law, reproduce bid documents and mail to all responding vendors, review bids received from vendors, and award the bid. Other costs include advertising in a publication such as *Passenger Transport* (approximately $300 for a bid announcement), printing costs for bid packages, and mailing costs.

The number of labor hours and the cost of the labor vary greatly from agency to agency. VOTRAN can be used as a case study. In 1997, VOTRAN solicited bids for the purchase of eight vehicles. According to their estimates, approximately 40 labor hours were used throughout the bid process, at an estimated cost of $800. VOTRAN also reported savings to the agency because they did not have to have a pre-production meeting ($1,100) and they did not have to do any vehicle inspections ($4,200), and therefore did not incur travel, lodging, and labor expenses. Including estimated costs for printing, advertising, and mailing, VOTRAN’s bid administration costs exceeded $6,400. They ultimately purchased the same vehicles from the same vendor through the FVPP contract at a total savings of approximately $56,000 in vehicles alone - enough to purchase an additional vehicle.

With the introduction of the FVPP, agencies who need to purchase vehicles no longer have to bear this expense. The entire bid process, including all previously cited costs, is paid for by the FVPP. Multiplied by the number of agencies that have purchased vehicles through this program since its inception, a substantial savings to taxpayers in bid administration costs has been achieved, in addition to documented savings on the vehicles themselves.
Summary

Over the first three years that the Florida Vehicle Procurement Program has been in place, a documented minimum savings of $4,052,569.00 has been achieved. Florida’s public transportation agencies have been able to procure higher quality vehicles at lower prices and with far less administrative cost and energy expended. The Florida Vehicle Procurement Program shows that well-planned, efficiently-administered programs can create a win-win situation to Florida’s public transportation agencies and the taxpaying public. The program has provided savings in money, time and energy, and at levels that prove it is worthwhile and successful.
**Reading the Data Table**

For clear understanding of the attached data table, please refer to the following category definitions:

**Year:** Manufacturer's model production year in which vehicles were purchased

**Vehicle Type:** Body type of vehicle

**Quantity:** Number of vehicles purchased under the FVPP program

**MSRP per Vehicle:** Manufacturer's suggested retail price which a single agency would pay for the vehicle. *This amount includes the base vehicle price and basic options including a diesel engine where indicated, a basic 12/2 seating plan, and wheelchair lift. Other options an agency might have chosen, such as a radio, are not included in this price.*

**Total MSRP Cost:** Aggregate of all MSRP costs for vehicle quantity (this amount does not include options other than a wheelchair lift, basic seating package, and diesel engine where noted).

**Actual FVPP Price per Vehicle:** Price paid through the FVPP for vehicle. *This amount includes the base vehicle price and basic options including a diesel engine where indicated, a basic 12/2 seating plan, and wheelchair lift. Other options an agency might have chosen, such as a radio, are not included in this price.*

**Total FVPP Cost:** Aggregate cost of all vehicles purchased through the FVPP (this amount does not include options other than a wheelchair lift, basic seating package, and diesel engine where noted).

**Savings per Vehicle:** Amount an agency saved pre-option by purchasing the vehicle through the FVPP.

**Total Savings:** Total amount saved on vehicles purchased through the FVPP.
### Cost Savings Data

#### MSRP and FVPP Price Comparisons

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<tr>
<th>Year</th>
<th>Vehicle Type</th>
<th>Quantity</th>
<th>MSRP Per Vehicle</th>
<th>Total MSRP Cost</th>
<th>Actual FVPP Price Per Vehicle</th>
<th>Total FVPP Cost</th>
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Procurement Savings By Model Production Year
MSRP and FVPP Price Comparisons

<table>
<thead>
<tr>
<th>Year</th>
<th>Total MSRP Cost</th>
<th>Total FVPP Cost</th>
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ACKNOWLEDGEMENT

The Center for Urban Transportation Research (CUTR) has been requested by the Florida Department of Transportation (FDOT) to identify economic benefits of the Florida Vehicle Procurement Program.

The following CUTR staff assisted in the research and preparation of this report:

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Project Manager: Mike Crittenden, Senior Research Associate
Staff Support: Kelly Lytle, Research Associate