Memorandum

MIAMI-DADE COUNTY

Date: April 26, 2012

To: Honorable Chairman Joe A. Martinez
and Members, Board of County Commissioners

From: Carlos A. Gimenez
Mayor

Subject: Miami-Dade County's Vehicle Fleet

This report provides the Board of County Commissioners (Board) information on the current inventory of vehicles located at the County's centralized Earlington Heights Fleet Facility. In addition, this report addresses the number of available police patrol vehicles in the current inventory and the recent recommendation to purchase additional police patrol vehicles. As explained in the report, actions were taken beginning in 2007 to reduce the County's fleet, subsequent to bulk purchases in prior years. This resulted in an excess supply of vehicles against much reduced demand.

Police Patrol Vehicles and the Inventory at Earlington Heights Fleet Facility

As shown in Attachment A, there are a total of 157 vehicles at the Earlington Heights Fleet Facility, which is the County's one and only facility used to receive new and used (those returned because they are no longer operationally necessary) vehicles. While in storage, all vehicles are maintained to operational standards.

Sixty-six of the stored vehicles belong to the Miami-Dade Police Department (MDPD), and 37 of these are MDPD pursuit vehicles. This number is low given the replacement rate of at least eight pursuit vehicles per month. Accordingly, the Administration recommended and the Board approved the purchase additional MDPD pursuit vehicles. This recommendation was based on two factors: 1) the County stood to benefit from the reduced vehicle prices ($1,221 per vehicle) on an offer that required immediate action, and 2) the 37 vehicles at Earlington Heights Fleet Facility are estimated to be placed in service in the near future, requiring additional vehicles to maintain operational readiness. The order of 121 pursuit vehicles would not be delivered to MDPD until a minimum of 120 days from the date of order (approximately delivery of late August 2012). Upon delivery, a two-month process is required to prepare the vehicles for road use (i.e. emergency lighting, radio, prisoner cages, graphics, and tag). All of the remaining 29 non-pursuit vehicles will be put into service by the end of June 2012.

Additionally, there is an inventory of fifty-seven 15-passenger vans that were purchased in 2006 in lieu of renting vehicles each year for departments (then Park and Recreation, Human Services, and Community Action Agency) to transport children to and from the various summer programs offered by the County. Rather than paying a private company a rental fee of $1,500 (per vehicle on a monthly basis for four months) each summer, the County purchased these vehicles. By 2010, these vehicles had paid for themselves. These 57 vans are also available for use during the year for a variety of other County functions.

In total, the remaining 34 non-MDPD vehicles are maintained in inventory for use by all other departments. Currently, there are four 2007 Prius hybrid sedans pending deployment, leaving a total of 30 unallocated non-MDPD vehicles that will be assigned as replacements are needed.

Background on Fleet Vehicle Purchases

Historically, the County purchased fleet vehicles as part of a planned annual process. Benchmarked performance goals of the vehicle replacement process included: bulk purchases; orderly placement of vehicles into service; and collection of replacement funding in installments from fleet users.

Several types of vehicles are commonly used in the County, including sedans, passenger vans, cargo vans and pickup trucks. Therefore, generic configurations of these vehicles were purchased on an annual basis and maintained in inventory for deployment as needed. The number to be purchased for each of these categories was determined by an evaluation of the fleet, condition of the vehicles, and estimation of how many were likely to need replacement in the following year.

This practice for purchasing and distributing vehicles was followed for many years. In 2007, an analysis of the condition of the fleet was conducted and consultations were held with vehicle manufacturers in an effort to determine if the current replacement mileage criteria could be extended. It was concluded that fleet vehicles, with continued proper maintenance, could be kept in service beyond 100,000 miles. Furthermore, the County only replaced vehicles when they were either considered a total loss in the event of an accident or when they required repairs that exceed the book value of the vehicle.

Also in 2007, a comprehensive study resulted in a reduction of the County's assigned vehicle fleet by 731 vehicles (see Attachment B). Since the completion of that initial fleet reduction, the size of the County's assigned light fleet has been further reduced by an additional 216 vehicles, for a total reduction of 947 vehicles.

As vehicles were turned in, staff reallocated those in good operating condition to departments that required replacement vehicles. Those that were no longer economically feasible for operation were sold at auction. However, as departments turned in vehicles and the existing ones in good standing were reallocated, 908 new vehicles that were procured in 2006 were being delivered. It was staff's intent at the time to receive the new vehicles and deploy them at a later date as needed. At its peak, in the Spring of 2008, approximately 1,200 unallocated vehicles were being administered by the County's Fleet Management operation.

It is important to note that for the vast majority of vehicles not yet placed in service, the warranty period did not begin until the vehicle was actually placed into service. In the case of the hybrid vehicles manufactured by Toyota (Prius), there is no allowance for a delayed warranty. However, there were 61 2007 Prius hybrid sedans at the Earlington Heights Fleet Facility at the time I became Mayor. Within a month of entering office, I directed staff to allocate all the 2007 Prius hybrid sedans and all but four have been put into service as of today. The remaining four have been allocated and are scheduled to be deployed in the near future. For more detail on the County's fleet of Priuses, Attachment C is a report sent to the Board.

Conclusion and Recommendations

The fact is that the County purchased new vehicles, reduced the number of deployed vehicles in the existing fleet, and increased the replacement mileage criteria, all resulting in an excess of County vehicles (new and used) in storage.

Prior to becoming Mayor, I repeatedly raised the issue of fleet reduction. Since I became Mayor, I tasked the Internal Services Department Director to implement a purchasing process which takes the current inventory and replacement needs into consideration. As such, we reduced the number of vehicles at the Earlington Heights Vehicle Facility from 340 vehicles to 157, a reduction of 183 vehicles since I took office. Of the remaining 157 vehicles, all 66 MDPD vehicles (inclusive of the 37 police patrol vehicles) will be deployed in the immediate future, fifty-seven are 15-passenger vans used by County departments for summer programs, four are 2007 Prius hybrid sedans that have been allocated and are scheduled to be deployed shortly, and 30 remain available for assignment as replacements are needed.

We will continue to institute controls with the County's fleet and only purchase new vehicles when it becomes an operational necessity.

Should you have any questions, please contact ISD Director Lester Sola at 305-375-2363 or me directly.

Attachments

c: R.A. Cuevas, Jr., County Attorney
Office of the Mayor Senior Staff
Lester Sola, Director, Internal Services Department
Charles Anderson, Commission Auditor

Attachment A

EH Inventory 4-24-2012

Vehicle Description	Quantity on Hand	Pending Deployment	Net On Hand
MDPD Used 2005 Dodge Stratus	10	4	6
MDPD 2006 Ford E-250 Heavy Cargo Van	2	1	1
MDPD 2006 Ford E-350 Ext. Length Heavy Cargo Van	1	1	0
MDPD 2006 Ford F-150 1/2 Ton 4x2 Ext. Cab Pickup	1	1	0
MDPD 2006 Chevy Silverado 3/4 Ton 4x4 Pickup	1	1	0
MDPD 2009 Ford F-150 1/2 Ton Ext. Cab 4x4 Pickup	1	1	0
MDPD 2009 Ford F-250 3/4 Ton Ext. Cab 4x2 Pickup	1	1	0
MDPD 2010 Dodge Charger Police Pursuit Sedan	37	7	30
MDPD 2010 Dodge Avenger Sedan	3	3	0
MDPD 2010 Ford F-150 1/2 TonExt. Cab 4x2 Pickup	1	1	0
MDPD 2010 Ford F-150 1/2 Ton Ext. Cab 4x4 Pickup	3		3
MDPD 2010 1 Ton 4x2 Ext. Cab Pickup	1		1
MDPD 2010 Ford F-250 Crew Cab 4x2 Pickup	1	1	0
MDPD 2010 Ford F-250 Crew Cab 4x4 Pickup with Lift gate	1		1
MDPD 2010 Ford E-150 Heavy Cargo Van	2		2
MDPD Total	**66**	**22**	**44**
Used 2000 Ford Explorer SUV 4x2	1		1
2006 Ford F-250 3/4 Ton 4x2 Pickups with Lift Gate	10		10
2006 Ford F-250 3/4 Ton 4x2 Pickups with Lift Gate & Hitch	2		2
2006 Freestar Mini Passenger Van	2		2
2006 Freestar Mini Cargo Van	3		3
2006 Summer and Special Program 15 Passenger Vans	57	9	48
Used 2007 Toyota Prius Hybrid Sedan	1		1
2007 Toyota Prius Hybrid Sedan	4	4	0
2007 Dodge Caravan Mini Passenger Van	10		10
2007 Dodge 3500 1 Ton 4x2 Pickup	1		1
Non Police Total	**91**	**13**	**78**
Grand Total	**157**	**35**	**122**

ATTACHMENT B

Memorandum

MIAMI-DADE COUNTY

Date: November 16, 2007

To: Honorable Carlos Alvarez, Mayor
Chairman Bruno Barreiro
and Members, Board of County Commissioners

From: George M. Burgess
County Manager

Subject: Report on County-owned Light Vehicle Fleet

Earlier this year I ordered a review of the use and assignment of County-owned light vehicles. The review has been completed and although overall management of fleet was found to be acceptable, I continue to be concerned with the size of the fleet and the assignment of take home vehicles. In order to right-size the fleet, reduce pollution and to reduce overall fleet costs, I have instructed Department Directors (see attached) to take immediate but significant steps to improve how we assign, maintain and manage County vehicles.

Directors must implement the fleet cost reductions outlined in the attached report, institute procedures to ensure due diligence in assigning vehicles (particularly take-home vehicles), manage vehicle inventories, ensure employees conform to established procedures and continue to minimize the size of the fleet going forward. I will be conducting follow-up assessments to track our progress, develop additional reduction targets and increase the number of alternate fuel vehicles in our fleet. In fact, I have directed General Services Administration that going forward, the County will purchase only alternate fuel vehicles for the light fleet.

c: Denis Morales, Chief of Staff
Assistant County Managers
Charles Anderson, Commission Auditor

Attachments

Memorandum

MIAMI-DADE COUNTY

Date: November 16, 2007

To: Department Directors

From: George M. Burgess, County Manager

Subject: County Light Vehicle Fleet

I have reviewed the attached fleet report and the findings suggest that while the overall management of vehicle fleets is acceptable, changes are needed to improve how we assign, maintain and manage the County's light vehicle fleet for optimal efficiency and environmental impacts. Therefore, beginning immediately, Directors are required to implement fleet cost reduction measures as outlined in the report, institute formal procedures to ensure due diligence in assigning vehicles (particularly take-home vehicles), improve management of vehicle inventories, and ensure employees conform to established light fleet policies and procedures.

This report recommends reducing the County's fleet by 606 vehicles, ceasing 379 24-hour vehicle assignments, and, over time, replacing 480 vehicles with alternate fuel vehicles. This reduction is to be considered Phase 1 of an ongoing countywide fleet reduction and rightsizing effort. I am challenging you to further analyze your operations and to realize additional reductions over the next 120 days, particularly in the number of 24-hour vehicle assignments. I will be conducting follow-up assessments to track your progress, develop reduction targets for subsequent vehicle reduction phases, and evaluate the extent to which we are purchasing alternate fuel vehicles to replace existing units.

The lack of consistent application of rules and careful justifications for vehicle assignments, particularly 24-hour assignments, must be addressed immediately. To address these issues, I am directing you to establish a zero-based approach to vehicle assignments and within the next 60 days, complete a re-justification of each and every 24-hour vehicle assignment consistent with the criteria detailed in the report. Additionally, the care and upkeep of vehicles must also be improved. While a number of departments have instituted periodic vehicle checks, effective immediately all departments must institute such programs to ensure supervisors conduct regular vehicle inspections and take prompt corrective actions as necessary.

Each of you who have not already done so, should conduct a physical vehicle inventory within the next 60 days and submit all data to the General Services Administration (GSA). GSA is charged with maintaining the master vehicle records for our entire light vehicle fleet. GSA will also roll out a revised vehicle inventory schedule beginning in mid-2008 based on a three-year inventory cycle. During the year that your department is scheduled to complete its vehicle inventory, GSA will also conduct a comprehensive assessment of your fleet, review your vehicle needs and vehicle utilization, and make recommendations to me regarding your fleet, particularly with respect to departmental vehicle pools, take home vehicles, and special vehicles.

Departments must make every effort to curtail the purchase of additional new vehicles and maximize the extent to which vehicles are shared among staff. I will be convening ad-hoc teams to evaluate all requests for new additional vehicles. To continue with our initiative of

"going green", whenever new or replacement vehicles are justified, the County will purchase only gasoline-electric hybrid or other alternate fuel vehicles for all applications for which such vehicles are suitable.

c: Honorable Carlos Alvarez, Mayor
Honorable Bruno A. Barreiro, Chairman
Members, Board of County Commissioners
Denis Morales, Chief of Staff
Assistant County Managers
Charles Anderson, Commission Auditor

Attachments

MIAMI-DADE COUNTY

REVIEW OF COUNTY OWNED LIGHT VEHICLES

(2007)

EXECUTIVE SUMMARY

At the County Manager's request, the review of County light vehicles was conducted with the objective of right-sizing the fleet of cars and light trucks, to assess vehicle purchasing and assignment practices, opportunities for reduction in fuel usage, emissions and ultimately, fleet costs. Light vehicles are defined as cars, light trucks and sport utility vehicles and may or may not be outfitted with special tooling such as portable welding machines, compressors, pumps, tool boxes, computer mounting brackets and the like. The review was conducted with the assistance of the General Services Administration Department (GSA) and user departments. The Department of Environmental Resource Management (DERM) also provided emissions and pollution data.

As of March 2007, the County's light vehicle fleet consisted of 8,862 vehicles, including police vehicles, of which 8,052 (91%) are assigned to individual County departments, 701 (8%) are retained for the countywide vehicle Loaner Program managed by GSA, and 109 (1%) are assigned to other non-County agencies. It is recommended that the County reduce the fleet by 606 vehicles (8% of the County's fleet). Excluding the vehicles assigned to the Police Department, the recommended reduction represents an 10% reduction in the remaining County light fleet. It is also recommended that the County cease 379 (25%) of the 1,500 24-hour vehicle assignments. Together, these reductions will result in an estimated $3.9 million in fleet cost reduction (based on the average cost of ownership). It should be noted however, that actual savings will vary based on the specific vehicle types removed from the fleet.

These fleet reductions will also result in reduced fuel consumption of approximately 617,000 gallons per year or 7% of current annual purchase volume. County vehicle pollution will also be reduced by as much as 4,300 tons of carbon dioxide equivalent annually. Vehicle returns to GSA should be phased over a three to four-month period to allow departments to complete the change and to allow GSA to arrange appropriate and timely vehicle disposal. It is also recommended that departments be credited with any net revenues realized from vehicle disposal.

Typically, vehicle assignments include (documented and undocumented) 24-hour take-home vehicles, departmental assignments for specific vehicle pools (in addition to the general GSA-managed central vehicle pool), and day-to-day vehicle assignments to individual staff. The lack of consistent application of the rules and careful justifications for vehicle assignments coupled with less than rigorous monitoring in some departments, create inevitably higher fleet costs and large discrepancies in the vehicle inventory records. In light of these issues, the report includes several recommendations for revising current vehicle policies, a revised draft Administrative Order and associated forms and applications to support the recommended reforms.

Lastly, while it is not economical or advisable to immediately replace the current fleet with gasoline-electric hybrid vehicles, a total of 480 older vehicles were identified (the will be due for replacement within the next three years) for which hybrid equivalents are recommended. Going forward, as the more economic gasoline hybrid and other alternative fuel vehicles become available, the County is encouraged to continue its efforts to aggressively replace conventional gasoline vehicles where suitable.

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BACKGROUND

Miami-Dade County's more than 60 departments and 32,000 employees are spread across a large service area covering 2,420 square miles (1,985 square miles of land and 434 square miles of waterways). Many departments also operate multiple facilities in various geographic locations and therefore the nature of the County's operations requires a large light vehicle fleet to provide the myriad of public services to a population of more than 2.5 million residents.

As of March 2007, the County's light fleet consisted of 8,862 vehicles (Attachment 1). A total of 8,052 (91%) are assigned to individual County departments, while 701 vehicles (8%) are retained for the countywide vehicle Loaner Program pool managed by the General Services Administration Department (GSA). A total of 109 vehicles (1%) are assigned to other non-County agencies including Jackson Memorial Hospital (63 vehicles), the State Department of Health (44 vehicles), and one vehicle each to the State Attorney's Office and the Metropolitan Planning Organization. While the County provides maintenance and fueling services to these external clients and a majority of the vehicles bear the County's logo, their assignment, use and management are not under the purview of the County Manager.

As shown in Attachment 1, a total of 38 County departments are assigned light vehicles with the majority (3,625 vehicles) assigned to the Police Department. These 38 departments together have a total of 8,052 vehicles. As a result of this seemingly high number of vehicles and other fleet management concerns, in February 2007 the County Manager initiated a countywide fleet assessment. The review was to address right-sizing the fleet of cars and light trucks, assessing vehicle purchasing and assignment practices, identifying opportunities for fuel and emission reduction, and reducing fleet costs.

FINDINGS

1. Miami-Dade County Light Fleet Vehicles

Vehicle records were obtained from GSA's Fleet Management database and from individual departments' fleet inventory records. However, the vehicle inventory maintained by the GSA Fleet Management Division did not match the data maintained by departments or the inventory of vehicles recorded in the GSA Materials Management Fixed Assets System. Therefore, it took significant effort to analyze the inventory before the fleet review could be completed.

The records show that as of March 2007, seventeen County departments had 50 or more light vehicles and together accounted for 7,756 (96%) of all vehicle assignments (Table 1). The Police Department is assigned 3,625 vehicles (45 percent of the fleet) partially due to the number of vehicles (1,731 vehicles) earmarked for the Personalized Patrol Vehicles (PPV) program and the Letter of Understanding (LOU) for Captains and Lieutenants. Until December 15, 2006, police officers residing outside Miami-Dade County who participated in the PPV program were not allowed to legally take their assigned County vehicles home (Resolution R-841-9). However, on December 5, 2006, the Board of County Commissioners passed Resolution R-1392-06 allowing officers residing in Monroe, Broward and Collier Counties to take assigned PPVs home. This action will increase fleet costs as additional officers residing outside Miami-Dade County opt to participate in the PPV program.

Table 1
Distribution of County Light Vehicle Fleet as of March 2007
(Departments Assigned 50 or More Vehicles)

County Department	Number of Employees	Number of Vehicles	% of Total County-Owned Light Vehicles	24-Hour Vehicles	
				Number of Vehicles	% of Department's Vehicles
1 Police	4,998	3,625	45%	2,261	62%
2 Water & Sewer	2,702	857	11%	138	16%
3 Park & Recreation	1,272	471	6%	19	4%
4 Aviation	1,593	401	5%	16	4%
5 Fire Rescue	2,541	389	5%	126	32%
6 Transit	3,876	306	4%	-	-
7 Housing Agency	698	271	3%	4	1%
8 Corrections & Rehabilitation	2,695	261	3%	67	26%
9 Public Works	933	276	3%	135	49%
10 Solid Waste Management	992	144	2%	16	11%
11 Building Department	356	139	2%	112	81%
12 Environmental Resources Management	519	126	2%	27	21%
13 General Services Administration	858	147	2%	45	31%
14 Enterprise Technology Services	611	102	1%	60	59%
15 Seaport	387	96	1%	-	-
16 Team Metro	247	95	1%	87	92%
17 Human Services	1,034	50	1%	1	2%
Total	26,312	7,756	96%	3,114	
All other Departments*	3,453	296	4%	118	40%
Grand Total	**29,765**	**8,052**		**3,232**	**40%**

* Excludes vehicles in the County's Loaner Pool

A total of 3,232 vehicles (40% of the vehicles assigned to departments) are classified as 24-hour vehicle (take home) assignments. Aside from the 1,731 PPV and LOU assignments, the Police Department has an additional 530 vehicles designated as take home. Other departments with a significantly large number of take home vehicles include Water and Sewer (138), Fire Rescue (126), Building (112), Public Works (135), Enterprise Technology Services (60) and Corrections and Rehabilitation (67). Aside from police officers, some employees who reside outside Miami-Dade County are also take County vehicles home. However, no written policy was found that explicitly authorizes or prohibits this practice.

Approximately 26% of all light vehicles are classified as underutilized (driven less than 6,000 miles per year). However, no empirical basis was found to justify 6,000 miles as an effective threshold. It should be noted that departments with closed operations (Airport, Housing, Seaport, and sections of the Water and Sewer Department) will rarely meet this threshold. All departments, except the Building and Police Departments, underutilize more than 10% of their vehicles. For example, 79% of the vehicles assigned to the Seaport are classified as underutilized, 37% at the Housing Agency, 46% at Aviation, 46% at DERM and 38% at the Water and Sewer Department. Some departments have employed a vehicle rotation schedule that results in all vehicles, including spare/pool vehicles, exceeding the 6,000 mile threshold and therefore, indicate that their vehicles are not underutilized.

2. Cost of Vehicle Ownership

Total Cost of Ownership

The County's light fleet comprises sedans, scooters, motorcycles, all terrain vehicles, 2X4 and 4X4 pick-up trucks, jeeps and utility vehicles. At initial purchases prices ranging from $10,575 for a Chevrolet Colorado to more that $23,000 for a Honda Civic Hybrid, the capital acquisition cost of

the current fleet of light fleet exceeds $150 million. Coupled with the life cycle costs of fuel, maintenance and repairs, the County's light fleet has a significant budgetary impact. Table 2 shows the life cycle costs of owning selected vehicle types based on an average price of $2.73/gal of gasoline, expected gasoline consumption and the emission load on the environment.

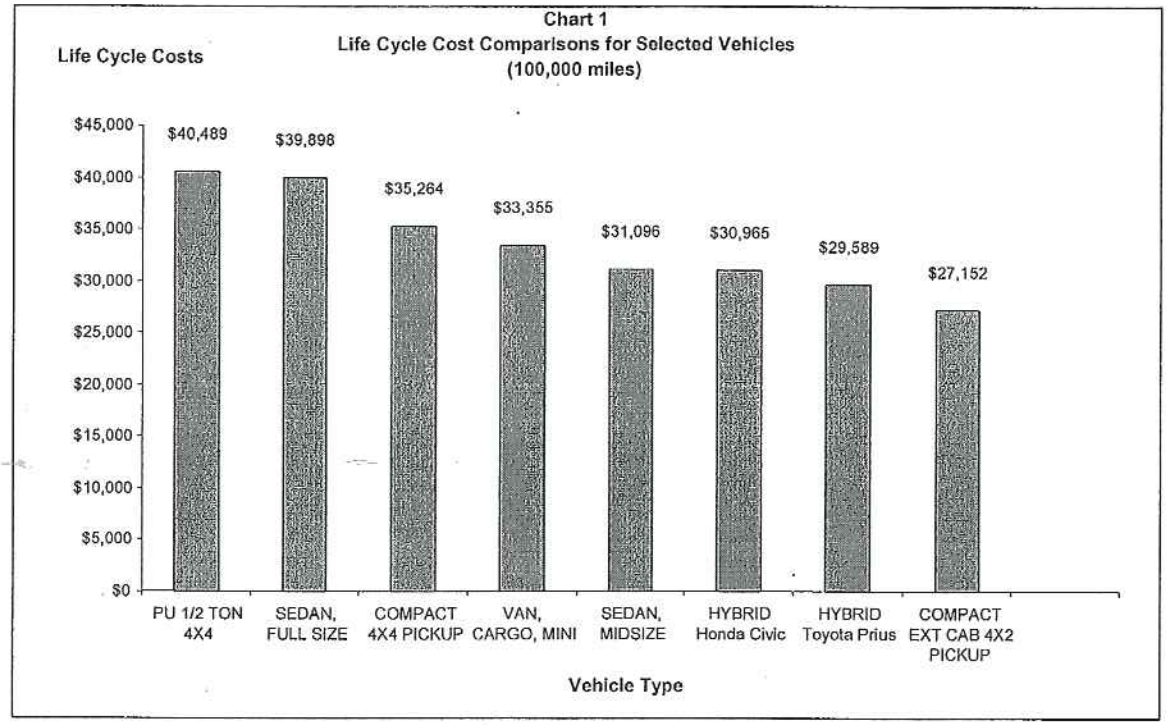
Table 2
Miami-Dade County
Life Cycle Cost for Selected Light Vehicles

Make	Model	Equipment Description	EPA City MPG (+/-3)*			Emissions per life cycle**	MPG per Transmitter	Pricing		Life Cycle Gasoline Consumption (Gallons)	Life Cycle Gasoline Consumption ($)	Lyfe Cycle *** Maintenance Charge ($)	LIFECYCLE COST (Price+Fuel+Maint)
			Min	Avg	Max			Year	Price				
DODGE	SPRINTER	VAN	20	23	26	88,787	-	2006	$ 24,121	4,348	$ 11,870	$ 11,302	$ 47,293
FORD	E-350	VAN LARGE	10	13	16	157,085	12	2007	$ 19,521	7,692	$ 21,000	$ 2,964	$ 43,485
FORD	E-350	VAN LARGE	11	14	17	145,865	12	2007	$ 18,103	7,143	$ 19,500	$ 2,964	$ 40,567
FORD	F-150	PU 1/2 TON 4X4	11	14	17	145,865	11	2007	$ 16,774	7,143	$ 19,500	$ 4,215	$ 40,489
FORD	VICTORIA	SEDAN, FULL SIZE	14	17	20	120,124	11	2007	$ 20,520	5,882	$ 16,059	$ 3,320	$ 39,898
DODGE	2500	VAN CARGO	10	13	16	157,085	10	2006	$ 15,650	7,692	$ 21,000	$ 2,964	$ 39,614
FORD	E-250	VAN, CARGO	11	14	17	145,865	10	2007	$ 15,769	7,143	$ 19,500	$ 2,964	$ 38,233
CHVRLT	IMPALA	SEDAN, FULL SIZE	18	21	24	97,243	14	2006	$ 19,110	4,762	$ 13,000	$ 3,320	$ 35,430
CHVRLT	SILVERADO	COMPACT 4X4 PICKUP	14	17	20	120,124	-	2007	$ 16,489	5,882	$ 16,059	$ 2,716	$ 35,264
DODGE	CARAVAN	VAN, CARGO, MINI	17	20	23	102,105	14	2007	$ 16,396	5,000	$ 13,650	$ 3,309	$ 33,355
FORD	FRESTAR	VAN, PASSENGER, MINI	15	18	21	113,450	17	2007	$ 14,187	5,556	$ 15,167	$ 2,259	$ 31,613
FORD	RANGER	COMPACT 4X4 PICKUP	17	20	23	102,105	-	2007	$ 15,086	5,000	$ 13,650	$ 2,716	$ 31,452
FORD	TAURUS	SEDAN, MIDSIZE	17	20	23	102,105	18	2006	$ 13,472	5,000	$ 13,650	$ 3,974	$ 31,096
HONDA	CIVIC	HYBRID Honda Civic	46	49	52	41,676	28	2006	$ 23,199	2,041	$ 5,571	$ 2,194	$ 30,965
TOYOTA	PRIUS	HYBRID Toyota Prius	57	60	63	34,035	40	2006	$ 22,845	1,667	$ 4,550	$ 2,194	$ 29,589
CHVRLT	COLORAD	COMPACT EXT CAB 4X2 PICKUP	15	18	21	113,450	15	2007	$ 10,575	5,556	$ 15,167	$ 1,410	$ 27,152
DODGE	STRATUS	SEDAN, MIDDLE SIZE	19	22	25	92,823	-	2006	$ 12,098	4,545	$ 12,409	$ 2,080	$ 26,587

* The average City Miles Per Gallon (MPG) rating was obtained from the Environmental Protection Agency (EPA).
** Emissions are measured in pounds of CO2 equivalent computed by DERM.
*** Life Cycle Maintenance cost is based on an average cost per year per type of vehicle supplied by GSA.

Life cycle costs were computed based on historic maintenance costs, a lifecycle of 100,000 miles and the minimum Environmental Protection Agency (EPA) fuel consumption rating. The lower EPA consumption (MPG) rating was used because it generally corresponds with more reliable data obtained from GSA. GSA began installing electronic transmitters on County vehicles for model years 2004 and later to automatically record vehicle mileage and gasoline usage. In most cases, the MPG computed using GSA's Vehicle Information Transmitters (VIT) was equal to, or slightly higher than the posted minimum EPA rating. A review of vehicle records shows that where the VITs are not installed, the mileage data manually entered by employees when fueling vehicles was generally unreliable. Of concern however, is the fact that the reported EPA fuel economy for the Honda Civic Hybrid vehicle is between 46 and 52 MPG. GSA's data suggests 28 MPG average for 11 Hybrid Honda Civics, well below the posted EPA rate even when the ± 3 MPG error is considered. Similar concerns exist regarding the 73 County-owned Toyota Prius gasoline-electric hybrid units. Given the new technology being used by GSA the VIT data was considered as more appropriate for this analysis.

The total cost of owing a midsize sedan (Chart 1) is in excess of $31,000 over the 100,000 miles lifecycle excluding insurance, major parts replacements, collision repairs, and accrued capital replacement charges while the cost of pick-up trucks generally exceeds $40,000. The comparative cost of a full size sedan similar to those assigned to the police department exceeds $39,000, and excludes the cost of specialized police equipment (radios, light bars, stroboscopic lights and sirens). Gasoline-electric (hybrid) vehicles such as the Toyota Prius and Honda Civic cost approximately $29,500 and $31,000 respectively.



While gasoline-electric hybrid cars have lower fuel consumption and correspondingly lower emission loads, hybrid vehicles are becoming just as economical as like-sized traditional gasoline only vehicles for city driving. Initially, the price of hybrid vehicles was up to $10,000 higher than that of comparative gasoline-only vehicles, an expense that was not completely offset by lower fuel consumption. In recent years however, the sustained increases in fuel prices have made small gasoline-electric hybrid cars just as economical as gasoline-only vehicles over the operating life cycle provided there are no major replacement parts needed. Current estimates suggest that replacement of electric motors for hybrid vehicles may cost between $5,000 and $7,000 while battery packs cost approximately $2,000 to $3,000 each. Although the County has owned hybrid cars since fiscal-year 2002 when they became available, there is insufficient operating experience with the units to assess full life cycle (typically 8-10 years) performance. Consequently, reliability and durability of electric drive motors and battery packs that are integral to the operation hybrids have not been fully assessed in the current County operating environments.

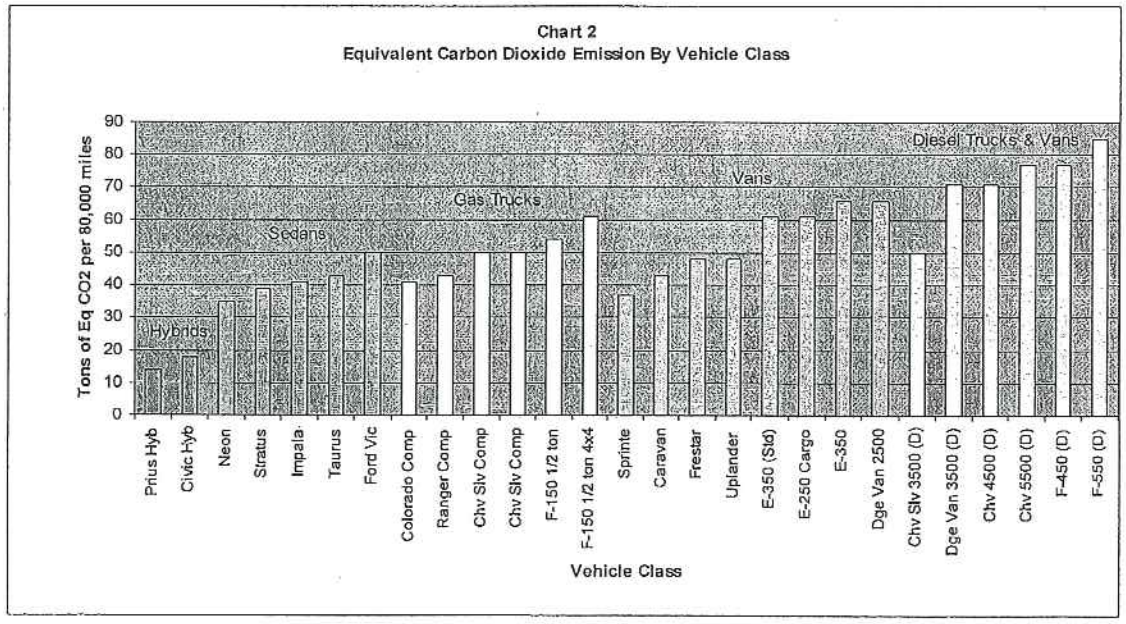
Some County employees who are eligible for car allowance benefits are assigned County vehicles in lieu of the benefits. A review of the historic costs associated with a sample of 17 cases assigned by various departments to employees who modestly use the vehicles during the workday shows it costs the County an average of $62,166 per vehicle over an eight year life cycle. This includes acquisition costs, monthly prepayments into the Vehicle Replacement Trust Fund for future vehicle replacement, vehicle tag, title and preparation charges, and operating expenses (fuel and maintenance). For the seventeen vehicles, annual payments into the Trust fund averages $3,585 per vehicle while operating costs averages $1,968 for a total annual expenditure of $5,553 per vehicle (excluding initial acquisition costs and the cost of any take home privileges). Conversely, annual car allowance and parking expenses for an employee with Level 3 Executive Benefits would be $2,670.

It is not practical to cease all 24-hour vehicle assignments and/or remove these vehicles from the fleet. However, significant savings can be achieved by reducing the number of employees

authorized to take County vehicles home. The savings that may be realized by ceasing some take home assignments is approximately $1,409 and 487 gallons of fuel per year per vehicle. This is based on an average round trip of 29 miles (home-work-home) as reported for this region by the U.S. Department of Transportation, Bureau of Transportation Statistics. The savings also assumes a price of $2.73/gal for gasoline, 235 working days per year and an average of 14 miles per gallon fuel consumption. Additionally, the reduction in miles driven would result in fewer preventive maintenance cycles each year.

Local Environmental Impact

Chart 2 shows the comparison of greenhouse gas emissions in equivalent tons of Carbon Dioxide (CO_2 Equivalent) over an 80,000 mile lifecycle. Emissions data was computed by the Department of Environmental Management (DERM) for the popular vehicle models shown. Greenhouse gas emissions are typically expressed in Carbon Equivalents so that the impacts of various compounds can be directly compared. Greenhouse gases are defined as the combination of Carbon Dioxide (CO_2), Methane (CH_4), Nitorous Oxide (N_20), and Hydro fluorocarbons (HFC). Each has varying capacities to adversely impact the environment and to trap heat, that is, their global warming potential. For example, methane is 21 times more efficient than carbon dioxide at trapping heat therefore, when calculating overall emissions, methane is multiplied by 21.



As shown in Chart 2, gasoline-electric hybrid vehicles emit significantly less greenhouse gases than traditional gasoline-only vehicles and have less devastating effects on the environment. DERM reports that the potential effects on global warming resulting from greenhouse gases include damage to coastal property and key tourist resources due to rising sea levels; damage to fresh water supplies and agriculture due to saltwater intrusion; increases in heat-related illness and possibly, the incidence of infectious diseases to more susceptible senior citizens and children. This suggests that the County must make every effort to reduce gasoline consumption and to adjust its business practices to reduce the adverse impacts on local ecosystems and the environment.

Commuting Practices

Employees frequently commute from their offices for face-to-face meetings and for training (sometimes multiple times per week). In fact, two of the most common uses listed for requiring County vehicles is to attend meetings (including Commission meeting) and for training. Videoconferencing and teleconferencing offer viable alternatives to commuting between locations. Videoconferencing is a set of interactive telecommunications technologies that allow two or more locations to interact via a simultaneous two-way (full duplex) audio-video transmission. Miami-Dade County owns 12 operational (though underutilized) videoconferencing facilities. The list of sites and design capacities are shown in Table 3. The Enterprise Technology Services Department (ETSD) is responsible for acquiring, installing, configuring and providing support and maintenance of video conference equipment. Set-up cost for a room-based system is approximately $5,000 with an annual ETSD maintenance fee of $1,200. A simple desktop application using a personal computer is $600. Therefore, where multiple employees need to commute by car to other locations for meetings, it may be more productive, expedient and less time consuming to teleconference or video conference in lieu of traveling.

Table 3
Miami-Dade County
Sites with Functional Videoconferencing Equipment
As of June 30, 2007

#	Departments Equipped with Videoconferencing Equipment	Location	Number of Rooms	Capacity (Persons)
1	SEAPORT	1015 N America Way	1	10 - 15
2	ETSD	10300 Sunset Drive Suite	1	15
3	ETSD, MDT, Mayor's Office	111 NW 1st Street	3	10 - 15
4	MDPIC	11805 SW 26 Street	1	10 - 15
5	Mayor's Office (West Dade)	1309-A SW 107 Avenue	1	10 - 12
6	Team Metro, SWM, MDHA, MDCR	2525 NW 62 Street	1	10
7	Elections	2700 NW 87th Ave.	1	10 - 15
8	WASD	3071 SW 38 Ave.	2	10 - 15
9	ETSD	5680 SW 87th Ave	3	10 - 25
10	DERM (Overtown)	701 NW 1st Court	2	10 - 15
11	EOC	9300 NW 41St.	1	10 - 15
12	PWD	9301NW 58th St	1	10
		Total	18	

3. Vehicle Assignment Practices and Opportunities for Vehicle Reduction

Detailed fleet assessments were conducted in 14 of the largest user departments. Actual vehicle assignments and use within individual business units were assessed in an effort to understand the nature and demands of the work function and the other factors surrounding the justification for vehicle assignments. Vehicle reduction and rightsizing potential was also evaluated based on the need for the vehicle, staff productivity impacts, and the potential for alternate approaches regarding work schedules and vehicle assignments within the context of established policies. Therefore, vehicle reduction potential was developed based on the opportunities to physically remove vehicles from the fleet, ceasing 24-hour assignments and the potential to replace conventional vehicles with gasoline-electric hybrids and/or other vehicle types as older units are replaced.

Prior to making recommendations for possible fleet reduction, it was necessary to review the inventory of vehicles assigned to departments. In the course of the review, it was discovered that the information maintained by GSA did not match the information maintained by departments and that the approval path for 24-hour vehicle assignments could be improved. In fact, in many cases where vehicles were to be assigned as take home vehicles, GSA had not received the final approved forms from the approving authorities. In addition to the differences noted between GSA Fleet Management database and the number of vehicles reported by departments, the number of vehicles recorded in GSA's Fixed Assets System (FAS) is higher than those recorded in the GSA Fleet Management database. Further efforts are needed to reconcile the total fleet inventory. A summary of the vehicle assignments for the 14 departments is shown in Table 4.

Table 4
Vehicle Assignment by Category as of June 2007

Department	24-Hour Assignment	Working Hours Assignment	Pool/Spares	Un-assigned	Total # of Vehicles
HOUSING	4	248	19		271
BUILDING	112	1	26		139
PARKS	19	262	190		471
SEAPORT	-	67	29		96
ETSD	60	20	22		102
TEAM METRO	87	-	8		95
DERM	27	62	37		126
PUBLIC WORKS	135	108	33		276
TRANSIT	-	60	246		306
WASD	138	400	319		857
CORRECTIONS	67	40	154		261
FIRE	126	96	167		389
POLICE	530	-	879	485	1,894 *
AVIATION	16	94	291		401
Total	1,321	1,458	2,420	485	5,684

*Total department fleet is 3,625 vehicles. PPV and LOU Programs total 1,731 vehicles and are not included in this total.

Administrative Order (AO) 6-2 which became effective March 15, 1994 and the County Manager's December 15, 1989 memorandum dictate the criteria for assigning County vehicles, vehicle operation, acquisition, maintenance, and disposal. Per the AO, departments are responsible for determining the number and type of vehicles necessary for their operations. In turn, GSA acting essentially as the County's car dealer, acquires, distributes, maintains and replaces vehicles as needed for most departments. Vehicle assignments, further clarified by the Manager's memorandum, include options such as departmental assignments, full-time 24-hour assignments, temporary 24-hour assignments, and motor pools.

24-Hour Vehicle Assignments

Essentially, take home vehicles fall into one of two categories: those that are permanently assigned to employees who are allowed to take the vehicle home after normal working hours, and those that are assigned to employees who park the vehicles at another County or other facility nearest to their home rather than at their typical work headquarters. In either case, an assigned 24-hour vehicle is typically considered a County perquisite and must be approved by, the Director, County Manager and the Office of Strategic Business Management. The assignment must also be reported to the

Internal Revenue Service (IRS) through the payroll process. Additionally, all 24-hour vehicle assignments are to be reported to GSA for inventory and risk management purposes.

AO 6-2 also states that there are positions for which the employees' duties and responsibilities require the use of a vehicle on a 24-hour basis. These permanent 24-hour vehicle assignments should be formally justified and requested by the department, and submitted to GSA for processing. The request is submitted to the Office of Strategic Business Management for review and budgetary approval, and then sent to the County Manager for approval. The approval/denied request should be returned to GSA for processing. Permanent 24-hour vehicle assignments are to be reviewed and rejustified annually. Each department is also required to submit the information to the Human Resources Department for tax withholding purposes. The analysis shows that these procedures are not consistently utilized and has resulted in inaccurate and outdated information being recorded in the Fleet Management and other reporting systems.

To be eligible for a 24-hour vehicle, an employee must meet one or more of the following seven criteria as clarified in the County Manager's 1989 Memorandum:

1. Be a County employee receiving Group 1 Executive Benefits and who requires a County car in lieu of the car allowance provided in the benefits package.
2. Be a Miami-Dade County Police Department (MDPD) police officer assigned to the Personalized Patrol Vehicle Program participant as outlined in Resolution No. R-941-91.
3. Be eligible under the MDPD Captains and Lieutenants January 28, 1992 Letter of Understanding.
4. Be a County employee who is a member of a bargaining unit and contractually entitled to an assigned 24-hour vehicle.
5. Be a County employee who spends a minimum of 80% of their work shift in the field and is required to begin and end their work shift performing County business in the field.
6. Be a County employee who is required to respond to emergency situations occurring outside of regular working hours (call-outs) an average of three times per week throughout the year.
7. Be a County employee required to attend unscheduled meetings or events on County business that cannot be performed during regular working hours, during the daily work commute or using a temporary 24-hour assignment on an average of three or more times per week throughout the year.

Vehicles may also be assigned as take home vehicles if included in labor and other special business agreements. For example, Fire Inspectors and Investigators are assigned 24-hour vehicles per the collective bargaining agreement. Additionally, Arson Investigators required to regularly respond to alarms both during normal shift assignments and after hours may be assigned 24-hour vehicles provided they reside within a 60 mile radius of the Fire Department Headquarters Building.

Of the 8,052 vehicles distributed among County departments, 1,501 (19%) are reported to be represent permanent 24-hour vehicles assigned to individual employees in addition to 1,731 (21%) assigned to MDPD through the PPV Program and the LOU for Captains and Lieutenants. This excludes the high number of vehicles that are parked at locations that are not the employee's headquarters. Some departments have been diligent in explaining the justification for 24-hour vehicles while others provide very little information. In fact, in a large number of cases, the justification provided for vehicle assignments is simply "operational need" with no details to allow for an objective review of the need with respect to the criteria noted above.

Additionally, a significant number of 24-hour vehicles are assigned to staff who are seldom or never called out or who seldom attend after-hours events and therefore, do not meet three-times-per-week criterion stipulated above. The general explanation given by departments is that the employee may be called out, is required to respond if ever an incident occurs after hours, or to attend night meetings whenever they occur. In such cases, departments are sometimes assigning 24-hour vehicles based on the presumption that employees may be called out with no definitive proof or history or the frequency of call outs. Aside from a very limited number of cases, staff does not generally keep logs of their call-out/meeting attendance activity to allow directors to determine if they meet the applicable criteria to be assigned a 24-hour vehicle. Additionally, a large number of 24-hour assignments are simply based on classification as opposed to operational necessity.

Despite the requirements set out above, some departments such as Building, Solid Waste Management and Team Metro have assigned 24-hour vehicles to employees who report to their work headquarters every morning before going into the field. While this technically violates established procedures, the review found that in some cases the practice has operational merit. For example, in an effort to deliver increased levels of building inspection services to the community, building inspectors report to the office daily to meet with walk-in customers prior to going into the field. During the construction boom of recent years, it became necessary to spend as much time as was necessary to complete field inspections. To require vehicles to be returned at the end of the work shift would have been counter-productive. Other departments have public safety and rapid response directives and strategies that warrant 24-hour vehicle assignments even though the recipients do not respond as frequently as outlined in the criteria above.

Consequently, in order to require staff to return County vehicles instead of driving directly home requires consideration of the following service vs. cost issues:

a) Given current traffic patterns (estimated to be approximately 13 miles/hour headway) if staff is required to return vehicles at the end of the shift, service work would typically have to end between one and two hours earlier to return vehicles if overtime pay is to be avoided. This reduces staff productivity.

b) Certain classifications would attract overtime payments if vehicles are returned after the end of the normal work shift while no useful work is being performed.

c) In cases such as Team Metro, while staff should ideally return the vehicles, office locations are predominantly in open shopping centers. Requiring vehicles to be returned at the end of the workday could result in County vehicles remaining largely unprotected at nights and on weekends. Some departments cite vandalism and break-ins to justify why vehicles are assigned on a 24-hour. Allowing the employee to take these vehicles home places the burden on employees to safeguard the asset in return for the take-home privilege.

d) Special compliance and protection of life directives and response strategies

e) If staff is directed to park at another County facility en mass, employees would have to compete for space in these secured facilities. It should be noted however, that the practice technically subsidizes the employee's home commute and the benefit may have to be reported to the IRS.

During the review, the overnight locations of some vehicles were visited to ascertain where vehicles were being parked. Some departments including Building, Police, Corrections and Team Metro are exempt by Florida Statutes from disclosing employees' home addresses. This random effort was for general information only, and did not target specific vehicles or departments. In most cases, vehicles checked were in the locations specified. In some cases the overnight location given was

an incorrect address or the location given was the formal work address and not the address of the facility at which the vehicle was supposed to be parked. Several County vehicles were found parked in shopping plazas, on swales, medians, and sidewalks. Others were parked in neighborhood parking spaces, on lawns, and on employees' driveways. This in no way suggests that parking locations are inappropriate because available parking depends on the community and space available at employees' residence.

Random checks for inappropriate use of vehicles showed, although it was not prevalent, that some employees are using County vehicles to take children to schools and colleges, go to lunch, to purchase personal items at auto shops among other violations.

Departments reported a total of 107 24-hour assignments vehicles (excluding Police vehicles) were made to employees who do not reside in Miami-Dade County. The exact number of vehicles parked outside the County after hours is outside the scope of this review and was not determined. In several instances however, Members of the Board of County Commissioners inquired about the cost of allowing employees to take vehicles home. Departments report that vehicles are typically purchased for a service function and are not purchased solely for take home purposes. The average cost of the take home privilege would be the incremental cost for fuel and maintenance incurred per vehicle, per year, to drive from the employee's residence to work and back. The additional cost for the 1,501 24-hour assignments is estimated to be $2.1 million per year or $1,409 per vehicle. If however, the County purchased a vehicle solely for an employee to take home; the acquisition cost would be an additional $13,000 to $26,000 per vehicle, depending on vehicle type.

All 24-hour vehicle assignments must be reported to the Human Resources Department (HRD) to ensure appropriate IRS reporting. The IRS specifically defines the use of government owned vehicles as the value of the benefit which the IRS may include in the employee's income. Exemptions apply only when:

1. The vehicle assigned to the employee qualifies as non-personal use vehicle such as: a fire engine, a flatbed truck, school bus, or a police or fire vehicle marked with an insignia or words which clearly show it is a government public use vehicle (marking on a license plate is not a clear marking)
2. An unmarked police vehicle if <u>all</u> of the following circumstances apply:
    a. the employee is a licensed law enforcement officer who is employed fulltime in the capacity of a law enforcement officer and whose main responsibility is to prevent and investigate crimes involving injury to persons or property, is authorized by law to carry firearms, execute search warrants, and make arrests;
    b. any personal use of the vehicle must be authorized by the government agency or the department that owns or leases the vehicle; and
    c. the use must be specific to law enforcement functions such as being able to report directly from home to a stakeout, surveillance site or emergency.
3. For "Bona fide non-compensatory business reason", where the employee must be required to commute in the vehicle for the benefit of the employer, <u>not</u> for the benefit of the employee. A driver generally meets this requirement if the vehicle is generally used each workday to carry at least three employees to and from work in an employer-sponsored community pool. This would be the case if the employee was driving a specially outfitted vehicle with equipment the employee would need if on call 24-hours a day. Other possibilities might be the unavailability of parking at the workplace, and an employee in the field who would otherwise have to return to the workplace before going home and might be able to work longer if allowed to commute in an employer provided vehicle

All 24-hour vehicle assignments that do not qualify for a tax exemption as described in the above categories should be subject to review for payroll reporting. However, there is a plethora of IRS rules and opinions regarding when and how much employees are affected when a County vehicle is assigned. The light fleet review revealed that less than 600 employees are being taxed for take-home vehicles. In the absence of data to support the fact that all 24-hour assignments have been thoroughly reviewed for IRS purposes, it may be prudent to review all cases in light f the fact that more than 1,400 employees have take home vehicles outside of the PPV and LOU programs.

Workday Vehicle Assignments

Workday vehicle assignments are not permanent 24-hour assignments and these vehicles should always be returned to headquarters at the end of the workday. In such cases, employees receive no additional perquisite resulting from the workday vehicle assignment. However, as set forth in A.O. 6-2, if there is a need for a temporary 24-hour vehicle assignment, it should be preplanned and properly approved by the department director prior and these temporary assignments should not exceed five working days per month. Another common practice is to assign vehicles to a supervisor or vehicle custodian who in turn assigns vehicles to employees on a daily basis. Although these vehicles should be returned to the worksite at the end of the workday, employees on occasion take the vehicles home or park them overnight at another County facility.

Special Vehicles

In order to better respond to emergencies and to meet specific maintenance and service needs, departments sometimes outfit certain vehicles with special tools or machinery such as portable welding machines, compressors, pumps, tool boxes, lift gates and the like. Since some specially outfitted vehicles are typically only used only when special needs arise, it is expected that these vehicles will have lower mileage and cost more than vehicles routinely used for everyday jobs. Some departments have the capacity to reduce the number of rarely used "specialty" vehicles by using these vehicles for other purposes in addition to these specialized uses where practical.

Motor Pool

As part of the light vehicle inventory, GSA administers the vehicle Loaner Program, a motor pool of 701 loaner vehicles. The pool is accessed by staff that requires vehicles for limited periods ranging from a few hours to a full day or longer and for use while assigned vehicles are being serviced. The pool also forms a convenient stock of vehicles for disaster response and to support local, state, and national elections. Loaner vehicles represent 8% of the light fleet and are distributed among five locations countywide.

Several departments also maintain department specific loaner pools in addition to the countywide motor pool. Departments indicated that loaner vehicles are not always comparable to the vehicle returned for service to GSA. Several other explanations were offered by departments, including the fact that local pools are convenient and allow staff to avoid delays in requesting loaner cars from GSA. Notwithstanding these comments, departments are generally very complementary of GSA services and turnaround times. Many departments also state that vehicles are being held in a local pool because the department has unfilled vacancies. Of particular concern is the fact that some departments justify their pools by suggesting that the County's General Fund was not used to acquire the vehicles. While local vehicle pools are sometimes necessary and always convenient, there is no process to periodically assess the appropriateness and size of these department pools.

4. Vehicle Replacement and Purchasing Practices

GSA is charged with managing the County's vehicle purchase and replacement program including vehicle repairs and maintenance. GSA also processes and reviews vehicle requests from

departments, but has no final authority or control in determining County departmental needs or the ability to deny vehicle requests.

GSA also administers the County's Fleet Management Trust Fund for financing annual vehicle replacements in which most departments participate. Initially, when a department has been approved (through the budgeting process) to purchase a new, additional vehicle, the department pays GSA in full for the vehicle. Included in this acquisition cost is a preparation and delivery charge including decal and tag fees. Once the vehicle is placed in service the department begins to pay a monthly capital charge over a specific period of time (currently 96 months) to replace the new vehicle as it becomes due. Estimated auction/disposal expenses at end of life are charged monthly over the projected eight-year life of the vehicle. Capital replacement funds are deposited in the County's Fleet Management Trust Fund for the future acquisition of replacement vehicles. The monthly capital charge is calculated based on the vehicle purchase price, the projected preparation/disposal charges of the replacement vehicle (adjusted for inflation), less the expected residual value of the vehicle.

Samples of monthly capital charges are as follows:

1. 2005 Toyota Prius hybrid : $275
2. 2006 Honda Civic hybrid : $300
3. 2006 Ford E-350 15 passenger van : $275

Added to the above charges, each participating department pays an insurance premium computed by GSA Risk Management Division. This charge is to cover expected claims arising from accidents and is currently $41.67 for light vehicles.

If a vehicle is 96 months old and is in good operating condition, the department may retain the vehicle and the monthly capital replacement charge ceases. Each year GSA identifies vehicles eligible for retirement and notifies departments. Based on current practices, a typical vehicle may be eligible for replacement depending on mileage (typically 100,000 miles), vehicle age, operating and maintenance costs, body condition and other criteria. When a department returns a vehicle to GSA as a surplus vehicle, GSA reserves the amounts previously paid into the Trust Fund to replace the vehicle for up to an additional 24 months. If not used by the department within the 24-month period, the department forfeits the amount already paid into the fund. Additionally, surplus vehicles are usually auctioned however; auction proceeds are not returned or credited to the departments, as it is assumed that these costs and credits are already included in the total vehicle costs.

During the review, department staff complained (without exception) about the amounts charged by GSA for vehicle replacement and other services, and suggested that GSA charges are too high. Several departments also suggested they could buy vehicles cheaper on the open market instead of through GSA. However, current open market prices do not support this claim as GSA obtains fleet cars and enjoys volume discounts that individual departments may not receive. Departments are also concerned that over the first 8 years after purchasing an additional vehicle, they have essentially paid for the vehicle twice. However, this is not an issue and should be better explained to departments.

The above capital funding and vehicle acquisition procedures coupled with departments' understanding of current procedures has caused the following behaviors:

1. Some departments are holding vehicles well past the economic life to avoid paying into the capital fund.
2. Failure to return unwanted vehicles unless they are requesting replacements.

3. Several departments choose not to participate in the fund. Incidentally, these departments also have oldest light fleets.
4. Delay returning surplus vehicles even when vacancies are unfilled for extended periods.

5. Preventive Maintenance and Upkeep

Preventive Maintenance

In October 2005, GSA introduces a preventive maintenance (PM) program called EZCare3000 in response to manufacturers' maintenance requirements. This differs from the original program in that it doubles the frequency of PMs to every 3,000 miles from every 6,000 miles. The program applies to 4,835 vehicles or 55% of the light fleet maintained by GSA. The Police and the Aviation departments with 3,625 and 401 vehicles respectively, are on a less frequent schedule.

The new PM program includes three types of services with a progressively increasing number of PM tasks completed:

1. Express Service or PM "A": Completed every 3,000 miles for regular oil and filter change and other minor checks and inspections for a charge of $39.99 per vehicle.
2. Plus Service or PM "B": Completed every 9,000 miles for a fee of $189.95 per vehicle.
3. Ultimate Service or PM "C": This is completed every 27,000 miles for $269.95 per vehicle.

With the implementation of the new PM program, approximately 15 additional scheduled PMs are required per vehicle over the lifecycle. Consequently, over the 10-year life cycle of a light vehicle, departments pay a slightly increased amount for maintenance ($2,939 vs. $2,779 per vehicle). However, for a fleet of 4,835 vehicles, this increases total County vehicle maintenance costs by $777,360 per year. Such a seemingly small change in maintenance requirements effectively doubles the GSA PM workload and doubles the time department staff spend returning vehicles for PM calls. Not surprisingly, some departments complain about its impact on field productivity. Additionally, given that GSA may issue loaner vehicles while the PM is being conducted, the loaner pool could also be impacted. Despite the issues, departments report that GSA provides very good service, particularly the one-hour oil change service.

Vehicle Upkeep

The County vehicles inspected are generally in very good mechanical and operating condition. Random inspections and observations revealed that several issues need to be immediately addressed by user departments.

- Housekeeping was very poor in a number of cases. Several vehicles had piles of trash (food wrappers, bottles and cups) and had not been washed.
- The cabin of a number of vehicles did not appear to have been cleaned in a long time.
- Several employees were observed smoking in County vehicles. Administrative Order 8-6 prohibits smoking inside all County owned-vehicles.

It is the responsibility of individual drivers and their departments to ensure that vehicles are returned for PM as scheduled and for the proper care and custody of assigned vehicles. This includes keeping the vehicle free of trash and junk and maintaining the general appearance (interior and exterior) of assigned vehicles. In support of these efforts, departments must implement procedures to ensure vehicles are being cared for and are periodically inspected. For example, Team Metro and the Police Department have policies that require monthly vehicle inspections that check

equipment condition, cleanliness, proper vehicle upkeep, and the existence of any unreported damages to the vehicle. GSA also notes vehicle abuse when vehicles are returned for service.

6. Electronic Transponders

County departments routinely take advantage of Florida Department of Transportation SUNPASS program. Purchase, assignment, use and monitoring of SUNPASS transponders are not centralized and no general guidelines exist. Very few departments have clear guidelines for employees regarding the use of transponders. In most cases monitoring is performed by reviewing monthly bills and spotting "unusual" activity. Unusual activity is communicated to the employee's supervisor for further action. Table 5 shows the Sunpass expenditures by department for the 14 departments reviewed. Together these departments own 3,847 Sunpass transponders and spend more than $47,000 per month on tolls ($564,000 per year). Several departments have a higher number of transponders than light vehicles which this typically occurs because some heavy vehicles are also equipped with Sunpasses. In some cases, departments also have several non-functioning transponders that were never removed from the inventory.

Table 5
Vehicle SUNPASS Usage

County Department	Number of Vehicles	Number of transponders	Average Monthly Toll Expenditures
POLICE	3,625	1,566	$ 21,070
WASD	857	1,026	$ 12,400
PUBLIC WORKS	276	380	$ 5,159
TRANSIT	306	96	$ 2,000
ETSD	102	97	$ 1,680
CORRECTIONS	261	390	$ 1,565
DERM	126	164	$ 1,308
PARKS	471	36	$ 715
HOUSING	271	70	$ 538
BUILDING*	139	-	$ 400
AVIATION	401	9	$ 113
TEAM METRO	95	13	$ 72
SEAPORT	96	-	$ -
FIRE	389	-	$ -
Total	7,415	3,847	$ 47,020

* The Building Department reimburses staff for use of toll roads. No transponders are issued.

RECOMMENDATIONS

The following is a list of recommended changes to the County's fleet operations. The recommendations include suggest changes to vehicle assignment practices and highlights opportunities for department directors to better manage their fleets and to reduce vehicle inventories.

Vehicle Assignment Practices

1. Employees who qualify, should be directed to use car allowances and the County's mileage reimbursement process where it is reasonable to do so, before any vehicle assignment is contemplated.
2. Improve oversight of take-home vehicles and 24-hour assignments. In light of the current business environment and the need to reduce expenses, immediately re-justify all vehicle assignments and remove all vehicles that do not meet the appropriate criteria. Direct departments to assign County vehicles on an exception basis after all other alternatives have been exhausted. Staff should share vehicles where practical, request loaner vehicles from the GSA pool for infrequent users, or allow eligible staff to be reimbursed for use of personal vehicles. A revised 24-hour Vehicle Request Form is attached (Attachment 2).
3. Revise the approval process for 24-hour vehicle approval as follows:
    a. Division employee completes request and justification
    b. Employee signs the application acknowledging his/her responsibilities
    c. Department director approves/denies the application and verifies that the expenditure is budgeted
    d. Director forwards the approved application to the Assistant County Manager
    e. Approved requests are routed to the department, to GSA for inclusion in the database and for risk management purposes, and to the Human Resources Department for payroll processing
4. Share vehicles in lieu of assigning vehicles by classification or function. While all departments reviewed employ some vehicle sharing, in an effort to minimize fleet costs, departments should create rotating on-call rosters (weekly, monthly, etc.) allowing employees to take the vehicle home only on the days that they are on-call instead of all staff within the classification being assigned a take home vehicle.
5. To address the issue of staff residing outside the County who are assigned vehicles, it may be prudent to set an effective radius, (possibly from the downtown Government Center) within which an employee may be able to take a vehicle home. If employees were allowed to park the vehicle at the nearest County facility in lieu of returning to the worksite at the end of the shift, employees should not be allowed to park the vehicle outside the County if the parking location is not the employee's home address.

Vehicle Purchases

1. Limit the purchase of new vehicles and maximize the extent to which vehicles are shared among staff.
2. As economics permit and the County gains further operating experiences with hybrid vehicles, purchase hybrid vehicles as a first option in lieu of traditional gasoline-only vehicles where suitable. Purchase hybrid vehicles only when technology, vehicle application, and economics permit. To the extent possible, continue to push for fleet volume deals for hybrid vehicle purchases. Current market trends suggest however, that this is progressively more difficult as

general sales of hybrid vehicles increase. As a result, it is important for GSA to continue to closely assess the economy of hybrid and other alternate fuel vehicles going forward.

3. Departments must be more deliberate in matching vehicle types to vehicle application in order to request the most economical, safe and suitable vehicle for the function. It may be helpful for GSA to publish general information brochures to departments regarding fleet purchasing limitations and the County's pollution reduction efforts. Many departments complain about GSA's reluctance to purchase their desired vehicle however, in most cases where GSA disagrees with the request, the requests do not fully support the best use of the public's dollars.
4. GSA should continue to coordinate with departments to determine what are the most commonly used specially outfitted, possibly interchangeable, vehicles needed and include some of these vehicles in the motor pool to minimize the number of "special" light vehicles in departmental pools. All directors should then be notified that such vehicles are available on loan.
5. Minimize the number of specially outfitted vehicles that are rarely used and consider dual use vehicles, thereby reducing the number and cost of vehicles required.
6. Continue the capital replacement fund and the pay-in-advance method of acquiring replacement vehicles. The primary advantage of this approach is that it offers improved cash flow management and business planning as opposed to the budget fluctuations that would occur if departments purchased on demand. Some departments have opted out of this plan, due to a desire to a) manage their own funds, b) avoid paying perceived high fees to GSA, and c) a drive to manage their affairs independently. The following changes are also recommended for managing the GSA Vehicle Replacement Trust Fund:
    a. Upon purchasing a new additional vehicle, GSA should provide a detailed cost breakdown to departments (vehicle invoice, tag, title, preparation and disposal fees).
    b. Detailed breakdown of the replacement capital charges must be provided (computed replacement value, amortization in years, residual value, inflation rates and other charges).
    c. Upon return of the vehicle to GSA, departments should be credited the amount realized at auction less any auction fees and residual assumed in 2 above net of the residual computed in payments already made. Where the vehicle is transferred to another department the donating department should receive credit for value of the vehicle payable by receiving department if the vehicle was not donated by the department.
    d. When department returns a vehicle and does not require a replacement vehicle immediately, the total sum paid into the capital replacement fund should be returned to the department instead of being appropriated by GSA after 24 months.
    e. Alternately, once a car is returned to GSA, departments should be allowed to request a replacement car after the 24-month period and have the request treated as a replacement vehicle instead of a new, additional vehicle as is the current practice.
7. Consider alternatives to charging departments for <u>each</u> instance when pool loaners are issued to temporarily replace department assigned vehicles returned for warranty repairs/PM.

<u>Fleet Cost Reduction</u>

Recommended vehicle reductions are made in three categories (Table 6). Additional fuel and pollution reduction impacts are presented in Attachment 3 for the 14 departments reviewed. Fleet cost savings can be achieved by a combination of removing vehicles from the feet, ceasing some 24-hour vehicle assignments and as vehicles become due for replacement, replace appropriate vehicles with gasoline-electric hybrids or other appropriate vehicles in the future.

Removing a vehicle from the fleet allows the department to avoid the capital replacement charges. Departments currently paying into the GSA managed Vehicle Replacement Fund will begin to

realize immediate savings for those vehicles for which they are now paying. Additional savings will be realized from reductions in fuel consumption and maintenance charges. Ceasing a 24-hour vehicle assignment will immediately result in fuel and maintenance savings for the portal-to-portal use of the vehicle. Over time, additional fuel savings will be realized by replacing conventional gasoline only vehicles with hybrid vehicles or other vehicles the employ other technologies not yet made popular.

Based on the assessment of departmental operations, it is recommended that the County reduce the fleet for the 14 department reviewed by 606 vehicles (8% of the total fleet or 10% of the fleet excluding vehicles assigned to the Police Department). The County should also and cease 24-hour vehicle assignments for an additional 379 vehicles. Together, this will result in and estimated $3.9 million in fleet cost reduction based on the average cost of owing and operating a County vehicle. Actual savings will vary based on the specific vehicles removed from the fleet, the actual charges associated with the vehicle and the cost of fuel. In addition to these savings, County fuel consumption will be reduced by approximately 617,000 gallons per year (7%) and associated vehicle emissions could be reduced by as much as 4,300 tons. Vehicle returns to GSA should be phased over a three to four-month period to allow departments to adjust and for GSA to arrange appropriate and timely vehicle disposal. Departments should also maintain appropriate logs to verify the reductions achieved. Several departments, as a result of this management review, began fleet reductions as early as May 2007. These reductions may generally be considered a part of the recommended changes made in Table 6.

Additionally, 480 vehicles (5% of the fleet) that are used in various applications are either due for, or will soon be eligible for replacement for which hybrid vehicles are suitable. It is recommended that these be replaced with hybrid vehicles as they become due. Over time, this will result in an additional fuel saving of approximately $468,000.

Notwithstanding these reductions operations in some departments are noteworthy. The savings assume that as a result of the service levels demanded in the Building Department as a result of the commitment to support the building industry, inspectors will continue to be assigned 24-hour vehicles even though they report to headquarters at 7:00 a.m. daily. Under the strict interpretation of the 24-hour vehicle assignments, inspectors should return vehicles to headquarters at the end of the workday which would reduce the level of field services to the industry. Regarding Team Metro, work procedures do not justify 24-hour vehicle assignments. Of primary concern however, is that some Team Metro offices are located in shopping plazas that may not provide adequate security for unattended County vehicles during nights and weekends.

Concerning the Fire Department, in order to ensure no impact on public safety response, ensure adherence to Presidential Order # 5 (regarding emergency response preparation) and the public response strategy, only 14 vehicles are being recommended to be removed from the 24-hour vehicle assignments. Lastly, in the case of MDPD the reductions recommended have no impact on current operations and only contemplates removing excess vehicles from the fleet. This still allows the department exceptional flexibility in vehicle assignments and to easily replace more than 100 vehicles per year and to also provide vehicles for more than 300 new recruits per year.

In addition to the above initiatives, it is also recommend that the County take the following steps:

1. Mandate that departments use existing video and teleconferencing facilities as a substitute to commuting for face-to-face meetings whenever feasible. Require departments equipped with the technology to cooperate in sharing locations as room schedules permit. However, in order to make this a preferred business practice, department staff must be trained to operate the equipment without ETSD's assistance and ETSD should minimize usage costs while keeping the technology current.

Table 6
Light Fleet Reduction Potential and Estimated Savings *

Department	Number of Employees	Number of Vehicles Assigned	Recommended Number of Units			Annual Estimated Savings					
						Realized from Fleet Reduction			Realized from Ceasing 24-Hour Assignments	Total Estimated Savings	Replace with Hybrid Vehicle (Future Savings)
			Remove from Fleet	Cease 24-Hour Assignment	Replace with Hybrid	Avoided Capital Payments (Vehicle Replacement)	Operating Costs	Total Cost Reduction Potential			
HOUSING	698	271	15	1	16	$ 53,775	$ 29,520	$ 83,295	$ 1,409	$ 84,704	$ 15,600
BUILDING	356	139	14	7	35	50,190	27,552	77,742	9,863	87,605	34,125
PARKS	1,272	471	24	6	13	86,040	47,232	133,272	8,454	141,726	12,675
SEAPORT	387	96	8	-	5	28,680	15,744	44,424	-	44,424	4,875
ETSD	611	102	13	53	1	46,605	25,584	72,189	74,677	146,866	975
TEAM METRO	247	95	5	85	54	17,925	9,840	27,765	119,765	147,530	52,650
TRANSIT **	3,876	306	82	-	33	293,970	161,376	455,346	-	455,346	32,175
CORRECTIONS	2,695	261	18	21	49	64,530	35,424	99,954	29,589	129,543	47,775
DERM	519	126	16	30	27	57,360	31,488	88,848	42,270	131,118	26,325
PUBLIC WORKS	933	276	14	60	24	50,190	27,552	77,742	84,540	162,282	23,400
WASD **	2,702	857	120	40	11	430,200	236,160	666,360	56,360	722,720	10,725
FIRE	2,541	389	32	14	68	114,720	62,976	177,696	19,726	197,422	66,300
POLICE ***	4,998	3,625	225	58	136	806,625	442,800	1,249,425	81,722	1,331,147	132,600
AVIATION **	1,593	401	20	4	8	71,700	39,360	111,060	5,636	116,696	7,800
Total	23,428	7,415	606	379	480	$ 2,172,510	$ 1,192,608	$ 3,365,118	$ 534,011	$ 3,899,129	$ 468,000
% Reduction (all departments)		% of Fleet	8%	5%	6%						
% Reduction (except PPV/LOU vehicles)		% of Fleet	10%	8%	9%						

Notes:

* Savings are based on the average cost of light fleets operations countywide and will vary by vehicle type and usage patterns. As a result of feedback from the review, several departments report that they have started to make changes in their fleet operations. The above saving/reductions should be viewed as the cumulative departmental target for changes as of May 2007. However, departments should provide adequate documentation to support reductions acchieved.

** This Department does not participate in the GSA Fleet Replacement Trust Fund, therefore the Avoided Capital Replacement Cost represent equvalent accruals for vehicle replacement.

*** Number of vehicles includes 1,731 vehicles under the PPV and LOU Programs.

2. Departments with a need to maintain a pool of vehicles should be required to periodically re-evaluate and minimize the size of their vehicle pools. This may require the County Manager to convene ad hoc management teams as necessary to assist departments, maintain objectivity.
3. Replace older vehicles with hybrids as replacement come due provided that hybrid vehicles continue to be economically attractive and are suited for the functions performed. Currently, replacing sedans with hybrid gasoline-electric cars for city driving can cut gasoline consumption by up to 40 % or more. However, the current hybrid vehicles in the County's fleet are ineffective for fuel savings at highway speeds and gasoline-electric full size trucks currently do not offer a significantly higher fuel economy. GSA should continue to aggressively monitor the industry and purchase economic alternate fuel and hybrid vehicles when they become available.

Controls

1. Reinforce the proper use and management of gas cards at the departmental level. Mileage data is frequently incorrect to justify fuel consumption and therefore significant improvements are required by staff assigned County vehicles. Transportation Coordinators must continue to locate, inventory, justify and monitor gas card usage, continue to report lost or stolen cards to immediately, and deactivate cards to avoid misuse or theft.
2. Implement procedures to ensure employees return gas cards as soon as their responsibilities change or the employee leaves the department. This action should be linked to other initiatives relating to employee separation/exit strategies for reclaiming County property (cell phones, ID cards, keys, etc.).
3. Within 60 days of rejustifying all 24-hour vehicle assignments, the Finance Department and HRD should review all 24-hour vehicle assignments (including cases where employees park at another County facility) and ensure appropriate payroll and IRS reporting are being done.
4. Modify AO 6-2 (See Attachment 2) to better align with current business necessities.
5. Centralized comprehensive software is recommended to manage and maintain records countywide. As GSA contemplates these tools, it is recommended that the application be web-based and allows departments to view vehicle data and update information about their vehicles. In order to ensure data integrity, GSA would control access, review and accept all requested changes before they can be permanently written into the database. GSA should reconcile the vehicle inventory at least once a year.
6. Departments must conduct periodic spot checks to ensure that County vehicles are not being used improperly with regards to the following:
    a. Taking children to schools and/or to camps
    b. Temporarily assigned 24-hour vehicles do not become "permanent"
    c. Supervisors are not unilaterally allowing staff to take County vehicles home
    d. Vehicles are not being used to inappropriately take staff to lunch or conduct any other activity than County business
7. Immediately re-justify all vehicle assignments and conduct a comprehensive field inventory to update and make corrections to the vehicle inventory. Using the data from the re-justification exercise, update and correct the current vehicle inventory, delete vehicles sold, written off, stolen or reassigned to other entities. Subsequently, departments should report only the exceptions to GSA. Reports are to be done in writing to ensure departments update their inventories and report changes to GSA and HRD within one pay period of the change. Also, at least once each year reconcile vehicle information recorded in the Fleet Management database with the Fixed Asset System and at least every three to five years, GSA should initiate a full field inventory of all County Vehicles.

8. While GSA is responsible for acquisition, maintenance, replacement and retirement of all County vehicles, departments individually determine the number and type of vehicles necessary to conduct day-to-day operations. Consideration should be given to establishing an ad hoc executive team to evaluate and approve vehicle requests prior to the proposed budget where a department's request is in excess of a fixed number or percentage of additional vehicles in any fiscal year.
9. Require all departments with assigned vehicles to conduct periodic vehicle inspections as necessary to improve housekeeping and to take action where employees fail to conform. A sample inspection form is presented in the recommended revisions to A.O. 6-2.
10. Department Directors should strictly reinforce the County's non-smoking policy.
11. Assessment of transponder use indicates that while it is not recommended that the function be centralized, departments must develop and issue general guidelines to their staff. Departments must also locate, inventory and periodically monitor transponder usage. Procedures must also be put in place to reclaim transponders when assignments change of employees separate from the County. When vehicles are removed from the fleet, ensure transponders are removed from the vehicle or immediately deactivated if stolen or lost.

Attachment 1

Distribution of County Light Vehicle Fleet as of March 2007

	County Entity	Number of Employees	Number of Vehicles	% of Total Light Fleet Vehicles Assigned to Departments	24-Hour Vehicles	
					Number of Vehicles	% Depatment's Assigned Vehicles
	County Department					
1	Police	4,998	3,625	45%	2,261	62%
2	Water & Sewer	2,702	857	11%	138	16%
3	Park & Recreation	1,272	471	6%	19	4%
4	Aviation	1,593	401	5%	16	4%
5	Fire Rescue	2,541	389	5%	126	32%
6	Transit	3,876	306	4%	-	-
7	Housing Agency	698	271	3%	4	1%
8	Corrections & Rehabilitation	2,695	261	3%	67	26%
9	Public Works	933	276	3%	135	49%
10	Solid Waste Management	992	144	2%	16	11%
11	Building Department	356	139	2%	112	81%
12	Environmental Resources Management	519	126	2%	27	21%
13	General Services Administration	858	147	2%	45	31%
14	Enterprise Technology Services	611	102	1%	60	59%
15	Seaport	387	96	1%	-	-
16	Team Metro	247	95	1%	87	92%
17	Human Services	1034	50	1%	1	2%
18	Community Action Agency	681	38	0%	38	100%
19	Animal Services	120	30	< 1%	11	37%
20	Property Appraisal	283	26	< 1%	-	-
21	Building Code Compliance	79	25	< 1%	18	72%
22	County Commission	186	26	< 1%	5	20%
23	Library	571	25	< 1%	8	32%
24	Office of the Clerk	229	16	< 1%	3	19%
25	Planning & Zoning	193	13	< 1%	15	115%
26	Elections	120	9	< 1%	-	-
27	Office of the Mayor	40	8	< 1%	2	25%
28	Office of Capital Improvements	38	6	< 1%	5	83%
29	Judicial Administration	268	6	< 1%	-	-
30	Communications	59	5	< 1%	2	40%
31	Juvenile Services	120	5	< 1%	1	20%
32	Consummer Services	126	44	< 1%	2	5%
33	County Attorney's Office	147	3	< 1%	3	100%
34	Medical Examiner	70	3	< 1%	-	-
35	Office of the Inspector General	38	3	< 1%	3	100%
36	Vizcaya Museum and Gardens	49	3	< 1%	-	-
37	County Manager's Office	42	2	< 1%	2	100%
38	Historic Preservation	4	1	< 1%	-	-
	Total	29,765	8,052	100%	3,232	40%
	County Loaner Pool					
1	GSA Fleet Management Pool		701			
	Other Agencies					
1	Jackson Memorial Hospital		63			
2	State Department of Health		44			
3	Metropolitan Planning Organization		1			
4	State Attorney's Office		1			
	Total		109			
	Grand Total		8,862			

Attachment 2

Revised Draft Administrative Order 6-2

Vehicle Inspection Report

24-Hour Vehicle Assignment Request Form

A.O. No.: 6.2 ***DRAFT***
Ordered:
Effective:

MIAMI-DADE COUNTY
ADMINISTRATIVE ORDER

ASSIGNMENT, OPERATION, ACQUISITION, MAINTENANCE AND DISPOSAL OF COUNTY VEHICLES

DRAFT DRAFT DRAFT

AUTHORITY:
Section 4.02 of the Metropolitan Dade County Charter.

SUPERSEDES:
This Administrative Order supersedes previous Administrative Order No. 6-2, entitled Use of County Vehicles, dated March 15, 1994.

POLICY:
A vehicle is often a necessary tool for conducting County business. It is the responsibility of each department to determine the appropriate number and type of vehicles necessary to meet their operational requirements. In order to provide these vehicles at the least cost, the acquisition, maintenance, distribution and replacement of County vehicles has been centralized. It is the responsibility of the General Services Administration Department (GSA) to administer this centralized effort and to provide departments with vehicles once proper approvals have been obtained. Departments and employees are responsible for the proper and safe operation of the County vehicles as outlined in this administrative order.

ASSIGNMENT OF VEHICLES:

A. Department Assignments
Departments will determine the number of vehicles necessary for their employees to carry out their job responsibilities. Additionally, it is each department's responsibility to conduct an annual review of vehicle requirements and assignments to take and report vehicle inventory.

B. Twenty-Four Hour Vehicle Assignments
There are positions and functions for which an employees' duties and responsibilities require the use of a vehicle on a 24 hour basis (take home vehicle). Full-time 24-hour vehicle assignments should recognize the need for emergency response, as well as operational requirements to improve the level of service to County residents.

There are two types of full-time 24-hour vehicle assignments. Vehicles that are permanently assigned to employees who are allowed to take the vehicle home after normal working hours; and vehicles that are assigned to employees who park the vehicles overnight at a location that is not the same as their work headquarters, usually closer to the employees' homes. Assignment of a full- time 24-hour vehicle must be justified in writing and requires the approval of the Department Director and the County Manager or designee. Requests for an assignment of this type should be made using the TWENTY-FOUR HOUR VEHICLE ASSIGNMENT APPROVAL/REQUEST FORM (see sample attached) and once approved, must be submitted to GSA for risk and inventory management processing, and to the human Resources Department for tax reporting purposes. This form lists those situations that warrant 24 hour vehicle assignments and the employee's responsibilities when assigned a take home vehicle.

To be eligible for a full-time 24-hour vehicle assignment, the employee must meet one or more of the following criteria:

1. Be a County employee receiving Group 1 Executive Benefits, who elects a vehicle assignment in lieu of the car allowance provided in the executive benefits package
2. Be a Miami-Dade County Police Department (MDPD) police officer participating of the Personalized Patrol Vehicle Program (Resolution No. R-941-91)

3. Be a MDPD Captain or Lieutenant eligible for a full-time vehicle assignment under the January 28, 1992 Letter of Understanding
4. Be a County employee who is a member of a bargaining unit and is contractually entitled to a full-time 24-hour vehicle
5. Be a County employee who spends a minimum of 80% of his/her work shifts in the field throughout the year and is required to begin and end the work shift performing County business in the field
6. Be a County employee who is required to respond to emergency situations occurring outside of regular working hours (call-outs or on-call) an average of three or more times per week throughout the year
7. Be a County employee required to attend unscheduled meetings or events on County business on an average of three or more times per week throughout the year and where these meetings/events cannot be performed during regular working hours, during the daily work commute or using a temporary 24-hour assignment

Prior to the beginning of each fiscal year, each department is responsible for the renewal of existing full-time 24-hour vehicle assignments. Renewals will be accomplished by verifying current information on full-time 24-hour vehicle assignments. The listing of approved take home assignments must be signed by the Department Director and approved by the County Manager or designee and subsequently forwarded to GSA for countywide inventory reporting and risk management assessments.

All new take home vehicle assignment requests and changes in assignments require the submission of a TWENTY-FOUR HOUR ASSIGNMENT APPROVAL/REQUEST FORM. However, where changes are minor and does not require County Manager's approval, changes must be reported to GSA as soon as they occur. Examples of such changes include address changes, vehicle replacements, etc.

Once a vehicle is assigned, to an employee and approved the department shall forward a copy of the approval together with a Personnel Change Document to the Human Resources Department so that appropriate income tax withholding may be applied to wage and salary.

C. Overnight Parking of County Vehicles
Department assigned County vehicles shall be parked at a department base of operation. Only full-time 24-hour assigned vehicles may be parked at the employee's residence on a regular basis or at the nearest County facility to the employee's residence.

Employees assigned take home vehicles shall return the vehicles to the department base of operations during a scheduled absence from work of 40 or more hours (e.g., vacation).

D Temporary Twenty-Four Hour Vehicle Assignments
A department director may temporarily assign a 24 hour vehicle to an employee for County business. However, this authorization shall be limited to a total of five (5) working days per month and must be approved in advance.

Vehicles shall only be used for official County business only, and transportation to and from the assigned work location. The written authorization must specify the reason for the temporary 24-hour vehicle assignment, the date the vehicle will be returned and the address at which the vehicle will be parked overnight. The approving department will maintain a log to document the authorized use of vehicles. The log shall indicate at a minimum, the name of the authorized employee, the vehicle number, the description of use, and the date and time the vehicle was assigned and returned.

E. Inter-Agency Pool
The GSA Fleet Management Division maintains an inter-agency motor pool for use by County departments. To control the use of vehicles and reduce fuel consumption, Department Directors or designees must approve pool vehicle requests in writing. Employees must present the written approval to the pool attendant to be able to sign out a pool vehicle.

Pool vehicles are intended for use between 7:00 a.m. and 6:00 p.m., Monday through Friday. A Department Director or designee, may authorize an employee to utilize a pool vehicle on an overnight basis by indicating in the written approval, the date and time the vehicle shall be returned and specifying where the vehicle will be parked overnight.

OPERATION OF COUNTY-OWNED VEHICLES:

A. Drivers Other Than County Employees
Only authorized County employees are approved to drive or operate County vehicles. Permission for non-county employees to operate County vehicles must be obtained from the Director of the Risk Management Division, General Services Administration.

B. Passenger Restrictions
County vehicles may be utilized to transport other County employees as passengers if the other County employees are on official County business. Also, non-County employees may be transported only if involved in County related business. However, non-County personnel may not be transported outside of Miami-Dade County without the written approval of the Director of the Risk Management Division.

County employees who have a 24-hour assigned vehicle shall not transport other County employees to and from work.

C. Unmarked Vehicles
In those instances where official County markings would be detrimental to the effectiveness of the work being performed, the Department Director shall obtain written authorization from the County Manager or designee to utilize an unmarked vehicle. In all other instances, County vehicles will bear official County markings.

D. Use of Vehicles for Out-of-County Business
If a Country vehicle is to be used for out-of-County business, a department may choose to use one of their assigned vehicles, or request a vehicle from the County's loaner pool. Additionally, GSA Fleet Management has available gasoline credit cards which may be used for out of town trips. In order to obtain these cards an approved travel request must be presented to the Fleet Management Division.

Due to special insurance restrictions, no County vehicle is to be used outside the State of Florida without the expressed written permission of the GSA, Risk Management Division. Permission to take the vehicle out-of-State must be obtained at least five (5) days prior to the date the vehicle is needed for out-of-state work.

E. Use of County Vehicles Generally
The use of County vehicles is restricted to County employees only and for County business only. No County vehicle is to be used for personal business. Additionally, in compliance with State law, all persons in a County vehicle are required to use their safety belts.

The following activities are prohibited in all County-owned and leased vehicles:

1. All smoking including County-owned vehicles
2. Transportation of alcoholic beverages of any type
3. Employees experiencing any type of impairment or condition that may adversely impact safety shall not operate a County vehicle
4. Employees shall refrain from eating while operating County vehicles
5. Driving erratically, recklessly, or in an otherwise unsafe manner
6. To conduct illegal acts or any action prohibited by the County, State or Federal regulations
7. Utilization of a County vehicle for any type of unauthorized personal compensation

The County is not responsible for actions resulting from the unauthorized use of County vehicles. Employees involved in crashes or other incidents resulting from unauthorized use of County vehicles are legally and

financially responsible for all damages and claims that result from such incidents, and are not eligible for Worker's Compensation benefits.

MAINTENANCE AND UPKEEP OF COUNTY VEHICLES:

A. Maintenance and Housekeeping

Employees who are assigned a County vehicle are responsible for the proper use, care, and proper housekeeping of the vehicle, and assuring that the vehicle is safe from vandalism or other damage. All overnight parking locations must be in accordance with County vehicle policies.

The GSA Fleet Management Division shall operate a countywide maintenance program and notify departments of required preventative maintenance checks. Departments must comply with these scheduled maintenance checks in order to maintain the condition of the fleet.

In addition to complying with Fleet Management's preventative maintenance schedule, employees with department and full-time 24-hour assigned vehicles are responsible for conducting periodic vehicle inspections and reporting any mechanical problem(s) immediately upon detection. Vehicle inspection should include cleanliness and daily vehicle inspections including but not limited to periodic checks of tire pressure, fluid levels, turn signals and general operation of vehicle lights. At least monthly, division or field supervisors shall conduct a throughout inspection of assigned vehicles and ensure that staff are adhering to County business policies. Where County policies are being violated, appropriate action must be taken to immediately correct the situation. Results of the inspections shall be recorded on a VEHICLE INSPECTION FORM and signed by both the employee to which the vehicle is assigned and his/her supervisor. Departments shall create a VEHICLE INSPECTION FORM that at a minimum captures the information requested in the sample VEHICLE INSPECTION FORM (Attached).

B. Availability of Loaner Vehicles During Scheduled Maintenance Checks

In order to minimize employee inconvenience when vehicles are being serviced, loaner vehicles may be made available from GSA Fleet Management. Employees requiring a loaner should request one at the time their servicing appointment is being made. The department will be notified upon completion of the repairs and servicing and will have three (3) days to return the loaner vehicle and pick up the departmental assigned vehicle. If the vehicle is not picked up after three (3) days, GSA Fleet Management will begin to assess time charges at the pool rate.

ACQUISITION OF VEHICLES:

A. Replacement of GSA Fleet Policy Vehicles

Vehicles have to be replaced periodically when they meet the necessary criteria. A vehicle may be eligible for replacement when it has been in service for eight (8) years, has 100,000 miles, GSA has determined that the vehicle is in poor working condition or the vehicle does not meet other established criteria. However, if a vehicle has met the age or mileage criteria, and is considered to be in good operating condition, a department may wish to retain the vehicle with the understanding that the monthly capital replacement fee will be eliminated. Each year the GSA Fleet Management Division will identify those vehicles eligible for retirement, and notify the appropriate departments.

B. Acquisition of New or Previously Assigned Vehicles

Departmental requirements for additional vehicles will be met by the purchase of a new vehicle, or, if available, a vehicle may be assigned from the loaner fleet or another department. If the purchase of a new vehicle is approved, the department will pay GSA in full for the vehicle. Included in this charge is a dealer preparation and delivery charge and any other necessary fees including but not limited to decal and tag fees. GSA shall hold title to the vehicle and once the vehicle is placed in service, begin charging the department a monthly capital charge over the projected life of the vehicle. The capital charges shall be deposited in the Fleet Management Trust Fund for the department's future acquisition of new and replacement vehicles.

C. Additional Vehicle Assignments

When a department wishes to add a vehicle to its existing fleet, a VEHICLE ASSIGNMENT REQUEST FORM must be completed. This request must be approved by the appropriate County authority and submitted to

GSA for review. The County Manager shall implement operational procedures to review and approve departmental requests to add vehicles to the fleet.

RETIREMENT OF VEHICLES:

The GSA Fleet Management Division shall be responsible for developing and implementing a vehicle retirement schedule based on replacement analyses. Once the GSA Fleet Management Division has determined that a vehicle should be retired, the vehicle shall be sold either by auction or through the solicitation of competitive bids or donated to non-profit organizations as provided in County legislation. Proceeds from the sale of retired vehicles shall be credited to the department, less any fees associated with the sale, and less any residual value as appropriate.

This Administrative Order is hereby submitted to the Board of County Commissioners of Dade County, Florida.

MIAMI-DADE COUNTY
Department Name
VEHICLE INSPECTION REPORT (Administrative Order 6-2)
For the Month/Quarter Ending _____, 20____

Instructions: Where undesirable conditions are found, ensure corrective action is taken as appropriate. Include additional comments as necessary. Employee assigned custody of the vehicle shall initial that they are aware of the inspection and the results. Supervisor's signature attests that the inspection was carried out and the employee was made aware of any remedial actions necessary.

INSPECTED BY: _____ TITLE: _____ INSPECTION DATE: _____

Employee Information		Vehicle Information	Damage Assessment											Cleanliness Interior / Exterior						Mandatory Supply Items (To be determined by Department)														Employee's Initials
Name of Employee Assigned Gas Card Number (GC) and Sun Pass Transponder (if applicable) (SP)		County Vehicle Number and Odometer Reading (OD)	Chipped/Broken Glass	Body / Roof (scratches, dents)	Bumper (front)	Bumper (rear)	Doors	Fender	Faded Paint	Interior (include upholstery)	Hubcaps (missing/damaged)	Tires (visual condition only)	Trunk	Exterior Appearance	Interior Cleanliness	Floors, Panels, Upholstery	Garbage and Litter Present?	Evidence of Smoking In Vehicle	General Vehicle Cleanliness	2-Way Radio	Measuring Wheel	Business Cards	Emergency Strobe Light	Rain Coat	Rubber Boots	Flashlight	First Aid Kit	Clipboard	Pens/Pencils	Camera	Battery Scale	Hammer	Paperwork	
NAME		#																														
GC	SP	OD																														
Comments:																																
NAME		#																														
GC	SP	OD																														
Comments:																																
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NAME		#																														
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I have conducted the vehicle inspections of the vehicles noted above in accordance with AO 6-2.

_____
SUPERVISOR'S SIGNATURE

Miami-Dade County

TWENTY-FOUR HOUR VEHICLE REQUEST

Administrative Order 6-2

Instructions: This request must be completed by the employee to whom the County funded 24-hour (take-home) vehicle will be assigned as defined in Administrative Order 6-2. Approved Requests must be submitted the General Services Administration and Human Resources Departments for inventory, risk management and payroll processing. If this is a new 24-Hour Vehicle Assignment, complete all sections. For Change/Update or Discontinuation of an existing 24-Hour Vehicle Assignment, complete Sections "A" and "C"

O New 24-Hour Vehicle Assignment O Change/Update Information O Discontinuation of 24-Hour Vehicle Assignment

SECTION A: Employee and Vehicle Information

Employee Last Name	Employee First Name	Classification	Employee ID Number

Department	Division	Work Address

Home Address: (Street, City, Zip code).
If legally exempt from providing home address enter "Exempt", your County of residence and round trip mileage

	County of Residence	Round Trip Miles Portal-to-Portal

Vehicle Number	Old Vehicle Number (If applicable)	VIN#: (leased/rented vehicles only)

Vehicle Make/Model	Model Year	MSRP: (for leased vehicles only)	Vehicle Assignment Date

O County Owned Vehicle (Yellow Tag) O Marked Vehicle O Unmarked Vehicle O Rented/Leased Vehicle (County Contract)

SECTION B: Justification (new assignments only)

To be eligible for a full-time 24-Hour Vehicle Assignment, you must meet one or more of the following criteria: Please check all that apply.

- ☐ I am a County employee receiving Group 1 Executive Benefits, who requires a vehicle assignment in lieu of the car allowance provided in the executive benefits package
- ☐ I am a Miami-Dade County Police Department (MDPD) police officer participating in the Personalized Patrol Vehicle Program (Resolution No. R-941-91)
- ☐ I am a MDPD Captain or Lieutenant eligible for a full-time vehicle assignment under the January 28, 1992 Letter of Understanding
- ☐ I am a County employee who is a member of a bargaining unit and contractually entitled to a full-time 24-hour vehicle
- ☐ I am a County employee who spends a minimum of 80% of my work shift in the field and is required to begin and end his/her work shift performing County business in the field
- ☐ I am a County employee who is required to respond to emergency situations occurring outside of regular working hours (call-outs) on an average of three or more times per week throughout the year
- ☐ I am a County employee required to attend unscheduled meetings/events on County business that cannot be performed during regular working hours, during daily work commute or using a temporary 24-hour vehicle assignment on an average of three or more times per week throughout the year
- ☐ Other (Please Explain) _____

_____

_____

SECTION C: Change/Update

Provide detailed description of Change/Update for the existing 24-Hour Vehicle Assignment:

SECTION D: Employee Affirmation

I have reviewed Administrative Order 6-2 and fully understand all the requirements and provisions associated with the assignment, operation and maintenance of the assigned vehicle. I affirm that I will comply with the provisions of Administrative Order 6-2 and that I also fully understand and accept the following (Initial each statement to indicate you understand and accept the provision)

_____ I shall be the only person authorized and responsible for driving, operating, and maintaining the vehicle clean

_____ I shall use the vehicle for County business only, or as provided in my Collective Bargaining/Other Agreement, and shall not engage in prohibited activities

_____ I shall return the vehicle to the worksite upon scheduled leave of 40 or more hours

_____ I shall be responsible for actions resulting from unauthorized use of the assigned vehicle

_____ _____
Employee Signature Date

SECTION E: Review and Approval

I reviewed this vehicle assignment request and the employee's eligibility to be assigned a County funded vehicle per Administrative Order 6-2. I approve ____/ do not approve ____ assignment ____ /discontinuation of _____ this 24-Hour Vehicle Assignment Request

_____ _____ _____
Supervisor Signature Print Name Date

_____ _____ _____
Department Director's Signature Print Name Date

County Executive Office

_____ Approved _____ Not Approved

_____ _____ _____
County Manager or Designee Signature Print Name Date

Distribution Instructions: Forward one copy of the approved request to the Employee, Employee Relations Department (accompanied by a Personnel Change Document) and one copy to the General Services Administration Department, Fleet Management Division.

FOR HUMAN RESOURCES DEPARTMENT USE ONLY

Is this 24-hour vehicle assignment taxable per Treasury Regulations, Section 1.274-5T and other applicable rules?

Taxable _____ Non-Taxable _____

Indicate applicable fringe benefit taxation method per Treasury Regulations, Section 1.61-21 and other applicable rules.

Taxable Commuting Rule _____ Taxable Lease Value Rule _____

Verified By:

_____ _____ _____
Signature Print Name Date

Attachment 3

Emission and Fuel Reduction Potential

Department	Number of Employees	Number of Vehicles Assigned	Estimated CO2 Emission Reduction (Equivalent Tons)			
			Fleet Reduction	Cease 24-Hour Assignment	Replace with Hybrid	Total Emission Reduction
HOUSING	698	271	75	3	40	118
BUILDING	356	139	70	24	88	181
PARKS	1,272	471	120	20	33	173
SEAPORT	387	96	40	-	13	53
ETSD	611	102	65	181	3	248
TEAM METRO	247	95	25	290	135	450
TRANSIT **	3,876	306	410	-	83	493
CORRECTIONS	2,695	261	90	72	123	284
DERM	519	126	80	102	68	250
PUBLIC WORKS	933	276	70	204	60	334
WASD **	2,702	857	600	136	28	764
FIRE	2,541	389	160	48	170	378
POLICE ***	4,998	3,625	1,125	198	340	1,663
AVIATION **	1,593	401	100	14	20	134
Total	23,428	7,415	3,030	1,291	1,200	5,521

* Tons of Carbon Dioxide Equivalent

Fuel Reduction Estimates

Department	Number of Employees	Number of Vehicles	Estimated Fuel Consumption Reduction (in Gallons)			
			Fleet Reduction	Cease 24-Hour Assignment	Replace with Hybrid	Total Fuel Consumption Reduction
HOUSING	698	271	10,714	487	5,714	16,916
BUILDING	356	139	10,000	3,409	12,500	25,909
PARKS	1,272	471	17,143	2,922	4,643	24,708
SEAPORT	387	96	5,714	-	1,786	7,500
ETSD	611	102	9,286	25,811	357	35,454
TEAM METRO	247	95	3,571	41,395	19,286	64,252
TRANSIT **	3,876	306	58,571	-	11,786	70,357
CORRECTIONS	2,695	261	12,857	10,227	17,500	40,584
DERM	519	126	11,429	14,610	9,643	35,681
PUBLIC WORKS	933	276	10,000	29,220	8,571	47,791
WASD **	2,702	857	85,714	19,480	3,929	109,123
FIRE	2,541	389	22,857	6,818	24,286	53,961
POLICE ***	4,998	3,625	160,714	28,246	48,571	237,532
AVIATION **	1,593	401	14,286	1,948	2,857	19,091
Total	23,428	7,415	432,857	184,573	171,429	788,859

ATTACHMENT C

Memorandum

MIAMI-DADE COUNTY

Date: June 23, 2010

To: Honorable Chairman Dennis C. Moss
and Members, Board of County Commissioners

From: George M. Burgess
County Manager

Subject: Report regarding the County's fleet of Toyota Prius

This report has been prepared in response to Resolution R-394-10, sponsored by Commissioners Souto and Sosa, which called for a report regarding the County's fleet of Toyota Priuses.

Miami-Dade County has been among the leaders in the fuel efficiency arena for almost a decade, and the General Services Administration (GSA) has been proactive in its involvement with emerging technologies in the fuel conservation area. From the initial acquisition of three hybrid vehicles, GSA has closely monitored the industry and repeatedly sought approval from the Board as it continued to expand the hybrid fleet making the County one of the leaders in the municipal hybrid area. In addition to the Toyota Prius, the County was the first entity to operate 50 General Motors hybrid pickup trucks and experience and measure firsthand the efficiency benefits of hybrid automated loaders for house-to-house refuse collection.

Resolution R-394-10 requested that the report address the following issues:

Item No. 1) The number of accidents and injuries, if any, attributable to safety issues related to the Prius

None are known.

Item No. 2) The steps being taken by the County to address the safety issues raised by the recent recalls

The Priuses in the County fleet are subject to Toyota **Safety Recall 90L**. Currently, our compliance with the recall is almost complete. All floor mats on the driver's side have been removed, and we are in the process of completing the remaining accelerator pedal modifications.

Item No. 3) The number of vehicles affected by the recalls

There are 376 Prius vehicles in our fleet impacted by the recall: 203 models manufactured in 2007, 74 manufactured in 2005, and 99 manufactured in 2004.

Item No. 4) The costs already incurred and anticipated to be incurred by the County as a result of the recalls (e.g., personnel time, vehicle down time and rental of replacement vehicles)

Maroone Toyota had technicians perform work at on site at Shop 2, Earlington Heights and the Motor Pool, so expended personnel time has been primarily limited to record-keeping. Downtime has been negligible and we have not incurred any rental costs.

Item No. 5) The average amount paid by the County per vehicle

The table below lists each model year's vehicles with the quantity purchased, the average price paid by model year, and the totals including total average price paid for all.

Model Year	Average Purchase Price	Qty. Purchased	Total Price
2002	$ 21,042.75	4	$ 84,171.00
2003	$ 19,954.00	52	$ 1,037,608.00
2004	$ 19,233.40	100	$ 1,923,340.00
2005	$ 20,369.83	75	$ 1,527,737.00
2006		0	$
2007	$ 22,845.00	203	$ 4,637,535.00
Total		**434**	**$ 9,210,391.00**
Average Toyota Prius Price			**$ 21,222.10**

Item No. 6) The total amount paid to Toyota for these vehicles

The above table lists the amount paid via purchase order to Toyota for these vehicles.

The total amount paid to Toyota for the 434 vehicles is $9,003,157.20, which represents the purchase order total amounts less the 2 percent deduction for the User Access Program (UAP), and the ¼ percent deduction for the Office of the Inspector General (OIG).

Item No. 7) The average life span of these vehicles

Based on current operating experience for the vehicles on hand, the estimated life span is in excess of 100,000 miles and ten years of operating life.

Item No. 8) The average number of miles driven by each vehicle in the County's fleet

57,336

Item No. 9) The average number of miles driven by each Prius in the County's fleet

34,395

Item No. 10) The total number Toyota Priuses currently in the County's fleet

432

Item No. 11) The total number Toyota Priuses currently active in the County's fleet

329

Item No. 12) The total number Toyota Priuses kept in reserve (i.e., not in use) in the last five years

Prior to the start of the fleet reduction program in November, 2007, Priuses were issued as they were delivered, inspected for acceptance, tagged and decaled. The fleet reduction program resulted in the reduction of the County's assigned vehicle fleet by 731 vehicles. Since the completion of that initial fleet reduction, the size of the County's assigned light fleet has been reduced by an additional 216 vehicles, for a total reduction of 947 vehicles, as of June 10, 2010. In addition to the fleet reduction, we also implemented vehicle operating life cycle extension programs, which extended fleet vehicle replacement guidelines from the 70,000+ mile range to 100,000+ miles. All of the turn-ins were evaluated to determine if they could be re-assigned or should be auctioned. As a result, 94 sedans were reallocated to replace assigned vehicles that were at the end of their life cycle. The fleet conservation effort and reallocation of resources resulted in the cited reserve of Priuses not yet issued.

The reserve for each of the past five years, is listed below:

- Priuses in reserve as of March 10, 2006: None
- Priuses in reserve as of March 10, 2007: None
- Priuses in reserve as of March 10, 2008: 151
- Priuses in reserve as of March 10, 2009: 149
- Priuses in reserve as of March 10, 2010: 131

As of June 10, 2010, 103 Priuses were in reserve.

Item No. 13) The storage location and required maintenance for Toyota Priuses kept in reserve

The Toyota Priuses kept in reserve are stored at the Earlington Heights New Car Get Ready Center, which is located at 2100 NW 41 Street.

Every two months the maintenance prescribed in Toyota Storage Guidelines Bulletin T-SB-0079-09 and T-SB-0152-09 is performed. In general, those guidelines require the 12-volt battery to first be connected, then the vehicle is started and driven within the facility to charge the batteries, circulate the fluids, cycle the air conditioning system, remove any surface rust from the brake rotors and prevent the tires from flat spotting. The vehicle is washed to remove corrosives from the paint, the tire pressures are checked and the vehicle is returned to its parking space. Finally, the 12-volt battery is disconnected. In general, this procedure takes about 30 minutes and no mechanical problems associated with the storage of Priuses have arisen to date.

Item No. 14) The inspection schedule for Toyota Priuses kept in reserve

Every two months

Item No. 15) The present value in dollars of those Toyota Priuses kept in reserve

$2,353,035.

Item No. 16) The value of all vehicles bought by the County in the last five years and kept in reserve

As stated earlier, reserve vehicles did not exist prior to the 2008 calendar year. The quantity and original purchase order prices of the vehicles in reserve for calendar years 2008, 2009 and 2010, as of March 10 of each year, are listed below.

	March 10, 2008		March 10, 2009		March 10, 2010	
Description	Qty	Estimated Value	Qty	Estimated Value	Qty	Estimated Value
Assorted Police Vehicles	437	$ 7,982,781.00	185	$ 3,066,600.00	30	$ 533,000.00
Assorted Vans	54	$ 796,304.00	55	$ 813,420.00	52	$ 763,256.00
Assorted Pickups	119	$ 1,343,170.00	62	$ 1,148,497.00	22	$ 401,457.00
Total	**610**	**$ 10,122,255.00**	**302**	**$ 5,028,517.00**	**104**	**$ 1,697,713.00**

Item No. 17) The criteria used by the County when determining whether to retire a vehicle in the County's fleet.

The guidelines are 100,000 miles or greater, with repair costs expected to exceed the economic value of the vehicle. The economic value of the vehicle is as listed in the National Automobile Dealers Association (Yellow) Used Car Guide, which is issued monthly.

Item No. 18) Whether the County performed a cost-benefit analysis prior to purchasing Toyota Priuses

Yes. On April 10, 2001, the Board approved Resolution R-378-01, directing the County Manager to enhance the utilization of alternative fuels in Miami-Dade County, and urged participation with the U.S. Department of Energy in placing alternative fuel vehicles in the Gold Coast. The U.S. Department of Energy considers hybrid gasoline/electric vehicles as alternate fuel vehicles.

In response to that resolution, then County Manager Steve Shiver appointed the Alternative Fuels Advisory Committee, which recommended "a series of pilot projects to include testing of hybrid (gasoline/electric) cars and hybrid (diesel/electric) buses," .... The attached report includes the cost-benefit analysis on which they based their recommendations.

Item No. 19) If so, a statement regarding the conclusions reached by staff

The Alternative Fuels Advisory Committees 2002 report stated, "Fleet Management should procure 5 to 10 hybrid vehicles over the next year. " A copy of that report is attached.

Item No. 20) The basis upon which the County determined that the Prius was preferable to other vehicles such as the Ford Fusion Hybrid, Ford Escape Hybrid, Ford Focus or Ford Taurus

The County uses a fuel efficiency measure (pursuant Resolution R-969-03) in determining the lowest priced vehicle offered. That criteria is the purchase price adjusted for the anticipated cost of fuel for 100,000 miles of operation, at EPA rated city (65%) and highway (35%) mileage and at projected upcoming fuel prices (as determined by the DPM). The Toyota Priuses were the lowest cost vehicle offered as a result of competitive bid, and therefore recommended for award, and approved for purchase by the Board.

Item No. 21) The advisability of continuing to include the Toyota Prius in the County's fleet of vehicles

Staff will continue to focus on clean air, fuel efficiency and hybrid vehicles. Staff purchases the lowest-cost hybrid vehicles based on the original purchase price, adjusted for the anticipated cost of fuel for 100,000 miles of operation, as stated in Item No. 21. Whether that recommendation is for a Toyota Prius, Nissan Leaf, Ford Fusion Hybrid, Honda Insight, or other brand vehicle, will be determined through the County's formal bidding processes.

Should you require additional information, please contact General Services Administration Director Wendi J. Norris or me directly.

Attachments

c: Honorable Carlos Alvarez, Mayor
Jennifer Glazer-Moon, Director, Office of Strategic Business Management
Wendi J. Norris, Director, General Services Administration
Charles Anderson, Commission Auditor

MEMORANDUM

Agenda Item No. 12(A)1

TO: Honorable Chairperson and Members
Board of County Commissioners

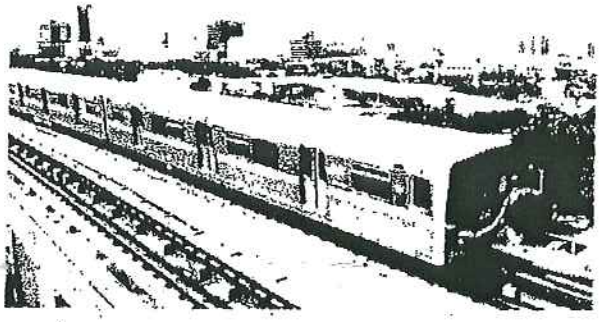
DATE: September 12, 2002

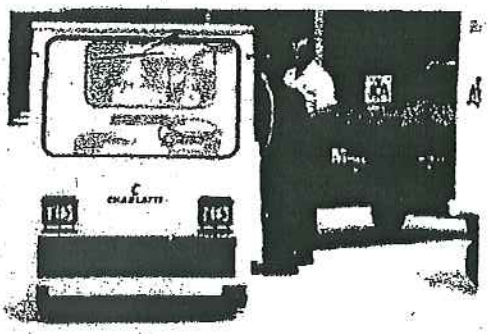
FROM: Steve Shiver
County Manager

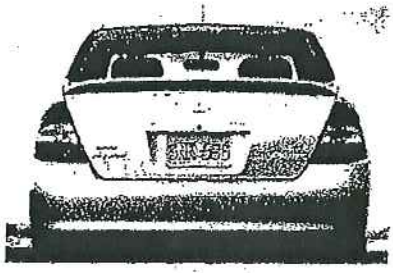
SUBJECT: Alternative Fuels Advisory Committee
Report and Recommendations

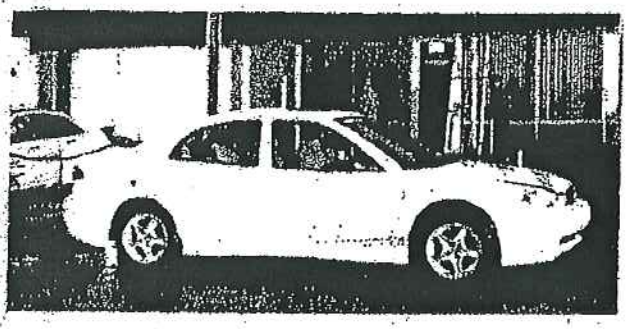
Pursuant to the requirements of Board Resolution R-378-01, approved April 10, 2001, the Alternative Fuels Advisory Committee has prepared the attached report for your review. The report includes recommendations comprising a plan to begin integrating alternative fuels and technologies into the County fleet and operations. The Committee is prepared to monitor and evaluate implementation of the recommendations.

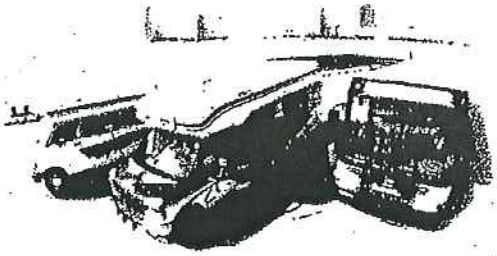
Alternative Fuels Advisory Committee Report and Recommendations

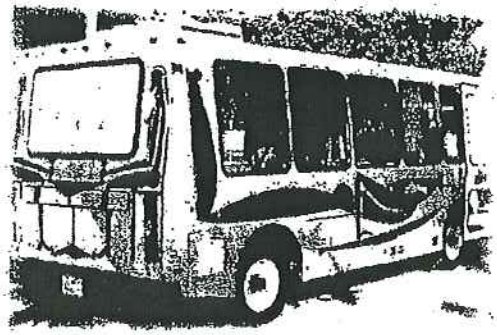


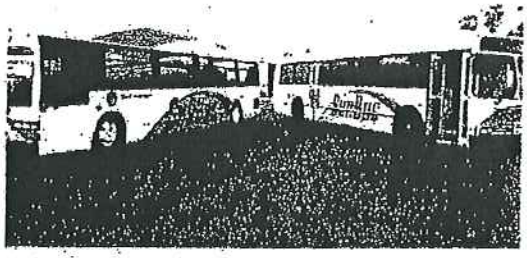












MIAMI-DADE

July 2002

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ALTERNATIVE FUELS ADVISORY COMMITTEE

REPORT AND RECOMMENDATIONS

The Alternative Fuels Advisory Committee was appointed by the County Manager on January 18, 2002, pursuant to Board of County Commissioners' (BCC) Resolution No. R-378-01. The Committee's mission, as stated in the Manager's appointment memo, is "to develop and implement a program to enhance the utilization of alternative fuels in Miami-Dade County." The Committee is comprised of staff representatives of the departments operating significant fleets (GSA, Transit, Aviation) and those having environmental and transportation planning responsibilities (DERM, MPO). The timeline for completing a Committee report and recommendations is July 31, 2002.

The Committee membership includes Doug Yoder, DERM, chair; Mayra Flagler, DERM; Roosevelt Bradley, MDTA; Mario Garcia, MDTA; Mark Glaiber, GSA; Hector Paredes, GSA; Pedro Hernandez, Aviation; Phil Gangi, Aviation; Carlos Roa, MPO; Susan Schreiber, MPO. Additional technical assistance has been provided by Olga Diaz, and Mark Hamilton, GSA; Fred Shields and Daniel Mondesir, MDT; Carlos Andres González, SFRPC; Patricia Gomez, DERM; Arturo Sosa, Aviation.

SUMMARY

After reviewing the available information regarding performance, environmental impacts, and costs of alternative fuels and transportation technologies, the Committee recommends a series of pilot projects to include testing of hybrid (gasoline/electric) cars and hybrid (diesel/electric) buses, electric tugs at the airport, use of biodiesel fuel at the airport, and monitoring of the experience of other transit agencies using a biodiesel fuel blend in their bus fleets. These recommendations recognize the potential efficiencies inherent in the emerging hybrid propulsion systems, but they also recognize that the substantially greater capital cost of hybrid vehicles are unlikely to be recovered through fuel savings over the life of the vehicle. As the market develops, the hybrid vehicles are likely to become less expensive relative to conventional vehicles so that savings in the cost of fuel will be a more significant factor. By using time now to determine the functionality, efficiency, reliability, maintenance costs, and potential resale value of hybrid vehicles, an experiential base will be created upon which to inform future decisions regarding the composition of the County fleet.

Another principal advantage of the hybrid technology is that the current County investment in fueling infrastructure can be utilized without modification. This fact was an important consideration with regard to the use of other alternative fuels such as compressed natural gas. The Committee also recommends that it remain in existence to monitor the implementation of the recommendations and the evaluation of the pilot projects over at least a one-year timeframe. The evaluation should result in another report to establish goals for systematic replacement of the fleet as warranted based upon the pilot projects and upon any other emerging technologies or fuels that may be ripe for practical application.

BACKGROUND

The standard vehicle fuels for many years have been gasoline and diesel oil. Vehicle technologies have been specifically designed for these fuels, as have the supply infrastructures. Several national issues have arisen over the past forty years to generate interest in alternative fuels. Among these issues are localized air pollution resulting in large measure from vehicle emissions; the potential insecurity of depending on foreign oil as a primary energy source (highlighted by fuel shortages such as those of the early 1970's); unpredictable price spikes for conventional fuels that have affected the economy in general and the cost of local government operations in particular; climate change resulting from greenhouse gas emissions, primarily from the combustion of fossil fuels; and, the long term imperative of developing sustainable alternatives to fossil fuels before those limited supplies are depleted. In partial response to these issues, national standards have been established that have decreased the emission of pollutants while increasing the efficiency of conventional gasoline and diesel engines, several types of alternative fuels have been developed to replace or supplement gasoline or diesel in internal combustion engines, electric and combination internal combustion/electric (hybrid) vehicles have been developed, and the adaptation of fuel cells from the space program to become a feasible source of "zero emission" electricity for use in electric vehicles is progressing.

No legal mandates currently exist requiring local governments in Florida to utilize alternative fuels in their operations. Such mandates have been considered in federal statutes and executive orders, and some states, such as California, have imposed their own requirements for alternatively fueled vehicles to address particularly difficult air pollution issues. Miami-Dade County currently meets all national ambient air quality standards and is predicted to continue to meet those standards as current transportation plans are implemented over the next several years. Miami-Dade County has developed and adopted by resolution a "Carbon Dioxide Emission Reduction Plan" (1993) to address the issue of climate change by undertaking a variety of actions to reduce greenhouse gas emissions resulting directly from County operations and by pursuing policies that will encourage sustainable development and encourage other levels of government and residents to make choices that are environmentally sustainable over the long term. Acting now to make County fleet operations more sustainable is completely consistent with those policies.

ALTERNATIVE FUELS

The current list of choices for alternative fuels include Compressed Natural Gas (CNG), Liquified Petroleum Gas (made from natural gas), Liquified Natural Gas (LNG), Ethanol (made from grain or biomass), Methanol (made from petroleum), electricity (produced at power plants and stored in batteries or produced by fuel cells that can operate on hydrogen or petroleum based fuels), and biodiesel (made from soybeans or recycled cooking oils). These fuels vary in comparison with gasoline and diesel in terms of their energy content, emissions from combustion, energy and emissions associated with production, performance and maintenance, engine modification requirements, availability, cost, and infrastructure required for use. As an example, compressed natural gas requires special fueling facilities that can

cost in the range of $750,000 each. The current lack of such facilities would require a very significant infrastructure investment, and the potential resale value of CNG vehicles is very low due to the lack of fueling facilities available to potential buyers. Fuel cells are still in the experimental stage with respect to vehicle applications. Electric vehicles have performance limitations based upon current battery technology.

EXISTING CONDITIONS

Miami-Dade County operates a fleet comprised of approximately 8645 light duty vehicles (cars and trucks typically operating on gasoline; approximately 700 vehicles are "dual fuel" vehicles that can run either on conventional gasoline or an 85% ethanol blend) and 3544 heavy-duty vehicles (including 706 buses (588 full size and 118 Bluebirds), 150 garbage trucks, and other vehicles typically operating on diesel fuel). GSA typically purchases about 1400 new vehicles per year to replace or expand the fleet. During the last fiscal year, the County used about 8.9 million gallons of gasoline and 12.5 million gallons of diesel fuel at a total cost of $20.4 million at current cost to the County ($1.03 per gallon of unleaded gasoline and $.90 per gallon of diesel fuel). Greenhouse gas emissions resulting from the combustion of these fuels are approximately 226,639 tons of CO_2 per year (Table 1 and Figure 1). The capital replacement value of the County fleet is in excess of $500 million. The County operates more than 30 conventional fueling facilities to service the fleet (and the fleets of some municipalities).

Table 1. Fleet Summary

Fleet Vehicles	Fuel Consumption/year	Cost (dollars/year)
8,645 light-duty	8.9 million gallons of gasoline	9.2 million
3,544 heavy-duty	12.5 million gallons of diesel	11.2 million

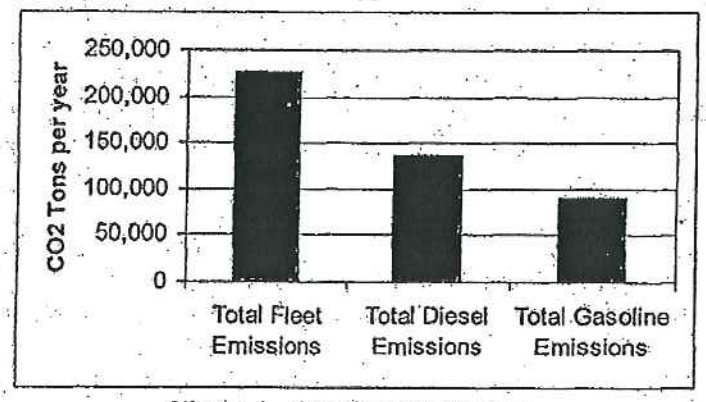

Figure 1. CO_2 Fleet Emissions

Over the years Miami-Dade County has tested a number of alternatively fueled vehicles and analyzed the experiences of other fleet operators to determine the feasibility of moving to other fuels or other types of vehicles. In particular the Miami Dade Transit Agency (MDTA) conducted controlled experiments with buses from 1992 to 1996. In that study similar buses were used to compare the results of using compressed natural gas (CNG), methanol, diesel with a special trap device to reduce particulate (smoke) emissions, dual fuel (CNG and diesel), and conventional diesel as the control. The study demonstrated that the alternatively fueled buses were both less efficient and more expensive to operate than conventional diesel buses. The methanol-fueled buses cost more than twice as much to operate as their diesel counterpart, and the CNG-fueled buses were about 175% more costly to operate. Since the study was completed, "clean diesel" technologies have been introduced that further reduce emissions from standard diesel buses.

THE CURRENT STATE OF TECHNOLOGY

While both gasoline and diesel engines continue to dominate the transportation sector, a variety of technologies are being developed that some day may replace the conventional internal combustion engine. "Hybrid" vehicles are now available that combine electric drives with internal combustion engines, thereby substantially increasing miles per gallon. Light duty vehicles such as the Toyota Prius and the Honda Civic hybrids perform very well and achieve efficiencies of 50 miles per gallon or more. Regenerative braking is used on these vehicles to capture the energy from braking that would otherwise escape as heat. This energy is used to recharge the batteries that operate the electric drive. Similar designs are being applied to buses, which should become commercially available in the next year or two. Hybrid buses have the capacity to double fuel efficiencies from 3.5 miles per gallon to the 6 or 7 miles per gallon range. New York City Transit has an on-going pilot test with 10 hybrid buses, which started in 1998. Also, they have ordered an additional 125 buses for their fleet.

Straight electric vehicles that operate on batteries requiring charging from the electric grid are currently available but require special charging stations and have historically had limited range. There are also electric buses that operate from overhead lines provided for that purpose in some cities, and locally both Metrorail and Metromover are powered by electric motors with electricity supplied at track level. Locally the "Electrowave" shuttle buses in the South Beach area have been the most conspicuous example of battery-powered vehicles in use, but the consensus now is that hybrid vehicles would be a more flexible choice for this type of trolley service.

Fuel cells create electricity through a chemical process that produces water as a by-product. They can use hydrogen or petroleum based fuels to do this. Many people believe that fuel cells will become the energy system of choice for all types of vehicles in the future. At this point fuel cells have been used with some success (though not in a cost competitive way) in buses and cars on a pilot basis. Additional work is ongoing, but it is fair to say that fuel cells have not yet achieved commercial viability as a power source for vehicles.

Compressed Natural Gas, Liquified Petroleum Gas, and ethanol or methanol blends all require some specialized dispensing equipment that requires substantial long-term investment, although "gasohol" (ethanol or methanol blends) utilizes the same basic equipment as gasoline. As other more sustainable alternatives are developed, particularly those alternatives that can utilize existing infrastructure will have a financial advantage over fuels that require construction of special storage and fueling infrastructure (as is the case of CNG and LPG and, to a lesser extent, M85 or E85 (alcohol/gasoline blends that are 85% alcohol and 15% gasoline).

CRITERIA FOR EVALUATING ALTERNATIVE FUELS AND TECHNOLOGIES

Alternative fuels and technologies need to be cost-effective, provide satisfactory performance, reduce harmful emissions to the environment, and be as sustainable as possible. Life cycle cost analysis that takes into consideration capital cost, operating cost, infrastructure needs, maintenance, performance, and equipment re-sale value is appropriate. Similarly, environmental emissions associated with the complete fuel cycle, including extraction of raw materials, processing, transport, storage, and combustion should be compared for each alternative fuel. Regard must be given to the probability that new and more efficient technologies will continue to be developed, so today's decisions may no longer be appropriate in tomorrow's world. This type of analytical review incorporating the most efficient, effective, and sustainable technologies and materials should recur as capital investments are made for the indefinite future.

CONCLUSIONS AND RECOMMENDATIONS

1. Alternative fuels requiring specialized fueling infrastructure should not be considered at this time. This includes Compressed Natural Gas, Liquified Natural Gas, and Liquified Petroleum Gas. The infrastructure costs associated with these fuels would be substantial, up to $750,000 per fueling station. Light duty vehicles designed to run on these fuels carry a purchase premium of approximately $4000 to $6000 per vehicle. CNG buses cost $30,000 or more than diesel buses. The resale value of such vehicles is diminished due to the general lack of fueling facilities. While there is some pollutant emission reduction in comparison with gasoline, those benefits are not present when diesel or biodiesel fuels are compared. The lack of fueling facilities could be a serious impediment to County operations in times of emergency, such as hurricane events.

2. Electric vehicles operating on batteries charged from the electric grid should be considered for specialized (generally off-street) uses. As noted below, the Aviation Department is undertaking a project that will replace the gasoline or diesel powered tugs used to haul luggage carts and other equipment with electric tugs.

3. A pilot project to evaluate the effectiveness and efficiency of hybrid electric light duty vehicles should be initiated. Presently the initial cost of a hybrid vehicle such as the Toyota Prius is approximately $21,000. This vehicle is functionally equivalent to the

Dodge Stratus that is currently purchased at $12,500 as the standard light duty car. Assuming similar maintenance requirements and an operating life of 75,000 miles with the Prius achieving 48.5 miles per gallon (the average of the EPA city and highway driving averages) and the Stratus achieving 24.5 miles per gallon (again, the average of the EPA city and highway driving averages), gasoline would have to reach a cost of $5.61 per gallon before the life cycle cost of the Prius would be equal to that of the Stratus (not including re-sale values) Figure 2. Presently the County purchases gasoline for about $1.03 per gallon. At that rate, the total cost of gasoline for the Stratus over a 75,000 mile lifetime would be about $3150, while the total cost for gasoline for the Prius would be about $1590. The fuel savings of the Prius would be $1560 over the life of the car, making it still $6940 more expensive than the Stratus due to the higher capital cost. Assuming that both cars would last for 100,000 miles (about 8 years of service), the lifecycle cost of the hybrid would still exceed that of the conventional vehicle by $6420 at today's gasoline prices. It is likely that gasoline prices will increase over time, but forecasting such a volatile market is very difficult.

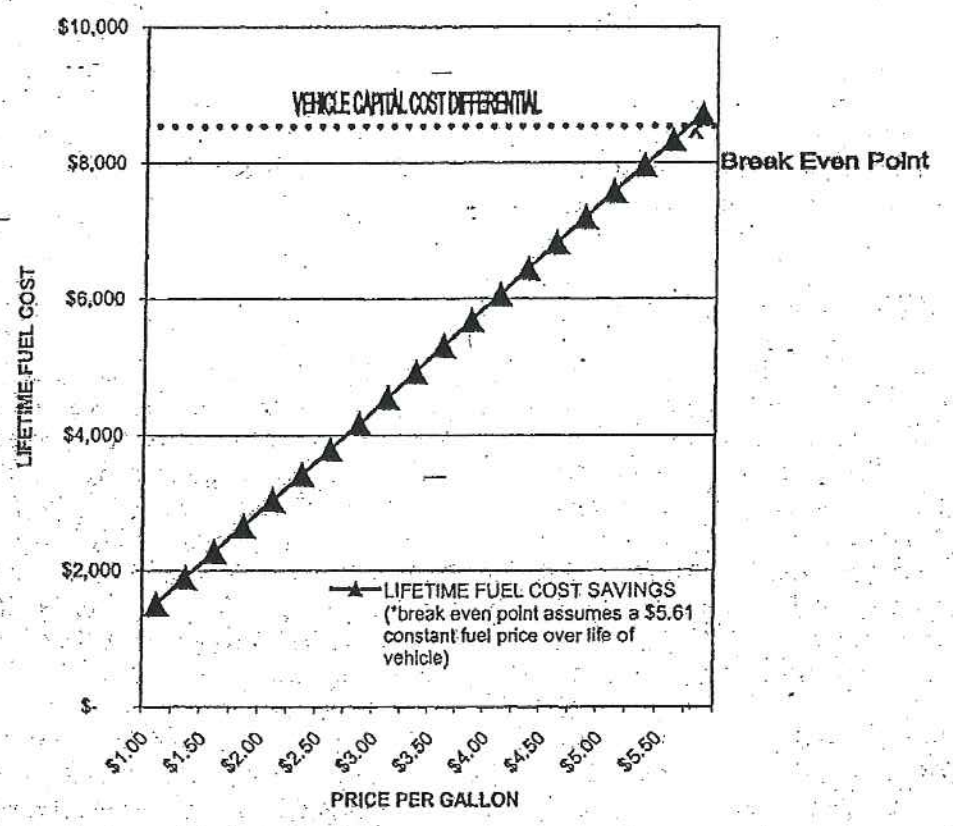

Figure 2. Life Cycle Cost Analysis for Hybrid Vehicles

A life cycle cost analysis prepared by a Toyota dealer for a five-year lifespan concludes that the Prius would actually save about $2317 over that five-year period. They assumed that gasoline would cost $1.35 per gallon and that the Prius would retain 35% of its value at the end of five years while the Stratus would retain 24% of its value. They also assumed that the base price of the Stratus would be about $15,600 (including an extended warranty) rather than the $12,500 price currently available to the County. This price is based upon pricing through the Florida Sheriff's Association and Florida Association of Counties contract. One unknown factor concerning the resale value of hybrid vehicles is the longevity of the battery for the electric drive. In the Prius, the battery (and the electric drive system) carries an 8-year/100,000 mile warranty, but the cost of battery replacement is estimated at $5000. As a Prius approaches the end of the warranty period, the relatively high cost of battery replacement may become a significant factor in the marketability of the vehicle. Actual experience with the re-sale of hybrids will be very helpful in improving the accuracy of the lifecycle cost analysis.

The Prius would, however, reduce greenhouse gas emissions by more than 50% and contribute directly to energy independence and sustainability by virtue of its greater efficiency. Unfortunately, there is at this time no reliable market for avoided greenhouse gas emissions, in part because the United States has declined to be part of the Kyoto Protocol, the worldwide effort to reduce greenhouse gas emissions. There are efforts underway through the Kyoto Protocol to establish a greenhouse gas emissions trading system which would give avoided emissions a monetary value. Greenhouse gas emission trades that have occurred to date place the value of a metric ton of CO2 between $.60 and $3.50. This value would have to approach $350 per ton to offset the capital cost differential between a hybrid vehicle and a conventional vehicle (including the fuel cost savings over the life of the car). As a more viable worldwide greenhouse gas emissions trading system develops in the future, the resulting value of avoided greenhouse gas emissions will further support the acquisition of hybrid vehicles.

The federal government has also failed to require more stringent vehicle efficiency standards (known as Corporate Average Fuel Efficiency or CAFE standards). The requirement for more efficient cars would almost certainly improve the demand for hybrid vehicles, thereby creating more competition and lower prices. As part of the County's adopted plan to reduce greenhouse gas emissions, the Board of County Commissioners and Mayor have recommended to Congress and the President the adoption of more stringent CAFE standards. The State of California has recently enacted its own efficiency standards that will require significantly more efficient vehicles to be sold in California beginning in 2009. Because of the size of the California market, this action may have the effect of a national standard, thereby further improving the market for hybrid vehicles.

It is also possible that hybrid vehicles will have lower maintenance costs or a longer usable lifetime, thereby improving the comparative lifecycle cost. Alachua County has been utilizing a small number of hybrid vehicles for two years. They plan to keep the vehicles for 8 years or 100,000 miles, and they report actual fuel consumption rates averaging 50 miles per gallon. Assuming the longer anticipated life, lower-cost

maintenance, and greater fuel efficiency, the Alachua County life cycle cost projection is approximately equal for the hybrid and a comparable conventional vehicle. It is also probable over time that the cost of hybrid vehicles will decline in comparison with conventional vehicles as more manufacturers enter the market and a greater market share shifts to hybrid vehicles. Currently about 45,000 hybrids are being purchased annually in the world market, but projections indicate sales increasing to about 500,000 vehicles in the next two years as more models become available.

Fleet Management should procure 5 to 10 hybrid vehicles over the next year, including 2 hybrids that have already been delivered. The mix of vehicles should reflect a range of vehicle types (as manufacturers make them available) so that the performance required of the County fleet can be evaluated. Over time these vehicles should be evaluated in terms of lifecycle cost, performance (including emission reductions), and maintenance. Each hybrid vehicle should have special signage to serve as an educational tool for the general public concerning the increased efficiency and reduced emissions associated with these vehicles. Given that the County typically purchases about 1400 new vehicles per year, this test of hybrid vehicles should have minimal budgetary impact while producing important data upon which to base future procurement decisions. Procuring greater numbers of hybrid vehicles at this time could have a significant budgetary impact due to the differential cost of standard and hybrid vehicles. It is prudent to use this time to evaluate the technology in anticipation of a smaller price differential between hybrids and conventional vehicles in the future.

4. The Transit Agency should carefully monitor the development of hybrid buses and, at the appropriate time, procure on a pilot project basis, a small number of diesel electric hybrid buses to test under normal use conditions. Existing data for hybrid buses suggests improved efficiency of up to 60%, improved brake life from regeneration and resulting savings from reduced number of brake relines over the life of the bus, reduction of soot particulates and hydrocarbon emissions by up to 90%, and reduction in greenhouse gas emissions corresponding with increased fuel efficiency. The Transit Agency is already working on a procurement of one hybrid bus. Consistent with funding capacity, up to 5 hybrids should be procured for testing purposes. Conventional buses now cost about $290,000 apiece, and hybrids presently cost up to $450,000 apiece. Again, this significant difference in capital cost is not realistically recoverable through fuel savings.

   A conventional bus gets about 3.5 miles per gallon. Our buses average about 42,000 miles per year. At the current price of $.90 per gallon for diesel fuel, the yearly cost of fuel for one bus is about $10,800. If we assume that a hybrid will double the fuel efficiency, the annual fuel cost per bus would be reduced to $5,400. At that rate, it would take 30 years of service to recover the initial capital cost difference of $160,000 per bus for a hybrid. At current prices, no significant replacement of the bus fleet is financially justifiable. However, the pilot project makes sense in terms of testing functionality and establishing a sound basis for future decisions. Our transit agency will have one of the newest bus fleet in the country as it continues its bus replacement program this fall, so time is available during which to test hybrids and to allow hybrid prices to become more competitive before a decision on systematic fleet replacement is made (Figure 3).

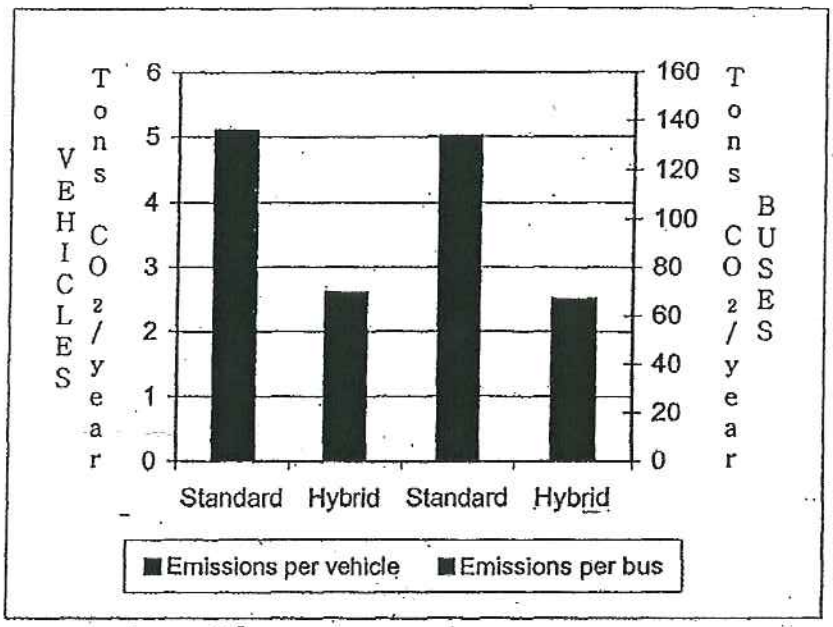

Figure 3. CO_2 Emissions reductions for hybrid vehicles and buses

5. The Transit Agency should monitor the experience of other transit agencies with respect to the use of biodiesel fuel blends as a substitute for conventional diesel fuels. "B20" is a blend of 20% biodiesel, typically made from soybeans, and 80% diesel fuel. There are some concerns that B20 accelerates the deterioration of gaskets and seals in the engine and that engine manufacturers may not be inclined to support warranties if there is a failure that may be caused by the use of B20 instead of regular diesel fuel. Favorable reports have been received from agencies using B20 in heavy-duty vehicles other than buses, but the experience with bus fleets appears to be more limited at this time. Presently the cost of B20 is $1.09 per gallon as compared with $.90 per gallon for conventional diesel. At current consumption rates, the annual cost to the County of replacing conventional diesel with B20 would be approximately $1.8 million with respect to the bus fleet. There may be a time in the future when biodiesel fuels become more competitive as world markets fluctuate and petroleum becomes scarce.

6. The Aviation Department has made application for two grants to support pilot projects in two areas of airside operations. One grant would evaluate the use of biodiesel fuel in the power equipment used to service planes, such as generators. This would reduce substantially the emissions from this equipment. Approximately 277,000 gallons of diesel fuel were used by the Aviation Department last year. The additional cost of using B20 biodiesel would be about $52,000 per year. The use of B20 would reduce greenhouse gas emissions by about 500 tons per year. As a facility where people, equipment, and cars congregate in large numbers, there has historically been a concern about air quality at the airport. The lower emissions of B20 could have particular value in consideration of these facts.

The second Aviation Department grant would test the use of electric tugs in place of internal combustion engine tugs that are used to haul luggage carts and for other purposes. These tugs would be battery operated and would be recharged off the electric grid, similar to golf carts at a golf course. These are "zero emission" vehicles, achieving the maximum possible on-site emission reductions. Based upon the results of these pilot studies, the Aviation Department would fully implement these practices by requiring all airside operators to utilize these fuels and equipment. The grant calls for replacing 13 gasoline powered tugs with electric tugs, saving 33,000 gallons of gasoline per year. There are somewhat more than 700 tugs currently in use at the Airport with the potential to be replaced by electric tugs. Conversion of all of these tugs would reduce fuel consumption by 1,800,000 gallons per year and reduce emissions by up to 18,000 tons per year of CO2. The use of additional electricity off the electrical grid will cause some increase of pollutant and greenhouse gas emissions at the power plants serving the grid, but in general those emissions will be less and will be more dispersed than direct emissions at the airport.

7. The Alternative Fuels Advisory Committee should continue to meet periodically to track the implementation of approved recommendations and to prepare another report to include the results of the pilot projects and recommendations for the fleet based upon those results and other appropriate factors at that time. It is anticipated that such a report could be completed within 18 months, allowing sufficient time to generate and analyze data from the pilot studies.

REFERENCES

- www.fueleconomy.gov
- www.tri-met.org/hybridbus.htm
- www.doe.gov
- www.nrel.gov
- www.biodiesel.org
- www.ccities.doe.gov
- www.eren.doe.gov/EE/transportation.html

MEMORANDUM

TO: Those Listed Below

DATE: January 18, 2002

SUBJECT: Alternative Fuels Advisory Committee Appointments

FROM: Steve Shiver, County Manager

On April 10, 2001 the Board of County Commissioners approved Resolution No.R-378-01 directing me to execute a Memorandum of Understanding with the U.S. Department of Energy redesignating Miami-Dade County as member of the Gold Coast Clean Cities Coalition. This reaffirmed the County's commitment to the coalition and its goals.

The Clean Cities Program, sponsored by the U.S. Department of Energy, supports public-private partnerships that deploy alternative fuel vehicles (AFVs) and build supporting infrastructure. By encouraging AFV use, the Clean Cities Program helps enhance energy security and environmental quality at both the national and local levels. In 1993 the Florida Gold Coast Clean Cities Coalition was created by Executive Order of the Governor and our subsequent Clean Cities designation by the U.S. Department of Energy.

The Florida Gold Coast Clean Cities Coalition is a public/private advisory board composed of state legislators, local government representatives, federal and state agencies, and private sector representatives concerned with alternative fuel programs. The role of the Coalition is to provide a fuel neutral policy direction to maximize the use of vehicles operating on clean alternative fuels throughout the five county area. This area includes Broward, Martin, Miami-Dade, Monroe and Palm Beach counties. The Department of Environmental Resources Management (DERM) and General Services Administration (GSA) staff represents Miami-Dade County in the Coalition.

The resolution approved by the Board of County Commissioners specifically directs the formulation of a plan that expands the use of alternative fuel transportation in the County. In order to accomplish this task, I am appointing a committee comprised of representatives from different County agencies that deal with fleets or transportation issues. In utilizing this approach, we can bring together valuable talent resulting in a plan addressing both short term and long-term recommendations and actions regarding alternative fuel use. The Committee's mission shall be to develop and implement a program to enhance the utilization of alternative fuels in Miami-Dade County.

The Alternative Fuels Advisory Committee membership is as follows:

Dr. Douglas Yoder, Committee Chair and Assistant Director, DERM

Hector Paredes, Assistant Facilities Supervisor, General Services Administration

Roosevelt Bradley, Asst. Director of Bus Operations, Transit Agency

Mario Garcia, Chief of Transit Planning, Transit Agency

Pedro Hernandez, Manager of Environmental Engineering, Aviation Department

Phil Gangi, Fleet Management Facilities, Aviation Department

Carlos Roa and Susan Schreiber, Transportation System Analysts, Metropolitan Planning Organization

Mayra Flagler, Urban CO2 Reduction Program Manager, DERM

The Committee shall meet as necessary and prepare a status report on is progress within four months of its appointment. The final report and recommended plan shall be completed by July 31, 2002.

cc:
Pedro G. Hernandez, Asst. County Manager
Bernard McGriff, Director, GSA
Danny Alvarez, Director, Transit Agency
Angela Gittens, Director, Aviation Department
Jose Luis Mesa, Director, MPO
John W. Renfrow, Director, DERM
Douglas Yoder, Asst. Director, DERM
Roosevelt Bradley, MDTA
Hector Paredes, GSA
Mario Garcia, Transit
Pedro Hernandez, Aviation
Phil Gangi, Aviation
Carlos Roa, MPO
Susan Schreiber, MPO
Mayra Flagler, DERM

Stephen P. Clark
Government Center
111 N.W. 1st Street
Miami, FL 33128

MASTER REPORT

File Number: 010880

File Number: 010880	File Type: Resolution	Status: Adopted
Version: 0	Resolution: R-378-01	Control: County Commission
File Name: MOU US DEPT OF ENERGY REDESIGN MDC AS CLEAN CITY		Introduced: 4/6/01
Requester:	Cost:	Final Action: 4/10/01
Ag. Date: 4/10/2001		Ag. Item: 9A4SUBSTITUTE

Notes:

Title: RESOLUTION DIRECTING THE COUNTY MANAGER TO EXECUTE A MEMORANDUM OF UNDERSTANDING (MOU) WITH THE UNITED STATES DEPARTMENT OF ENERGY REDESIGNATING MIAMI-DADE COUNTY AS A CLEAN CITY; DIRECTING THE COUNTY MANAGER TO DEVELOP AND IMPLEMENT A PROGRAM TO ENHANCE THE UTILIZATION OF ALTERNATIVE FUEL IN MIAMI-DADE COUNTY; AND URGING THE PARTICIPATION OF THE U.S. DEPARTMENT OF ENERGY IN PLACING ALTERNATIVE FUEL VEHICLES IN THE GOLD COAST

Indexes: UNITED STATES DEPARTMENT OF ENERGY
MEMORANDUM OF UNDERSTANDING

Sponsors: Katy Sorenson

Sunset Provision: No

Effective Date:

Expiration Date:

History of Legislative File 010880

Ver	Acting Body	Date	Action	Sent To	Due Date	Returned	Pass/Fail
0	County Attorney	4/6/01	Assigned	Joni Coffey			P
0	Board of County Commissioners	4/10/01	Adopted				

Body:

WHEREAS, the counties of Martin, Palm Beach, Broward, Miami-Dade and Monroe have been designated by the United States Department of Energy as the Florida Gold Coast Clean Cities Coalition; and

WHEREAS, in 1994 these Gold Coast counties received a Clean Cities designation and subsequently were redesignated in 2000; and

WHEREAS, the Clean Cities Coalition is a public/private advisory board whose role is to provide a fuel neutral policy direction to maximize the use of vehicles operating on clean alternative fuels throughout the five-county area; and

WHEREAS, the regional policy plans for both the South Florida and Treasure Coast Regional Planning Councils include the goal of improving air quality in their respective geographic areas which encompass the Gold Coast; and

WHEREAS, Miami-Dade County membership in the Clean Cities Coalition from 1994-1999 resulted in multiple grant and rebate opportunities; and

WHEREAS, Miami-Dade County wishes to reaffirm its commitment to the coalition,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY

COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA:

Section 1. The County Manager is hereby directed to execute the Addendum to the Memorandum of Understanding (MOU) for the Clean Cities Program, in substantially the form attached hereto.

Section 2. The County Manager is further directed to develop and present to this Board a Clean Cities plan for Miami-Dade County, which will contain at a minimum the following goals:

a. to expand the use of alternative fuel transportation in Miami-Dade County;

b. to develop new infrastructure to allow and encourage the utilization of alternative fuel, and/or to increase the utilization of existing infrastructure by alternative fuel transportation;

c. to contribute to economic development through the support of alternative fuel industry;

d. to promote the benefits of using alternative fuel vehicles;

e. to support and expand public access to information on alternative fuels and technology; and

f. to gain legislative support and funding for alternative fuel vehicle programs.

Section 3. The County Manager is further directed to promote Miami-Dade County's activities and achievements under the Clean Cities Program through the local and national media. The County Manager is further directed to educate other local governments regarding alternative fuel vehicles, both independently and in cooperation with the U.S. Department of Energy.

Section 4. This Board hereby approves and urges the participation of the U.S. Department of Energy in its efforts to place alternative fuel vehicles in the Gold Coast.