



**Council**  
**Communication**  
Office of the City Manager

<b>Date</b>	February 11, 2008
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<b>Agenda Item No.</b>	<b>54</b>
<b>Roll Call No.</b>	<b>08-</b>
<b>Communication No.</b>	<b>08-076</b>
<b>Submitted by: Merrill Stanley, Deputy City Manager</b>	

**AGENDA HEADING:**

Approving Bid No. V07-047 for Purchase of 36 Vehicles for City Fleet.

**SYNOPSIS:**

Recommend approval of purchase of 36 vehicles for the City fleet as part of Fleet Services' annual purchasing plan. The vehicles will replace City vehicles that meet or exceed established replacement criteria.

**FISCAL IMPACT:**

Amount: \$837,387.88

Funding Source:

\$752,567.88 - FY 2007-08 Operating Budget, Equipment Replacement Fund, PWK010407, page 322

\$84,820 - Master Lease Agreement, FY 2007-08 Operating Budget, Debt Administration, FIN900100, page 155.

**ADDITIONAL INFORMATION:**

As part of the Fleet Services annual purchasing plan, bids were solicited for 38 vehicles (17 different bid items) to replace City vehicles meeting or exceeding established replacement criteria. Two bid items, each of which contain one vehicle for the Aviation Department, were included as part of the acquisition strategy of Centralized Fleet Management. These vehicles, however, are not included in this bid award; their purchase was approved by the Airport Board on February 5, 2008.

Twenty one bids were mailed and responses were received from seven area dealerships. The bids received are a result of Fleet Services' initiated specification development, with input from the user departments. This approach is consistent with Centralized Fleet Management, which intends to increase the utilization of replacement vehicles while reducing the environmental impact of the fleet's operation. Bid responses were compared to recently published State of Iowa Department of Administrative Services contracts, and purchasing off the State Contract was recommended when it resulted in the lowest cost alternative. The resulting bid award recommendations were based on bidders that met minimum specifications, after a 1% local preference allowance.

In instances where alternative fuel or technology vehicles were proposed, differences in acquisition costs and lifetime (100,000 miles) fuel costs were estimated and included in the cost comparison. Bid evaluations include an analysis of the lifetime fuel costs based on City Fleet data where available, or EPA fuel efficiency ratings where fleet data was not available. A variety of gas-electric hybrid, E85 capable engines, and Diesel engine technology alternatives were bid by vendors, and were considered.

Conventional gasoline engines are recommended when contrasted to E85 capable engines and gas-electric hybrids. E85 capable vehicles are recommended for 17 vehicles because they are the same vehicle in either case; however, the use of E85 fuel is not recommended because of an estimated increase in lifetime fuel costs of \$85,000. The purchase of two additional E85 capable vehicles is not recommended due to increased acquisition costs of \$17,000 and estimated lifetime fuel costs of \$2,600.

The purchase of eight vehicles with diesel engines with an increased acquisition cost of \$46,000 and increased lifetime fuel costs of \$9,000 is recommended because of the increased fuel efficiency of the diesel engines and the opportunity for additional fuel savings and a positive environmental impact provided by the use of up to 20% (B20) biodiesel fuel. Additions to the fleet of diesel engine powered trucks will demonstrate continued leadership in the year round use of renewable biodiesel fuel. Currently, the City is one of just a few Midwestern municipalities that utilize 5% (B5) throughout the year. Fleet Services will increase the percentage of biodiesel to up to 20% (B20) during the warmest weather months.

This practice of maximum utilization of biodiesel will set Des Moines apart from other entities currently considering or using biodiesel on a limited basis. Fleet Services staff evaluations have determined that additional environmental benefits can be achieved with the use of B20 biodiesel fuel. These include an 8% increase in fuel efficiency when compared to conventional gasoline engines. When compared to gasoline emissions, carbon dioxide emissions are reduced by one ton for each 100 gallons of biodiesel consumed. To further reduce the environmental impact of diesel engines, these units meet the 2007 clean air emissions standards of 50% reduction in Nitrogen Oxides (NO<sub>x</sub>) and a 90% reduction in Particulate Matter (PM) or soot compared to the earlier models of diesel engines.

Bids for four hybrid alternative vehicles are not recommended due to their higher acquisition cost, which total \$34,000, and a lifetime fuel cost savings of only \$3,500. Five vehicles did not have an alternative fuel or technology option proposed by bidders.

Two bid items are not recommended to be awarded as there were not bids received for item eight, a four-wheel drive passenger van. A small two-wheel drive passenger van, substantially compliant with the specifications, is available from the State Contract, and is recommended for purchase. Item seven, a crossover vehicle, is not recommended to be awarded because a standard SUV better meets the operational needs of the department and is competitively priced.

A summary comparison of each type of vehicle bid, showing the acquisition and fuel costs of standard fuel versus E85, diesel, and hybrid follows. Staff recommendations have been shaded in gray.

## Vehicle Bid Summary

Item #	QTY	Alternative Description	Standard Acquisition cost	Green Alt Acquisition cost	Green Premium
<b>E85 Engine</b>					
1	14	Marked Patrol Cars	\$ 300,342.00	\$ 300,342.00	\$ -
6	2	Large SUVs	43,579.84	60,285.92	16,706.08
9	1	Mid sized sedan	15,308.67	15,308.67	
10	2	Large sedans	42,782.00	42,782.00	
19		Subtotal Alt E85 acquisition costs	\$ 402,012.51	\$ 418,718.59	\$ 16,706.08
		Increased lifetime fuel costs			\$ 87,808.80
		Subtotal Green premium			\$ 104,514.88
<b>Diesel Engine</b>					
2	3	Cab and Chassis (animal control)	\$ 69,114.00	\$ 85,662.00	\$ 16,548.00
5	1	Extended Cargo Van (prisoner wagon)	17,560.94	24,996.79	7,435.85
12*	1	9200 GVW crew cab pickup truck	27,769.87	33,185.89	5,416.02
13	1	9200 GVW Pickup truck	26,535.00	32,051.00	5,516.00
14	1	16,000 GVW truck w/service body	40,778.00	46,142.00	5,364.00
15	1	16,000 GVW truck w/service body	32,714.00	38,078.00	5,364.00
8		Subtotal Alt Diesel engine	\$ 214,471.81	\$ 260,115.68	\$ 45,643.87
		Increased lifetime fuel costs			9,196.75
		Subtotal Green premium			\$ 54,840.62
<b>Gas Electric Engine</b>					
3	4	Small SUV	\$ 78,359.88	\$ 112,111.88	\$ 33,752.00
		Decreased lifetime fuel costs			(3,493.57)
		Subtotal Green premium			\$ 30,258.43
<b>No Green Alternative Bid</b>					
4	3	Standard SUV	\$ 63,515.85	\$ 63,515.85	\$ -
8	1	Small passenger van	17,021.01	17,021.01	
11	1	Compact pickup truck	16,362.95	16,362.95	
5		Subtotal No Green Alternate Bid	\$ 96,899.81	\$ 96,899.81	\$ -
<b>Grand Totals</b>					
36		Vehicles			
		Acquisition Costs	\$ 791,744.01	\$ 887,845.96	\$ 96,101.95
		Net Increased Fuel Costs			93,511.98
		Green Premium			\$ 189,613.93
				* Acquisition costs are net after trade in	
<b>Recommended for award</b>				<b>\$ 837,387.88</b>	

**PREVIOUS COUNCIL ACTION(S): NONE**

**BOARD/COMMISSION ACTION(S):** Airport Board

Date: February 5, 2008

Resolution No: A08-034 and A08-035

Action: Moved by Brooks to approve bid items for purchase of two vehicles for Aviation Department.  
Motion Carried: 7-0-0-0. Yeas: Ashman, Brooks, Erickson, Gentry, Hansell, Ross, and Ward Nays: 0  
Abstained: 0 Absent: 0

**ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE**