

COUNCIL WORKSHOP ITEM

ITEM: Vehicle Purchase
DATE: February 22, 2001
PREPARED BY: Jerry Sprecher, Deputy Village Manager
PURPOSE: Authorize Purchase

DISCUSSION:

We have placed on hold for several months the purchase of a variety of vehicles scheduled for the 00/01 budget year. As of today's date, we have been advised that the City of Chicago and the Gas Technology Institute have completed their long-awaited agreement for the funding of compressed natural gas (CNG) fueling stations. It is hoped that this will result in our return to Council shortly with the final agreement and a purchase request which includes CNG vehicles.

The recommendation herein is the first of at least two purchase requests within the next few weeks to buy vehicles from the current budget and the 01/02 Budget. The current request is to buy various conventional vehicles, with our recommendation to purchase CNG vehicles to follow. To some extent the delay in the agreement for the fueling center has served to help us reevaluate the mix of CNG and conventional fuel vehicles to be purchased. Due to the soon-anticipated request for the purchase of CNG-fueled vehicles, this report will provide an overview of our requirements under Clean Air and Clean Fuel regulations.

Regulatory Considerations

The *Clean Air Act* (CAA) requires that 70% of the model year 2001 vehicles purchased by the Village, with a gross vehicle weight rating (GVWR) less than 8,500 lbs., meet EPA emission requirements of a clean fuel vehicle (CFV). For vehicles with a GVWR of less than 26,000 lbs., 50% of the new vehicles must be clean fuel vehicles.

The *Energy Policy Act* (EPACT) requires that beginning with the 2002 model year, 20% of our new vehicle purchases must be alternative-fuel vehicles. The funding of the CNG station will provide a tremendous convenience to the Village in the future as we meet the alternative-fuel vehicle purchase requirements and serve as a regional fueling center at the same time.

The Village is required to comply with both of the above regulations, although the purchase of any CNG vehicle will generally surpass the emissions ratings required by the Clean Air Act. Vehicles meeting Clean Air Act standards must be designated *Low Emission Vehicle* (LEV). However, there are levels of LEV vehicles that meet increasingly more stringent emission standards: *Inherently Low Emission Vehicle* (ILEV), *Ultra Low Emission Vehicle* (ULEV), and *Zero Emission Vehicle* (ZEV). These designations are based primarily on the level of emission of two pollutants: nitrogen oxides and hydrocarbons. Only electric vehicles meet the most stringent, ZEV designation. CNG vehicles generally fall into the ULEV category.

Cost Considerations/Incentives

As a general statement, light-duty CNG vehicles cost \$1,000 to \$6,000 more than conventional fuel vehicles. Fuel costs, however, range from 15%-40% cheaper for CNG vehicles. An EPA comparison of Ford F-150 pick-ups, for example, shows an annual fuel cost differential of \$435 in favor of the CNG vehicle. On a six-eight year life cycle, that reduces the overall cost of the vehicle by \$2,610-\$3,480. The same kind of comparison with the Ford Crown Victoria results in a \$450 per year fuel savings for the CNG model. Vehicle rebates for CNG vehicles are offered up to 80% of the cost differential between CNG and non-CNG new vehicle costs, up to a maximum of \$4,000 per vehicle. This rebate, combined with better fuel economy, makes the initial cost premium of the CNG vehicle more palatable.

The Illinois Clean Fuel Program also provides credits associated with fleet compliance of clean fuel vehicle purchases. For example, 70% of model year 2001 light-weight vehicles must be LEVs. If ten vehicles are purchased, and all are LEVs, the three additional vehicles result in a credit. The amount of credit varies according to the type of vehicle. Similarly, additional credits are gained from purchasing vehicles that exceed the LEV designation, e.g., ULEV. The value of these credits is that they may be used in future years to compensate for vehicle purchase(s) that do not meet clean fuel requirements, or they may even be marketed to other fleets that do not comply.

Other Considerations/Purchase Request

It should be noted that there also exists *flexible fuel* vehicles, which can burn conventional gasoline or any mix of ethanol up to E-85 fuel (85% ethanol). There is an additional incentive to purchase these vehicles, via a rebate program from the Illinois Department of Commerce and Community Affairs (DECCA) for flex fuel purchases, up to \$800 per vehicle. While this is a good incentive and E-85 is certainly promoted in Illinois, the flex fuel vehicle itself carries no impact on the emissions designation or the related credit program of the IEPA. As a practical matter, the logistics of fueling are such that flex fuel vehicles purchased by the Village will normally be fueled with conventional gasoline. Nonetheless, the opportunity is there to use E-85 fuel, and it is anticipated that more of these fueling stations will be generated in the future. The current purchase recommendation includes the Ford Taurus and Ranger, and they are flex fuel models.

As noted, there are a variety of vehicle purchases pending for this year, including Police squad car purchases charged to the 01/02 Budget, with a March 1 order deadline because of the State Contract requirements. Council will recall that several months ago we looked at alternatives for purchasing vehicles, ranging from all CNG-fueled vehicles to a mix of both conventional and CNG vehicles. The temptation, with a new CNG fueling facility pending, remains to purchase as many CNG-fueled vehicles as possible. However, it does make sense to purchase a mix of CNG and conventional vehicles, for the following reasons:

1. Our commitment to alternative fuel vehicles is long-term. We should not reasonably expect that all new vehicles purchased should be CNG-powered.
2. In addition to the initial higher cost of CNG vehicles, CNG vehicle offerings are more limited.

3. Until CNG fueling facilities are more readily available we need to ensure that we have vehicles which can be readily fueled. This is particularly important for vehicles that may be used for more than local travel.
4. We continue to meet or exceed Clean Air requirements with the requested purchase.

Upon completion of the fueling facility agreement, it is anticipated that staff will promptly follow with a request to purchase several CNG fuel vehicles.

It is requested at this time that Council authorize the purchase of various vehicles for the Building Services, Code Services, Fire, Police, and Water Programs. All vehicles are non-CNG fueled vehicles; all except the Crown Victorias are designated as low emission vehicles (LEV). It should also be noted that the Crown Victorias are requested to be purchased from the 2001/02 Budget. This request is due to a March 1 cut-off date for ordering these vehicles under the State's purchasing contract. Due to the timing of the State contract we have purchased squads in this manner for several years.

ATTACHMENT:

Recommended Purchase- cost summary

Vehicle listing of 00/01 vehicles and 01/02 vehicles requested for purchase prior to 5/1/01

RECOMMENDATION:

It is requested that Council authorize on February 27 the purchase of vehicles at the following net cost:

(1) Six (6) Ford Crown Victoria sedans from Madden Ford: \$102,166.

The request for Council approval on February 27 is needed to meet the order deadline from the State, for the Crown Victoria purchase. Staff regrets the need to request immediate Council action.

(2) The following purchase request can wait for approval on the March 6th Consent Agenda:
Eight (8) Ford Taurus sedans from Terry's Ford: \$112,338.
One (1) Ford Ranger pickup from Terry's Ford: \$12,280.

The Taurus sedans and the Ranger pick-up would all be purchased from the 2000/01 Budget. Their total cost is \$17,108 under budget. The six Crown Victoria vehicles are to be purchased from the 2001/02 Budget, and their total cost is \$3,434 less than the proposed budget.

Anticipated Fleet Purchases remaining in 00/01				(Bold print = vehicles requested February 27 Workshop)				
Vehicle #	Year and Make	Vehicle Life	Program	00/01 Budget	2001/02	Purchase Request	Emissions/ Fuel	EPA Compliance
New	Pickup Truck							
841	1988 Chev Caprice	6	Inspect.	\$15,453		TBD	CNG	Exceeds
854	1990 Chev Caprice	8	Eng.	\$18,000		TBD	CNG	Exceeds
144	1991 Chev Blazer	8	Eng.	\$15,454		TBD	CNG	Exceeds
New	Pickup Truck	8	Traffic	\$22,076		TBD	CNG	Exceeds
New	Sedan	8	Streets	\$15,454		TBD	CNG	Exceeds
887	1994 Chev Caprice	8	PW Water	\$15,454		\$14,479	LEV/Flex	Meets
814	1996 Crown Vic	6	PD Invest	\$17,661		\$12,013	LEV/Flex	Meets
820	1997 Crown Vic	3	PD Patrol		\$17,600	\$17,101	Std.	Exempt
827	1998 Crown Vic	3	PD Patrol		\$17,600	\$17,101	Std.	Exempt
823	1997 Crown Vic	3	PD Patrol		\$17,600	\$17,101	Std.	Exempt
825	1998 Crown Vic	3	PD Patrol		\$17,600	\$17,101	Std.	Exempt
826	1998 Crown Vic	3	PD Patrol		\$17,600	\$17,101	Std.	Exempt
782	964 1993 Chev Caprice	3	PD Patrol		\$17,600	\$17,101	Std.	Exempt
872	1991 Chev Caprice	6	Fire Prev	\$16,558		\$14,479	LEV/Flex	Meets
New	Sedan	6	Code	\$15,453		\$14,479	LEV/Flex	Meets
New	Sedan	6	Code	\$15,400		\$14,479	LEV/Flex	Meets
New	Sedan	6	Code	\$15,400		\$14,479	LEV/Flex	Meets
New	Sedan	6	Code	\$15,400		\$14,479	LEV/Flex	Meets
191	1998 Chev Van	6	Code	\$15,400		\$14,479	LEV/Flex	Meets
New	Pickup Truck	3	PSRT	\$23,153		TBD	CNG	Exceeds
New	Pickup Truck	8	Bldg Svcs	\$15,000		\$14,326	LEV/Flex	Meets