## MEMORANDUM

TO: Mayor Prussing

FROM: City Comptroller

RE: Comparison of Costs of Hybrid Vehicle vs. Subcompact

DATE: January 9, 2008

One of the Council and City goals is to reduce the fuel usage of city vehicles. Toward that end, the City has replaced the 2 meter patrol vehicles with hybrid vehicles and has ordered a hybrid vehicle to replace the Ford Taurus in CD. In both these instances, it made sense from both an operational and financial consideration to purchase the hybrid.

The City also needs to replace a subcompact vehicle used by the inspectors in CD. Because the cost of this new Ford Focus subcompact under state purchasing is remarkably low \$12,000 (cost of hybrid under state purchasing is \$24,000), the financial cost of purchasing a hybrid vehicle in this case is considerably higher and there is no operational reasons to purchase the hybrid.

Attached is a spread show showing the present value cost comparison. Even assuming the cost of gas will increase 10% annually (\$7.78/gallon in year 10), the present value of the subcompact is \$15,991 and the present value of the hybrid is \$25,961 or a savings of \$9,970 to purchase the Ford Focus subcompact.

While not abandoning the goal of purchasing more fuel efficient vehicles, my recommendation is to purchase the subcompact in this instance and continue to evaluate every vehicle purchase in the future.

If you agree, do you feel we need to bring this question to the attention of the City Council?

## COMPARISON OF HYBRID CAR PURCHASES 01/09/08

PRICE OF HYBRID \$ 24,000
PRICE OF SUBCOMPACT \$ 12,000
CURRENT PRICE OF GAS/GALLON \$ 3
ASSUME GAS PRICE INCREASE 10%.
ASSUME SUBCOMPACT MILEAGE 25 MPG
ASSUME HYBRID MILEAGE 30 MPG

ASSUME HYBRID MILEAGE
ASSUME SAME REPAIR COST

FOCUS	\$	OCUS 3.00 CE/GAL.	MPG 25 # GAL.		FUEL \$\$	PV FACTOR	PV\$
PURCHASE PRICE FUEL YR 1 FUEL YR 2 FUEL YR 3 FUEL YR 4 FUEL YR 5 FUEL YR 6 FUEL YR 7 FUEL YR 8 FUEL YR 9 FUEL YR 10 RESIDUAL VALUE = \$	\$ \$ \$ \$ \$ \$ \$	3.30 3.63 3.99 4.39 4.83 5.31 5.85 6.43 7.07 7.78	132 132 132 132 132 132 132 132 132	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- 436 479 527 580 638 702 772 849 934 1,027	0.952 0.907 0.864 0.823 0.784 0.746 0.711 0.677 0.645 0.614 0.585	\$ 12,000 415 435 455 477 500 523 549 575 602 631 (1,170)
\$7.30/GAL. YR 10 =		10%					\$ 15,991
HYBRID	\$ PRIC	3.00 CE/GAL.	MPG 30 # GAL.		FUEL \$\$	PV FACTOR	PV\$
PURCHASE PRICE FUEL YR 1 FUEL YR 2 FUEL YR 3 FUEL YR 4 FUEL YR 5 FUEL YR 6 FUEL YR 7 FUEL YR 8 FUEL YR 9 FUEL YR 10 RESIDUAL VALUE = \$	\$ \$ \$ \$ \$ \$ \$ \$	3.30 3.63 3.99 4.39 4.83 5.31 5.85 6.43 7.07 7.78	110 110 110 110 110 110 110 110 110	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	363 399 439 483 531 585 643 707 778 856	1.00 0.952 0.907 0.864 0.823 0.784 0.746 0.711 0.677 0.645 0.614	\$ 24,000 346 362 379 398 417 436 457 479 502 526 (2,340)
\$7.30/GAL. YR 10 =		10%					\$ 25,961