# DPW OPERATIONS DIVISION - FLEET Services and Fleet Operations

RESEARCH AND ANALYSIS SECTION LEGISLATIVE REFERENCE BUREAU

#### Executive Summary: 2011 City of Milwaukee Proposed Budget

Hearing Date: October 22, 2010

- Fleet Services has been awarded grants that will provide marginal funding for up to 61 vehicles that could be purchased as either hybrids or alternativefueled vehicles. Of these, 38 heavy duty trucks would likely be equipped with compressed natural gas (CNG) engines, and the remaining 23 units could be hybrid electric vehicles. In addition, all diesel-powered equipment units that are purchased will be using biodiesel, which is classified as an alternative fuel.
- Fleet Operations has had challenges meeting the salary budget in 2010 due to attrition rates below what was anticipated. In the 2011 Proposed Budget, the PCA is increased to 3% of all Fleet Operations salaries. Shortfalls in the Fleet Salaries accounts are anticipated if predicted attrition does not take place.
- 3. A total of 105 pieces of new equipment have been received and placed in service, while 114 vehicles and pieces of equipment were sold off or disposed of by Fleet Services as of October 7, 2010, for a net decrease of nine pieces. These included units owned by DPW divisions and the Milwaukee Police Department. The net proceeds to this point are as follows:
  - DPW units: \$65,901.41
  - MPD units: \$45,122.03
  - Total: \$111,023.44

4. The Major Capital Equipment program focuses on equipment replacement, including garbage and recycling collection, snow and ice control and pickup and dump trucks for use as pool equipment. The requested funding was reduced by \$7.5 million (58%). The level of funding is unchanged from 2010 and approximately \$500,000 below the budgeted average of the last five years. The total 6-year capital request is \$77,674,915.

Category	2009 Actual	2010 Budget	% Change	2011 Proposed	% Change
Total Expenditures	\$28,170,730	\$23,514,609	-16.5%	\$24,795,867	+5.4%
Positions	817	674	-17.5%	673	-0.1%
FTE's (all)	232.8	210.17	-9.7%	198.92	-5.4%

**Personnel:** The 2011 Proposed Budget includes 673 authorized positions for the DPW Operations Administration, Fleet Services and Fleet Operations / Dispatch sections. This is a proposed reduction of one position from the previous year for these three sections.

Fleet Operations has had challenges meeting the salary budget in 2010 due to attrition rates below what was anticipated. In the 2011 Proposed Budget, the PCA is increased to 3% of all Fleet Operations salaries. Shortfalls in the Fleet Salaries accounts are anticipated if predicted attrition does not take place.

The Environmental Policy Analyst, previously under the Environmental Services Section and in the Forestry budget, has been moved to the Operations Administration Section to reflect duties that include work for all of the Operations Section rather than solely the Forestry Section.

**Sales of Surplus Fleet Vehicles:** A total of 105 pieces of new equipment have been received and placed in service, while 114 vehicles and pieces of equipment were sold off or disposed of by Fleet Services as of October 7, 2010, for a net decrease of 9 pieces. These included units owned by DPW divisions and the Police Department. The net proceeds to this point are as follows:

DPW units: \$65,901.41 <u>MPD units: \$45,122.03</u> Total: \$111,023.44 As new equipment is placed in service, used equipment is retired from service and sold as surplus. This equipment is sold at about 15 various sales each year, including auctions and on-line bids. Additionally, 28 pieces of equipment are awaiting sale at auction or pending on-line sales. Occasionally, surplus equipment may be held and used longer. An example of this would be keeping a replaced truck during colder months for use during snow and ice operations since more frequent breakdowns occur during this type of severe service. In addition, warmer months have proven to be the most favorable time to sell used equipment. Fleet Services will continue to monitor use of equipment, identifying potential fleet reductions, and selling off replaced units as soon as practical.

**Hybrid or Alternative Fueled Vehicles:** Fleet Services has been awarded grants that will provide marginal funding for up to 61 vehicles that could be purchased as either hybrids or alternative fueled vehicles. Of these, 38 heavy duty trucks would likely be equipped with compressed natural gas (CNG) engines, and the remaining 23 units could be hybrid electric vehicles. In addition, all diesel-powered equipment units that are purchased will be using biodiesel, which is classified as an alternative fuel.

DPW began using hybrid vehicles in late 2007 with 11 small SUV-type utility trucks (Ford Escape) in certain work situations. Five additional hybrid SUVs and cars were purchased in late 2009. Two heavy duty diesel-electric hybrid aerial trucks were also added to the fleet.

### **DPW OPERATIONS DIVISION - FLEET SERVICES AND FLEET OPERATIONS**

Even though many of the hybrid cars and trucks have been on the road for well less than a year, Fleet Operations has already computed a fuel savings of \$17,630. Non-hybrid cars have an average operating cost of \$0.1171 per mile, while the hybrids are costing \$0.0679 – a difference of about one-half cent per mile. The real difference is the fuel economy. Where regular cars in the fleet may average 16-18 MPG, the hybrid cars are averaging 36-42 mpg. The SUVs also show a significant improvement in fuel economy, from 11-13 MPG with a regular SUV to 23-30 MPG with the hybrids.

Outside of grant-assisted purchases, the switch to new technology must be evaluated on a case-by-case basis, as each hybrid option and alternative fuel has different costs and paybacks. Purchase decisions are based on factors such as available funding, anticipated mileage, applicable grants, fuel efficiency and marginal cost payback and value to the environment in terms of reduced pollution. However, with fuel prices constantly changing, it makes evaluation a moving target. A vehicle purchase that makes sense when gasoline is selling for \$4 a gallon may not make sense when gasoline is selling for \$2.50 a gallon.

**Grants:** Fleet received three grants in 2010 which will affect vehicles and equipment to be purchased and delivered in 2011. These grants include:

- <u>US DOE/ARRA Grant</u>: \$4,842,060 awarded for the following projects, all of which must be completed by end of 2011:
  - \$3,600,000 for the construction of two CNG refueling stations, fully funded.
  - \$1,198,060 (\$59,903 each) for the marginal cost of 20 CNG refuse packer trucks. City share: \$4,132,980 (\$206,649 each).
  - \$44,000 (\$2,000 each) for the marginal cost of 22 light duty hybrid or electric vehicles.

- <u>WDNR Grant</u>: \$100,000 awarded for the marginal cost replacement of two existing City trucks, with one hybrid aerial truck and one clean diesel vacuum/catch basin cleaner truck. City share: \$323,186 total. Duration unknown as of yet.
- <u>CMAQ Grant</u>: \$4,335,000 awarded for the following projects, for which the duration is not yet known:
  - \$1,800,000 for the construction of one CNG refueling station, fully funded.
  - \$1,200,000 (\$60,000 each) for the marginal cost of 20 CNG refuse packer trucks (City share: \$4,120,000).
  - \$1,195,000 (\$27,159.09 each) for the retrofit of 44 existing trucks with new cleaner diesel engines. City share would be the remainder of the engine replacement costs, if any.
  - \$60,000 (\$638.30 each) to retrofit up to 94 existing trucks with diesel oxidation catalyst (DOC) mufflers.
  - \$40,000 for the marginal cost of biodiesel fuel for blending with petroleum diesel fuel.
  - \$40,000 for training in ECO-Driving techniques for City drivers, required for the Local Government Insurance Fund. The Insurance Fund was budgeted at \$220,504 in 2010, with the 2011 increase representing a return to historic levels after a one-year relief in payments due to state legislation that authorized distribution of surplus funds from the Wisconsin Local Government Property Insurance Fund.

# **Capital Projects**

<u>Major Capital Equipment - \$5,550,000</u>: This program provides for equipment that exceeds \$50,000 and has a life expectancy of at least 10 years. The program focuses on equipment replacement, including garbage and recycling collection, snow and ice control and pickup and dump trucks for use as pool equipment.

The requested funding was reduced by \$7.5 million (58%). The level of funding is unchanged from 2010 and approximately \$500,000 below the budgeted average of the last five years. The total six-year capital request is \$77,674,915.

<u>Two-Way Radio Replacement - \$238,000</u>: This program provides funding to strategically replace obsolete twoway radio equipment. The total 6-year capital request for this program is \$902,300. Funding has not been requested past 2012. \$412,000 in carryover borrowing authority remains.

Description - Units Planned for Replacement
Backhoe/Loader
Sweeper
Sweeper
End Loader/Wheel Loader
Aerial, 36 ft Step Van Body
Dump Truck, 2-Yard w/Compressor
Dump Truck, 5-Yard
Dump Truck, 5-Yard
Dump Truck, 5-Yard w/Underbody Plow
Packer, 20-Yard Container
Packer, 25-Yard Rearload w/Cart Lifters
Packer, 25-Yard Rearload w/Cart Lifters and Container Lift Arm
Packer, 25-Yard Recycling
Packer, 31-Yard Front Loading Container
Pickup, Utility Body
Pickup, Utility Body
Pickup, Utility Body
Truck, Multi-Function, Compressor, Salter, Plow
Truck, Multi-Function, Compressor, Salter, Plow Roll-Off Truck
Roll-Off Truck
Step Van
Step Van

## Issues to Consider

- Council File Number 090279, relating to purchasing Ο vehicles made in the U.S., has had some effect on Fleet Operation's efforts to purchase hybrid/alternative energy vehicles. Fleet utilizes DOA-Procurement Services Section for the purchase of all vehicles and equipment, and adheres to the conditions in the resolution. The purchase of light-duty hybrid vehicles, such as cars and small trucks, is limited at this time to one specific make and model small truck, which complies with the ordinance's definition of vehicles made in the U.S. However, hybrid vehicles that do not comply with the U.S.-made definition are available on cooperative purchases such as the State of Wisconsin vehicle bid, and the resolution allows them to be purchased due to the large discounts afforded to the City through these cooperative bids. There are ample choices available for U.S. made larger hybrid and alternative fueled vehicles, such as CNG trucks and hybrid/electric utility trucks.
- Fleet Operations has had challenges meeting the salary budget in 2010 due to attrition rates below what was anticipated, combined with the no-layoff clause associated with the DC 48 contract. Shortfalls in the Fleet Operations Salaries accounts are anticipated if predicted attrition does not take place.