

## **EQUIPMENT SERVICES DIVISION**

The Equipment Services Division is comprised of three fulltime A.S.E. (Automotive Service Excellence) Certified Master Technicians and one Part-time Data Entry Operator. The Equipment Services Supervisor supervises the Division and provides direction to personnel who are responsible for performing or providing oversight of the following functions, duties and activities:

1. Automotive repairs and maintenance of trucks, tractors, automobiles, fire apparatus and other specialized equipment, for all Village departments (except Recreation), the Glenbard Wastewater Authority (GWA) and the Glen Ellyn Volunteer Fire Company. The majority of all repairs are performed in-house (with the exception of body work and warranty work performed by the authorized dealer). This includes about 85 vehicles for the Village, 20 for the Glenbard Wastewater Authority and 15 for the Fire Company.
2. Emergency twenty-four hour road service.
3. Fuel distribution, monitoring, and underground storage tank (UST) compliance.
4. Maintenance of computerized fleet maintenance system that tracks all vehicle repairs and preventive maintenance histories as well as parts disbursements and inventories.
5. Preparation of detailed bid specifications for securing new vehicles and equipment.
6. Coordination of the legal disposition of all "out-of-service" Village-owned vehicles and equipment.
7. Acquisition of parts and processing all vendor invoices related to the Division.
8. Maintenance and servicing of all shop equipment and acquisition of approved new items.
9. Snow removal and ice control assistance, storm damage cleanup and emergency flood response, and other emergency operations.

Equipment Services is funded as an internal service fund with each operating division paying an inter-fund transfer amount to the Equipment Services Fund for services, parts and fuel based on the average prior 2-year's history. Equipment depreciation is also charged with amounts paid annually to the Equipment Services Fund in order to accumulate the financial resources needed for orderly equipment replacement when it has reached the end of its economic and/or useful life. The depreciation account does not include vehicles from the Glenbard Wastewater Authority or the Glen Ellyn Volunteer Fire Company.

### **Equipment Services Accomplishments for FY06/07**

1. Equipment Services Technicians maintained their A.S.E. Master Certified status and re-certified in areas where required. All Equipment Service Technicians hold double Master Certifications in the Automobile and Medium/Heavy Duty Truck Classifications.
2. This year was a turning point for the Equipment Service Division as we have taken steps to provide a more efficient fleet of equipment and vehicles that will reduce air pollution and our dependency on foreign oil by utilizing renewable fuel sources. The entire fleet of diesel-powered vehicles and equipment now runs on an ultra low sulphur 20% blend of bio-diesel,

which is made from soy bean oil. The fleet also has a number of gasoline-powered vehicles that are capable of running on an alternative fuel known as E85, which is made up of 85% ethanol. This is made from corn and is also a renewable fuel source. Equipment Services put the Village's first Hybrid vehicle into service and the Village Manager will use it. Hybrid vehicles utilize internal combustion engines coupled with electric generators/motors that drive vehicles with electric power. These vehicles are very fuel-efficient and provide zero-emissions when running on battery power only. This is another step toward our goal of providing the Village with a "Green Fleet".

3. Equipment Services developed preventive maintenance (PM) checklists for all new vehicles placed into service.
4. Division personnel tore down old and setup three (3) new marked Police Patrol Cars, and one new Sergeants Command SUV. Equipment removed from the old marked squad cars and subsequently installed in the new units included computers complete with mounting stations, Digital Eyewitness Video systems, AVL systems, light bars, communication radios, vehicle partitions, sirens, radars, additional emergency lighting, trunk boxes, electronic weapon racks, all decals, numerals and lettering, and other equipment as required. The new Police Sergeants Command SUV received all of the same equipment as the marked squad cars with the addition of a rear command console and a new low profile, low amp draw, L.E.D. light bar.
5. Division personnel procured and set up a new Equipment Services road-service truck. This vehicle is used by the Equipment Services Division as a road service/fuel transfer truck to provide emergency service and repairs to all Village of Glen Ellyn, Glen Ellyn Volunteer Fire Department, and Glenbard Wastewater Authority vehicles and equipment. This truck will also respond to DuPage County Public Works Mutual Aid Operations. Emergency lighting, a secure idle system, fuel transfer tanks, an on-board engine driven air compressor, tool box with basic tool set, jump start power pack, an air jack, vehicle graphics and a communication radio was installed.
6. Division personnel recycled an out-of-service Police SUV to be used as a Glen Ellyn Volunteer Fire Department Squad. Emergency lighting was retrofitted to meet the needs of the department. Communication radios, a shoreline, department graphics and other equipment as required were installed.
7. The Equipment Services Division wrote specifications for safety upgrades and the reconditioning of Glen Ellyn's Volunteer Fire Company aerial Tower 30. Division personnel transported the Tower to and from the original manufacturer in Roanoke Virginia. State of the art electronic controls for the ladder, outriggers, auto-level and interlock systems were installed. The aerial ladder was removed and completely refurbished with new wiring and hydraulics. A rear vision safety camera that automatically engages when the vehicle is placed in reverse was installed. Rear vehicle lighting was upgraded to low amp draw L.E.D. lights. Necessary chassis and minor body repairs were done. U.L. tests were performed and all air tanks were tested and certified.

8. Equipment Services personnel, set up and put into service one (1) trailer mounted trash pump for Glenbard Wastewater Authority. Vehicle numbers, trailer wire connectors and other necessary equipment were installed.
9. Equipment Services wrote specifications, advertised, and procured 2 vehicles through the State of Illinois bidding process or through the competitive bidding process for the Glen Ellyn Public Works Divisions. Equipment Services personnel installed vehicle graphics, safety warning lighting, safety equipment, communication radios and any equipment necessary to satisfy the needs of the department on a new street sweeper and a new 10-wheel dump truck.
10. Equipment Services wrote specifications and coordinated the installation of three computerized closed-loop ground speed controlled systems for the application of road salt. These were installed onto three of our existing heavy-duty front line plow trucks (truck's #201, #203 and #251). The closed-loop system consists of an electronic controller (brain); vehicle speed, conveyor speed and liquid flow sensors; five hydraulic valve sections with electronic solenoids all housed in an enclosure; an upgraded hydraulic pump; all interconnecting wires and hydraulic plumbing. These units conserve salt, therefore reducing the negative impact of chloride entering our storm water system.
11. Equipment Services personnel replaced twenty (20) AVL (automatic vehicle location) control modules with updated units. The manufacturer at no cost provided these updated modules to the Village. These units are installed in high usage equipment that is used year round for various tasks. It provides tracking, vehicle performance, engine trouble code and running parameters, OEM recalls, and the ability to create various reports.
12. Continued laboratory analysis of lubricants used in the fleet of the Glen Ellyn Police Department and the various departments of Public Works to lower the cost of preventive maintenance and decrease downtime.
13. Required annual line-leak detection testing was performed on (1) gasoline and (1) diesel underground storage tanks.
14. Implemented and followed the established standards for the quality of repairs performed in the department and the accountability of staff time.

### **Equipment Services Goals for FY07/08**

1. Division personnel will continue to strive to improve upon its preventive maintenance programs and, through cost-effective measures, maintain the current level of services provided.
2. Preventive maintenance checklists will be periodically reviewed and adjusted according to long-term vehicle & equipment repair and maintenance histories.
3. Conduct research in conjunction and cooperation with all Village departments and divisions for which the acquisition of new or the replacement of existing vehicles and equipment are scheduled during the fiscal year to ensure that accurate and detailed bid specifications are properly prepared. As delivery of these vehicles and equipment occur, Division personnel

will install all specialized equipment and perform any other tasks necessary to place these vehicles into service.

4. Perform the annual teardown of old and setup of new police squad cars.
5. Continue to ensure that the Division's facility is in full compliance with all environmental-related laws and mandates. Reexamine all practices and procedures to ensure that the Division continues to operate in full compliance with all laws and mandates and in an environmentally safe manner.
6. Mechanic training will continue with both fee-based and free training courses offered by the National Association of Fleet Administrators (NAFA), Elgin Sweeper Company, Navistar Company, Allison Transmission, Emergency (fire) Vehicle Technician (EVT), Municipal Fleet Managers Association, Inland Diesel, etc. Emphasis will focus on Division personnel studying for and taking EVT certification tests (fire equipment) during the course of the fiscal year as well as Automotive Service Excellence (ASE) certifications.
7. Continue to perform cost effective tasks and services in an efficient manner for our customers (e.g., other Village departments and divisions) routinely and as special needs arise.

### **Annual Funding of Equipment Services Fund**

Funding contributions paid into the Equipment Services Fund by user departments are allocated for two basic purposes:

1. **Operations & Maintenance (O&M)** - To pay the costs of routine, on-going maintenance and preventative maintenance of the Village's fleet and other major equipment. These costs generally include maintenance staff salaries and benefits, parts purchases, outsourced major maintenance and fuel costs.

Total budgeted O&M costs of the Fund are contributed by user departments based on their proportionate share of costs incurred in the prior fiscal year.

2. **Equipment Replacement** - Each user pays into the depreciation/replacement account the total estimated replacement value of their equipment assets over their estimated useful/economic life. For example, a newly purchased vehicle may have an initial cost of \$20,000 and an estimated useful life of 4 years. Assuming an increase in replacement cost of 3% each year, over the 4 year estimated life of the vehicle, the expected replacement value would be 112% of its original cost or \$22,400. Based on this replacement cost, a total of \$5,600 will be deposited into the replacement account each year for the next 4 year period, at the end of which, the total replacement cost of the vehicle will be available to purchase the replacement vehicle.

## Annual Funding Adjustment

**Operations and Maintenance (O&M)** - To avoid the accumulation of unneeded O&M cash reserves above the established 25% reserve level, an adjustment is made each year which increases or reduces the amount contributed by user Funds/Departments for the upcoming budget by the amount of any net O&M surplus or deficit from the most recently completed fiscal year.

**Equipment Replacement** – Each year, the net proceeds received from the sale of disposed vehicles will be applied against the scheduled contributions by user Funds/Departments for the upcoming budget year.

A review of FY05/06 actual revenues and expenditures shown below indicates that O&M revenues exceeded O&M Fund expenditures by \$48,197. This is shown as follows:

	<u>FY05/06 Actual Results</u>		
	<u>O&amp;M</u>	<u>Replacement*</u>	<u>Total</u>
Revenues	\$838,002	\$541,060**	\$1,379,062
Expenditures	<u>(789,805)</u>	<u>(661,199)</u>	<u>(1,451,004)</u>
Surplus / (Use of Cash)	<u>\$48,197</u>	<u>(\$120,139)</u>	<u>(\$71,942)</u>

*\* It is normal to experience regular surpluses or deficits in the replacement portion of the fund. This is due to the annual variability in scheduled replacements of various pieces of equipment. It is important to maintain a minimum working cash balance equivalent to at least the total accumulated depreciation contributions in the fund to ensure its long-term ability to purchase replacement equipment as scheduled.*

*\*\* Includes \$128,060 in proceeds received from the sale/disposal of vehicles.*

The calculation of O&M costs to be contributed by user departments for FY07/08 and the previous fiscal year is shown below:

	<b><u>FY06/07</u></b> <b><u>Budget</u></b>	<b><u>FY07/08</u></b> <b><u>Budget</u></b>
Total Equipment Services Expense Budget	\$1,202,000	\$1,233,700
Less: Vehicle Replacements (funded through accumulated depreciation)	<u>(348,000)</u>	<u>(353,000)</u>
Amount to be Contributed for O&M	\$854,000	\$880,700
Less: Interest Income	(100,000)	(129,500)
Sale of Replaced Vehicles	(50,000)	0
Fuel Purchased by Park District	(55,000)	(48,000)
Prior Year O&M Surplus Credit	0	(48,200)
Use of Cash – O&M Reserves	0	0
Amount to be Contributed by User Departments for O&M**	<u>\$649,000</u>	<u>\$655,000</u>

\*\* This amount is then allocated to user departments based on their percentage use of the “garage” for the prior two fiscal years.

**Minimum Cash Reserve Policy**

The total accumulated cash balances in the Equipment Services Fund as of May 1, 2006 was \$2,396,000. Taking into account projected cash inflows and outflows for the current 2006/07 and next 2007/08 fiscal years, the cash balance at April 30, 2008 is projected to be \$2,518,000.

Minimum cash balances for this fund should be no less than the accumulated contributions into the equipment replacement account (\$2,364,000) plus 25% of budgeted operating expenditures of the O&M component of the fund. Projected minimum cash reserves for FY07/08 are identified as follows:

Total Projected Available Cash 5-1-08	\$2,563,000
Reserve for Equipment Replacement (funded depreciation)	(2,336,000)
Reserve for Operations (O&M) 25%	<u>( 220,000)</u>
Minimum Cash Reserve Balance Needed	<u>\$2,556,000</u>
Projected Unrestricted Cash on 5-1-08 over minimum cash reserves required	<u>\$ 7,000</u>