



AGENDA

COMMITTEE OF THE WHOLE

July 21, 2009 - 7:30pm

- 1) Vehicle Acquisition:**
 - a) FD Ambulance**
 - b) FD BC Command Vehicle**
 - c) PW Sweeper**
 - d) PW Refuse Truck**

- 2) Crossing Guards**



1)

ROLLING MEADOWS FIRE DEPARTMENT

Memorandum

Thursday July 16, 2009

TO: Sarah Phillips, City Manager
FROM: Ron Stewart, Fire Chief
SUBJECT: **Purchase of Ambulance and Battalion Chief Vehicle**

The Fire Department is requesting authorization to move forward with the purchase of two vehicles, an ambulance and a battalion chief vehicle. Both of these vehicles are essential to fire department operations as maintaining a safe and reliable fleet of vehicles assures that we can meet the emergency response needs of the community.

Realizing the importance of fiscal responsibility and the need to prioritize capital expenditures, we believe consideration of these purchases is warranted at this time. By moving forward with these purchases, the city has the opportunity to realize a cost savings as well as maintain the integrity of our current vehicle replacement program.

Battalion Chief Vehicle:

As you may recall in August of 2007, the purchase of a battalion chief vehicle was delayed in conjunction with a revised vehicle replacement program for fire department staff vehicles. At this time, the City Council directed the fire department to defer the replacement of this vehicle until a target mileage of 50,000 was achieved. Currently, the mileage of this vehicle has exceeded the 50,000 mile mark at 53,097 miles. We would now like to proceed with the purchase of this vehicle.

We have obtained pricing for the replacement of this vehicle under The Suburban Purchasing Cooperative. The cooperative agreement guarantees a base bid price of \$26,383 for the purchase of a 2010 Ford Expedition. In addition to the base price, further vehicle modifications would be required to add emergency lighting, radios and a slide-out storage tray. The total price of purchasing and modifying this vehicle is estimated at \$50,000 (Table 1). Attached you will find a summary detailing the specifics of the base bid package that includes a listing of the standard options (Appendix A).

Table 1: Total Purchase Price Summary

Base Bid	\$26,383.00
Options/ Lettering	\$ 4,500.00
Emergency Lighting	\$12,617.00
Radios	\$ 3,500.00
Slide-out Tray	\$ 3,000.00
Total Purchase Price	\$50,000.00

Upon the purchase of this vehicle, the existing battalion chief vehicle (Unit 655) will be rotated into reserve status. Unit 655 would remain in reserve status until the vehicle attains the 100,000 mile mark. The current back-up battalion chief vehicle (Unit 656) will be rotated out of the fleet and sent out to auction. The table below details information regarding the age and mileage of the vehicles mentioned above (Table 2). The estimated trade-in value of Unit 656 is estimated at between \$3,000-\$5,000. These funds would be used to off-set the purchase price of this vehicle.

Table 2: Vehicle Data

Unit	Year	Make	Model	Mileage	Status
655	2002	Chevy	Suburban	53,097	Frontline
656	1995	Chevy	Suburban	66,232	Reserve

Ambulance:

In addition to researching the replacement of the battalion chief vehicle, we have also been aggressively working with several ambulance vendors searching for a demo or stock ambulance that would fit our operational needs. Over the last several months, we have come to realize that many vendors have been reluctant to manufacture a wide selection of such vehicles due to the economic situation. As a result, we have been unsuccessful in our efforts to locate a demo or stock vehicle that would meet our specifications. Based on this fact, we feel the best option at this time is to proceed with the award of a contract for the purchase of an ambulance by September 1st of this year with a 2010 delivery date.

By awarding a contract for purchase in 2009, the city would realize some cost savings as well as retain some design flexibility that will be lost in future model years. The 2010 model ambulance will be impacted by new emissions control regulations that go into effect in the 2010 model year. The 2010 compliant truck chassis will require additional equipment such as Diesel Exhaust Fluid Tanks and additional cooling system components. These added components are estimated to increase the cost of an average chassis by at least \$10,000-\$15,000. Additionally, these new components coupled with the increased curb weight of the 2010 vehicles will limit the design flexibility of the next generation of ambulances.

By awarding a contract for the purchase of this vehicle by September of this year, we will not incur the costs associated with these new emission standards. More importantly, we will retain the ability to order a vehicle that allows for a consistent design of the box (patient treatment area) allowing us to keep the design of our ambulances standardized for as long as possible.

The current replacement schedule for an ambulance calls for a front line ambulance to remain in service for 5 years and then rotate to reserve status for a maximum of 6 years (Table 3). Currently, we have two frontline ambulances and one reserve ambulance. Unit 625 (2002 Navistar) has been in frontline service for over 7 years and Unit 623 (2004 Navistar) will complete 6 years of frontline service in 2010. Our reserve ambulance Unit 621 (1996 International) has been in service for a total of 13 years by the end of this year (Table 4).

Table 3: Ambulance Replacement Schedule

Vehicle	Front Line	Reserve	Total Service
Ambulance	5	6	11

Table 4: Service History of Ambulance Fleet

Vehicle	Frontline	Reserve	Total Service	Mileage	Engine Hours
1996 International	5	8	13	85,734	10,710
2002 Navistar	7	0	7	60,043	9110
2004 Navistar	5	0	5	35,491	4275

As indicated by the mileage and the engine hours, our fleet of ambulances sustains the most service duty related wear and tear. Further delaying the purchase of an ambulance will result in increased downtime of the frontline ambulances, increased repair and maintenance costs and a reduction in the quality of service provided to the citizens.

Upon the purchase of a new ambulance, Unit 625 (2002 Navistar) will rotate into reserve status and Unit 621 (1996 International) will rotate out of the fleet. The estimated trade-in value of this vehicle is estimated between \$5,000-\$8,000 and these funds would be used to off-set the purchase cost of this vehicle. We have also obtained pricing from The Suburban Pricing Cooperative on the purchase of a new ambulance. Below is a list of the price quotes by vendor (Table 5).

Table 5: SPC Ambulance pricing

Vendor	Type	Price
Horton Emergency Vehicles	Type 1 International	\$239,941
Foster Coach Sales	Type 1 International	\$260,544
Wheeled Coach Industries	Type 1 International	\$245,169

The Fire Department is recommending the purchase of these two vehicles and seeking City Council approval authorizing funds for these purchases. We respectfully request that the City Council authorize the purchase of a battalion chief vehicle not to exceed \$50,000 and authorize the purchase of an ambulance not to exceed \$240,000. These funds would originate from the Vehicle Replacement Fund.

Sutton Ford Inc

SPC Contract Winner

2010 Ford Expedition SSV 4x4

Call Louis Zager (708) 720-8000

Fax (708) 720-4305

Standard Package: \$26,383.00

Warranty 3 year/36,000 & 5 year/60,000 powertrain

- Free Delivery Within 30 Miles
- 5.4L 3-valve Triton® V8 engine
- 6-speed automatic transmission with overdrive
- Air conditioning
- Auxiliary Heater/Air Conditioning
- 28 Gallon Fuel Tank (33.5-gallon on Expedition EL)
- 150 AMP Heavy Duty Alternator
- 650 CCA Battery
- P265-OWL All-Terrain Tires
- 4-wheel independent suspension with coil-over heavy duty gas shocks — Front: double wishbone, Short- and Long-Arm (SLA) design; rear: multilink design
- 4-wheel power disc brakes with Anti-lock Brake System (ABS), Brake Assist and Electronic Brakeforce Distribution (EBD)
- Battery saver
- Body-on-frame construction
- Advanced Trac® drive system w/roll stability control
- Flat Load Floor, Rear
- Floor Covering Vinyl
- Grille, Black
- Black Floormats, Carpet Deleted
- Manual Lumbar Support, Driver & Passenger
- Privacy Glass
- Spare tire — Underbody mounted “temp” Full-size
- Speed Control
- Stabilizer bars — Front and rear
- Variable-assist, power rack-and-pinion steering
- Adaptive energy absorbing steering column
- Belt-Minder® safety belt reminder
- Child-safety rear door locks
- Front-seat side airbags
- LATCH — Lower anchors and tether anchors for child-safety seats on rear-outboard seat locations
- Regular Axle
- Safety belts — 3-point for all outboard positions and 2nd- and 3rd-row center positions
- Side-intrusion door beams
- Tilt Wheel
- Power Windows
- Power Locks
- Power Mirrors
- Front Cloth Captains Chairs
- Rear Vinyl Second/Third Row Bench
- Heavy Duty Trailer Tow Package
- Remote Keyless Entry
- Premium Stereo/CD
- Trailer sway control
- Windshield Wipers — Front: speed-sensitive, 2-speed variable-intermittent; rear: intermittent with washer

Order Cut off Date March 31, 2010

Committee of the Whole Agenda – July 21, 2009

1) Public Works Department Proposed FY2010 Vehicle Replacements

1. Refuse Truck
2. Sweeper

Discussion: Deferral was made for the FY2009 Budget of all scheduled vehicle equipment replacements, including a Refuse Truck and a Street Sweeper.

Public Works Department is again recommending the replacement of these vehicles, for the FY2010 Budget, and is requesting that the Mayor and City Council at this time consider the commencement of the equipment procurement process with the intent of selecting and ordering the vehicles for the receipt and use of them in early 2010.

There are several replacement vehicle acquisition options available for evaluation, including:

- New equipment – outright purchase
- New equipment – leasing
- Used/Demonstrator equipment
- “Like new” slightly used repossessed/returned equipment
- Contract Services (operational change)

The attached two reports prepared by Assistant Public Works Director Bob Hartnett provide historical information on the City refuse collection and street sweeping services, analysis on existing equipment conditions begin recommended for replacement, evaluation on equipment currently on the market, and recommendations on how to proceed.

Staff has not yet procured firm pricing for replacement vehicles, as this would be done through an “advertisement for bid” process. This would include the outright purchase option, leasing option, and trade-in value for existing equipment. Any consideration for the procurement of “less than new” vehicle equipment will require authorization for staff to negotiate prices.



InterOffice Memorandum

Date: Thursday, July 16, 2009
To: Mayor and City Council
From: Bob Hartnett, Assistant Public Works Director
CC: Sarah Phillips, City Manager
Fred Vogt, Public Works Director
Subject: Proposed 2010 Vehicle Replacement - Street Sweeper

Sweeper Service Summary

The City's street sweeping service is designed to ensure the following goals are met:

- Remove street debris from the curb & gutter system to keep the storm sewer inlets clear and functional.
- Enhance the City's appearance by maintaining a clean and presentable roadway system.
- Ensure all leaves, and tree debris is removed from the roadway during the spring and fall seasons.
- Provide street sweeping services for special events including parades, festivals, and crash clean up.
- Maintain the cleanliness of the City's public building parking lots.
- Provide reliable equipment to respond to emergency street sweeping needs and to regular sweeping schedules.

These efforts are currently performed by City owned equipment and contract services.

Street Sweeper Ownership & Maintenance Histories

The City has owned a single street sweeper since the 1970's. Between 1975 and 2009, the City has owned four (4) different street sweepers. Records for the equipment from the 1970's and 1980's no longer exist, however records for the sweeper purchased in 1990 and 2001 are on file.

The sweeper owned by the City in the 1970's was an Elgin Pelican, which was a three wheeled mechanical street sweeper. This machine was replaced by a Tymo Vacuum style sweeper, in the 1980's.

The 1990 a Sun-Vac brand street sweeper was purchased by the City, to replace the Tymo sweeper. This unit cost \$87,117 and was traded-in in 2001 for \$10,000. This vehicle's operating cost was extremely high costing \$92,765. Repair costs included the following:

- Body Repairs \$4,690
- Chassis Repairs \$50,300
- Broom System \$9,922
- PM Services \$5,580

It was the City's experience with street sweepers, 20 years ago, that initiated staff's decision to reduce the service life of the street sweepers from 9 years to 7 years and established a vehicle replacement policy that included additional criteria for replacement beyond just service life and vehicle miles.

Equipment Replacement Options: The existing 2001 Geo Vac, that replaced the Sun Vac, was purchased for \$140,145 and has an estimated trade-in value of \$20,000. This vehicle has depreciated over 80% in eight years. The life-to-date repairs of this vehicle are \$78,948 or 56% of the purchase price. This sweeper has 27,090 miles and 6,293 hours. Based on trade-in value and the fact that repairs have exceeded 50% of the purchase price, this vehicle is being recommended for replacement.

Public Works staff has considered three options for replacing the existing sweeper including new vehicle replacement, replacement with a used vehicle, and increasing contract services.

1. **New Sweeper:** Staff prepared a request for proposal for a new sweeper that included four options as outlined below:

- Mechanical Sweeper 2007 Emission Complaint Diesel Engine
- Mechanical Sweeper 2007 Alternative Fueled Engine
- Vacuum Sweeper 2007 Emission Complaint Diesel Engine
- Vacuum Sweeper 2007 Alternative Fueled Engine

Both mechanical and vacuum sweepers use rotating brooms to kick-up street debris and both machines use water systems to spray water on the pavement for dust control. The major differences between the two sweepers are listed below.

- A mechanical sweeper is built on a custom chassis, and vacuum sweepers are mounted on conventional cab-over chassis.
- A mechanical sweeper uses a conveyor belt to carry the collected debris into a hopper. Hoppers are generally sized at about 3.5 yards.
- A vacuum sweeper uses air suction to pull up the loosened debris and sends the material into the hopper. These hoppers generally are sized at about 8 yards.
- A mechanical sweeper has a top speed of approximately 18 miles per hour, and a vacuum sweeper can drive at all road speeds.

The proposal was sent to four equipment dealers, as follows:

Dealer	Sweeper Brand	Sweeper Style
EJ Equipment, Inc.	Tymco	Vacuum Only
Stapp Equipment Co	Schwarze	Mechanical & Vacuum
Autotruck	Allianz	Mechanical & Vacuum
Standard Equipment	Elgin	Mechanical & Vacuum

The pricing received from each dealer is listed below:

Dealer	Sweeper Brand	Mechanical Diesel Engine	Mechanical Alternative Fueled	Vacuum Sweeper Diesel Engine	Vacuum Sweeper Alternative Fueled
EJ Equipment	Tymco	N/A	N/A	\$171,665	\$218,665
Stapp Equipment	Schwarze	No Bid	No Bid	\$166,136	\$238,625
Autotruck	Allianz	\$155,000	185,000	\$180,000	N/A
Standard Equipment	Elgin	\$147,936	\$249,490	\$181,929	\$292,047

2. Used Equipment: Staff also has been researching the used equipment market. Of the new equipment dealers listed, only Standard Equipment maintains an inventory of used equipment on their web-site. Three units on their website were selected for further consideration by staff. The used sweepers are all manufactured by the Elgin Sweeper Company, and are approximately 2 – 4 years old.

Staff also contacted the Elgin Sweeper Company directly and has been informed of a sweeper which is a 2008 model that was originally sold to the City of Jacksonville, Florida. Jacksonville is a coastal community with a humid climate where temperatures reach into the 90's. The operator's compartment of this sweeper has an air conditioning system that is unable to affectively cool the cab under these conditions. Staff will continue to research this particular machine to determine if the unit would be acceptable in our climate.

A consideration to be aware of when considering purchasing used equipment is that a certain amount of the service life will have been used up when the vehicle is placed in service. The replacement of any used equipment will need to be planned for accordingly in future schedules.

Prior to recommending any of these used machines for purchase consideration, staff would complete a through review of each vehicle's condition.

The base pricing of the three used street sweepers are as follows:

2004 Elgin Pelican	\$ 88,000
2007 Elgin Eagle	\$147,000
2008 Elgin	To Be Determined

3. Increase Contract Services: Another option being considered is to expand the contract services currently are used during the fall leaf season, and/or to provide street sweeping services by contract year round.

Contract street sweeping services are priced out on a "per curb lane mile" basis. The City has approximately 114 miles of curb within the city. Based on a budget figure of \$36.00 per mile the minimum cost for one complete sweep of all City streets would be approximately \$4,000.

A common practice for a street sweeping contract would be to bid out services at the following frequencies:

<u>Time</u>	<u>Service</u>	<u>Base Cost</u>	<u>Full Cost</u>
June – September	One Full Sweep Per Month	\$4,000 x 4 Months	\$16,000
March – April - May	Spring Clean-up of all City Streets	4 Complete Sweeps	\$16,000
Fall Leaf Season	October, November, December	9 Complete Sweeps	\$36,000
Special Events @ \$100 per hour			\$2,000
Annual Cost			\$70,000
Aggregate Cost for Seven Years of Contract Sweeping Service			\$490,000

The current annual cost for the City's in-house street sweeper service is estimated at \$64,000 per year based on the following calculation.

Annual Labor Cost	\$32,000
Maintenance & Operation	\$15,000
Capital Cost for Vehicle Replacement	\$17,000
<u>Annual Program Cost</u>	<u>\$64,000</u>
Seven year program cost	\$455,000

The cost calculations for the contract services were derived from phone interviews of three separate sweeping companies. When you consider the long term cost of owning a sweeper and the scheduling flexibility versus contract cost, there is an advantage to keeping this service in-house.

The following chart lists some of the advantages and disadvantages to the three alternatives in equipment provisions listed above.

	Cost	Warranty	Machine Availability
Purchase of New Machine	Initial cost is high, but unit will have a higher trade-in value	Full OEM warranty, plus extended warranty if desired	Up-time of a new machine Would be predictably higher than a used machine.
Purchase of Used Machine	Initial cost is lower, but unit will have little to no trade-in value & a short service until next replacement	Partial OEM warranty, or no warranty, extended warranties could be purchased	Up-time would be limited due to the amount of repairs needed to keep an older unit in service.
Contract Services	Long term cost equal to or even higher than in-house service	N/A	Contract services generally are preformed once per month, additional sweeps in any given month would be additional costs

Staff Evaluation Summary

- The used mechanical which is a 2004 model year is not being considered due to its age. The mileage is 18,199 and the machine hours are 86,756. The 2007 vacuum sweeper is also not being considered due to the price this unit is priced \$34,929 less than a comparable new model. A new machine would come with a full warranty and provide the City with a much longer service life than a used sweeper. This used machine has 37,200 miles and 3,300 machine hours.
- The 2008 model only has 500 machine hours, upon further investigation, including a test operation and full inspection this unit may offer some benefit to the City.
- When considering the cost difference between a new mechanical sweeper and a new vacuum sweeper the vacuum sweeper has several advantages including:
 - A larger hopper size, a mechanical sweeper can collect more than twice the amount of a mechanical sweeper.
 - A vacuum sweeper can travel to and from the job site and dump site in half the time of a mechanical sweeper.

These two items will save a considerable amount of labor hours during the fall leaf season and during spring clean-up.

A typical fall day the vacuum sweeper will collect 5 -6 loads of debris in one, eight hour shift. The mechanical sweeper would only be able to collect about half as much debris, and therefore double the time it would take to complete the fall season leaf clean-up city wide.

- Based on the cost of contract street sweeping staff is not recommending additional funding for these services.

The new street sweepers which would be considered have 2007 compliant diesel engine and would be the preferred choice of vehicle.

Staff recommends the solicitation of Sealed Bid Proposals from the three vendors listed above, and any other vendors who may seek to submit a proposal based on the City's specifications. Staff would also recommend seeking out pricing from the U.S. General Service Administration (GSA), which is the Federal Governments Joint Purchasing Agency.

Staff anticipates being able to provide a purchase recommendation to the City Council by the August 25, 2009 Council meeting. This recommendation will outline the following

- Advantages or disadvantages and cost of the 2008 sweeper available from Elgin.
- Bid results for a new vacuum style street sweeper
- Pricing for a vacuum style street sweeper from the GSA Office.

Action on replacement vehicle purchase would be subject to City Council direction to include the cost of vehicles in the FY 2010 Vehicle Replacement Fund budget.

Attachments:

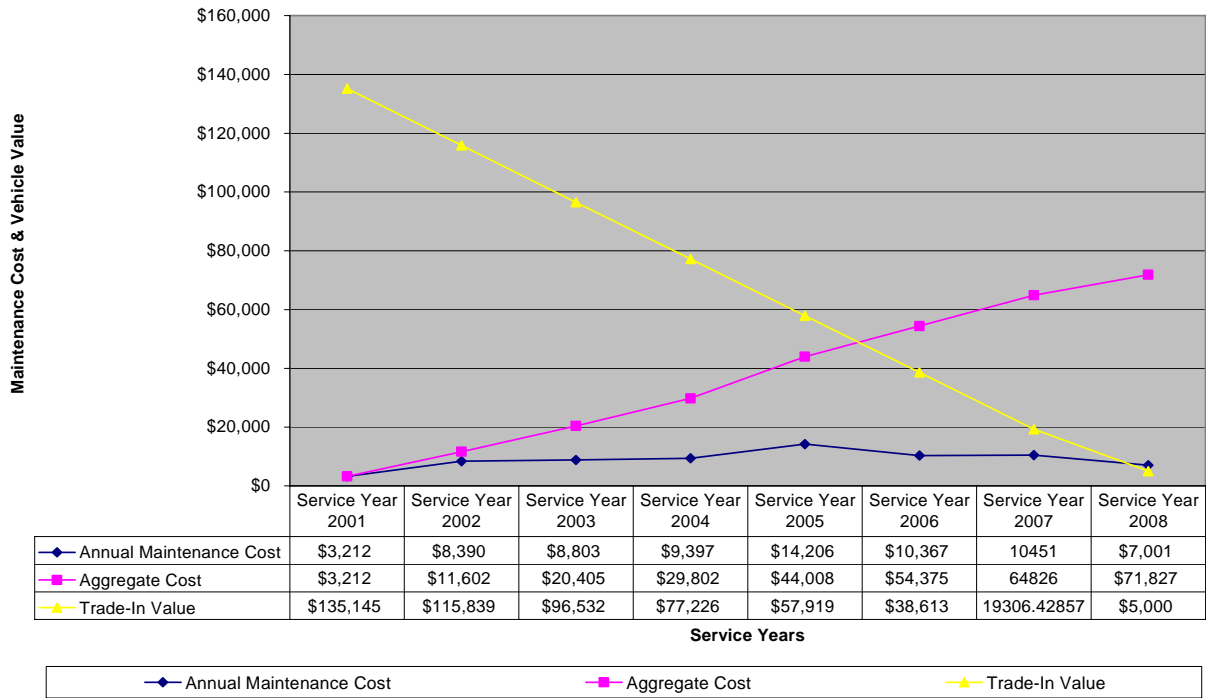
- Proposed Vehicle Replacement Photograph & Inventory Data with Maintenance History Graph.

2001 Elgin GEO Vac Street Sweeper



RM #	Type	Side #	Department	Make	Model	Year	Meter as of January 31 2009
RM109	SWEEPER	330	PW STREETS	STERLING	GEO VAC	2001	6,068

**RM109 2001 Sterling / Geo-Vac Sweeper
Purchase Price \$140,145**





InterOffice Memorandum

Date: Thursday, July 16, 2009

To: Mayor and City Council

From: Bob Hartnett, Assistant Public Works Director

CC: Sarah Phillips, City Manager
Fred Vogt, Public Works Director

Subject: Proposed 2010 Vehicle Replacement – Refuse Collection Truck

In 1996 the City made significant changes to the refuse collection program that was in place at that time. The most significant changes were: 1) the elimination of bulk container service for residential use (this eliminated one roll-off truck, and several dozens containers of various sizes); 2) Changed from purchasing 2-person collection vehicles to 1-person collection trucks; 3) Vacating the City's refuse transfer station on Berdnick Street in favor of driving route trucks directly to the SWANCC transfer station T (this change also eliminated one position and a tractor trailer combination vehicle). These changes reduced full-time staffing in the Public Works Refuse Division from six employees to four full-time employees supplemented with seasonal positions.

Proposed Refuse Truck for Replacement

This report will focus on options for replacing the current 2002 Sterling (chassis) / Leach (body) rear loading refuse collection vehicle. The 2002 Sterling / Leach refuse truck was purchased for \$120,000, and was put into service in August of 2002. As of July 1, 2009 this vehicle has had \$59,727 worth of vehicle maintenance costs. These costs are broken down as detailed:

<u>Repair Types</u>	<u># of Repairs</u>	<u>Labor Hours</u>	<u>Labor Cost *</u>	<u>Parts Cost</u>	<u>Total</u>	<u>% of Total</u>
Preventative Maintenance	61	116	\$7,112	\$2,153	\$9,265	16%
Driver Reported Defect	184	184	\$13,739	\$13,429	\$27,168	45%
Statutory & Routine Inspections	116	97	\$7,116	\$13,982	\$21,098	35%
Warranty Service	11	9	\$596	\$0	\$596	1%
Road Calls	14	15	\$930	\$669	\$1,599	3%
Totals	386	419	\$29,493	\$30,234	\$59,727	100%
Fuel Cost					\$46,827	

*Note: Of the 386 repair events, 15 were completed at outside repair shops.

Based on the City's criteria standards for replacement, the vehicle is rated as follows:

- ❖ Overall vehicle condition Fair. The vehicle's overall appearance is good; however the chassis manufacturer has gone out of business. Since the vehicle is out of warranty, the largest effect will be on, resale value and long term repair parts acquisition. Typical repairs for refuse trucks with a service life of longer than seven years include packing system failures, body repairs, brakes, transmission and hydraulic system repairs.
- ❖ Life-to-Date Repair Costs 80% of the cost of repair services are derived from the driver's report of defects and from repairs conducted after vehicle inspections. This amount totals \$48,262 which equates to 40% of the purchase price. In 2008, the vehicle exceeded \$16,000 in repair costs.
- ❖ Vehicle intended use The Refuse Division has four residential collection vehicles, all of which are used regularly each week. Even if the oldest truck is considered a back-up, it is needed year round due to equipment maintenance and repairs of the remaining three collection truck and when route volumes increases.
- ❖ Can the vehicle be used elsewhere in the fleet? This vehicle's use is applicable to refuse and other debris collection.

Based on the criteria, this vehicle is being recommended for replacement. The typical delivery time for this type of vehicle is 120 to 190 days minimum (from receipt of order). Based on two independent estimates of this vehicle, the expected trade-in value is \$22,000.

2007 Vs. 2010 Emission Standards for Diesel Engines

At this time there are significant issues facing the heavy truck market. Engine manufacturers must begin producing engines which meet the 2010 Federal emission standards, and as such there has been a contraction of both engine and chassis manufacturers. (Note: Engine manufactures will again be facing even more stringent emission requirements in 2015.) The up-charge for the 2010 compliant engine will be between \$10,000 and \$15,000.

All City vehicles, with diesel engines, which are purchased between 2010 and 2015, will be required to have an engine which meets the 2010 emission requirements. Engines meeting the 2007 emissions standards are still available to be ordered, and are likely to be available for the next two to three months, depending on the manufacturer. (Note: These new emissions regulations will affect all diesel equipment purchased by the City including dump trucks, ambulances, and fire trucks.)

Alternatives Replacement Vehicles

Option #1 Used Vehicle Public Works staff has researched options for a used or demo vehicle which may be available for purchase.

Only vehicles which are of the 2007 model year or newer have been considered, due to the wear & tear older vehicles would be subject to. Staff was able to locate five vehicles that met the model year requirement. However, none of the vehicles listed include right-hand steering, nor have 20 yard capacity packing bodies that the City utilizes. Right-hand steering packages can be added to a vehicle by an aftermarket up-fitter, if the parts are available, for additional cost of \$8,000 - \$12,000. Only one of the vehicles found includes a warranty, all other are being sold as is. The pricing for these vehicles is as follows:

Vehicle #1	2008 Sterling	New Spec Vehicle	\$141,500
Vehicle #2	2007 Sterling	Used Refuse Truck	\$137,500
Vehicle #3	2008 International	Used Refuse Truck	\$ 94,900
Vehicle #4	2007 Mack	Used Refuse Truck	\$159,500
Vehicle #5	2007 Mack	Used Refuse Truck	\$159,500

Each of the vehicles that are listed is priced lower than what new vehicle will cost, however each would require additional costs for, at a minimum, the following:

- Travel expenses for on-site vehicle inspections, (all of the used vehicles considered were listed by out of state dealers including Florida, Ohio and Texas.)
- Right-Hand Steering installation,
- Transport to the up-fitter's location and to the City,
- Any repairs which may be required,
- Installation of City's 2-way radio, City specified warning lights, and decals.
- Removal of unwanted or non-functional equipment.
- Re-Painting of vehicle to match City's Fleet
- No Trade-In Credit Value

Based on the added expenses, and the unknown long term viability of purchasing a used refuse truck, **staff would not recommend pursuing this option at this time.**

Option #2 New Vehicle In addition to researching used vehicles, four requests for proposals were sent out to the local chassis dealers. Public Works staff has created multiple option Request-for-Proposals which included the following engine options:

1. 2007 Compliant Engine
2. 2010 Compliant Engine
3. Natural Gas Powered Engine (CNG)
4. A chassis with a 2007 Compliant Engine with Launch Assist
(For more information launch assist chassis please see Appendix "A" Item 2.)

Note the engine options items 3 & 4 are considered alternative fuel vehicles and as such are eligible for a Tax Credit to offset a percentage of the purchase price for a new vehicle. Since the City is Tax Exempt, this tax credit can be taken by the chassis selling dealer, and then used to reduce the final price paid for the vehicle.

The dealers that were contacted, and their equipment responses and the base process received are listed as follows:

Dealer	Chassis Brand	Body Brand Bid #1	Body Brand Bid #2
Cumberland Service Center	Crane Carrier	McNeilus	Heil
Peterbilt Illinois – Wadsworth	Peterbilt	McNeilus	No Bids Received
Standard Equipment	Autocar	Heil	No Bids Received
Northern Illinois Mack *	Mack	No Bids Received	No Bids Received

* Northern Illinois Mack did not submit a proposal for any of the options. They cited the cause as an inability to determine price points at the three, six or the nine month intervals which the City may consider for ordering a vehicle.

Dealer / Chassis & Body	2007 Truck & Body	2010 Truck & Body	CNG Truck & Body	Launch Assist Truck & Body
Standard Equipment Autocar / Heil	\$181,430	\$193,403	\$227,130	N/A
Peterbuilt Illinois Wadsworth Peterbilt / McNeilus	\$172,174	\$182,174 * Estimated Price	\$229,828	N/A
Cumberland Service Center Crane Carrier / McNeilus	\$176,551	\$188,001	\$237,178	\$301,441
Cumberland Service Center Crane Carrier / Heil	\$188,207	\$199,207	\$240,819	\$312,647

* This Peterbuilt Company has not published its 2010 chassis price at this time.

Staff Evaluation Summary

- The 2007 Compliant Engine vehicle would meet all of the City's requirements and could be put into service within 170 – 190 days.
- The 2010 compliant engine would also meet the city's requirements, however there is a higher purchase cost and there will be slightly higher operating cost due to the diesel emission technology.
- The CNG engine and body will also meet the City's requirements. Even though the initial purchase price is higher, this amount is reduced by the Federal Tax Credit and the potential for lower operating cost for fuel. Compressed Natural Gas (CNG) currently cost \$2.19 per gallon equivalent, and there is a fueling station located within 10 miles of the SWANCC Transfer Station which City vehicles could use. Diesel fuel is currently costing the City \$1.52 (on Contract) and \$1.85 (Non-Contract); however, these fuel prices are expected to rise.
- The Launch Assist vehicles have large potential fuel saving cited. Some manufacturers are suggesting that the fuel savings are over 50%. However, at this time the vehicle initial purchase price is very high and only specialized trained OEM mechanics are being allowed to work on the drive train systems.

The vehicles which include the 2007 compliant engines would be the preferred choice of vehicle at this time. These vehicles offer the lowest cost to purchase, and if ordered within the next 30 to 60 days could be put into service some time after January 1, 2010.

Staff recommends the solicitation of Sealed Bid Proposals from the three vendors listed above, and any other vendors who may seek to submit a proposal based on the City's refuse truck specifications.

Staff would request that all sealed proposals include the following:

- Firm pricing for a 2009 model year chassis with OEM right-hand steering,
- With a 2007 emission complaint engine, including a 20 yard rear loading packer body,
- Trade-in amount for the City's current refuse collection vehicle, and
- Municipal Lease / Purchase options

Staff anticipates being able to provide a purchase recommendation to the City Council by the August 25, 2009 Council meeting, or whenever the City Council approves of an appropriate plan to include this vehicle in the FY 2010 Vehicle Replacement Plan budget.

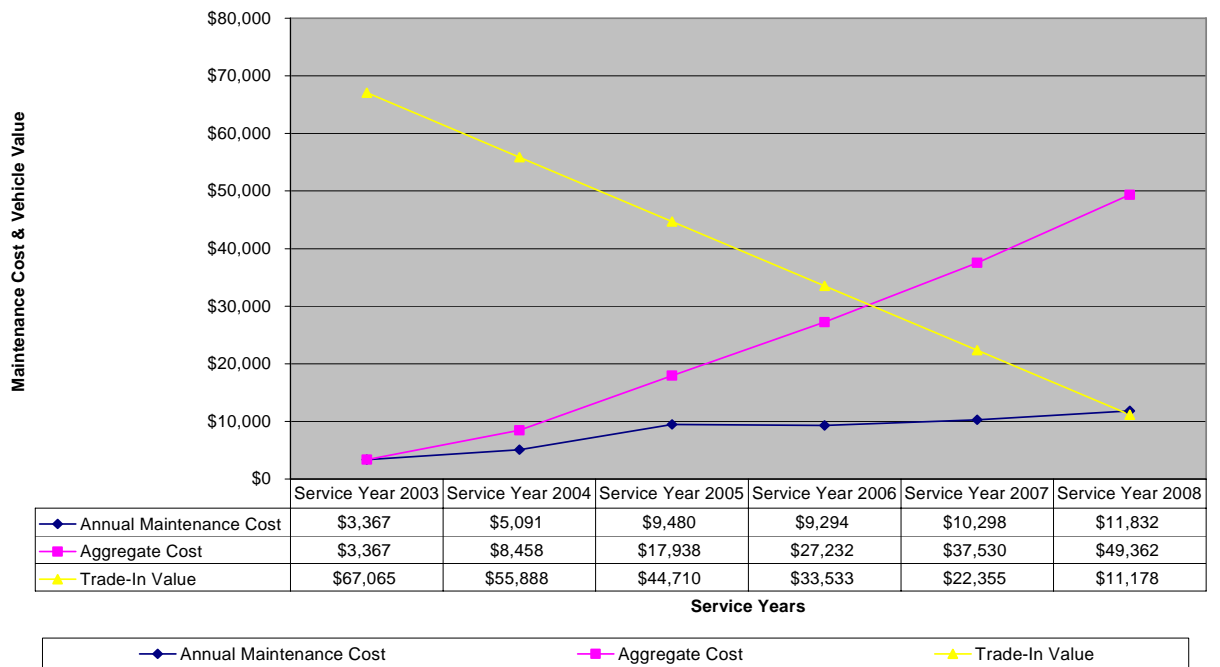
Attachments:

- Proposed Vehicle Replacement Photograph & Inventory Data with Maintenance History Graph
- Maintenance History Graph for three additional Refuse Trucks
- Appendix "A" Items 1 & 2
 - **ITEM 1 Heavy-Duty Diesel Emissions Standards:**
 - **ITEM 2 Hydraulic Launch Assists Systems (HLA):**

2002 Sterling / Leach Refuse Collection Vehicle

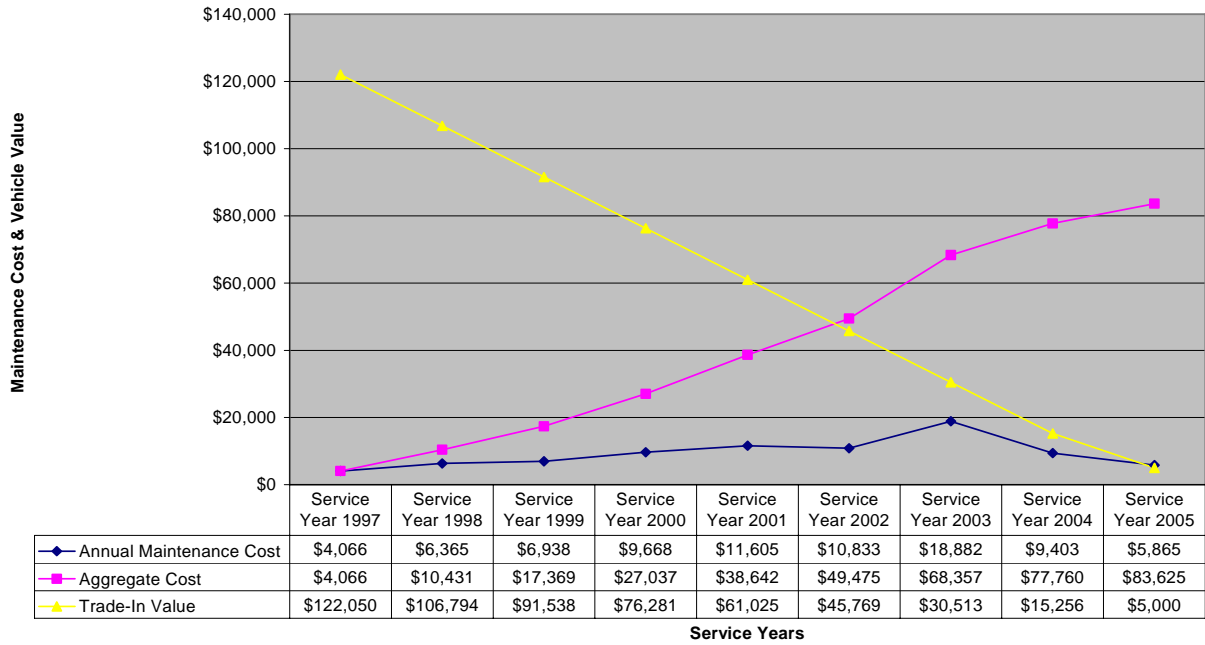


**RM207 2002 Sterling / Leach Refuse Truck
Purchase Price \$72,065**

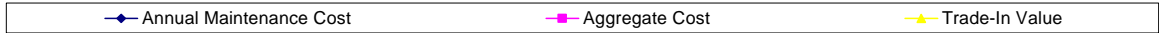
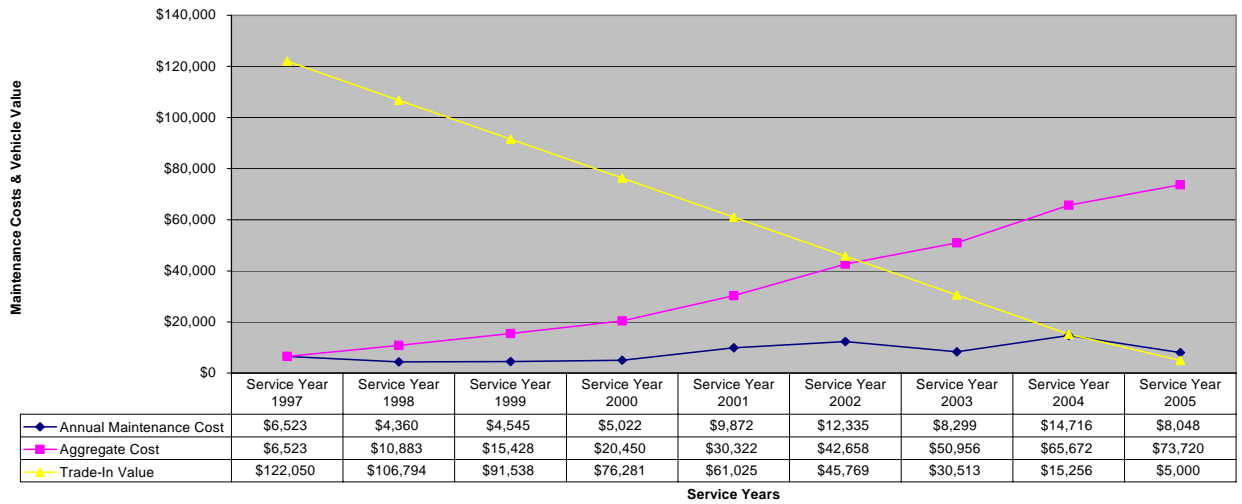


RM207

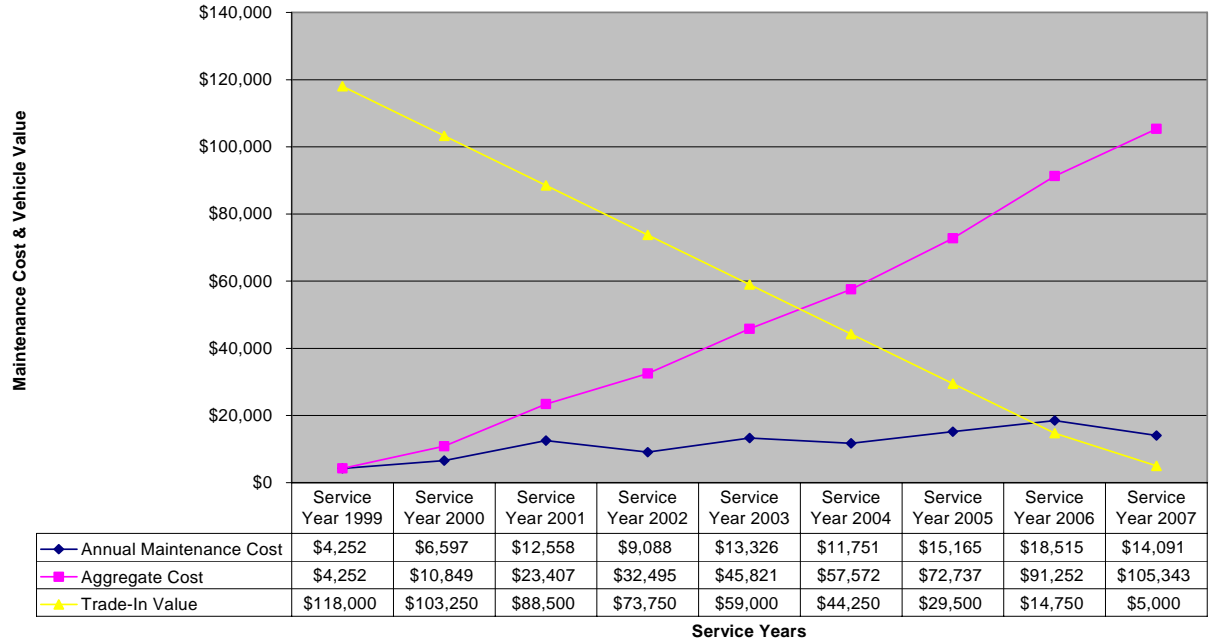
RM042 1997 Mack / Heil Refuse Truck
Purchase Price \$127,050



RM043 1997 Mack / Heil Refuse Truck
Purchase Price \$127,050



RM068 1999 Crane Carrier / Heil Refuse Truck
Purchase Price \$123,000



◆ Annual Maintenance Cost	■ Aggregate Cost	▲ Trade-In Value
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Appendix "A"

ITEM 1 Heavy-Duty Diesel Emissions Standards:

Due to the growth in freight movement, regulation of vehicles used to transport freight, as in the Clean Diesel Truck and Bus Rule, is becoming increasingly important. In December 2000, EPA issued the final rule for a two-part strategy to reduce diesel emissions from heavy-duty trucks and buses. This included new diesel-engine standards in model year 2004 for all diesel vehicles over 8,500 pounds. Additional diesel standards and test procedures will begin in 2007. These standards are based on the use of high-efficiency advanced emissions controls.

Because emissions-control devices are damaged by sulfur, EPA also initiated a program requiring cleaner diesel fuels. Refiners are required to start producing diesel fuel for highway vehicles with a sulfur content of no more than 15 ppm, beginning in 2006. This is down from the current level of 500 ppm, a 97 percent reduction. In order to ensure a smooth transition, these rules will be phased in between 2006 to 2010. Source: U.S. Environmental Protection Agency. Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements. December 2000. For more information please log-on to the Federal Highway Administration's web-site at:

<http://www.fhwa.dot.gov/environment/aqfactbk/page14.htm>

ITEM 2 Hydraulic Launch Assists Systems (HLA):

The HLA system recycles energy by converting kinetic energy into potential energy during deceleration via hydraulics, storing the energy at high pressure in an accumulator filled with nitrogen gas. The energy is then returned to the vehicle during subsequent acceleration thereby reducing the amount of work done by the internal combustion engine. This system provides considerable increase in vehicle productivity while reducing fuel consumption in stop-and-go use profiles like refuse vehicles and other heavy duty vehicles.

For additional information please see the following web-site.

http://en.wikipedia.org/wiki/Hydraulic_Launch_Assist

COMMITTEE OF THE WHOLE AGENDA - July 21, 2009

2) CROSSING GUARDS

Background – We will provide an update on the funding for the Crossing Guards this fall, as well as review funding for the 2010 budget.