

**VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL MEETING
JULY 6, 2010 AGENDA**

SUBJECT:	TYPE:	SUBMITTED BY:
Purchase of a New Fire Department Ladder Truck	✓ Resolution Ordinance Motion Discussion Only	Jim Jackson Fire Chief

SYNOPSIS

Resolutions have been prepared for the following items:

- Authorize the purchase of a 2010 Smeal 100' Rear Mount Platform Ladder Truck in the amount of \$920,386 from Smeal Fire Apparatus Corporation of Synder, Nebraska
- Authorize the Village Manager to dispose of the Village's current Pierce 100' Platform Ladder Truck as surplus equipment. If approved, the Village will receive, at a minimum, a \$149,000 trade-in value for its existing ladder truck from Smeal Fire Apparatus Corporation. This resolution will also authorize staff to market the sale of the current ladder truck elsewhere.

STRATEGIC PLAN ALIGNMENT

The Five Year Plan and Goals identified *Exceptional Services and Communication*.

FISCAL IMPACT

The total contract price for the proposed Smeal ladder truck purchase is \$920,386. Upon purchase of the proposed Smeal ladder truck, the Village would trade-in its current Pierce 100' Platform Ladder Truck to Smeal or another company for a minimum price of \$149,000. As a result, the net cost of the proposed Smeal would not exceed \$771,386. If approved, the Village would finance the Smeal ladder truck purchase over a period of ten years. The total annual cost of owning and operating the new ladder truck should be equal to the cost of owning and operating the current truck. A complete summary of the fiscal impact of the proposed Smeal ladder truck is provided in the background section below.

UPDATE & RECOMMENDATION

This item was discussed at the May 18, 2010 meeting. Staff recommends the Village Council table this item until a date uncertain. Please review the attached report for more information.

BACKGROUND

The Village purchased its current Pierce 100' Platform Ladder Truck in 1998. The ladder truck has served multiple functions during its life including allowing firefighters to provide water streams at an elevated level and providing a working platform from which tasks such as rescue, ventilation, or overhaul can be completed. The ladder truck is centrally located at Fire Station 2 at 5420 Main Street to maximize response to incidents. The chart below summarizes the annual ladder truck response history since 2005.

Ladder Truck Responses	
Year	Responses
2005	987
2006	1057
2007	819
2008	1097
2009	840

At the time of purchase, the estimated useful life of the Pierce ladder truck was 17 years with replacement scheduled for 2015. However, the high rate of usage which the ladder truck has experienced has resulted in increased maintenance and repair costs for the Village. In addition, the amount of time the Pierce ladder truck has been out of service for repairs and maintenance has increased in recent years as well. Thus far in 2010, the ladder truck has been out of service for almost 60 days and has incurred repair and costs in excess of \$40,000. The table below summarizes the annual ladder truck repair costs and out of service time from 2005 through 2009:

Year	Annual Repair Costs	Days Out of Service
2005	\$26,227.13	7
2006	\$38,649.93	24
2007	\$53,617.36	24
2008	\$37,235.08	28
2009	\$14,105.46	41
Total	169,834.96	124

As a result of the increasing maintenance and repair costs associated with the Village’s Pierce ladder truck, staff is recommending the truck be replaced. In August of 2009, staff distributed an RFP for a new ladder truck and received responses from a total of five vendors. Of the five vendors only two met the Village’s technical specifications as stated in the RFP (Smeal and Pierce). Pierce submitted a proposal for the purchase of a ladder truck with a net cost of \$781,000 (purchase price of \$896,000 and a trade in value of \$115,000).

During the procurement process, staff continued to monitor the economic state of the Village and determined the purchase of the ladder truck should be deferred. Since then, the ladder truck has experienced multiple mechanical issues that have warranted staff to revisit the purchase of a new ladder truck as a viable alternative to repetitive maintenance costs and multiple days out-of-service. As a result, staff contacted the two vendors that met the Village’s technical specifications in an effort to obtain updated pricing for the ladder truck. Pierce did not respond and Smeal submitted the following proposal.

Fully equipped in cost	Yes
Price	\$ 920,386.00
Trade-in	\$ (149,000.00)
Net Price	\$ 771,386.00
3rd Yr Warranty	Included
TOTAL	\$ 771,386.00

Based on the information listed above, staff proposes the purchase of a 2010 Smeal 100’ Rear Mount Platform Ladder Truck from Smeal Fire Apparatus Corporation of Synder, Nebraska. The ladder truck meets all Village specifications and has the lowest net cost.

The price of the proposed Smeal ladder truck is \$920,386. If approved, the Village would designate its existing Pierce ladder truck as surplus and would receive a \$149,000 trade-in value from Smeal for the truck. As a result, the net cost of the proposed Smeal ladder truck would be \$771,386. If approved, the purchase of the Smeal ladder truck would be financed for a period of eight to ten years. The lease agreement will be prepared and executed when the truck is delivered to the Village, scheduled for February of 2011. The lease agreement may require Village Council approval. Staff analyzed the fiscal impact of financing the proposed Smeal ladder truck purchase and determined the annual cost of financing

the Smeal ladder truck would be less than the cost associated with continued maintenance and operation of the Village's current Pierce ladder truck. The table below compares the FY10 cost of operating and maintaining the current ladder with the estimated cost of the proposed Smeal ladder truck:

	Current Pierce Truck	Proposed Smeal Truck
Annual Maintenance and Repair Costs	\$ 33,967	\$ 1,940
Annual Allocation for Purchase of a New Ladder Truck	\$ 80,155	NA
Annual Principal Payments	NA	\$ 77,039
Earned interest on Annual Allocation for New Ladder Truck	\$ (11,327)	NA
Estimated annual Interest paid on loan - (interest rate 5.23%)	NA	\$ 22,238
Net Annual Cost	\$ 102,795	\$ 101,217

ATTACHMENTS

Ladder Truck Purchase Final Report

VILLAGE OF DOWNERS GROVE
COUNCIL ACTION SUMMARY

INITIATED: Fire Department **DATE:** June 1, 2010
(Name)

RECOMMENDATION FROM: _____ **FILE REF:** _____
(Board or Department)

NATURE OF ACTION:

- Ordinance
- Resolution
- Motion
- Other

STEPS NEEDED TO IMPLEMENT ACTION:

Motion to Adopt "A RESOLUTION AUTHORIZING EXECUTION OF A SALES CONTRACT BETWEEN THE VILLAGE OF DOWNERS GROVE AND SMEAL FIRE APPARATUS CO. ", as presented.

SUMMARY OF ITEM:

Adoption of the attached resolution shall authorize execution of a sales contract between the Village and Smeal Fire Apparatus Co. for the purchase of a 2010 Smeal 100' Rear Mount Platform Fire Ladder Truck.

RECORD OF ACTION TAKEN:

RESOLUTION NO. _____

**A RESOLUTION AUTHORIZING EXECUTION OF A SALES CONTRACT
BETWEEN THE VILLAGE OF DOWNERS GROVE
AND SMEAL FIRE APPARATUS CO.**

BE IT RESOLVED by the Village Council of the Village of Downers Grove, DuPage County, Illinois, as follows:

1. That the form and substance of a certain Sales Contract (the “Contract”), between the Village of Downers Grove (the “Buyer”) and Smeal Fire Apparatus Co. (the “Seller”), for a 2010 Smeal 100' Rear Mount Platform Ladder Truck, as set forth in the form of the Contract submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

2. That the Village Manager and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver the Contract, substantially in the form approved in the foregoing paragraph of this Resolution, together with such changes as the Manager shall deem necessary.

3. That the proper officials, agents and employees of the Village are hereby authorized and directed to take such further action as they may deem necessary or appropriate to perform all obligations and commitments of the Village in accordance with the provisions of the Contract.

4. That all resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

5. That this Resolution shall be in full force and effect from and after its passage as provided by law.

Mayor

Passed:
Attest: _____
Village Clerk



SMEAL FIRE APPARATUS CO.

P.O. Box 8
610 W Fourth St.
Snyder, NE 68664
402-568-2224
Fax: 402-568-2346
Email: sales@smeal.com
Web: sméal.com

SALES CONTRACT

This Sales Contract is made and entered into by and between Smeal Fire Apparatus Co. of Snyder, Nebraska, Seller and

_____ Village of Downers Grove, Illinois _____

_____ Buyer.

PRODUCT DESCRIPTION:

_____ 100 foot rear mount platform _____

(Enter a brief product description and quantity of the items purchased on this contract)

PURCHASE. Buyer does hereby agree to purchase and accept delivery of the apparatus described in the Smeal Fire Apparatus Co. Proposal attached hereto, which is made a part hereof by this reference, upon the following terms and conditions:

1. **ACCEPTANCE.** This Sales Contract shall become a contract and a binding obligation only when accepted by the Seller as provided in paragraph 9 hereof.

2. **COMPLETION.** The Smeal Fire Apparatus Co. supplied apparatus and equipment, excluding dealership supplied equipment, covered by this contract will be completed in Snyder, Nebraska within approximately 270-330 calendar days after written acceptance of this Sales Contract by the Seller, or as soon thereafter as is consistent with good workmanship and subject to any and all delays resulting from causes beyond the control of Seller, and contingencies set out in paragraph 11 hereof. It is understood by both the Seller and the Buyer that *Change Orders* executed after contract acceptance will delay delivery.

3. **SPECIFICATIONS.** The attached Smeal Fire Apparatus Co. Proposal, dated July 6, 2009 and amended by letter dated May 26, 2010, attached here to and incorporated herein by reference as Exhibit A, shall control the construction of the apparatus and be binding upon both Buyer and Seller, notwithstanding any other specifications or proposals whether written or oral heretofore supplied, considered or discussed. If there is any conflict between Buyer's specifications and the attached Proposal (Exhibit A), the attached Proposal and specifications will control and prevail.

4. **WARRANTY.** The attached warranty or warranties shall apply to this agreement:

In addition to the warranties included in the proposal the following warranties shall apply:
3 year bumper to bumper warranty and an additional 2 year warranty for the cab and chassis
(Copies may be attached.)

5. **PERFORMANCE BOND.** The following bonding provisions are applicable:

_____ Performance Bond NOT required.

X Performance Bond Required - Performance Bond (Surety Bond) will cover standard one year warranty period only and will not cover extended warranties offered by seller or other component manufacturer.

EXCEPT AS SPECIFICALLY PROVIDED ABOVE, SELLER DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND WARRANTIES THAT ARISE BY OPERATION OF LAW, COURSE OF TRADE, COURSE OF PERFORMANCE, OR USAGE OF TRADE.

6. LIMITATION OF REMEDIES. In no event shall Seller be liable for special, incidental, or consequential damages nor for any damages which exceed the purchase price of the apparatus.

7. PRICE. Buyer agrees to pay for the apparatus described herein the total sum of:

_____ Dollars
Nine hundred twenty six thousand eighty six
(\$ 926,086).

State and local sales taxes, if any, are not included in the purchase price. It is understood by both the buyer and the seller that *Change Orders* executed after contract acceptance may increase or decrease the price. The purchase price herein is based upon all applicable state and federal manufacturing law, regulations, orders, mandates and standards in effect as of the date of this Agreement (hereinafter "Standards") such as, for example, the Standards mandated by the National Fire Protection Association, tentative interim amendments to the National Fire Protection Association Standard, Underwriters Laboratories of Canada, and the Environmental Protection Agency. The purchase price shall be subject to increase due to any state or federal Standards that are adopted, issued or mandated following the date of this Agreement that require the apparatus(es) described above to be manufactured and/or delivered in compliance with such Standard(s)

8. PAYMENT. The purchase price shall be paid in the following manner:

The Village has agreed to pay the gross contract price of \$926,086.00. Upon execution of this Agreement Smeal shall provide the Village with a performance bond in the amount equal to one hundred percent (100%) of the gross contract price. Upon delivery and acceptance of the truck by Downers Grove the contract amount shall be due and owing to Smeal. This shall include the trade-in value of \$149,000.00 for the 1998 Pierce 100' Platform Truck. Nothing herein shall limit the Village's right to sell the 1998 Pierce 100' Platform Truck on its own and not trade it to FAST.

All checks must be made payable to Smeal Fire Apparatus Co. only and delivered to Seller at its offices in Snyder, Nebraska. Under no circumstances shall payment be made to a dealer or any one else as Seller's agent. Smeal Fire Apparatus Co. is the only authorized payee. Any representation that payment is to be made to any other party is absolutely unauthorized.

9. SELLER'S REPRESENTATIONS. All representations made and/or actions taken by a dealer or agent either before or after execution of this Sales Contract are not binding on the Seller. This Sales Contract in order to be effective and binding upon Seller must be signed and accepted by an authorized officer of Seller. The effective date of this Sales Contract will be the date it is signed and accepted by the Seller.

10. BUYER'S REPRESENTATIONS. Buyer is The village council of the Village of Downers Grove,
(Fire Department, Fire District, Municipality, Borough, Etc.)

and has the power and authority to enter into this Sales Contract and perform its obligations hereunder; this Agreement has been duly authorized, executed and delivered by Buyer and is the valid, enforceable and binding obligation of Buyer; and Buyer represents that there are no warranties, agreements or understandings, written or oral, which in any manner alter, abridge or conflict with the terms of this Sales Contract. Buyer represents that the individuals listed below have authority to sign all documents including but not limited to, all change orders on behalf of Buyer.

11. DELAY ON PERFORMANCE. Seller's Performance under this Sales Contract is subject to delays resulting from strike, insurrection, war, accidents, fires, floods, commandeering of plant or other demands of governmental authority, delays in transportation, or materials, delays in receipt of information when clarifications are requested, and all other causes beyond the control of Seller.

12. TESTING. In the event Buyer wishes to test the apparatus, such test shall be made within ten (10) days after arrival of the apparatus at its destination. A written report of any and all tests shall be promptly forwarded to Seller. If Buyer fails to test within this time limit and/or fails to forward test results to Seller, the apparatus shall be considered as fully complying with contract specifications as described in paragraph 3.

13. TITLE. All apparatus shall remain the property of Seller until the purchase price is paid in full. In the event of default in payment, Seller may take full possession of all apparatus sold hereunder and any payments that have been made shall be forfeited and/or considered as rental for the use of the apparatus up to date of taking possession.

14. MISCELLANEOUS. The following miscellaneous provisions shall apply to this Sales Contract:

14.1 Entire Agreement. This Sales Contract, and the specifications and warranty attached hereto sets forth the entire agreement between the parties and there are no promises, agreements, conditions or understandings, either oral or written between them that are other than as herein set forth. Except as herein otherwise provided, no subject alteration, amendment, change or addition to this Sales Contract shall be binding upon either Seller or Buyer unless reduced to writing and signed by them.

14.2 Severability. If any term, covenant or condition of this Sales Contract, or any application thereof to any person or circumstance, shall, to any extent, be invalid or unenforceable, the remainder of this Sales Contract or application of such term, covenant or condition to persons or circumstances other than those as to which it is held as invalid or unenforceable, shall not be affected thereby and each term, covenant or condition of this Sales Contract shall be valid and enforceable to the fullest extent permitted by law.

14.4 Binding Effect. This Sales Contract shall be binding upon and inure to the benefit of the parties and their respective successors and assigns. Except with the written consent of the other party hereto, no person shall take any action which will allow any right hereunder to be assigned or held by any other person.

IN WITNESS WHEREOF, this Sales Contract has been duly executed by the parties hereto on the date set forth opposite their name.

To be completed by the Authorized Smeal Distributor

By: _____ Date: ____/____/____
Smeal Fire Apparatus Co.
Dealer Representative

Mailing Address of Customer: _____

Printed Name of Fire Chief or Primary Contact: _____
_____ Title: _____

Business Telephone Number: (_____) _____ - _____

To be completed by the Purchasing Entity

Printed Name: _____ Title: _____
Signature: _____ Date: ____/____/____

Printed Name: _____ Title: _____
Signature: _____ Date: ____/____/____

Printed Name: _____ Title: _____
Signature: _____ Date: ____/____/____

Printed Name: _____ Title: _____
Signature: _____ Date: ____/____/____

Attests: _____ *Date:* ____/____/____

To be completed by Smeal Fire Apparatus Co.

By: _____ Date of Acceptance: ____/____/____

Smeal Fire Apparatus Co.
Delwin Smeal, President

Attests: _____ *Date:* ____/____/____

May 26, 2010

Village of Downers Grove
801 Burlington Ave
Downers Grove, IL 60515

To Whom It May Concern:

Based on the outcome of our meeting, Fire Apparatus & Supply Team is Happy to provide you with your adjusted price the 2010 Smeal 100' Rear Mount Platform proposed.

The following changes have been made,

The Independent front suspension is included

The 3 year bumper to bumper warranty is included with an additional 2 years on the chassis

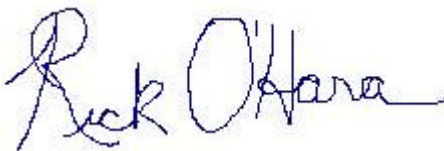
The (5) Scott Airpack units and (5) Spare bottles have been deleted from the contract

Auto- Lube system is included in the contract price

The New Contract price is \$ 926,086.00

Subtracting a trade-in value of \$ 149,000 dollars, the amount due upon completion would be \$ 777,086.00

Respectfully,



Rick O'Hara

Memorandum

To: Village Council
From: David Fieldman, Village Manager
Re: Responses to Ladder Truck Purchase Questions
Date: June 17, 2010

At the June 8, 2010 Village Council meeting, the Village Council tabled the discussion of the ladder truck purchase to the July 6, 2010 meeting. The tabling was intended to allow Village Council members to submit specific questions to staff and to allow staff ample time to prepare responses to the questions.

To date, four Village Council members have met with me to discuss the proposed purchase, ask questions and express their concerns. Based on the discussions with the Council members, it appears that there is strong support for the continued operation of a ladder truck in the manner described in the May 26 memorandum, but there is not clear support to proceed with the purchase until additional financial and budgetary analysis is completed. It also appears that there is concern about purchasing a \$920,000 apparatus given the current economic conditions and financial challenges faced by the Village. Specifically, Council members are concerned that financing all or a portion of the purchase price for a ladder truck would obligate the Village to make annual payments beginning in 2011. Council members are not sure if the Village is in a position to make these annual payments. Council members have indicated that they would like a better understanding of the FY11 municipal budget including the General Fund and Equipment Replacement Fund and the 2011-2013 long range financial plan prior to making a decision regarding this significant purchase.

During this decision making process, staff has used the analogy of trading in an existing car when the expected repair bills are approximately equal to the costs of monthly payments on a new car. Continuing with this analogy, Council members have noted that people may choose to continue to make repairs to an existing car if they feel that their financial condition may not allow them to make several years of new car payments. In these situations, a person may choose to make on-going repairs to the existing car until they know that they can afford the payments on a new car over an extended time frame. There is variability and flexibility offered by maintaining the existing car, but the payments on a new car are an obligation.

Council members have submitted the following questions:

- What is the current and future condition of the Equipment Replacement Fund?
- Please explain the policies and practices related to the Equipment Replacement Fund.
- Is there enough money in the Equipment Replacement Fund to pay for the ladder truck and avoid financing all or a portion of the cost of the ladder truck?
- Could the Village “borrow” from the Equipment Replacement Fund and make annual payments from the General Fund to the Equipment Replacement in lieu of entering in a financing agreement? What is the impact on the General Fund if this approach is selected? Does this approach provide the Village with more budgetary and financial flexibility?

- Can the Village use the \$526,000 of accumulated pre-funding payments in the Equipment Replacement Fund towards the purchase of a new ladder truck and finance the balance of the purchase price? How much would the finance payments be and what would be the impact on the General Fund and Equipment Replacement Fund if this approach is selected?

Staff recommends considering the purchase of a new ladder truck at a Council meeting after the long range financial plan meeting and after the October budget meeting. During the October budget meeting, staff will present the information on the General Fund and Equipment Replacement Fund and provide detail responses to the Council questions. It is important to understand that the existing ladder truck will remain in service until a decision is made and a replacement truck is delivered. Additional maintenance costs may be incurred during this time. There is a risk that the costs of maintaining the existing ladder truck could be significant. However, major repairs have recently been completed and the ladder truck is functioning well at this time. Under this scenario, the item would appear on the July 6 Council meeting agenda and staff will provide a brief update.

Memorandum

To: Village Council
From: David Fieldman, Village Manager
Re: Additional Information about Ladder Truck Purchase
Date: May 26, 2010

This report provides responses to the questions asked at the May 18, 2010 Village Council meeting regarding the purchase of a ladder truck. Specifically, the report outlines the primary uses of the ladder truck, summarizes responses and response times, explains the use of other ladder trucks in the mutual aid system, quantifies the service level impacts of eliminating the ladder truck from the Village fleet, explains the life and replacement strategy for the existing ladder truck, details three options for the purchase of a new ladder truck and two options for the sale of the existing ladder truck, identifies an option for an additional warranty and compares the selected ladder truck to a similar vehicle recently purchased by Hinsdale.

The key points are as follows:

- The primary functions of the ladder truck are to assist firefighters in performing search, rescue and ventilation activities and to extinguish fires.
- The response times for the ladder truck range from 2 to 7 minutes with an average response time of 4 minutes, 51seconds.
- Ladder trucks from three neighboring departments are available to respond to calls for service per mutual aid agreements. The response times for these trucks range from 12 to 15 minutes.
- The elimination of the ladder truck from the fleet would decrease the Village's ISO rating from 3 to 4. ISO estimates that cost of insurance would increase by an average of \$188 per year per business; an estimated annual cost to the entire business community of \$650,000.
- Through 2010, a total of 12 annual pre-funding payments to the Equipment Replacement Fund will have been made totaling about \$520,000.
- Staff will pursue the sale of the existing ladder truck. If the net proceeds from sale of the truck are less than \$149,000, staff would trade-in the truck to Smeal for \$149,000.
- The total cost of owning and operating the existing ladder truck over the next 10 years is estimated to be \$242 per day in service compared to \$236 per day in service for a new truck.
- **Staff recommends** financing the net purchase price of \$771,386. The \$520,000 in pre-funding payments should remain in the Equipment Replacement Fund. This amount along with the accrued interest and residual value of the truck would be used to purchase a replacement truck in approximately 10 years.

Primary Uses of the Ladder Truck

The ladder truck is an integral part of the Village's fire response strategy. While the ladder truck is used to respond to many calls for service, its primary functions are to assist firefighters in performing search, rescue and ventilation activities and to extinguish fires.

Upon arriving on the scene of an active fire, firefighters immediately begin forcible entry, search, rescue and ventilation efforts. During search and rescue, firefighters move through the building or structure looking for people and assisting them in exiting the building. The ladder truck is used to provide firefighters safe and quick access to above grade (2nd story and above) and below grade portions of the building. In some cases, the ladder truck is used to remove people from buildings when other means of egress such as interior stairs are blocked by smoke, fire, or partial building collapse.

Ventilation involves cutting holes in the roof to allow heat and smoke to exit the structure. Proper ventilation decreases the risk the fire will spread throughout the structure reducing the super heated gases and smoke inside the building increasing the survival rate for victims and firefighters. Ventilation should be performed immediately at the scene of the fire. Ventilation channels the heat and gases providing firefighters with better visibility to search for victims. Firefighters must have quick access to the roof to perform this function. The ladder truck allows quick access to the roof of the vast majority of buildings within Downers Grove.

The ladder truck is also used to provide an efficient means of delivering heavy water streams for elevated positions adjacent to or above the fire building. Firefighters apply water to the fire from the top down from their position in the bucket of the ladder. This position also allows firefighters a good vantage point to see the fire's progress and control the spread of fire to neighboring structures.

The ladder truck is used a first responder for EMS calls. The truck is equipped with basic life support equipment. The Village's Rescue Squad is also equipped with basic life support equipment. Either of these vehicles can respond to EMS calls.

Ladder Truck Responses and Response Time

The Village's fire response procedures call for the ladder truck to arrive first on the scene of a fire or simultaneously with other responding apparatus. The early arrival of the ladder truck is critical. This allows the search, rescue and ventilation activities to commence as soon as possible.

The ladder truck is located at Station 2 in the center of the Village to allow for the shortest overall response times to all areas of the Village. Response times for the ladder truck range from 2 minutes for the areas close to Station 2 to 7 minutes for the areas located along the exterior boundaries of the Village. The average response time for the ladder truck is 4 minutes, 51seconds.

The ladder truck responds to approximately 800 to 1,000 calls per year. Specifically, the ladder truck responds to the following types of calls:

- Still Alarms (204 Responses in 09)- Still alarms are those calls of a minor nature. A relatively small fire or other emergency incident that that is handled with a single fire apparatus.
- Elevated Stills (131 Responses in 09) - Elevated still alarms require additional manpower and resources that a single apparatus cannot handle.
- Special Response (11 Responses in 09) - Special responses are incidents that involve a threat to life or property.
- Full Stills (200 Responses in 09) - A full still alarm involves a significant threat to life and property in which a greater fire department response (apparatus and manpower) will significantly decrease the threat to life or property.
- Ambulance Requests (295 Responses in 09) – Any request for Emergency Medical Services.

Mutual Aid for Ladder Trucks

The Village participates in a mutual aid system in which neighboring fire departments assist the Village in responding to certain calls for service, and vice versa. In the current mutual aid system, ladder trucks from Lisle-Woodridge (located at 1005 School Street), Westmont (located at 6015 South Cass Ave) and Lombard (located at 2020 South Highland Ave) respond to Village's requests for mutual aid. The average response times for these ladder trucks are 12 to 15 minutes.

Service Level Impacts of Eliminating Ladder Truck from the Fleet

If the Village were to eliminate the ladder truck from the fleet and rely on the mutual aid responses as described, search, rescue and ventilation activities and some fire suppression activities would be delayed. The average response time of a ladder truck would increase from 2-7 minutes to 12-15 minutes.

Further, the Village's Insurance Service Organization (ISO) rating would decrease. The Village is currently rated 3 on a scale of 1 to 10, with 1 being the best rating. Per ISO review standards the Village cannot maintain the current rating of 3 if the ladder truck were eliminated from the fleet. The Village's ISO rating would decrease to 4. ISO estimates that cost of insurance would increase by an average of \$188 per year per business. The Downers Grove Economic Development Corporation estimates that there are 3500 businesses located in the Village. Therefore, the estimated increase in cost of insurance to the business community is \$650,000 per year.

Life and Replacement of the Existing Ladder Truck

The Village purchased the existing ladder truck in 1998 for approximately \$600,000. At the time of the purchase, the Village estimated the expected life of the ladder truck to be 17 years. Based on this life expectancy, the Village established a schedule for payments from the General Fund to the Equipment Replacement Fund. The schedule included 17 annual payments beginning in 1998 and continuing to 2014. The annual payments increased at a rate of 2.5% per year with the first year payment of \$35,294 and a final

year payment of \$52,394. The total of the 17 annual payments totaled \$736,400. The total payments, along with the interest earnings accumulated over the 17 year period (estimated to be \$186,000), were designed to generate approximately \$922,000 to purchase a new ladder truck in 2014 (see the attached pre-funding payment schedule).

In 2009, Village staff determined that the ladder truck would not meet the original life expectancy of 17 years. To address this issue, staff increased the annual payment to approximately \$80,000 beginning in 2010. To date, a total of 12 annual pre-funding payments to the Equipment Replacement Fund have been made totaling about \$520,000. In addition, staff began pursuing the option of purchasing a new ladder truck prior to 2014.

Purchase of a New Ladder Truck

The purchase price of the new ladder truck is \$920,386. The manufacturer of the ladder truck, Smeal, has offered to purchase the existing ladder truck from the Village for \$149,000. The net price of the new ladder truck would be \$771,386.

Staff has identified three general options for the purchase of the new ladder truck.

Option 1 – Purchase the Ladder Truck with Existing Funds in the Equipment Replacement Fund. Under this option, the Village would pay \$771,386 to Smeal with funds from the Equipment Replacement Fund. This payment would reduce the cash balance in the fund from \$1.5 million to approximately \$730,000. The Village would continue to make pre-funding payments from the General Fund to the ERF based on the expected life of the ladder truck and estimated replacement cost at the end of the expected life. Staff does not recommend this option because the balance of the Equipment Replacement Fund would be reduced so that the Village may not be able to replace other vehicles in the fleet pursuant to the recommended replacement schedule.

Option 2 – Finance the Purchase of the Ladder Truck and Apply a Down Payment from the Equipment Replacement Fund. Under this option, the Village would pay \$771,386 to Smeal. The Village would use all or a portion of the \$520,000 in pre-funding payments already made to the ERF as a down payment and would finance the balance of the purchase price. The Village would continue to make pre-funding payments from the General Fund to the ERF based on the expected life of the ladder truck and estimated replacement cost at the end of the expected life. Staff does not recommend this option because if the \$520,000 is paid out, the Village will not have ample funds available for the ladder truck to be replaced in the future. The lack of funds may cause the Village to lease the replacement vehicle. Depending where interest rates are at that time, this may not be a cost effective option. Maintaining the cash balance gives the Village more options in the future.

Option 3 – Finance the Purchase of the Ladder Truck with No Down Payment. Under this option the Village would finance the entire net purchase price of the ladder truck, \$771,386. The \$520,000 in pre-funding payments to the ERF would remain in the fund and would be used towards the purchase of a ladder truck at the end of the life of the new

ladder truck. Interest earnings on the \$520,000 over the next ten years plus the trade-in value of the new ladder truck should allow sufficient funds for the purchase of a truck at that time. Staff recommends this option because it allows the Village to purchase the ladder truck taking advantage of the existing low cost of financing while providing a sufficient balance in the Equipment Replacement Fund for the future replacement purchase.

Staff prepared a 10-year operating pro-forma comparing the cost of continuing to operate the existing ladder truck to the cost of purchasing and operating a new ladder truck pursuant to the recommended Option 3 above. The total cost of owning and operating the existing ladder truck over the next 10 years is estimated to be \$784,000. The existing ladder truck is expected to be out of service for approximately 400 days. The total cost of owning and operating a new ladder truck over the next 10 years is expected to be about \$825,000, considering a residual value of the truck of \$300,000. The new ladder truck is expected to be out of service for approximately 160 days. Based on this information, the total cost of owning and operating the existing ladder truck over the next 10 years is estimated to be \$242 per day in service compared to \$236 per day in service for a new truck. For additional information, please see the attached 10-year operating pro-forma.

Sale or Trade-in of the Existing Ladder Truck

Staff has identified two non-exclusive options for the sale or trade-in of the existing ladder truck. The first option is to attempt to sell the ladder truck to another department and the second option is to trade in the ladder truck to Smeal for \$149,000. Staff will pursue both options. The Village will offer the ladder truck for sale to another fire department. Traditionally, brokers are used for the sale of large, specialized fire apparatus such as a ladder truck. Brokers are paid a commission based on the sale price of the apparatus. The Village may be able to obtain a higher net sale price of the ladder truck by using a broker. If the Village receives an offer to purchase the ladder truck with net proceeds to the Village greater than \$149,000, staff will sell the ladder truck to another department. If the Village fails to receive an offer to purchase the ladder truck with net proceeds to the Village greater than \$149,000, staff will trade in the ladder truck to Smeal for \$149,000.

Warranty

Smeal offers a 3-year warranty on the new ladder truck. Based on the Village Council inquiry about the availability of additional warranty coverage, staff determined that Smeal offers a 5-year warranty (an additional two years) at a cost of \$5600. Staff recommends that the Village purchase the 5-year warranty.

Comparison to the Hinsdale Ladder Truck

The ladder truck recently purchased by Hinsdale is a single axle, medium duty ladder, designed specifically by the Hinsdale fire department for their community and their operation. The tip load (weight limit at the end of the ladder) of the ladder is greatly reduced limiting the amount of firefighters that can safely work on the ladder. The compartments that carry equipment are limited in size and quantity not allowing for the

full compliment of necessary equipment that the Downers Grove Fire Department would normally carry. The overall cost of the Hinsdale ladder truck was \$967,000.

General Terms and Conditions of the Purchase Contract

Staff has negotiated a contract for the purchase of a new ladder truck from Smeal subject to the following key terms and conditions.

Purchase Price:	\$920,386
Trade-In Price:	(\$149,000)
3-Year Warranty:	Included
Additional 2-Year Warranty:	\$5,600
Net Purchase Price:	\$776,986 due upon delivery

Delivery Date: 330 days from date of execution

Staff Recommendation

Staff recommends the following:

- Purchase of a new ladder truck pursuant to the terms and conditions of the contract as described above.
- Pursue selling the existing ladder truck to another department using the services of a broker. If the Village fails to receive an offer to purchase the ladder truck with net proceeds to the Village greater than \$149,000, staff will trade in the ladder truck to Smeal for \$149,000.
- Finance the net purchase price \$771,386 (the warranty will be purchased directly from the Equipment Replacement Fund and not included in the amount to be financed). The \$520,000 in pre-funding payments to the ERF would remain in the fund and would be used towards the purchase of a ladder truck at the end of the life of the new ladder truck. The Village would select a financial institution for the financing based on a competitive process. Village Council approval is required prior to entering into the financing agreement.

Attachments

- 1998 Ladder Truck Pre-Funding Payment Schedule
- Existing & New Ladder Truck 10-Year Operating Pro-Forma

Prefunding
Schedule
Pierce
Ladder
Truck

1998 Pierce Ladder		<u>Original Prefunding Schedule</u>		<u>Revised Schedule</u>	
\$600,000.00	17	Yearly	Cumulative	Yearly	Cumulative
	1998	35,294.12	35,294.12	35,294.12	35,294.12
	1999	36,176.47	71,470.59	36,176.47	71,470.59
	2000	37,080.88	108,551.47	37,080.88	108,551.47
	2001	38,007.90	146,559.38	38,007.90	146,559.38
	2002	38,958.10	185,517.48	38,958.10	185,517.48
	2003	39,932.05	225,449.53	39,932.05	225,449.53
	2004	40,930.36	266,379.89	40,930.36	266,379.89
	2005	41,953.61	308,333.50	41,953.61	308,333.50
	2006	43,002.46	351,335.96	43,002.46	351,335.96
	2007	44,077.52	395,413.47	44,077.52	395,413.47
	2008	45,179.45	440,592.93	45,179.45	440,592.93
	2009	46,308.94	486,901.87	0.00	440,592.93
	2010	47,466.66	534,368.53	80,155.00	520,747.93
	2011	48,653.33	583,021.86	75,000.00	595,747.93
	2012	49,869.66	632,891.53	75,000.00	670,747.93
	2013	51,116.41	684,007.94	75,000.00	745,747.93
	2014	52,394.32	736,402.25	75,000.00	820,747.93
		<u>Estimated Interest Accrued @ 3.0%</u>		<u>Estimated Interest Accrued @ 3.0%</u>	
	1998	1,058.82	1,058.82	1,058.82	1,058.82
	1999	2,144.12	3,202.94	2,144.12	3,202.94
	2000	3,256.54	6,459.49	3,256.54	6,459.49
	2001	4,396.78	10,856.27	4,396.78	10,856.27
	2002	5,565.52	16,421.79	5,565.52	16,421.79
	2003	6,763.49	23,185.28	6,763.49	23,185.28
	2004	7,991.40	31,176.67	7,991.40	31,176.67
	2005	9,250.01	40,426.68	9,250.01	40,426.68
	2006	10,540.08	50,966.76	10,540.08	50,966.76
	2007	11,862.40	62,829.16	11,862.40	62,829.16
	2008	13,217.79	76,046.95	13,217.79	76,046.95
	2009	14,607.06	90,654.01	13,217.79	89,264.74
	2010	16,031.06	106,685.06	15,622.44	104,887.18
	2011	17,490.66	124,175.72	17,872.44	122,759.61
	2012	18,986.75	143,162.46	20,122.44	142,882.05
	2013	20,520.24	163,682.70	22,372.44	165,254.49
	2014	22,092.07	185,774.77	24,622.44	189,876.93

Ladder
Truck
10 year Pro Forma

Current Truck v. New Truck

Base - 10 Year
Lease

			<u>Current</u>	<u>New</u>
1	2011	Prefund\Lease Cost	75,000	99,277
		Maint\Repairs	33,967	1,940
		Out of Service	35	7
2	2012	Prefund\Lease Cost	75,000	99,277
		Maint\Repairs	37,970	1,940
		Out of Service	40	7
3	2013	Prefund\Lease Cost	75,000	99,277
		Maint\Repairs	40,000	1,940
		Out of Service	37	7
4	2014	Prefund\Lease Cost	75,000	99,277
		Maint\Repairs	40,000	4,740
		Out of Service	40	7
5	2015	Prefund\Lease Cost	0	99,277
		Maint\Repairs	42,000	4,740
		Out of Service	38	7
6	2016	Prefund\Lease Cost		99,277
		Maint\Repairs	50,000	9,480
		Out of Service	40	15
7	2017	Prefund\Lease Cost		99,277
		Maint\Repairs	50,000	12,480
		Out of Service	40	15
8	2018	Prefund\Lease Cost		99,277
		Maint\Repairs	50,000	18,720
		Out of Service	40	17
9	2019	Prefund\Lease Cost		99,277
		Maint\Repairs	65,000	35,000
		Out of Service	45	35
10	2020	Prefund\Lease Cost		99,277
		Maint\Repairs	75,000	40,000
		Out of Service	50	40

	<u>Current</u>	<u>New</u>
Total Prefund\Lease Cost	300,000	992,770
Total Maint\Repairs	483,937	130,980
Sub-Total	<u>783,937</u>	<u>1,123,750</u>
Residual Value	0	300,000
Net Cost	<u><u>783,937</u></u>	<u><u>823,750</u></u>
Days out of service	<u>405</u>	<u>157</u>
Days in service	3,245	3,493
Cost per Day in Service	242	236