

AGENDA TITLE:

Joint Purchase of an Aerial Ladder Truck with other Southern Marin Fire Agencies

RECOMMENDED MOTION:

Adopt a motion authorizing the movement of up to \$97,000 from Equipment Reserve into the Operating Budget for the Joint Purchase of a Ladder Truck. The final amount of this authorization would be based upon the approval of the City Manager and/or the City Finance Committee.

SUMMARY

Adoption of this motion would authorize the movement of up to \$97,000 from the Equipment Reserve Fund into the current Operating Budget. This would allow this money to be spent within the current fiscal year. The intent of this movement is to allow the City of Sausalito to purchase a used aerial ladder truck in a joint venture with the other fire service agencies serving the Southern Marin area. This includes Southern Marin Fire District, County of Marin, City of Mill Valley and the Tiburon Fire District. The cost of the unit would be split among the agencies. The exact cost of the split is currently in negotiations and could change based upon where the vehicle is stationed and which agencies participate in the joint purchase.

BACKGROUND

Currently the City of Sausalito owns a 1983 Sutphen Tower Ladder that was purchased as a manufacturers demo and has been in frontline service for 25 years. It is in need of replacement. For more detailed information on the serviceability of the current ladder truck see attachment A.

The contract between the City of Sausalito and Southern Marin Fire states that the agencies should explore the joint purchase of an aerial ladder for the replacement of this unit. We have been working with the other Southern Marin fire agencies in an effort to purchase a vehicle that would serve the needs of all of the communities in Southern Marin. Presently, we have an opportunity to purchase a used ladder truck at a very reasonable price. Although this unit is used, it still has 5-7 years of service life left.

	/
Item #:	QH_
Meeting Date:	12-809
Page #:	1

At present, we have not worked out the details of the joint purchase. I have attached a spreadsheet that examples the three most likely cost formulas. All of the agencies have expressed a desire to purchase the vehicle in a joint venture, however, the location and staffing of the vehicle has not been resolved. If all of the agencies participate, it will likely be stationed at the Mill Valley Public Safety Building or Southern Marin Station 4 (Tamalpais Valley). Currently the key issues are response time versus staffing level.

ISSUES

At present, the plan for a joint purchase with the other Southern Marin agencies calls for the ladder truck to be stationed at either Mill Valley Public Safety Building or Southern Marin Station 4. The key issues are that the staffing level at the Mill Valley PSB would only allow for the unit to be staffed with two personnel. This level of staffing does not meet industry standards or NPFA (National Fire Protection Association) recommendations. Our Firefighter's Union has come out in opposition to decreasing the staffing on the ladder truck. The other option under consideration is SMFD Station 4. Although the unit would be staffed with three personnel, it poses a longer response time to Tiburon. Currently, the ladder truck is stationed at Station 4 (during the construction of the Sausalito Public Safety Facilities).

FISCAL IMPACT

The immediate fiscal impact would be the expense of \$35,000 to \$97,000. This is in contrast to the expense of Sausalito purchasing a ladder truck as a sole agency.

STAFF RECOMMENDATIONS

Adopt a motion authorizing the movement of up to \$97,000 from Equipment Reserve into the Operating Budget for the Joint Purchase of a Ladder Truck. This authorization would be based upon the approval of the City Manager and/or the City Finance Committee.

ATTACHMENTS

Attachment A - Serviceability of the current ladder truck Attachment B - Projected Agency Costs

Item #: 6 H

Meeting Date: 12-8-09

PREPARED BY:

REVIEWED BY:

Jim Irving Fire Chief

Charles Francis
Administrative Services Director

SUBMITTED BY:

Adam W. Politzer City Manager

> Item #: Meeting Date: 12-8-0

Page #: ____

Attachment A

Detailed Information on the Current Ladder Truck

The current ladder truck is a 1983 Sutphen Tower Ladder that was purchased as a manufacturers demo and has been in frontline service for 25 years. This was this is in addition to the time that it was utilized as a demonstration unit. This vehicle has served us well, though with some serious limitation. This unit is designed as a tower ladder and was outfitted with a tower unit until we began to have integrity issues with the tower stabilizer. The management at the time decided it was best (least expensive) to remove the tower unit and operate the aerial as a straight ladder. This removed 10' for the overall length of the ladder. It has also proven to be dangerous and ineffective due to the box-truss construction and the short ladder length of 65'. To explain, the box-truss ladder has a climbing area that is meant to give access to the tower unit and it is from the tower unit that access is made to the roof surface (or other area to which you wish to gain access). With a straight aerial ladder one will step over the side of the rail to make access to the roof. When utilizing the box-truss constructed ladder as a straight ladder there is an extra 3' of depth to contend with, making the transition from ladder to roof an unsafe transition in addition to making it impossible to properly ladder windows.

Currently we are experiencing a number of operational issues that warrant mechanical work. A full completion of the repairs would eclipse the value of the unit. The general mechanical deficiencies and safety concerns are as follows:

- 1. Onboard water tank is separating at a seam creating a significant leakage of water
- 2. The priming pump for the water pumping system is out of service
- 3. The seat belts are only lap belts and are inoperative due to improper manufacturer size
- 4. Recurrent air brake leakage
- 5. 2009 pump test proves 5 leaking plumbing valves
- 6. Pump fails dry vacuum test
- 7. Significant engine power drop off
- 8. Unsafe surface areas (no slip resistance)
- 9. Crew cab is unenclosed (crew members are open to the elements)
- 10. Communications with crew members is ineffective due to open crew cab and lack of headset communication unit

- 11. Lack of automatic ground stabilizer lock out or warning device (indicates stabilizers are not set properly or may be moved with ladder extended)
- 12. Lack of ladder high speed disconnect when unit is in pump mode (enables spike in pressure to hose lines that may be deployed and operating)

In addition to these issues that are in need of attention, the more serious condition is the overall safety of the unit. I have consulted NFPA 1901 Annex D in order to obtain a professional perspective and is the benchmark criteria that is utilized when a person is injured or killed in the line of duty due to vehicle related incident.

NFPA 1901 Annex D explained:

NFPA 1901 Annex D addresses the problem of older vehicles that do not incorporate current features and safety standards. The annex recommends replacement of any vehicles that were built prior to 1979. It further recommends refurbishment or replacement of any vehicles built between 1979 and 1991. If units are refurbished and retained, they should be placed in reserve status.

Annex D is designed to help departments determine if an apparatus is in need of upgrading or refurbishing.

Beginning with the 1991 edition of NFPA 1901, a number of significant safety features were incorporated into the standards: Fully enclosed riding areas, stronger aerial ladders, auxiliary braking systems, reflective striping, improved warning lights and no roof-mounted audible warning devices, to name a few.

By upgrading to equipment that meets the newer NFPA 1901 standards, you can significantly reduce the potential of serious injury or death resulting from injuries sustained in accidents or operation of these vehicles.

Truck #1 deficiencies as pertains to NFPA 1901 Annex D in detail:

- 1. Lack of fully enclosed cab
- 2. Warning lights and reflective striping do not meet the current standard
- 3. Slip resistance of walking surfaces and handrails do not meet the current safety standard
- 4. Ground and step lights do not meet the current safety standard
- 5. Noise levels in the driving and crew levels do not meet the current standards
- **6.** All horns and sirens need to be relocated from the roof to an area as low and far forward as possible
- 7. Seat belts need to be available for every seat and must be new or in serviceable condition

6H

- 8. Sign plates need to be present that state "no riding on open areas"
- **9.** A transmission shift pump interlock need to be present and working properly on vehicles with an automatic transmission
- 10. The electrical system must be updated to meet the current standard

		2	

Agency	Reside	ential	Multi F	am Residential		Comr	mercial		Total	Cost
	Total	Value	Total	Value	%	Total	Value	%	%	\$170,000
SMFD	5194	\$1,875,812,445	432	\$232,115,036	30.54%	100	\$129,343,041	21.44%	20.00%	\$34,000
MVFD	3753	\$1,339,050,439	401	\$124,394,478	16.37%	209	\$149,268,557	24.75%	20.00%	\$34,000
TFPD	2441	\$1,339,264,153	187	\$104,542,612	13.75%	49	\$51,182,646	8.49%	20.00%	\$34,000
BELV	822	\$538,350,879	32	\$32,699,697	4.30%	10	\$7,185,158	1.19%		\$0
SAUS	1335	\$544,537,734	652	\$218,543,971	28.75%	219	\$206,453,239	34.23%	20.00%	\$34,000
MCFD	102	\$20,388,936	22	\$47,749,569	6.28%	28	\$59,754,981	9.91%	20.00%	\$34,000
	13647	\$5,657,404,586	1726	\$760,045,363		615	\$603,187,622		100.00%	\$170,000

Split Based upon Commercial and Multi-Family Occupancies

Agency	Residential		Multi Fam Residential		Commercial				Total	Cost
	Total	Value	Total	Value	%	Total	Value	%	%	\$170,000
SMFD	5194	\$1,875,812,445	432	\$232,115,036	30.54%	100	\$129,343,041	21.44%	24.54%	\$41,711
MVFD	3753	\$1,339,050,439	401	\$124,394,478	16.37%	209	\$149,268,557	24.75%	21.90%	\$37,226
TFPD	2441	\$1,339,264,153	187	\$104,542,612	13.75%	49	\$51,182,646	8.49%	10.28%	\$17,471
BELV	822	\$538,350,879	32	\$32,699,697	4.30%	10	\$7,185,158	1.19%	2.25%	\$3,823
SAUS	1335	\$544,537,734	652	\$218,543,971	28.75%	219	\$206,453,239	34.23%	32.37%	\$55,023
MCFD	102	\$20,388,936	22	\$47,749,569	6.28%	28	\$59,754,981	9.91%	8.67%	\$14,746
	13647	\$5,657,404,586	1726	\$760,045,363		615	\$603,187,622		100.00%	\$170,000

Split Involving only SMFD and Sausalito

Agency	Reside	ential	Multi F	am Residential			nercial		Total	Cost
	Total	Value	Total	Value	%	Total	Value	%	%	\$170,000
SMFD	5194	\$1,875,812,445	432	\$232,115,036	51.51%	100	\$129,343,041	38.52%	42.93%	\$72,988
MVFD	3753	\$1,339,050,439	401		0.00%	209		0.00%	0.00%	\$0
TFPD	2441	\$1,339,264,153	187	**	0.00%	49		0.00%	0.00%	\$0
BELV	822	\$538,350,879	32		0.00%	10		0.00%	0.00%	\$0
SAUS	1335	\$544,537,734	652	\$218,543,971	48.49%	219	\$206,453,239	61.48%	57.07%	\$97,012
MCFD	102	\$20,388,936	22		0.00%	28		0.00%	0.00%	\$0
	13647	\$5,657,404,586	1726	\$450,659,007		615	\$335,796,280		100.00%	\$170,000