

This is a presentation of facts for the consideration of the community and the Board. This is not indented to promote the disillusion or the continuance of the ambulance transport service either way.



Analyzing Fire-Based EMS

The Numbers



What is the full cost of
collecting and providing an
ambulance service to the
community of Lehigh Acres?

Analyzing Fire-Based EMS

- The ambulance service is a critical component of our community's health care system, providing both emergency care, as well as the transportation of patients to medical facilities.
- Prompt and skilled EMS service provided in the first moments of emergency care can make the difference between a patient's full-recovery or an extensive and costly patient rehabilitation.

Analyzing Fire-Based EMS

- Due to the training, expertise, and equipment of fire service-based EMS responders, they are capable of simultaneously securing a scene, mitigating the hazard, and triaging, extricating, treating, decontaminating (if necessary), and transporting the patients who have been injured to an appropriate medical facility
- Time efficiency is a key component of the best designed EMS systems
- No service more capable of rapid multi-faceted response than a fire-based EMS system

Overhead Costing

1. Costing looks at the **cost of all resources** used to provide services rather than expenditures made to operate municipal departments;

Overhead Costing

2. Costing includes **all** costs of providing a service, not just those found in the budget or financial reports of the department responsible for the service;

Overhead Costing

3. Costing focuses on the **cost** of the resources used to provide a service **during a given period of time**, regardless of when cash disbursements are made to purchase these resources.

Analyzing Fire-Based EMS

- Overhead verses Operating Costs
- Current Cost of EMS
- Analyze Costs verses Revenue/Receipts

Purpose of Costing

The purpose of costing is not simply to collect cost data, but to provide everyone present with information they can use to make better management decisions on providing the ambulance service.

Overhead Cost for FY10-11

- Personnel
 - Salaries/wages, additional pay, supervision
- Equipment & Supplies
 - Capital, equipment maintenance, apparatus maintenance, equipment supplies, stationary supplies, equipment insurance, service-related supplies
- Facilities/Other
 - Utilities, COPCN, ALS Certification, etc.

Direct and Indirect Service Inputs

	Direct Inputs	Indirect Inputs
Personnel	Salaries and Wages, Overtime Pay Fringe Benefits - EMT/Paramedic, Supervision by Battalion Chiefs & EMS Coordinator	Salaries and Wages, Fringe Benefits - Mechanic, Billing, Administrative Staff, Logistics, etc.
Equipment & Supplies	Ambulance Maintenance Vehicle Supplies Ambulance Insurance Communication Equipment Service-Related Supplies	Annual depreciation
Facilities	COPCN ALS Certification	Utilities

Personnel - Type of Cost/Account	Direct Cost		Indirect Cost	
	Calculation	FY1 Cost (a)	Calculation	FY1 Cost (b)
Line 1 – Salaries & Wages (including Fringe Benefits)		\$1,615,218.06 (1 Paramedic - \$98,544.93, 1 EMT - \$86,051.42, 1/3 of average PM/EMT – 30,766.06) x 3 shifts x 2.5 Rescues per shift		\$112,635.27 45% of Mechanic - \$44,461.56 / 95% of Billing Specialist - \$68,173.71
Line 2 – Additional Pay (Overtime)		\$37,587.67 Overtime 20% of total (OT - \$154,364.15 + FICA - \$11,808.86 + FRS - \$21,765.35 = \$187,938.35 x 20% = \$37,587.67)		N/A
Line 3 – Supervision		\$150,720.39 (3) Battalion Chiefs x 15% - \$147,927.89 x (3) BC's x 15% = \$66,567.55 EMS Training Officer x 75% - \$112,203.79 x 75% = \$84,152.84		\$36,706.82 2% - Fire Chief - \$185,982.9 x 2% = \$3,719.66 / 2% - Asst. Chief - \$128,885.01 x 2% = \$2,577.70/ 10% - Finance Manager - \$87,549.60 x 10% = \$8,754.96 / 2% - Administrative Assistant - \$95,991.78 x 2% = \$1,919.84/ 25% - Logistics Manager - \$78,938.68 x 25% = \$19,734.67
Grand Total Personnel Costs (line 6a + 6b)		\$1,719,373.28		\$251,960.18

Equipment & Supply Costs - Type of Cost/Account	Direct Cost Calculation FY1 Cost (a)	Indirect Cost Calculation FY1 Cost (b)
Line 1 – Equipment Capital		R-101 (07-4) - \$179,438.89 – 4/18/08 – \$29,906.49 / yr R-104 (07-5) - \$179,438.89 – 4/18/08 – \$29,906.49 / yr R-102 (06-2) - \$171,232.68 – 8/02/06 – \$28,538.78 / yr Res R1 (06-1) \$170,808.67 – 7/10/06 – \$28,468.11 / yr Res R2 (02-3) \$149,398.06 – 9/12/02 – \$0 – fully depreciated R-180 (00-1) - \$134,865.40 – 1/31/99 – \$0 - fully depreciated Total Cost - \$116,819.86 – annual depreciation
Line 2 – Equipment Maintenance Repairs & Maintenance	Stretcher Maintenance / Repair – \$1,202.72 annually (7 Stretchers)	
Line 3 – Apparatus Maintenance Repairs & Maintenance	37.9% of Work Orders - \$49,225.11	
Line 4 – Equipment Supplies	Miles Driven (3 Rescues / 3 Reserve Rescues) – 142,437.20 Fuel Consumed (Gallons) – 18,101.69 Average Price per Gallon (Diesel Fuel) - \$3.22/gallon Fuel Cost (FY 2010/2011) – Rescues = \$58,246.21	
Line 5 – Stationary Supplies	10% - Office Supplies - \$1,378.36 10% - Computer Supplies - \$2,724.36 Postage/Mailings - \$5,490.21 (12,477.75 x \$0.44/letter) Billing Software Support - \$2,979.02 Batteries/Chargers - \$2,635.00 Collection Fees (PAC) - \$7,213.20 Total Stationary Supplies, etc. - \$22,420.15	

Equipment & Supply Costs - Type of Cost/Account	Direct Cost Calculation FY1 Cost (a)	Indirect Cost Calculation FY1 Cost (b)
Line 6 – Equipment Insurance	R-101 (07-4) - \$1,905.00 (annual premium) R-104 (07-5) - \$1,905.00 R-102 (06-2) - \$2,083.00 Res R1 (06-1) \$1,976.00 Res R2 (02-3) \$2,083.00 R-180 (00-1) - \$2,083.00 Total Cost - \$12,035.00 – Annual Insurance Premiums	
Line 7 – Service-Related Supplies	Total Paramedic Supplies (FY 2010/2011) - \$154,873.64 75% applicable to Rescue Service = \$116,155.23 (8) Portable Radios + (6) Rescue radios (Usage Fee) - \$12.93/month x 14 radios x 12 months = \$2,172.24 Praixair Distributions – Oxygen tank refill = \$21,243.97 x 95% = \$20,234.97 / WTEC – Radio maintenance = \$4,555.28 x 33% (6 vehicles out of 18 vehicles) = \$1,518.43 IT Vendors = \$34,435.50 x 10% = \$3,443.55 TOTAL = \$143,524.42	
Grand Total Equipment – Service Related Costs (line 7a + 7b)	\$286,653.61 (Direct)	\$116,819.86 (Indirect)
NOTE: Total replacement cost represents the original purchase cost of the six (6) rescues. According to a six-year replacement schedule, four (4) of the six (6) should be replaced by the end of the fiscal year (11/12).	R-101 (07-4) - \$179,438.89 – 4/18/08 – replace date – 4/17/14 R-104 (07-5) - \$179,438.89 – 4/18/08 – replace date – 4/17/14 R-102 (06-2) - \$171,232.68 – 8/02/06 – replace date – 7/31/12 Res R1 (06-1) \$170,808.67 – 7/10/06 – replace date – 7/08/12 Res R2 (02-3) \$149,398.06 – 9/12/02 – replace date – 9/10/08 R-180 (00-1) - \$134,865.40 – 1/31/99 – replace date – 1/29/05 Total Cost - \$985,182.59 Represents replacement cost	

Facility Cost / Other Cost(s)	Direct Cost		Indirect Cost	
	Calculation	FY1 Cost (a)	Calculation	FY1 Cost (b)
Line 1 Facility Cost – Utilities			Utility charges for Stations 101, 102, and 104 total \$68,868.57: \$54,951.37 for electricity, \$7,936.86 for water (not including Station 104), and \$5,980.34 for propane. 25% of the utility charges are allocated as an indirect cost of the rescue service: \$17,217.14	
Line 2 Other Costs – COPCN Lee County	Annual fee(to Lee County) is	\$500		
Line 3 Other Costs – ALS Certification Florida Department of Health (6) Rescues	Annual fee (to Florida Department of Health) is	\$150		
Line 4 – Total Facility / Other Costs		\$650		\$17,217.14
GRAND TOTAL - Direct Costs		\$2,006,676.89		
GRAND TOTAL – Indirect Costs				\$367,531.94
GRAND TOTAL – ALL COSTS		\$2,354,208.83		

Revenue Considerations

(Addition Cash Flow)

- ALS / BLS Revenue (FY 2010/2011) – Gross Billings Charged by LAFD for transports
 - **\$2,854,196**
- ALS / BLS Receipts (FY 2010/2011) – amount of cash collected during fiscal year
 - **\$1,428,451**
 - Average monthly collections for current charges (less than 30 days old) – **48%**
 - Average monthly collections for charges (30+ days old) – **52%**
 - Oldest charge collected on during fiscal year – **5/01/09**

Revenue Considerations

(Addition Cash Flow)

- ALS / BLS Receipts (FY 2010/2011) – **\$1,428,451.02**
- Direct Costs – **(\$2,006,676.89)**
- Indirect Costs – **(\$367,531.94)**
- Total (annual) Net Loss – **(\$945,757.81)**

What is the financial effect on personnel costs if transport service were eliminated?

Account – Personnel	Direct Costs	Indirect Costs	Actual savings if eliminated
Salaries and Wages	\$1,615,218.06	\$112,635.27	\$1,615,218.06
Additional Pay	37,587.67	\$0	37,587.67
Supervision	<u>66,567.55</u>	<u>120,859.67</u>	<u>\$0</u>
Total - Personnel	\$1,719,373.28	\$233,494.94	\$1,652,805.73

What is the financial effect on equipment costs if transport service were eliminated?

Account – Equipment	Direct Costs	Indirect Costs	Actual savings if eliminated
Capital	\$0	\$116,819.86	\$116,819.86
Equipment Maintenance	1,202.72	\$0	1,202.72
Apparatus Maintenance	49,225.11	\$0	49,225.11
Supplies (Fuel)	58,246.21	\$0	58,246.21
Stationary Supplies	22,420.15	\$0	22,420.15
Equipment Insurance	12,035.00	\$0	12,035.00
Service Supplies	<u>143,524.42</u>	<u>\$0</u>	<u>143,524.42</u>
Total - Equipment	\$286,653.61	\$116,819.86	\$403,473.47

What is the financial effect on facility costs if transport service were eliminated?

Account – Facilities/Other	Direct Costs	Indirect Costs	Actual savings if eliminated
Facilities - Utilities	\$0	\$17,217.14	\$0
Other - COPCN	500.00	\$0	500.00
Other – ALS Licenses	<u>150.00</u>	<u>\$0</u>	<u>150.00</u>
Total - Facilities	\$650.00	\$17,217.14	\$650.00

What is the total financial effect to the District if transport service were eliminated?

Account – Summary	Direct Costs	Indirect Costs	Actual savings if eliminated
Personnel	(\$1,719,373.28)	(\$233,494.94)	(\$1,652,805.73)
Equipment	(286,653.61)	(116,819.86)	(403,473.47)
Facilities / Other	<u>(650.00)</u>	<u>(17,217.14)</u>	<u>(650.00)</u>
Sub-total	(\$2,006,676.89)	(\$367,531.94)	(\$2,056,929.20)
ALS / BLS Revenue – FY 2010/2011	<u>\$1,428,451.02</u>		<u>\$1,428,451.02</u>
Total – Annual Savings	(\$945,757.81)		**(\$628,478.18)**

Pros/Cons of Transport Service provided by the District

Pros:

- There is continuity of care provided by first responders and continued to the hospital/medical facility
- Delays in transports are minimized by having a dedicated rescue service within the District
- Personalized care between District personnel and local citizens is established and maintained

Pros/Cons of Transport Service provided by the District

Cons:

- Annual (estimated) loss of \$628,478.18 to the District's operations/budget
- Capital replacement of ambulance/rescues is necessary and is to be built in the District's Capital Replacement Plan
- Availability of staff within the District (for major incidents) is a consideration
 - Currently an average of 35% of patients are transported outside of the District (therefore; staff is unavailable during that time period)

Analyzing Fire-Based EMS

Questions / Discussion?