#### AMBULANCE OPERATIONS FUND

#### **GENERAL INFORMATION:**

Through June 30, 2000, ambulance service for the City of Muscatine and surrounding townships was provided by a private ambulance service under contracts between the City and each respective township, and the ambulance service. The agreement with the previous ambulance provider expired on June 30, 2000. This agreement provided for a City subsidy to the ambulance service of \$90,500 per year and subsidies from the townships that totaled \$24,500 per year.

In August of 1998, the City contracted with an outside consultant to provide a thorough analysis of the City's system of pre-hospital care involving the Muscatine Fire Department and Muscatine Ambulance, Inc. The consultant's report was used as a basis for development of specifications and a request for proposals (RFP) for potential providers of ambulance services upon the expiration of the ambulance contract on June 30, 2000. After reviewing two proposals, the City Council selected the Muscatine Fire Department to provide this service. In order to account for revenues and expenditures of the Fire Department Ambulance Service, this operation was established as an enterprise fund of the City.

In 1999/2000, \$289,690 was expended for purchasing and equipping three (3) new ambulances and purchasing the necessary supplies to begin providing services effective July 1, 2000. The original budget for the 2000/2001 fiscal year included costs and cost allocations to fund this new operation. Five new firefighter positions, one-half of a Fire Mechanic position and a half-time equivalent clerical position were included in this budget. Additionally as part of the Ambulance Operation's administrative fee, 50% of an Assistant Fire Chief and 25% of the Fire Chief's costs were also charged to this budget. The budget also included funds for supplies and services associated with this service including funds to contract for ambulance billing services.

Since the ambulance service became a city operation in 2000, the city has been able to allocate the cost of firefighters and administrative positions to this operation. This amount has varied based upon revenues generated and fund balances at the end of each fiscal year. This allows the city to relieve the General Fund of these expenses.

Effective for the 2007/2008 year, the City made a number of changes to employee allocations to address decreases in fund balance in the Ambulance Fund as well as assisting with balancing the General Fund budget. These changes included transferring the 6.5 fulltime equivalent firefighter/mechanic positions from the Ambulance Fund to the Fire Department budget in the General Fund. Funding transfers are now being made from the Ambulance Fund to the General Fund for a percentage of the total wage and benefit costs for the overall fire department staff. Benefit costs for these positions are funded from the Employee Benefits tax levy for General Fund Employees. Also in 2007/2008, a decision was made to use bond financing for the refurbishment of two ambulances (\$160,000).

A rate increase was implemented April 1, 2006 which increased the base rate from \$450 to \$485. This was the first increase in the base rate since the Fire department began providing ambulance services in 2000. Rates were again increased effective April 1, 2007 due to reduced revenues to the Ambulance Fund. Under the new rate structure fees vary by level of ambulance service with the BLS rate increasing to \$525, the ALS1 to \$575 and the ALS2 to \$675. Rates were again adjusted in January, 2009. The rates for ALS1 increased from \$575 to \$586 and for Skilled Care Transport from \$775 to \$1,002. Effective July 1, 2010 the rates for ALS1 increased to \$616, ALS2 to \$891, and skill care transports to \$1,053. Effective July 1, 2011, the base rate was increased to \$560, ALS1 increased to \$665, ALS2 increased to \$962 and SCT increased to

\$1,137. These rate adjustments correspond to the increases in the amounts allowed by Wellmark for these types of transports.

#### **CURRENT TRENDS AND ISSUES:**

Beginning in the 2008/2009 revised estimate and continuing through 2012/2013, personnel costs in the Fire Department budget are being allocated to the Ambulance budget on a percentage basis rather than by computing a specific number of fire positions and position allocations. This percentage has been increased from 22% to approximately 24% in 2011/2012 and 2012/2013. The 2011/2012 revised estimate funding transfer from the Ambulance fund was increased \$35,400 from the \$750,900 originally budgeted due to increased overtime in the fire department revised estimate. The Ambulance funding transfer for 2012/2013 is budgeted at \$773,800, again 24% of fire department personnel costs. As 90% or more of Fire department calls are medical, this percentage allocation is appropriate and at the same time maintains an adequate balance in the Ambulance fund.

The revised estimated expenditures for 2011/2012 are \$111,800 higher than originally budgeted. The overall increase is due to increases in fuel costs (\$18,200), medical supply costs (\$3,000), vehicle maintenance costs (\$15,000), capital outlay (\$39,000), and the transfer to the General Fund (\$35,400). The increase in capital outlay includes \$26,100 for a LifePak 15 (with \$20,000 of this purchase funded from a grant from the Muscatine Health Support Foundation) and \$12,000 for a power cot for the new ambulance (funded from remaining bond proceeds for prior year ambulance refurbishments).

The budgeted expenditures for 2012/2013 are \$117,900 (8.7%) lower than the 2011/2012 budget. This overall decrease is primarily due to a decrease in the capital outlay allocation. The budget also continues the increased allocations for fuel, medical supplies, and vehicle maintenance.

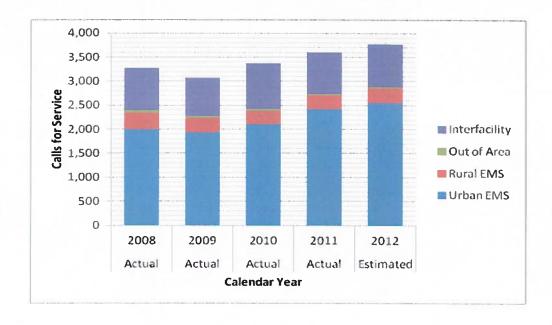
Ambulance service fees are estimated at \$1,200,000 for both 2011/2012 and 2012/2013. Usage and revenues have fluctuated in recent years and staff continues to monitor trends in these areas. The fund balance at the end of 2012/2013 is projected at \$246,333.

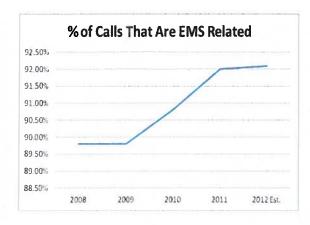
#### **GOAL STATEMENT:**

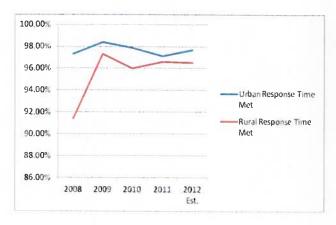
To provide high performance paramedic transport services in the Muscatine area, responding to all emergency calls with a transport unit in less than 9 minutes on not less than 95% of all response requests within the "Urban Zone" and less than 15 minutes on not less than 95% of all response requests within the "Suburban/Rural Zone."

# PERFORMANCE MEASURES

	Actual 2008	Actual 2009	Actual 2010	Actual 2011	Estimated 2012
Urban Zone Medical Responses	1,992	1,929	2,106	2,413	2,550
Suburban/Rural Zone Medical Responses	350	302	278	292	300
Out of Territory Medical Responses	55	48	32	25	25
Interfacility Transfers	879	787	951	872	900
Total EMS Calls	3,276	3,066	3,367	3,602	3,775
EMS Calls as % of Total Fire Calls	89.8%	89.8%	90.8%	92.0%	92.1%
EMS Training Hours	2,437	2,719	1,983	1,174	1,200
Urban Response Time Compliance					
(8:59 minutes or less on at least 90% of calls)	97.3%	98.4%	97.9%	97.1%	97.7%
Suburban/Rural Response Time Compliance					
(14:59 minutes or less on at least 90% of calls	91.4%	97.3%	96.0%	96.6%	96.5%







#### **RECENT ACCOMPLISHMENTS:**

Once again the department played host for a training day supported by the Iowa EMS Association held at Discovery Park. In addition to Muscatine Fire department personnel, providers from many other EMS agencies were also in attendance. This event is one way that Muscatine reaches out to neighboring EMS providers to assist them in their training and response preparation. The 2012 EMS event has already been planned and scheduled and is expected to once again help our neighbors and ourselves improve service delivery.

During the past year the department received the old Mule from the Police department when they purchased a new off road vehicle. The old Mule underwent limited refurbishment by Fire department mechanics, with a focus on electrical improvements and providing a solid mechanical base to work from. In addition, department personnel applied all appropriate decals to the vehicle and prepared it for use. An EMS skid was purchased for the vehicle and it is now a functioning EMS support vehicle. The Mule has been outfitted with basic supplies and is upgraded with advanced supplies as needed. The unit has been used to provide standby support to sporting events which will help to improve department efficiency during such events.

This year marked the 20th Annual Child/Family Safety Day sponsored by the Muscatine County EMS Association in conjunction with the Muscatine Fire Department. In 2010 the event was moved to Blain's Farm and Fleet parking lot and this partnership has worked very well. Each year this is a day devoted to informing the public about who we are and what we do. Ambulances, fire trucks, Water Rescue boats, and a Medforce helicopter were on display. The American Red Cross and Trinity ER were on hand with a booth to answer questions and also had give-aways for adults and children. This past year the Muscatine Agility Club of Iowa provided education about pet safety and shared their very friendly dogs, which is always a crowd pleaser. The department was fortunate to have contributions from Muscatine businesses that made it possible to have this day. Coloring books were provided to the children, smoke detectors, escape ladders, and other items were given to some lucky winners. The children had a chance to experience a "smoke house" and learned what to do in case a fire would break out in their home.

The Muscatine Fire department was able to once again provide support and leadership to the state organization of EMS providers. The Iowa EMS Association (IEMSA) is the recognized organization for EMS issues and training in the state. This year Muscatine's Fire Chief, Jerry Ewers, served as the President of IEMSA. In addition Muscatine Firefighter/Paramedic Tom Summitt served yet another year on the board of directors. Both of these individuals have provided countless hours of leadership, support, and direction for EMS providers state wide. In addition to these two individuals, Muscatine businessman Tom Hendricks 'Taco Tom' was recognized at the annual IEMSA conference for his support of EMS in our community. IEMSA is also the organization that recognized Muscatine Fire Department as its 2002 Career Service Provider of the year. No other agency in the state provides as much support and leadership to IEMSA as Muscatine.

Thanks to a partial grant of \$20,000 from the Muscatine Health Support Foundation, the Department was able to purchase a LifePak 15 (LP15) for the new ambulance. This purchase allowed the department to further raise the level of care provided to the public. The new monitor allows better and easier 12 lead EKG acquisition, has an integrated CO2 monitor (used for patients with respiratory issues), and includes additional monitoring capabilities that will help identify persons who may have health effects caused by smoke inhalation. The department will utilize the LP15 not only for patients, but it will be a useful device to help determine actions relating to employee rehabilitation at fire scenes.

The Muscatine Fire Department has been a driving force in the improved treatment of a certain type of heart attack, called an ST elevated myocardial infarction (STEMI). We have been leaders at implementing a

bypass protocol, which decreases the event to cardiac catheterization time, which results in a lowered chance of death and an increase in heart muscle saved. Through the receipt of grant funds, the department was able to upgrade the cardiac monitors and provide software and related equipment for Muscatine Trinity Hospital so that 12 lead EKGs can be transmitted from the field. For patients with a STEMI, the 12 lead is sent to the receiving hospital if the patient is taken to Iowa City. The Muscatine Fire Department, with some assistance from Trinity Muscatine, has been a motivating agent for the two main Quad City hospitals to obtain the technology so that telemetry may be sent to them. Both Genesis East and Trinity Rock Island will soon be getting the necessary equipment, so in the near future STEMI patients that go to the Quad City hospitals will be able to benefit fully from the bypass protocol and telemetry.

Customer service in the provision of interfacility transfer services to Trinity Muscatine have been identified as an area in need of improvement. Ongoing communication with Trinity Emergency Department Director Dr. Eric Schmieg and our department has resulted in improvements to the delivery of services and improved asset utilization. Thanks to Dr. Schmieg and the Trinity Emergency Department, the dispatching process has been streamlined and the occurrence of requests for service that draw department staffing critically low have decreased. This ongoing conversation is also improving patient care and providing better relationships with the hospital, their staff, and our department.

The Department has been working to improve communications and relations with other members of the health care community. Presently a representative from the fire department is involved in committees and/or meetings with local long term residential health facilities, the public health community, and thanks to Trinity Muscatine staff, we also participate in their trauma and emergency department committee meetings. This has opened the channels of communication and provided for improved service delivery, which ultimately improves patient care. The department regularly takes ideas developed in these various settings and uses them to provide a better level of patient care. It can be said that the Muscatine ambulance operations has been fully integrated into the health care community.

The department was successful in obtaining a partial grant of \$20,000 from the Muscatine Health Support Foundation for purchase of a new cardiac monitor. This purchase was required due to the addition of the new 5th ambulance. The department also submitted applications for several Assistance to Firefighter Grants. One grant application was for an exhaust containment system for the fire apparatus, one was for the purchase of additional Lucas CPR devices, and the third grant was for the replacement of outdated cardiac monitors. The Lucas devices and the cardiac monitors are in the 5 Year Capital Improvement Plan, so if grant funded would be awarded, the City will see a direct positive impact in the ambulance operations capital improvement plan. Award notifications should be released within the next six months.

#### **OBJECTIVES TO BE ACCOMPLISHED IN 2012/2013:**

- \* To develop a comprehensive medical helicopter protocol.
- \* To research and potentially integrate a cardiac enzyme procedure to further identify and better treat chest pain patients.
- \* To research and potentially integrate a stroke bypass protocol.
- \* To share the department's tactical EMS experience with the wider EMS community to further improve the support provided to law enforcement officers and civilians at high risk situations.

- \* To research and potentially integrate therapeutic hypothermia protocols and systems for treatment of return of spontaneous circulation patients and those with neurological deficits, including stroke.
- \* To research, create, and implement an ambulance ordinance for the City of Muscatine in order to ensure high quality ambulance service in the City.
- \* To review the ambulance operation for "Lean" initiatives. (Management Agenda High Priority)

## **Ambulance Operations**

### **Fund Statement**

		Actual 2009/2010		Actual 2010/2011		Budget 2011/2012		Revised Estimate 2011/2012		Budget 2012/2013	
Beginning Balance, July 1	\$	283,380	\$	281,293	\$	297,493	\$	458,463	\$	254,033	
Revenues											
Ambulance Fees Ambulance Fees (Prior Year Amount	\$	1,008,079	\$	1,245,636	\$	1,100,000	\$	1,200,000	\$	1,200,000	
Over (Under) Accrual)		(17,072)		75,716		0		0		0	
Township Subsidies		31,400		31,400		31,400		31,400		31,400	
Donations		10,899		7,737		0		20,000		0	
Interest		911		632		200		1,100		600	
Reimbursement of Damages Transfer In: Ambulance Refurbishment Capital		5,000		160		0		0		0	
Project Fund		0		0		0		12,470		0	
Total Revenues	\$_	1,039,217	\$	1,361,281	\$	1,131,600	\$	1,264,970	\$	1,232,000	
Funds Available	\$	1,322,597	\$	1,642,574	\$	1,429,093	\$	1,723,433	\$	1,486,033	
Expenditures (1)	_	1,041,304	_	1,184,111		1,357,600	1	1,469,400		1,239,700	
Ending Balance, June 30	\$	281,293	\$	458,463	\$	71,493	\$	254,033	_\$	246,333	
Increase (Decrease) in Fund Balance	\$	(2,087)	\$	177,170	\$	(226,000)	\$	(204,430)	\$	(7,700)	

<sup>1.</sup> Expenditures include changes in compensated absences and other post-employment benefits.

### **Explanation of Changes in Fund Balances:**

The fund balance decrease in 2011/2012 is primarily due to the purchase of an additional ambulance at a cost of \$160,000 and various other capital items totaling \$81,700.

# Activity: Ambulance Operations

:0	Actual 2009/2010	Actual 2010/2011	Budget 2011/2012	Revised Estimate 2011/2012	Budget 2012/2013	Percent Change
		Expendit	ure Summary			
Personal Services	\$ 105,739	\$ 124,591	\$ 122,500	\$ 121,800	\$ 125,400	2.37%
Commodities	56,554	67,288	64,700	87,900	82,700	27.82%
Contractual Services	143,054	150,587	146,100	161,000	153,300	4.93%
Capital Outlay	55,766	108,852	240,900	279,900	5,800	-97.59%
Transfers	678,300	729,419	783,400	818,800	872,500	11.37%
Total Expenditures	\$ 1,039,413	\$ 1,180,737	\$ 1,357,600	\$ 1,469,400	\$ 1,239,700	-8.68%
		Fundi	ng Sources			
Ambulance Fees	\$ 991,007	\$ 1,321,352	\$ 1,100,000	\$ 1,200,000	\$ 1,200,000	9.09%
County Subsidy	31,400	31,400	31,400	31,400	31,400	0.00%
Donations	10,899	7,737		20,000		
Interest	911	632	200	1,100	600	200.00%
Other	5,000	160		12,470		
Total Funding Sources	\$ 1,039,217	\$ 1,361,281	\$ 1,131,600	\$ 1,264,970	\$ 1,232,000	8.87%

Personnel Schedule								
	Actual 2009/2010	Actual 2010/2011	Budget 2011/2012	Revised Estimate 2011/2012	Budget 2012/2013	Budget Amount 2012/2013		
Full Time:								
Ambulance Billing Manager	1.00	1.00	1.00	1.00	1.00			
Part Time:								
Ambulance Attendants	0.53	0.53	0.53	0.53	0.53			
Office Coordinator	0.25	0.25	0.25	0.25	0.25			
Total	1.78	1.78	1.78	1.78	1.78	\$ 101,100		
Employee Benefits						24,300		
Total Personal Services						\$ 125,400		

	Capital Outlay			
Item:	Quantity	Replacement	Ai	nount
Trailer for Mule	1	No	\$	2,000
Medication Refrigerators	5	No		3,800
Total			\$	5,800