# Ambulance Services Audit September 2012

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# Ambulance Services Audit



**Project #11-18** September 28, 2012

# Executive Summary

Requests for ambulance transports have steadily increased since contract inception

Contractor is in general compliance with service agreement

# Opportunities for Improvement

- More detailed financial reporting
- List public education classes on the vendor website
- Document reasons for priority code changes
- Conduct routine reconciliations to verify maximum billing rate
- Obtain and/or conduct customer surveys

As part of the 2011 Annual Audit Plan, the City Auditor's Office conducted an audit of Ambulance Services. The audit was conducted in accordance with generally accepted government auditing standards, except for peer review. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The objectives of the audit were to ensure that:

- patient transport data was accurate and adhered to approved billing rates;
- quality control practices resulted in positive public relations; and,
- ambulance deployment and coverage was adequate and met expected contractual service levels.

Review of patient transport data and vendor billings indicated that transport type, either advanced or basic care, was billed at the authorized rate. However, errors were detected in reference to the number of miles billed.

The City Auditor's Office identified in its review of quality control practices, the need for more effective customer satisfaction surveys in order to better assess service quality. Requests for medical-related services, from Arlington residents, have increased since the inception of the current ambulance services contract. A review of service response data shows the vendor maintaining adequate vehicle and staffing assets to meet residents' requests for medical transports.

Although the City Auditor's Office noted general contract compliance and adequate deployment levels, opportunities to improve contract oversight and the calculation of liquidated damages were noted.

# Audit Scope and Methodology

Documentation, correspondence and transactions from October 2008 to December 2011 were included in the scope of this audit. The audit was conducted in accordance with generally accepted government auditing standards, except for peer review. The following methodology was used in completing the audit.

- Interviewed Arlington Fire Department (AFD) staff associated with contract monitoring
- Interviewed American Medical Response (AMR) management, located in Arlington
- Observed incoming calls for emergency medical services at the City's communications center
- Observed call routing and ambulance dispatch by AMR
- Reviewed the ambulance services contract currently in use, with assistance from the City Attorney's Office
- Examined audited financial statements submitted by AMR
- Observed AFD's response to medical-related calls dispatched to firefighters at station 9
- Extracted emergency medical response-related data from the City's computer aided dispatch system (for analysis), with assistance from AFD and City communications center personnel
- Examined patient billing records retained by AMR
- Examined liquidated damage assessment process for compliance with contract clauses
- Visited AMR's Arlington facility to determine whether assets required by the contract are maintained
- Reviewed AMR website for compliance with contract requirements
- Examined medical-related certifications for AMR staff
- Examined City's financial system (Lawson) records to ensure proper receipt of ambulancerelated revenue
- Examined patient survey process to ensure adequacy
- Validated billing data used by AMR to compute the maximum average billing rate

# **Background**

A request for ambulance service begins with a citizen calling the City's 9-1-1 emergency communications phone number. Prior to routing the call to ambulance dispatch, the City's telecommunications staff assigns a priority code, based on perceived medical condition and established medical protocols. The ambulance unit closest to the party requesting medical assistance is dispatched for faster service.

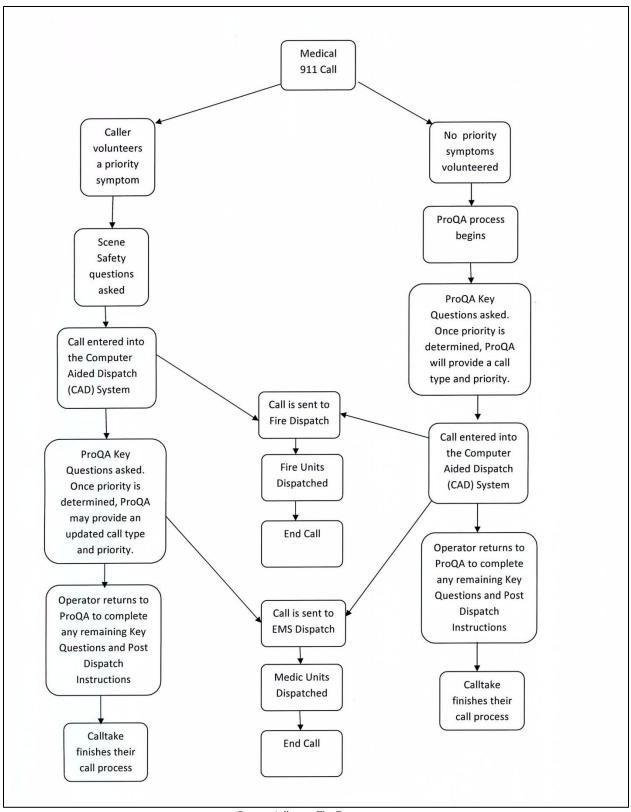
The ambulance dispatch desk is located inside the City's communications center. However, it is staffed by American Medical Response (AMR), the company with which the City has contracted ambulance services for Arlington residents. Tiburon is the primary telecommunications system used for dispatching. Tiburon, a combination of Computer Aided Dispatch (CAD) and records management, is used for both police and fire-related activities. Tiburon is used as follows for fire and EMS-related purposes.

- Emergency Medical Services (EMS) dispatch centralized location to dispatch citizens' requests for ambulance services to AMR medics on standby throughout the City
- Fire Dispatch centralized location to accept citizens' calls for the Arlington Fire Department and medical services, and to dispatch those calls to the 17 fire stations located within the City

Arlington firefighters are also dispatched to medical calls that are considered life threatening and thus categorized as a priority 1 or 2. They are also dispatched to some priority 3 non-life threatening calls. If AFD arrives before the AMR medics, AFD initiates necessary medical care.

The City is currently in the process of replacing Tiburon CAD due to growth in call volume, citizen requests for services, and inherited system limitations. The City is planning to purchase a new CAD system from Intergraph software. The replacement CAD system is expected to cost \$2.6 million, excluding mobile hardware. Intergraph CAD software offers features such as webenabled remote dispatch, multi-agency information sharing, better use of historical data, GIS and Google mapping, and improved audit trails. The system is expected to go live in the second quarter of FY2013.

The basic dispatch process is shown in the following flowchart. It should be noted that patients are primarily transported to Arlington Memorial Hospital, Medial Center of Arlington, Mansfield Methodist Hospital, or JPS Hospital of Fort Worth. Transportation to other hospitals within the metroplex is made based on medical protocol or upon request by the patient.



Source: Arlington Fire Department

NOTE: ProQA software is used to determine patients' medical priority status

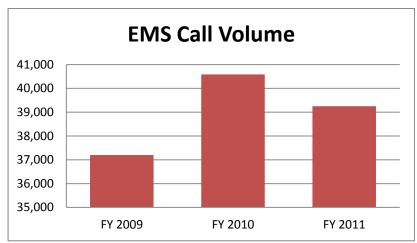
AMR has provided ambulance service to the City of Arlington since 2000. The current ambulance services contract has existed since October 2008, with authorized contract revisions and extensions.

AMR is the sole ambulance service provider within the City of Arlington. AMR provides ambulance service to 2,100 communities across the nation, with an employee base exceeding 17,000. AMR also provides fixed wing air ambulance service, managed transportation to the health care industry, 9-1-1 communications services, on-site health services and offshore medical services.



AMR assets dedicated to Arlington operations include 24 ambulance units which are housed in various locations throughout the City, including fire stations and major intersections. Each ambulance unit is equipped with medical supplies and medical equipment. Medical supplies and equipment are stored at Cowboys Stadium for special events. In addition to providing routine ambulance service, AMR is responsible for planning and responding to any declared disaster in Arlington. Required equipment includes a mass casualty trailer with medical supplies and additional ambulances for local and national disasters. The contractor is also required to offer standby services in major public events such as sporting events, concerts and public festivals. Standby hours are in addition to the public relations events.

The medical operations section of AFD, in general, oversees the contract and ambulance services. The medical operations section consists of a battalion chief, EMS lieutenant, administrative coordinator, clinical coordinator and a quality coordinator. The City's contract with AMR expires in 2013, with an option for a three-year renewal. Call volume since the current contract inception is shown in the following chart.



Source: Arlington Fire Department

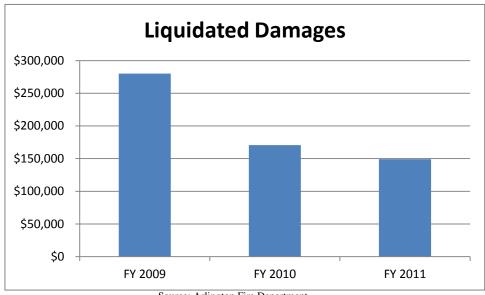
AFD offers Arlington residents the opportunity to participate in AMR's *Ready Care* subscription program which limits out-of-pocket expenses for medically necessary transports. The annual subscription rate for members having primary and secondary insurance is \$60. The annual rate for members having only primary insurance is \$67.50, while the rate for members with no insurance is \$400 per year.

The maximum ambulance transport rate authorized by the City Council was \$1,123.34 in FY2009 and FY2010; \$1,161.42 in FY 2011 (3.39% increase) and \$1,202.07 in FY2012 (3.5% increase). The maximum allowable rate is a combination of transport, mileage and wait-time charges. Justifiable annual rate increases are granted, but not to exceed 5%.

The City's ambulan	co commune requi	i co uic ioi	ponse unites.

<b>Priority Level</b>	Description	Maximum Time
1	Life threatening emergency	8.29 min
2	Non-life threatening emergency	11.29 min
3	Urgent pre-hospital or time-sensitive hospital	15.29 min
	transfer	
4	Scheduled transfer	One (1) hour
5	Unscheduled transfer	One (1) hour
6	Home to diagnostic facility transfer	Two (2) hours

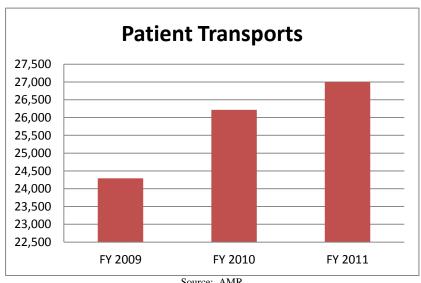
AMR is assessed damages for non-compliance with contract performance standards, which include late response (based on priority level), lack of equipment and supplies in ambulances, fewer than eight ambulances on duty and in service, late submittal of required periodic reports to the City, and not meeting accreditation requirements for staff members. Alternatively, AMR may earn incentives when ambulance service performance exceeds standards required in the contract. Liquidated damages may be reduced by those performance incentives. As shown in the following chart, liquated damages paid to the City have decreased each year. The exact reason for the decrease is unknown. However, it could be attributed to a "learning curve", internal issues within AMR and/or revised performance measures.



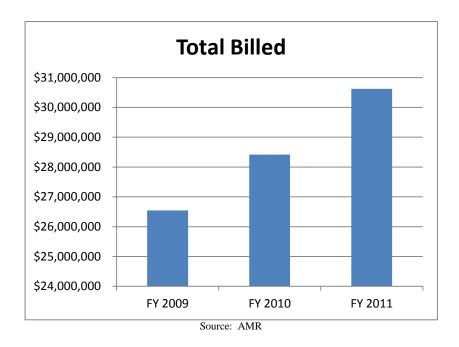
Source: Arlington Fire Department

The ambulance contract requires AMR to provide software compatible with the City's CAD software. Compatible software includes ProQA, which is used to determine medical priority status of the patient; AQUA software which is used for quality assurance reviews within ProQA, and FirstWatch to track real-time ambulance response times. Once the patient transport is complete, AMR medics create a billing file using ProQA software. A medical report listing medical conditions, dispensed medication and other relevant information is also created. AMR is required to bill and collect funds for ambulance services directly from its facility in Arlington, and to provide a customer service telephone number to Arlington residents.

As noted in the following charts, an increase in the number of patient transports has resulted in increased AMR billings over the last three fiscal years.



Source: AMR



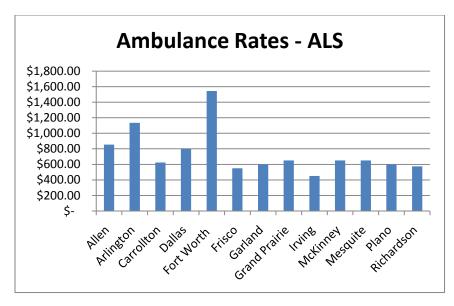
Patients are billed, based on the following rates established by AMR to meet the maximum average transport rate authorized by City Council.

Charge	Amount
Basic Life Support (BLS) Non Emergency	\$ 533.15
Basic Life Support – Emergency	\$1,084.13
Advanced Life Support (ALS) Non Emergency	\$ 957.66
Advanced Life Support - Emergency	\$1,084.13
Mileage	\$ 13.91

According to AMR billing records, approximately 80% of patients are transported as ALS. In addition to emergency services, AMR also provides non-emergency transportation between medical facilities, as well as transportation to a patient's home from a medical facility. Non-emergency transports are billed at a lesser rate, plus mileage.

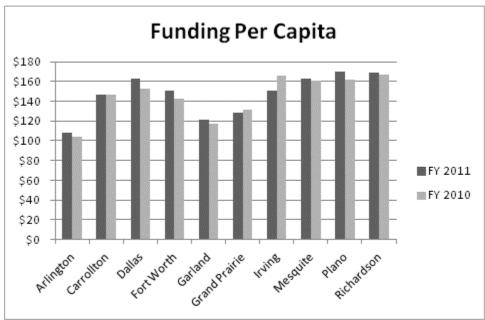
Charges presented in the aforementioned charts include all required medications and no other surcharges are billed. Even though all patients are billed at the rates shown above, contractual obligations between AMR and various insurance plans limit what is actually collected. The latest audited AMR financial statement for 2011 shows an allocation for uncompensated care at 51% of revenue.

In comparison, the following chart shows the average billing rates for ambulance services throughout the Metroplex. The cities of Arlington and Fort Worth have contracted ambulance services, while individual fire departments provide ambulance services for the remaining cities in the survey. The rates represent basic charges for ALS emergency transportation.



Source: Irving Fire Department

As shown in the chart above, the citizen billing rate for ambulance transportation is lower for cities where ambulance service is provided by the municipal fire department. However, the true cost of providing the service is being subsidized by taxpayers. Even though the ambulance billing rates are lower in these cities, the per capita costs of the fire departments are higher than Arlington's costs. Per capita funding for various metroplex fire departments is presented in the following graph.



Source: Arlington Fire Department

AFD monitors ambulance billings by calculating the maximum average bill (MAB). The MAB is calculated by dividing the revenue shown in audited financial statements by the total patients transported during the revenue year.

AMR is also required to provide emergency medical information and education to Arlington residents, including but not limited to, the City's emergency medical services system, first aid, CPR, injury prevention and 9-1-1 system information. At least 400 hours of public relations service events are to be provided each year. In collaboration with AFD, AMR is also required to develop an internet website that provides information about the Arlington EMS system and lists upcoming public education classes and other events of interest to the public.

The Emergency Physicians' Advisory Board (EPAB) has been established to serve as an advisory body for the City Council in regard to medical control of the EMS system. The Board consists of 11 members and a compensated medical director position. Members are physicians in Arlington area hospitals. Expenses associated with EPAB, including compensation for the Medical Director, are funded by a \$7,375 monthly fee paid by AMR.

The Arlington Fire Department has entered into a consulting contract with Polaris Consulting to manage the current AMR contract. Services provided by the consultant include review of periodic performance reports, evaluating contractor performance, assisting with contract negotiations and interpreting contract terms. Lawson financial records show that approximately \$51,000 was paid for consulting services from FY2009 through FY2011. Consultant-related expenditures are paid from the Liquidated Damages Fund, which is comprised of liquidated damages received from AMR.

The fund balance within the Liquidated Damages Fund exceeded \$1 million in FY2010. However, expenditures included \$513,600 in capital improvement expenditures to remodel a facility to house AFD medical equipment and supplies. Two positions associated with medical services are also funded at \$150,000 annually. The Liquidated Damages Fund fund balance is declining due to improved compliance by AMR. FY2012 budget documents indicate that funds are expected to fall below medical-related expenditures by the end of FY2014.

# **Detailed Audit Findings**

# 1. AMR has not complied with financial reporting requirements noted within the contract.

Audited financial statements submitted to AFD for FY2009 and FY2010 did not comply with the executed contract. Section 4.B of the ambulance services contract requires that subscription plan receipts be provided to the contract administrator with each year's audited financial statements.

Section 20.A.2 of the contract requires that annual audited financial statements include a breakdown by service type, including all emergency and non-emergency transports, annual subscription program, public education activities and any operations.

Total revenue, net of contractual provisions, is included in AMR's financial statements. However, subscription plan receipts and a breakdown by service type are not included. Itemization enables the contract administrator to monitor revenue categories and compute per capita revenue in order to assess if vendor billings are within City Council approved rates.

## Recommendation:

The Fire Chief should require that American Medical Response (AMR) comply with the contract (and thus allow AFD to ensure compliance with approved rates) by providing subscription plan receipts and a breakdown by service type, including all emergency and non-emergency transports, annual subscription program, public education activities and any other operations.

# Management's Response:

Concur. The 2009 and 2010 ambulance contract audit reports reflected a standard industry reporting format which was reviewed and approved by the City's Finance Department. All future AMR financial reports will reflect detailed contract requirements.

**Target Date:** 2011 was in this requested format.

**Responsibility:** Medical Operations will ensure this requirement is met.

David Stapp, Battalion Chief

# 2. The vendor website does not list public education classes or allow on-line registration.

Section 19B of the ambulance services contract states: "Internet Web Site. In collaboration with the Fire Department, CONTRACTOR shall develop an internet web site that provides information about the Arlington EMS system. The web site shall be regularly updated and include a schedule of upcoming public education classes and other events of interest to the public. The web site shall allow persons to electronically register for those classes and events.

The web site shall also include a listing of continuing education classes available to CONTRACTOR and Fire Department employees."

The website maintained by AMR for Arlington residents does not list public education classes offered to the public by AMR, and lacks the ability to register for events on-line. AMR indicated that the primary public education class offered to the public is CPR training. AMR provided evidence of a flyer, with CPR class details, that is distributed to citizens during public events.

The City Auditor's Office noted that the Arlington CPR program was recently recognized for high participation rates. In addition, AFD noted that the vendor has met the department's expectations related to public education. However, public notification via printed media only limits exposure and thus diminishes public awareness of available curriculum. Increasing the awareness of scheduled community and public relations safety events could result in more citizen participation, and could place citizens in a position to become better educated, possibly resulting in lower medical costs. Also, the ability to register on-line is a convenience to the public, considering the increased use of web resources.

#### Recommendation:

The Fire Chief should require AMR to list courses offered to the public on the AMR website and enable online registration to Arlington residents, as required contractually.

# Management's Response:

Partially Concur. The City of Arlington Fire Department ensures that AMR is providing sufficient support in community education efforts. We use AMR to provide support in a much broader community education/training effort in Arlington. The AFD directs this effort through multiple methods which exceed the requirements listed in the contract. The AMR website now reflects CPR course offerings, but registration is done by phone. We believe that direct communications with customers is much more effective than "online" registration. In this case, we manage this issue in the "spirit" of the contract because actual efforts exceed contact limits.

Target Date: Completed

Responsibility: David Stapp, Battalion Chief

# 3. Reasons for priority code changes, used to calculate liquidated damages, are not documented.

Liquidated damages are assessed in instances where the contractor fails to comply with time, performance or other contract requirements or standards. Ambulance response time, based on assigned priority code, is the primary basis for calculating liquidated damages.

Priority codes are documented within CAD upon receipt of incoming calls. However, priority codes can change multiple times while the response is in progress, as determined by established

medical protocols. Audit testing indicated that AFD sometimes changed priority codes within CAD during the liquidated damage assessment process. However, the reason for the change is not documented. The City's current liquidated damage calculation practice does not require documentation if the priority code is changed during the damage assessment process.

Monthly queries are set up within CAD to extract data used for assessing liquidated damages. The following variances were noted when comparing priority codes within CAD to those used to assess liquidated damages. The City Auditor's Office was unable to determine the reasons for the variances during a review of exceptions. In some cases, call text within CAD identified reasons the priority code may have changed based on established medical protocol (e.g., health status updated after initial call, inclement weather, etc.). In other cases, there did not appear to be a valid reason for the priority code change.

Month	Total Variances	Call Volume
January 2011	97	3,237
March 2011	111	3,505
June 2011	113	3,066

The ambulance vendor is given the opportunity to appeal assigned priority codes. AFD provided the City Auditor's Office with evidence which indicated that the vendor agreed with the priority code changes. However, the evidence did not include documentation of the reason for the changes and did not include all priority code changes identified by audit testing. While the variances represent less than 5% of the monthly call volumes, lack of documented reasoning for priority codes changes would prevent AFD management from determining if the variances are valid and legitimate, and therefore, if the liquidated damage calculation is accurate. Lack of adequate documentation could also contribute to collusion between vendor and City employees. An erroneous priority code could result in a monetary benefit or monetary disadvantage to the vendor, as well as the City.

## Recommendation:

The Fire Chief should require routine managerial reviews (during the liquidated damages estimation process) to verify that priority code changes are valid and that the reasons for making priority code changes have been properly documented.

# Management's Response:

Partially Concur. This effort occurs today. Medical Operations staff review EMS calls to ensure that EMD protocols are followed.

Emergency Medical Dispatch protocols allow for the changes in priority. These priority changes are verified by staff now. Based on Audit's recommendation, an additional documentation category has been added as an internal control tool.

Target Date: Completed

Responsibility: David Carroll, Assistant Chief

# 4. Component used to calculate maximum average billing (MAB) is not reconciled.

MAB represents the maximum ambulance rate that the City Council has authorized Arlington citizens to be billed. MAB is calculated by dividing AMR's revenue by the number of patient transports. Total transport figures are reported to AFD in monthly and quarterly key performance indicator reports. However, the total number of patients billed, per AMR, is not reconciled to CAD data to ensure accuracy.

AMR utilizes patient transport data shown in the City's CAD to generate bills for patient transports. AMR creates ambulance billings within their own system, using patient account numbers derived from the City's 9-1-1 CAD call number.

Reconciliations were attempted by the City Auditor's Office, through a newly created report that extracted EMS call data with "transport complete" command and the billing data file provided by AMR. However, the reconciliation was affected by the following.

- Data Entry Errors Errors included invalid total transported values within CAD and incorrect reference numbers keyed into the AMR billing system. For example, audit testing identified one call (dated 1/5/11) with 12 transports in one ambulance.
- CAD System Limitations A system limitation forced medics to close out a call with a
  "transport complete" command when conditions of the call changed during the
  ambulatory response. Call changes included priority code, destination of the medics,
  and/or destination medical facility. In these events, a second "transport complete"
  command existed, thus duplicating results.

The following chart summarizes Internal Audit's attempt to reconcile the total number of patients transported, per AMR billing records, to patient transports recorded in the City's CAD system. The difference represents approximately 3.5% of AMR reported transports.

Time Period	AMR Totals	CAD Totals	Variance
January 2011	2,199	2,268	(69)
March 2011	2,279	2,374	(95)
June 2011	2,258	2,330	(72)
Total	6,736	6,972	(236)

In absence of the ability to reconcile CAD and AMR billing data, AFD is unable to attest to the accuracy of patient transports and thus is unable to verify the maximum average cost billed.

# Recommendation:

In reference to the new system that is planned to replace CAD, the Fire Chief should consider including features within the specifications that would not require closure of an EMS call in-progress when changes occur during ambulatory response.

# Management's Response:

Concur. The new Intergraph CAD will allow for "transport updates" which the current Tiburon CAD does not.

Target Date: December 2012

Responsibility: Brian Riley, Assistant Chief

## Recommendation:

The Fire Chief should require a routine reconciliation between CAD's patient transport data report and AMR patient transport figures.

# Management's Response:

Do Not Concur. The CAD and AMR billing systems have completely different purposes and are not meant to be compared to each other as a method of patient validation. The CAD system is a call dispatching and response tracking system. The billing system used by AMR is separate and meant for patient billing for the services provided.

This is not a contract requirement.

Target Date: Not Applicable
Responsibility: Not Applicable

**Audit Comment:** The City Auditor's Office agrees that CAD data is not used for patient billing. However, since CAD includes the number of transports and is an informational source used for AMR billings, reconciliations would identify any discrepancies which could impact the maximum average bill chargeable to the public.

# 5. Ambulance billings contained mileage overcharges.

Vendors should bill customers in accordance with authorized rates and in the correct quantities. In addition to the approved standard charges, which are based on the type of medical transport, the ambulance services contract allows AMR to bill for mileage. The current billing rate of \$15.13 per mile is charged based on the distance between the patient pick-up and drop-off locations. However, review of ambulance billings identified mileage charges that exceeded total miles traveled.

In reviewing data supporting the MAB calculation, the City Auditor's Office noted that there were a number of high value bills that exceeded the MAB amount. Review of a selected number of the bills identified what appeared to be mileage overcharges. Therefore, the City Auditor's Office reviewed a judgmental sample of 25 from a population of 14,300 bills above \$1,300. Pickup and drop-off locations, as well as beginning and ending mileage, are documented in the City's CAD system by AMR medics. The review included independent verification of mileage between origination and destinations shown in the CAD system.

Test results identified 11 out of 25 billings (44%) with mileage overcharges. The overages averaged \$342 per billing (22 miles) and represented approximately 19% of the total ambulance charges for those 11 exceptions, as shown in the following table.

	Mi	leage Overcharges	
Date of Service	Level Of Service	Approximate Mileage Overcharge	Total Billing
10/14/2011	ALS	\$405	\$2,266
11/18/2010	ALS	540	1,957
06/11/2010	ALS	195	1,850
04/16/2011	ALS	180	1,796
03/12/2010	ALS	150	1,638
06/28/2010	ALS	75	1,511
01/05/2011	ALS	600	1,957
08/16/2011	ALS	735	1,942
12/24/2010	ALS	450	1,737
01/25/2011	ALS	309	1,635
12/02/2011	ALS	120	1,647
Total		\$3,759	\$19,936

AMR indicated that the overcharges were the result of human error, and that refunds had been initiated upon notification by Internal Audit. The current ambulance contract does not contain any clauses to mitigate billing errors or require a secondary review process.

Section 18 of the Ambulance Contract states that the contractor is responsible for all billings and collections for ambulance service rendered under the contract. The contract also requires that the contractor assign a local employee to be assigned to the investigation and resolution of each billing complaint. The City Auditor's Office noted that AFD has not requested or received reports of billing complaints, as AFD stated they rely on insurance agencies to detect erroneous billings during claim reviews. Although the City is not contractually responsible for review of billing data and insurance companies may detect erroneous billings, periodic review of billing data supporting the MAB might identify systemic billing issues that should be addressed by the contractor. Without such a review, the City is relying on receipt of citizen complaints to identify possible issues.

As noted in the Background section of this report, the City already contracts with an EMS consultant to monitor the ambulance contract and review the MAB calculation. It is possible that the consultant can periodically review contractor billing data for anomalies indicating possible systemic billing issues.

#### Recommendation:

The Fire Chief should consider periodic review of contractor billing data by the City's EMS consultant to identify systemic billing issues.

# Management's Response:

Do Not Concur. This is an AMR business liability concern. The City is not responsible for validation of mileage data entered into AMR billing records. The City immediately responds to citizen complaints about AMR billing issues and pursues the resolution of billing issues on a case by case basis. To interject the City into mileage verification will put the City into a liability concern – this is not the intent of the contract. The contract is intended to assign the billing liability issue to the contractor - who is responsible for accurate patient billing.

Target Date: Not Applicable
Responsibility: Not Applicable

**Audit Comment:** The City Auditor's Office agrees that AMR is responsible for all billings rendered under the terms of the ambulance contract. However, the City Auditor's Office concluded that contract oversight, via a periodic review of contractor billing data, would help demonstrate adherence to the contract requirement to bill at the appropriate rate. While ambulance services and billings are being provided by AMR, citizens may consider erroneous billings to be reflective of the City of Arlington.

## Recommendation:

The Fire Chief should require AMR to implement a quality assurance methodology in its patient billing processes in order to detect possible mileage overcharges.

# Management's Response:

Concur. New electronic patient care reporting technology provides AMR with audit capability of transport mileage per call. AMR will conduct random audits and provide the AFD's Medical Operations section with mileage audit reports.

Target Date: In process

Responsibility: David Stapp, Battalion Chief

# 6. The AFD has not requested customer service surveys as provided for in the ambulance service contract.

According to the ambulance services contract (Section 10.C.5), at least once each year, the City *may* require the contractor to mail a quality and customer service satisfaction questionnaire to designated patients (e.g., advanced versus basic life support) or other system stakeholders served

during a period of up to one month. The contract states that the City will design and approve the questionnaire and that questionnaires will be returned directly to the City for processing.

Periodic citizen surveys help assess vendor performance and identify potential inefficiencies or ineffectiveness of the ambulance carrier. Although not requested under the noted contract clause, AMR conducted customer surveys of clients served. An example of the survey conducted by AMR is included as Exhibit A of this report. AMR indicated that it surveys approximately 25% of the patients transported. Per AMR, patients are selected at random, on a quarterly basis.

AMR Customer Feedback Forms provided to the City Auditor's Office include questions regarding the appearance and professionalism of the ambulance crew, the level of care received and the overall level of satisfaction. The surveys did not include specific questions regarding billing accuracy. However, AMR provided the City Auditor's Office with examples of billing complaints received from customers via e-mail.

Although AMR maintains files of survey responses and billing complaints, the City Auditor's Office noted that AFD has not requested access to the surveys conducted by AMR nor has the AFD inquired regarding complaints received by AMR. The AFD has also not exercised the contractual option to design and approve the content of AMR's Customer Service Feedback Form nor to identify the types of designated patients to be surveyed. Instead, AFD expects customers to contact them directly in the event of a serious customer service matter. According to the AFD, the City has received approximately eight complaints in the past two fiscal years. AFD was not able to provide the City Auditor's Office with any documentation of these complaints.

Although the AFD did not provide the City Auditor's Office with a specific reason why the contractually-allowed surveys were not requested, AFD stated that customer surveys would be difficult to conduct due to the inability of the patients to determine if AFD paramedics or AMR medics treated them. Both parties attend to patients at times.

Although developing and conducting customer service surveys may be difficult, the AFD has several resources/alternatives available to assist the department in assessing citizen satisfaction.

- 1. As noted earlier, AMR periodically conducts customer service surveys. AFD could request summaries of AMR's survey results and request survey modifications to ensure that the desired data is obtained. The AFD also has a \$28,000 annual agreement with an outside ambulance services consultant for various services, including the periodic review of vendor data and evaluation of contractor performance. The AFD could request that the outside consultant verify, validate and summarize AMR survey results under its existing agreement with the consultant.
- 2. The City conducts an annual City Services Satisfaction Survey which includes a section to rate ambulance services. The survey is sent to a group of randomly selected citizens but only 49 responded that they had actually used AMR services. Citizens who used ambulance/EMS were asked to rate the quality and timeliness of services received. Citizens who had not used ambulance/EMS were asked to rate their perception of

services provided. While this general information is obtained from the city-wide survey, AFD may desire more specific questions regarding service levels, medical treatment received and/or billing practices. The AFD could request that modifications be made to the annual survey to accommodate more specific ambulance related questions.

- 3. The City utilizes the Citizen Action Request Form (CARF) to document citizen compliments and complaints. The CARF does not include a complaint category for ambulance services, as noted in Exhibit B of this report. The AFD could request CARF modifications that would result in the ability to obtain more useful citizen feedback on ambulance operations.
- 4. AFD could conduct or contract with an outside vendor to conduct an independent periodic survey of ambulance patients. This option would appear to be the most costly alternative and not economically feasible.

Without periodically conducting or reviewing valid customer service surveys, the AFD may be unable to determine if contract amendments are needed to address contractor deficiencies to ensure that service levels remain high. Feedback from clients would also provide an additional avenue for the medical director to monitor vendor compliance to established medical protocols.

## Recommendation:

The Fire Chief should consider obtaining and/or conducting on a routine basis statistically valid customer surveys of ambulance patients.

# Management's Response:

Do Not Concur. Ambulance/Emergency Medical Services. Among users in the past 12 months, ambulance and emergency medical services continue to be rated very high (95%+ top two box) on quality of service and timeliness of service. The City survey is a sufficient customer satisfaction survey tool. See latest City survey

http://www.arlingtontx.gov/cityservicessatisfactionsurveys/FY2012\_CitizenSurveyFinalReport.pdf

Target Date: Not Applicable Responsibility: Not Applicable

**Audit Comment:** The City Auditor's Office agrees that ambulance/emergency medical services continue to be rated high, based on city-wide citizen survey results. However, as previously noted, survey results may be more effective if additional information is obtained, especially since the City's ambulance/emergency medical services are being conducted by a third party contractor. If citizens responding to the City Services Satisfaction Survey had noted poor ambulance/EMS quality, management would be unaware of the reason for the low rating (e.g., lack of professionalism, condition of equipment, etc.).

While the City Auditor's Office was unable to determine the statistical validity of surveys administered by AMR, AMR surveys are more frequent (quarterly versus annually), are targeted

to those who are known to have utilized ambulance/EMS during that referenced period, and include more detailed information than that provided in the citizens' survey.

AFD's request for, and review of, more detailed surveys could help identify and resolve performance deficiencies in a timely manner. Detailed survey results could also be used to help support future performance contracting requirements.





## **Customer Feedback Form**

## **AMR Arlington, TX Operations**

#### How Do You Rate AMR?

(1 = Poor/5 = Excellent)

N/A

1.	How was the appearance of the ambulance crew?	1	2	3	4	(3)	
2.	How was the professionalism of the dispatcher and ambulance crew?	1	2	3	4	(5)	
3.	How was the care you received?	1	2	3	4	(5)	
4.	What was your overall level of satisfaction?	1	2	3	4	5	
5.	If needed, would you use AMR service again?	1	2 :	3	4	(5)	
6.	Would you recommend AMR service to family and friends?	1	2	3	4	(5)	
7.	Would you like an AMR Representative to contact you about the service you received?	1	2	3	4	5	V

What date did you use AMR service? \_7/18/2011

What did you like most about AMR service? FAST RESPONSE
# PROFESSIONAL SERVICE
What did you like least about AMR service? PKK-UP TRUCK
WY CAB HOOED A VERY ROUGH, UNCOMFORTABLE
Additional comments RIDE, YOU NEED A LOST & FOUND"
PABILITY FOR OVER LOUPERD ETEMS LEFT IN CAR!

You may also provide customer feedback electronically, via the AMR Arlington website. The link to the feedback is <a href="http://www.amr.net/About-AMR/Locations/Operations/Texas/Arlington">http://www.amr.net/About-AMR/Locations/Operations/Texas/Arlington</a>.

Please return the completed survey to American Medical Response P.O. Box 181029 Arlington, TX 76096-1029





# **Customer Feedback Form**

# **AMR Arlington, TX Operations**

Date of Service: 7/17/2010

How Do You Rate AMR?

(1 = Poor/5 = Excellent)

N/A

What date did you use AMR service? 177-2010

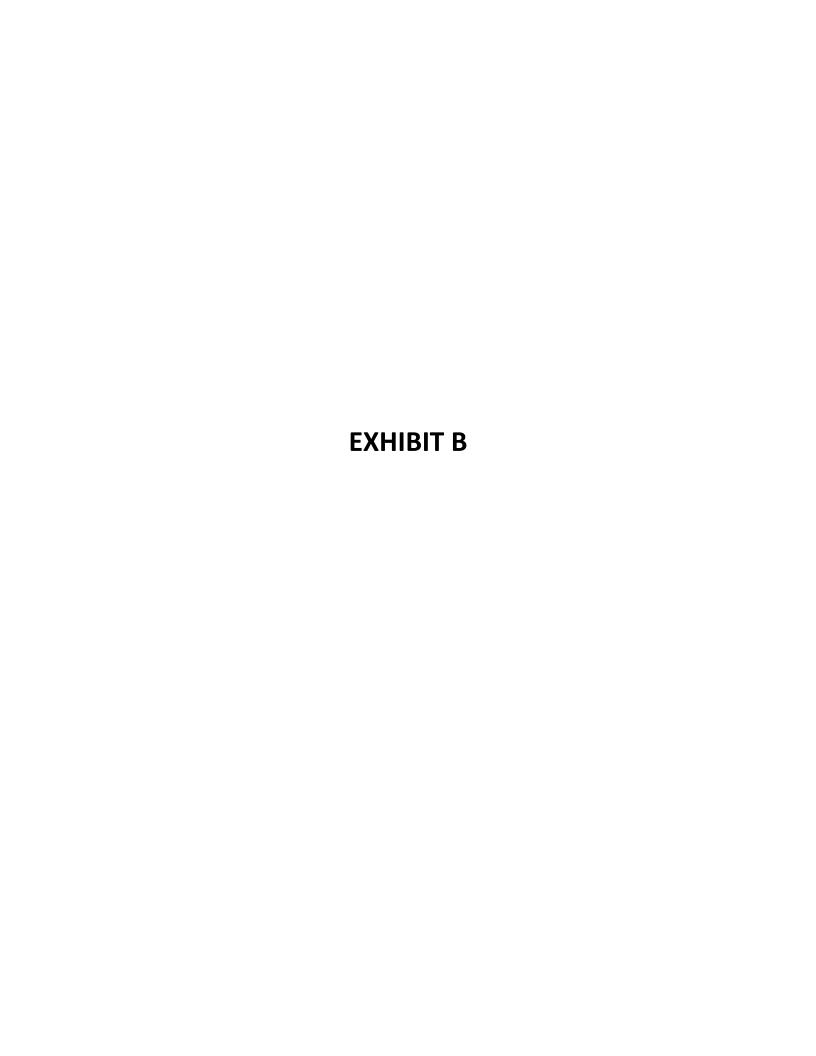
1.	How was the appearance of the ambulance crew?	1	2	(3)	4	5	
2.	How was the professionalism of the dispatcher and ambulance crew?	1	2	3	4	5	140000
3.	How was the care you received?	1	(2)	3	4	5	_
4.	What was your overall level of satisfaction?	1	2	3	4 .	5	
5.	If needed, would you use AMR service again?	1	2	3	4	5 ,	
6.	Would you recommend AMR service to family and friends?	1	2	3	1	5	
7.	Would you like an AMR Representative to contact you about the service you received?	1	2	3	4	5	

What did you like most about AMR service?		
What did you like least about AMR service?	RUDICULOUS COST	
OR PROPERLY VERIFY NOTED	on besine for service	t

You may also provide customer feedback electronically, via the AMR Arlington website. The link to the feedback is <a href="http://www.amr.net/About-AMR/Locations/Operations/Texas/Arlington">http://www.amr.net/About-AMR/Locations/Operations/Texas/Arlington</a>.

Please return the completed survey to

American Medical Response P.O. Box 181029 Arlington, TX 76096-1029



Action Request Type(REQI	IIDED)	
	iolation (Only One Option may be selected)	
C Compliment	C Miscellaneous(AFD Patch Request	es, etc.)
C CPR Classes	Outdoor Burning Questions/Conce	erns
C Fire Lane Violations	C Public Education Requests	
C Knox Box Questions/Cor	ncerns C Smoke Detector Requests	
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Anonymous To check sta supplied, the irst Name	tus of your ticket, please record the action reques e action request number will be automatically sen Last Name	st number. If valid email address t to your email address.
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Anonymous To check sta supplied, the first Name  Street No  acility Type	tus of your ticket, please record the action reques action request number will be automatically sen  Last Name  REQUIRED  Street Name	t to your email address.