

ANDERSON COUNTY TENNESSEE EMS OPERATIONAL AND FINANCIAL AUDIT

FINDINGS OF FACTS

22 FEBRUARY 2018



AGENDA

- Introductions
- Project History
 - IDR
 - Site Visit
 - Claims Review
- Reporting of Facts
- Recap
- Questions
- Next Steps

FITCH & ASSOCIATES

- Presentation Team
 - Anthony Minge, EdD – Partner – Project Coordinator
 - Skip Kirkwood, J.D, EMT-P – Operations
 - Dianne Wright, MPA – Finance
- Other Contributors
 - Melissa Coons, BS, CAC – Claims Review
 - Jay Fitch, PhD – Founding Partner – Project Oversight

PURPOSE

- Operational and Financial Audit of Anderson County EMS
 - Assess Current Status
 - Operations
 - Costs
 - Revenue
 - Identify
 - Best Practices
 - Areas for Improvement
 - Opportunities to Mitigate Risk

SCOPE OF SERVICE

- Organizational Structure
- Management Practices & Flow
- Quality Improvement
- Hiring Standards and Recruitment
- Staff Levels, Utilization and Retention
- Staff Training/Education Practices
- Fleet Management
- Facilities Utilization
- Dispatch Services
- Technology Utilization
- Asset Management
- Fleet Expenditures
- Other Equipment Expenditures
- General/Non-Capital Expenditures
- Safety, Security, Risk Management
- Record Keeping
- Billing Practices
- Customer Service
- Staff Salaries
- Budgeting
- Revenue Stream Utilization and Availability of Additional Funds
- Revenue Collection

PROJECT TIMELINE – TO DATE

- Information Data Review – 9/14/17
- Employee Surveys – 11/10/17
- Claims Review – 12/15/17
- Site Visit – 1/15/18 thru 1/19/18
- Finding of Facts Reporting – 2/22/18

INFORMATION DATA REQUEST

- Pre-Hospital Medical Transportation System
- Operations
- Human Resources
- Organizational Structure
- Financial Considerations
- Customer Service, Accountability, & Education
 - 5 Years of Data
 - Ambulance Deployment Analysis
 - Unit Hour Cost Analysis
 - Geo-Spatial Analysis

EMPLOYEE SURVEY

- Deployed Electronically via email by Fitch
- All Responses were Anonymous
- 44 Respondents – 56%
- 14 Provided Additional Email Commentary

SITE VISIT

- Ride-Along
 - Station Visits
 - Geography of the County
- Interviews w/Personnel
 - Director
 - Managers/Supervisors
 - Hospital
 - Nursing Homes
 - County Personnel
 - Employees – 18 Interviewed
 - Committee Members/Commissioners/Mayor
 - Other Stakeholders

ORGANIZATIONAL STRUCTURE & MANAGEMENT PRACTICES & FLOW

- Sole provider of all ambulance services in the county per County legislation
- As of FY2010, designated enterprise/business type activity; operations and capital to be funded from activities; were not able to sustain
- Director reports to County Mayor
- Organized in 4 functional areas: Operations, Admin, Training, Support (Fleet, Supply, Buildings)
- ACEMS employees accomplish building and grounds maintenance

DISPATCH SERVICES & TECHNOLOGY UTILIZATION

- Call-taking/dispatch by E911 Communications District (\$100,000 annual cost)
- Computer Aided Dispatch (CAD) system does not meet current or even basic public safety standards
- No reliable radio between ACEMS and police and fire 1st responders

CAD ISSUES

- CAD does not interface with dispatch system; impacts record keeping/reports
- Call location data entered in manually; increased errors and delays dispatch
- CAD developed by former county employee; not able to upgrade
- Vehicle location software not fully available so closest ambulance not always dispatched
- After 8 p.m. alert system defaults to phone calls which delays dispatch
- 8 pm to 8 am convalescent calls not screened for medical necessity

FACILITIES UTILIZATION / SAFETY, SECURITY & RISK MANAGEMENT

- 5 of 6 stations are sub-standard
- Ambulance weight is too light to safely sustain patient module, personnel
- ACEMS transports deceased persons — not a typical ambulance function

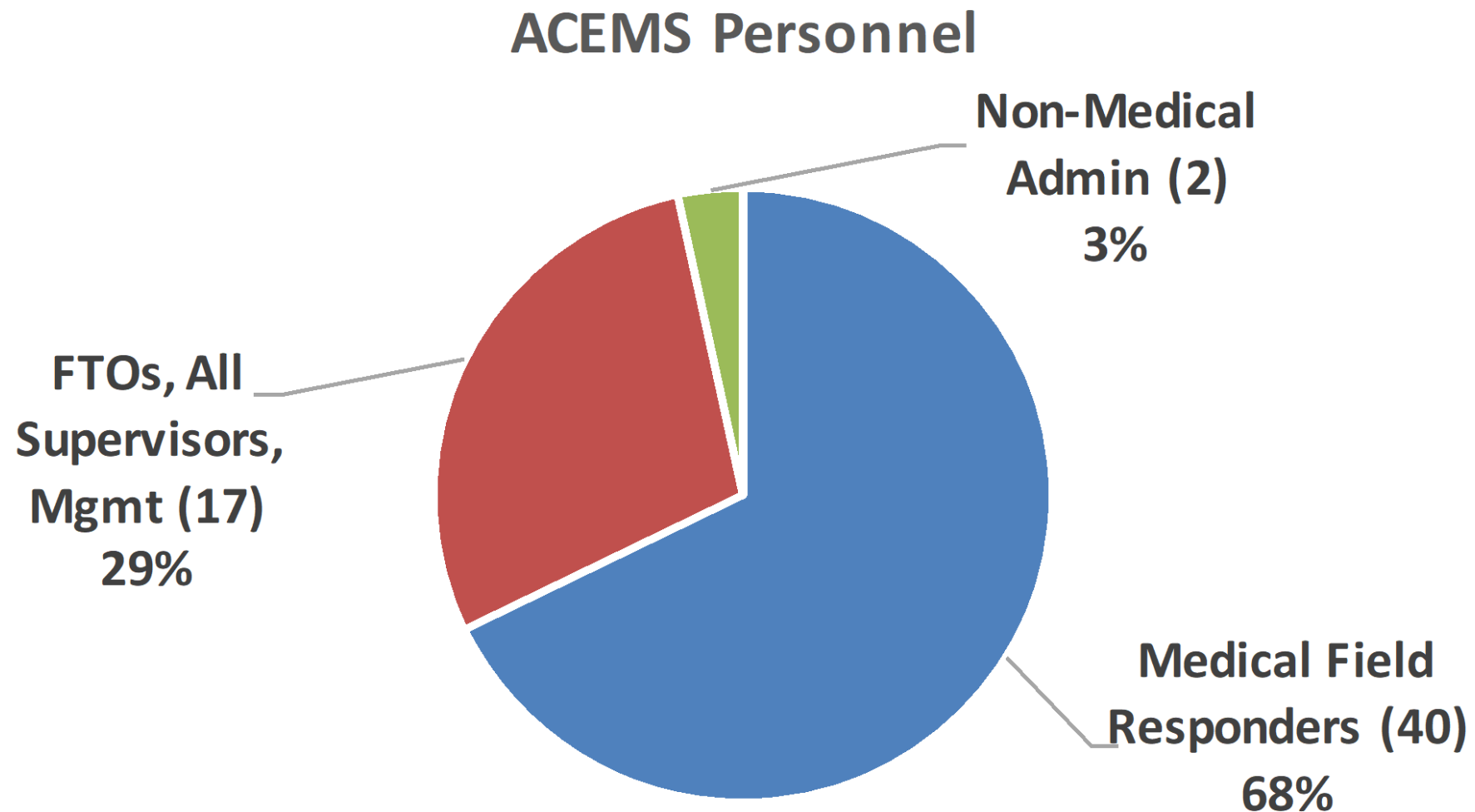
STAFF TRAINING / EDUCATION PRACTICES

- A requirement of hiring is a valid EMT or paramedic certification
- ACEMS trains personnel on off-duty (overtime) status to avoid shutting down ambulances while training is conducted
- ACEMS clinical education program appears to meet needs of personnel

STAFF SALARIES & STAFFING LEVELS

- Personnel Costs - 70% of budget
- Salaries are at or below those of area agencies even though workloads are high
- Average Gross Annual Salary
 - EMT \$35,285
 - Paramedics \$44,056
 - Gross annual salaries reported do not include overtime pay

HIRING STANDARDS AND RECRUITMENT



UTILIZATION & RETENTION

- ACEMS crews are out of station close to half the time they are on duty
- ACEMS 911 Units - UHU .35 to .45
 - Also out of station for fueling, supply stocking, and cleaning ambulance
- Years in services for the 59 ACEMS employees —
 - 8 have less than one year;
 - 16 of have more than 10 years;
 - 35 average 3.7 years

QUALITY IMPROVEMENT, RECORD KEEPING & CUSTOMER SERVICE

- Medical Director - Emergency Physician at Methodist Hospital
 - Limited involvement with EMS
 - Does not engage in field response or teach EMS continuing education
 - \$12,000 annual contract payment
- Public Education/Awareness Programs
 - Limited due to staffing and budget constraints
- Customer Complaints
 - Appear handled appropriately; many are not within ACEMS jurisdiction
- Record Keeping
 - Image Trend (ePCR) - \$1.59 per chart
 - PCS forms
 - Billing
- Operational Performance Data – Being Accurately Reported

FLEET & ASSET MANAGEMENT & FLEET EXPENDITURES

- Ambulances -17
 - Average mileage 243,500
 - 10 front line units, 4 w/patient care modules remounted once
 - 5 back-ups - average mileage 292,797
 - 11 ambulances exceed county's 250,000 mile standard; 10 are > 7 year standard
- Support Vehicles -10 County Motor Pool
- Patient Module Maintenance
- Last New Ambulance Purchased – 2012

OTHER EQUIPMENT & GENERAL NON-CAPITAL EXPENDITURES

- Other Expenditures
 - Worker's compensation - reduced in FY2018 from appx. \$200,000 to \$93,000
- Area Fire Depts.
 - ACEMS restocks medical supplies,
 - Shares medical direction and
 - Provides training opportunities at no cost
- Medical Equipment
- P-Cards
 - Consultants reviewed 12-months transactions - found no issues

"LOANS" FROM COUNTY

- 7 Year Note – Issued 2016 - Capital Outlay Note Ambulance - \$223,225
- Interest per year 2.25%
- FY 2017 – Only paid interest/none to principle - \$4,365
- FY2018 Loan Payment to County - \$34,668

- Owe The County - \$1,185,508 (pg 88 of CAFR)

BUDGETING

- Budget Process
 - Does not account for required 911 “readiness”
- Budget Book
 - No description/detail; no agreed upon narrative
- Capital is first area for cuts in order to maintain personnel for response capacity
- Convalescent trips having a negative impact on 911 readiness and responses

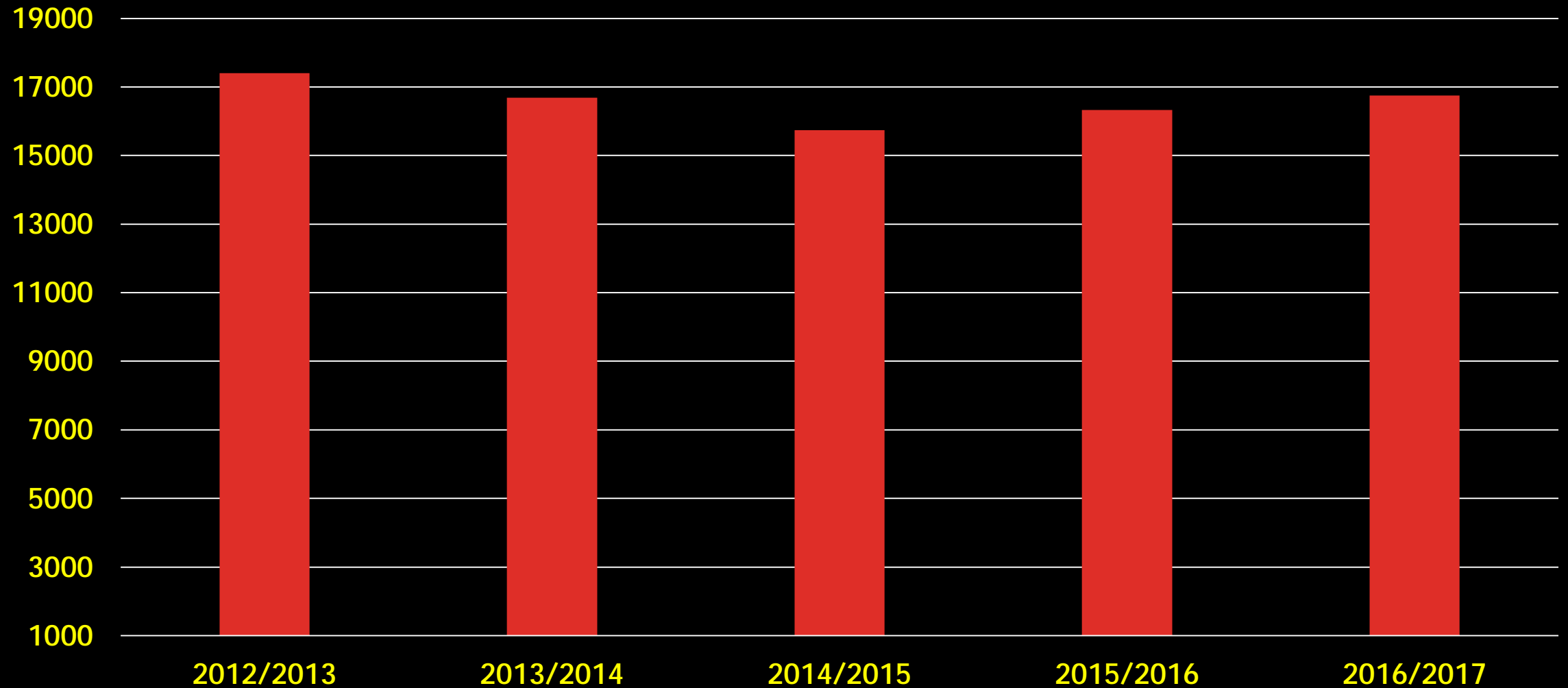
BILLING PRACTICES & REVENUE COLLECTION

- ACEMS utilized AMB billing prior to a transition to Digitech in 2017
- ACEMS was audited in 2014
 - Substantial Payments Refunds
 - Prepayment Review
- Charge for billing services for FY2017
 - AMB - \$168,000
 - Digitech - \$195,000 – Fee 4.5% of Net
- No Monthly AR Calls
- Wakefield & Associates

ACEMS RATE SCHEDULE

SERVICE	CODE	12/13	13/14	2014	2015	15/16	16/17	17/18
MILEAGE	A0425	\$10	\$10	\$10	\$14.50	\$14.50	\$14.50	\$21.64
ALSNE	A0426	\$600	\$600	\$600	\$650	\$650	\$650	\$743.94
ALSE	A0427	\$605	\$605	\$605	\$850	\$850	\$850	\$1177.88
BLSNE	A0428	\$400	\$400	\$400	\$550	\$550	\$550	\$619.93
BLSE	A0429	\$495	\$495	\$495	\$750	\$750	\$750	\$991.90
ALS2	A0433	\$715	\$715	\$715	\$1100	\$1100	\$1100	\$1704.85
SCT	A0434	\$825	\$825	\$825	\$1300	\$1300	\$1300	\$2055.93
TRTNTXPT	A0998	\$0	\$0	\$0	\$75	\$75	\$75	\$100
ME/COR	A0999	\$0	\$0	\$0	\$100	\$100	\$100	\$100

Annual Transports



SERVICE MIX

	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
ALSE	52%	48%	30%	35%	35%
BLSE	1%	3%	26%	21%	21%
ALS2	0.4%	.07%	0.8%	0.8%	1.1%
SCT	0.5%	0.03%	0.2%	0%	0.1%
ALSNE	0.4%	0.8%	0.7%	0.6%	0.8%
BLSNE	46%	47%	41%	42%	40%
TRTNTXPT	0%	0%	0.3%	0.4%	1.1%
ME/COR	0%	0%	1%	0.02%	1%

PAYOR MIX

	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Medicare	52%	52%	45%	65%	58%
Medicaid	18%	17%	17%	12%	23%
Commercial	24%	24%	30%	15%	9%
Self Pay	5%	6%	7%	7%	7%
Other	0.2%	0.6%	0.4%	1%	3.6%

REVENUE COLLECTION

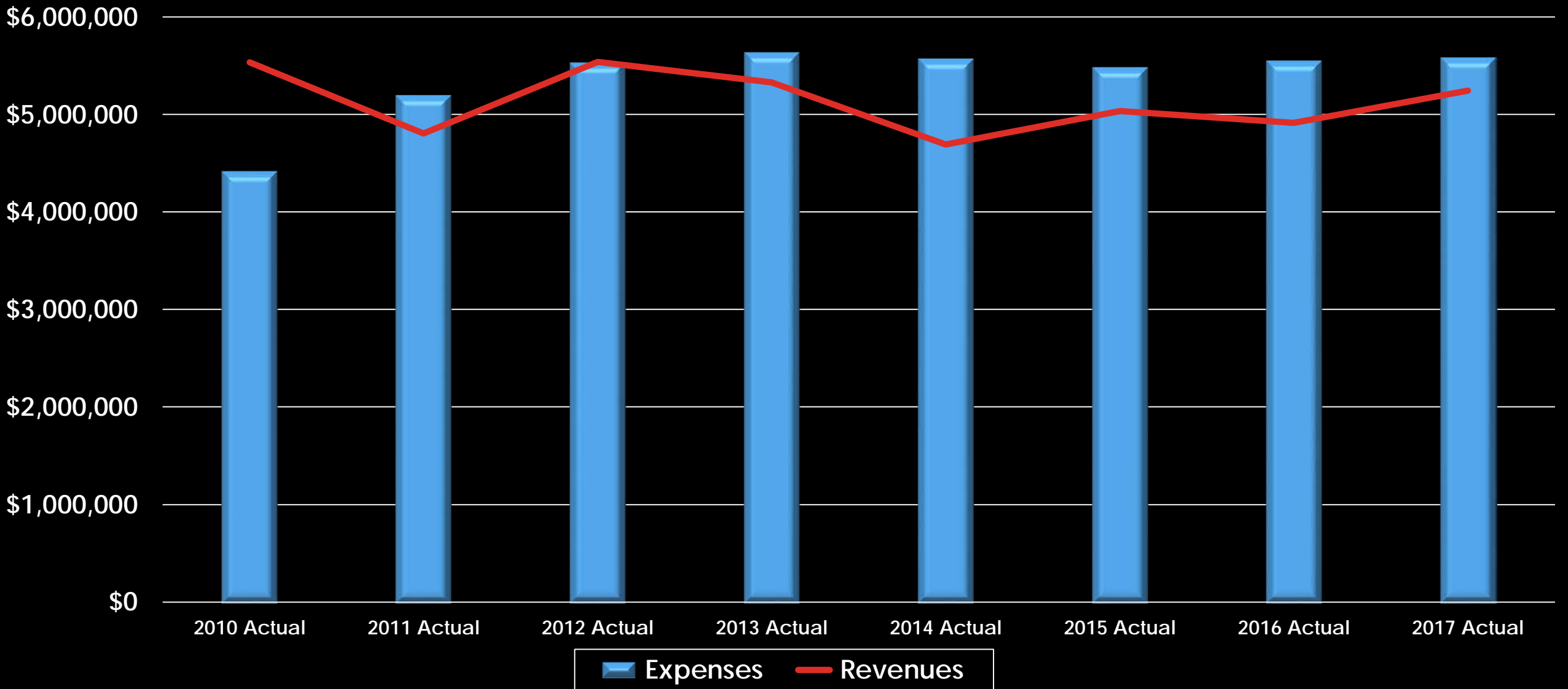
FY	Trips	Gross Charges	Cash Collected	Cash Per Trip
2012/2013	17404	\$ 11,091,000.00	\$ 5,336,338.45	\$ 306.62
2013/2014	16679	\$ 10,448,065.00	\$ 5,166,905.95	\$ 309.79
2014/1015	15733	\$ 11,550,506.56	\$ 4,599,279.35	\$ 292.33
2015/2016	16321	\$ 13,979,568.56	\$ 5,150,531.53	\$ 315.58
2016/2017	16744	\$ 14,621,922.36	\$4,955,832.58	\$ 295.98

REVENUE STREAM UTILIZATION & AVAILABILITY OF ADDITIONAL FUNDS

- All Funds Collected Go Directly To Support Operating Costs
- No Capital Fund/Reserves
- Methodist Contract Expired
- Roane County - \$59,000 annual subsidy

ACEMS Revenues and Expenditures FY2010 to FY2017

Source: CAFR Ending 6/30/17



PER TRANSPORT COST/REVENUE

Cost Per Unit Hour	\$85.71
Cost Per Transport	\$333.09
Revenue Collected Per Transport	\$295.98
Loss Per Trip	\$37.11

911 RESPONSE TIMES

- Traditionally – 8 minutes or less at 90th Percentile
- Recently – 12 to 15 minutes* at 90th Percentile
 - *With prompt (4-5 minute) and reliable First Responder response
- ACEMS – 19* minutes at 90th Percentile
 - *Calculated from time of 911 call to arrival

RE-CAP OF FINDINGS

- FITCH captured and reviewed extensive data through IDR, survey, site visit, interviews and extensive follow up with county personnel
- ACEMS organizational set up is typical for EMS agencies
- Dispatch services cost \$100,000 annually; system does not meet basic standards for EMS
 - record keeping and reports are negatively impacted
 - call location data input manually delays ambulance dispatch
 - vehicle location not implemented; closet ambulance dispatch not certain

RE-CAP OF FINDINGS

- 5 of 6 stations are substandard
- Ambulances do not conform to some safety specifications and stated county policies
- 17 Ambulances with average mileage of 243,500; 11 exceed county's 250,000 standard
- Last new ambulance in 2012
- Medical Equipment in old and often unreliable

RE-CAP OF FINDINGS

- ACEMS has a good training program; conducts training off-duty to avoid shutting down units
- Public education and awareness programs are limited due to staffing and budget constraints
- Salaries are at or below area agencies and workload is high
- Personnel costs are 70% of operating budget; low compared to other agencies
- Utilization (hours working calls) are higher than recommended for 24 hour ambulance crews

RE-CAP OF FINDINGS

- Budget documents lack historical record of performance, policy and budget decisions
- Budget process does not account for "911 readiness"
- Capital is first area cut in order to maintain personnel for response capacity
- There is no capital fund for new or replacement vehicles and equipment
- Revenues have been consistently less than expenses since FY2011
- P-card review indicated no issues; ACEMS personnel handle all building maintenance which adds to P-card usage

RE-CAP OF FINDINGS

- Rate adjustments are made periodically and are appropriate to capture allowable fees from payors while not over-burdening patient with high out-of-pocket costs
- Service Mix is considered appropriate (since 2014)
- Payor Mix is heavily weighted in Fee Schedule based payors
- Collected revenue per transport is below cost per transport

RE-CAP OF FINDINGS

- No evidence that County has adopted performance standards
- 911 response performance is 19 minutes for 90% of calls; this is slower than most urban/rural communities

PROJECT TIMELINE

- 2/26/18 – Deadline for Submission of Additional Questions/Clarifications Identified in the Finding of Facts Reporting Meeting
- 3/09/18 – Draft Report (via e-mail)
- 3/14/18 – Deadline for e-mail submission of questions/clarifications of draft report
- 3/22/18 – Presentation of Draft Report
- 3/23/18 – Provision of meeting minutes and Memo of Understanding (MoU)
- 3/27/18 – Deadline for EMS Audit Committee Review and Approval of Memo of Understanding
- 4/06/18 – Final Audit Report Distribution
- 4/16/18 – Final Audit Report Presentation at County Commission Meeting

