



# Emergency Medical Services Operational and Financial Audit

## Anderson County, Tennessee



Presented by  
FITCH AND ASSOCIATES, LLC  
Platte City, Missouri  
April 16, 2018



# Project Goals

- Identify any operational modifications that would allow ACEMS to operate more efficiently and economically.
- Confirms a desire to improve the overall performance and quality of services while improving the use of taxpayer money.
- Later – the team was asked to address a number of specific issues raised by some elected and appointed officials.

# Process

- Information and Data Request to the county
- Conferences with Audit Advisory Committee
- Data and geo-spatial analysis
- Employee survey
- Site visit including station visits and ambulance/supervisor ride-alongs
- Employee, supervisor, manager, and stakeholder interviews
- Findings of Fact presentation to Audit Advisory Committee
- Draft report submitted to Audit Advisory Committee
- Revisions based on AAC and Project Manager feedback
- Final report delivered to Board of County Commissioners

# Thanks to

- Audit Advisory Committee Chair Myron Iwanski and members
- Project Manager Randy Walters
- EMS Director Nathan Sweet and EMS staff
- County staff that support EMS (Motor Pool, Sheriff's Office)
- Mayor Terry Frank
- Commissioners who spoke with the team in person or by phone
- EMS employees who participated in staff survey, interviews, and ride-alongs.
- Community stakeholders – fire chiefs and others

# No Legal Obligation to Provide EMS

- Not a mandatory service in Tennessee. Cities and municipalities MAY provide, but are not required to do so.
  - Emergency (911)
  - Non-emergency (convalescent)
  - Both
- Anderson County has occupied the EMS space for nearly 50 years – practically speaking, the citizens expect the county to provide at least emergency service.
  - Convalescent transport probably less so, given the “loss per call” issue.

# 911 Emergency Medical Services Today

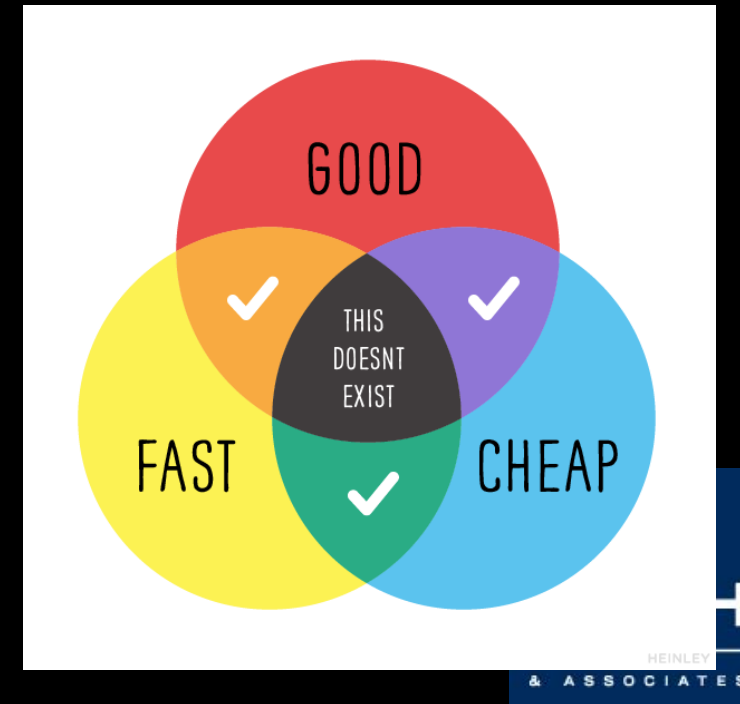
## Reality #1



# 911 Emergency Medical Services Today

## Reality #1

- You can't have all three.
- Further compounded because in EMS, most communities include "fast" as part of "good."





# 911 Emergency Medical Services Today

## Reality #2

- A “self funding” EMS agency is a rare thing, possible in only very unique circumstances:
  - Densely populated community – low cost to serve
  - High prevalence of commercial health insurance
  - Low prevalence of Medicare and Medicaid beneficiaries
- Once possible, the concept began to fade in the late 1990s and further dwindled with the National Medical Ambulance Fee Schedule in 2002 (Balanced Budget Act of 1997).
- Medicare pays “below cost” of providing service (GAO reports 2007 and 2012).



# 911 Emergency Medical Services Today

## Reality #2

- Anderson County has high Medicare and Medicaid utilization.
- No benchmarked public EMS agencies operated without taxpayer subsidy (from the General Fund, in addition to revenue).
  - Average \$14.95 per capita
  - Average 32% of EMS budget

# Benchmarking – sample counties

	Montgomery Co.	Sevier Co.	Anderson Co.	Sumner Co.	Bradley Co.	Robertson Co.	Sullivan Co.	Durham Co. NC	Wake County NC
	General fund	General fund	Enterprise fund	General fund	General fund	General fund	Special fund	General fund	General fund
Footnotes	1	2					3		
Area	544	360	345	543	331	476	430	298	980
Population	194,000	95,946	75,936	175,990	104,091	69,165	156,791	302,000	1,100,000
Scheduled UH	122,640	70,080	64,240	124,176	57,284	64,320		113880	306600
Scheduled UH per capita	1.582	1.369	1.182	1.417	1.817	1.075	#DIV/0!	2.652	3.588
Dispatches	34,000	15,000	20,516	23,562	26,815	9,259	23,123	42,000	101000
UHU(d)	0.28	0.21	0.32	0.19	0.47	0.14		0.37	0.33
Transports	17,000	11,750	17,516	18,439	17,000	6,223	17791	28,000	74000
Budget	\$9,500,000	\$4,600,000	\$5,529,480	\$8,900,000	\$5,589,847	\$4,522,763	\$6,424,672	\$15,572,000	\$42,400,000
Revenue	\$6,300,000	\$3,300,000	\$5,264,944	\$6,300,000	\$4,900,000	\$2,080,699	\$3,983,510	\$8,400,000	\$26,400,000
FTE	124	57	59	149	70	52		179	540
Subsidy per capita	16.49	13.55	3.48	14.77	6.63	35.31	15.57	23.75	14.55
FTE per 10,000 pop.	6.39175	5.94084	7.76970	8.46639	6.72488	7.51825	0.00000	5.92715	4.90909
Budgeted cost per sched. UH	\$77.46	\$65.64	\$86.08	\$71.67	\$97.58	\$70.32	#DIV/0!	\$136.74	\$138.29
Cost per transport	\$559	\$391	\$316	\$483	\$329	\$727	\$361	\$556	\$573
Budgeted cost per capita	\$32	\$34	\$69	\$36	\$47	\$30	\$25	\$28	\$24
Cost per square mile	\$17,463	\$12,778	\$16,027	\$16,390	\$16,888	\$9,502	\$14,941	\$52,255	\$43,265
Population density (PPSQM)	357	267	220	324	314	145	365	1,013	1,122
Percentage subsidy	0.34	0.28	0.05	0.29	0.12	0.54	0.38	0.46	0.38

# Anderson County EMS Today

- Anderson County EMS has been under-funded for many years.
  - Inadequate number of ambulances to provide acceptable response time to emergency ambulance calls (19:00 minutes at 90<sup>th</sup> percentile)
    - Vehicles do not meet county's own Commission-adopted standards
  - Vehicles and medical equipment in bad shape – aged and worn
  - Attempts to “enhance revenue” by concentrating on (slightly) more lucrative convalescent calls has negatively impacted emergency response performance
- Staff morale is poor because of issues mostly beyond the control of EMS Department leadership

# Anderson County EMS Today

- High percentage of Medicare and Medicaid (you can only get what you can get)
- Good billing and collections program
- Room for improvement with documentation
  - Medical necessity at dispatch and in the field

	2012/2014	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Medicare	52%	52%	45%	65%	58%	60%
Medicaid	18%	17%	17%	12%	23%	17%
Commercial	24%	24%	30%	15%	9%	11%
Self-Pay	5%	6%	7%	7%	7%	10%
Other	0%	1%	0%	1%	4%	2%

# Benchmarking against the “Fitch 50”

- Demonstrate achievement of **10/50** benchmarks
- Demonstrate partial achievement of **28/50** benchmarks
- Demonstrate non-achievement of **12/50** benchmarks

# The risks.....



## W.Va. EMS agency, dispatch to pay \$1.4M in teen's death

Leland Brown II died after it took 19 minutes for an ambulance to arrive to treat him for what was determined to be cardiac arrest

Feb 15, 2018

# 911 Emergency Medical Services Today

## Reality #3

- Anderson County is not a desirable candidate for privatization of emergency 911 ambulance service
  - Difficult geography
  - Low call density
  - Poor insurance payer mix
- County would expect to have to subsidize any private provider, AND assure a profit margin
  - Costs likely to increase each time contract is renewed



# What is needed – Critical Priorities

- Policy Decision – Business Model: Does Anderson County wish to be in the 911 emergency ambulance business, the convalescent ambulance business, or both?
  - Both models involve a loss on most every transaction
  - The decision will drive future decisions
    - Fleet makeup
    - Biomedical equipment selection and costs
    - Facility types and locations
  - Audit Committee member comment regarding county's "moral obligation" to provide both services – does that exist?
- Stop making operational decisions to "chase revenue"!
  - Budget drives operations; revenue is an independent function

# What is needed – Critical Priorities – ASAP!

- Fleet condition – replacement and quality of ambulances
  - Replace worn vehicles
  - Purchase durable vehicles – ACEMS will use them *hard* and *long*!
    - Patient care module conversion – current construction safety standards (CAAS GVS)
    - Chassis – assure adequate capacity (4xx series vehicles instead of 3xx series)
  - Current “critical vehicle failure” rate is 3 times national standard
- Replace biomedical equipment
  - Absolutely essential for quality paramedic-level patient care
  - Best prices with single bulk purchase every 5-7 years
  - All must be standardized for good clinical practice
  - Failures or poor function directly impedes lifesaving patient care

# High Priorities

- OIG Exclusion List checks
- Replace CAD system with CAD that meets all data and operational needs of EMS agency
  - Integration with 911 telephone system
  - Integrated with automated vehicle location system
  - Integrated with in-vehicle navigation and automated status reporting
  - Integrated with radio system
  - Interfaced to patient care reporting system
  - Robust records management and reporting
- Policy and Contract Improvements (numerous)

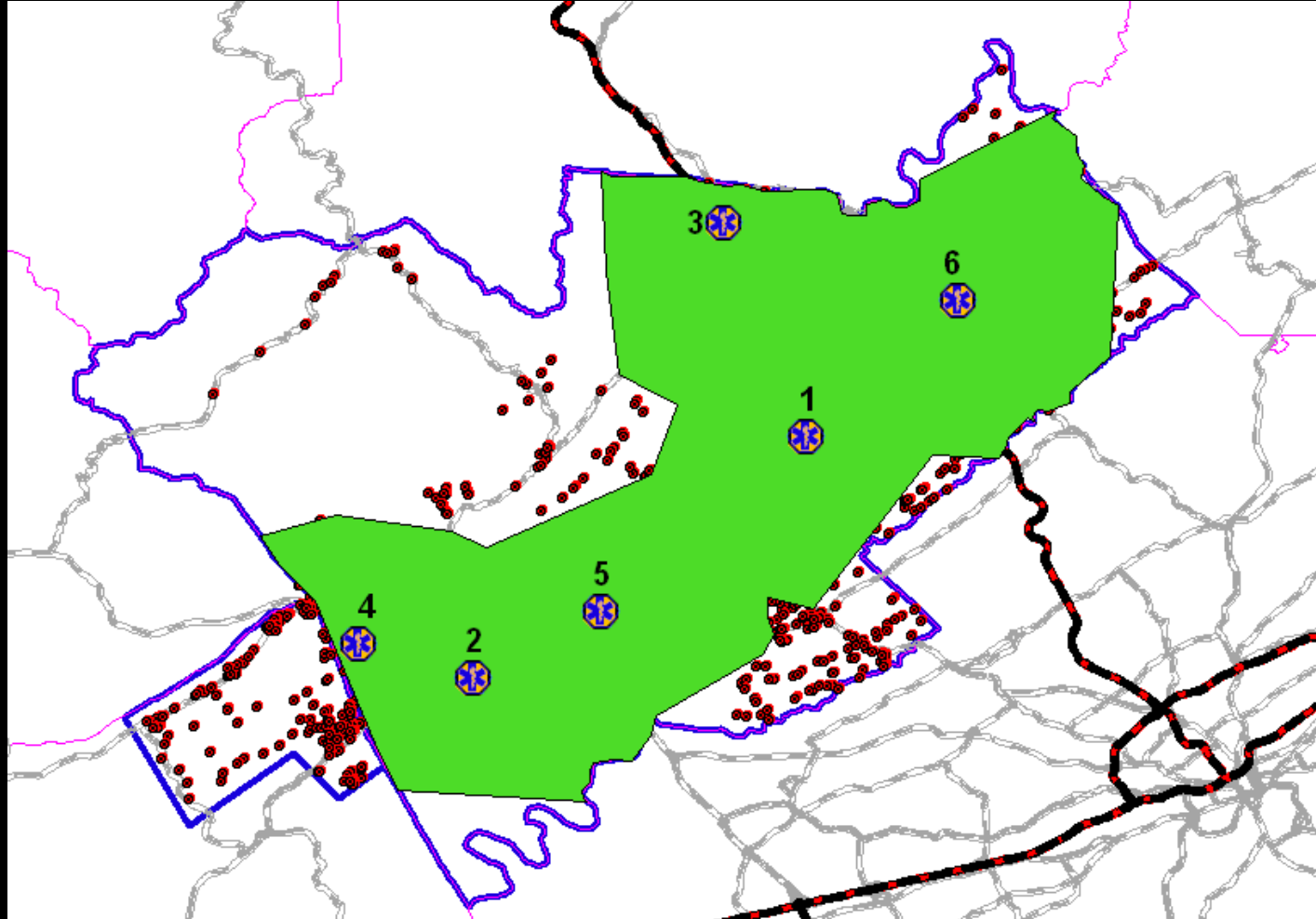
# High Priorities

- Additional staff training and billing process improvements
- Internal compliance program
- Establish “low level” beyond which future convalescent calls will not be accepted.

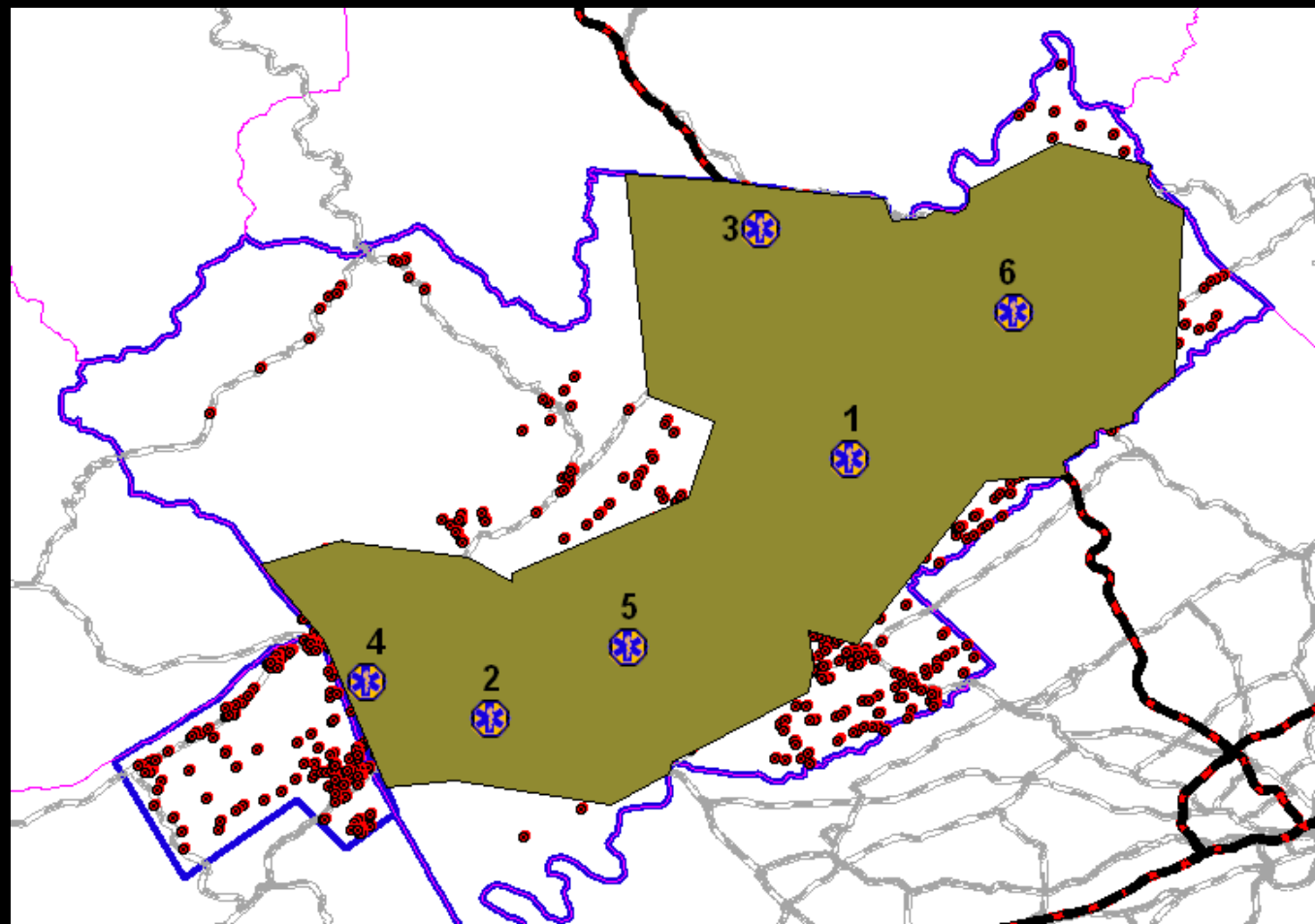
# A quick look at station locations

- Not much benefit from station 6 – right on the county line
- Not much benefit from station 4 – right on the county line
  - But – current and future relationship with Roane County?
- Station #2 resources might better be used toward Claxton – again close to the county line
- Good station locations probably require further study and capital funding

# Six available units

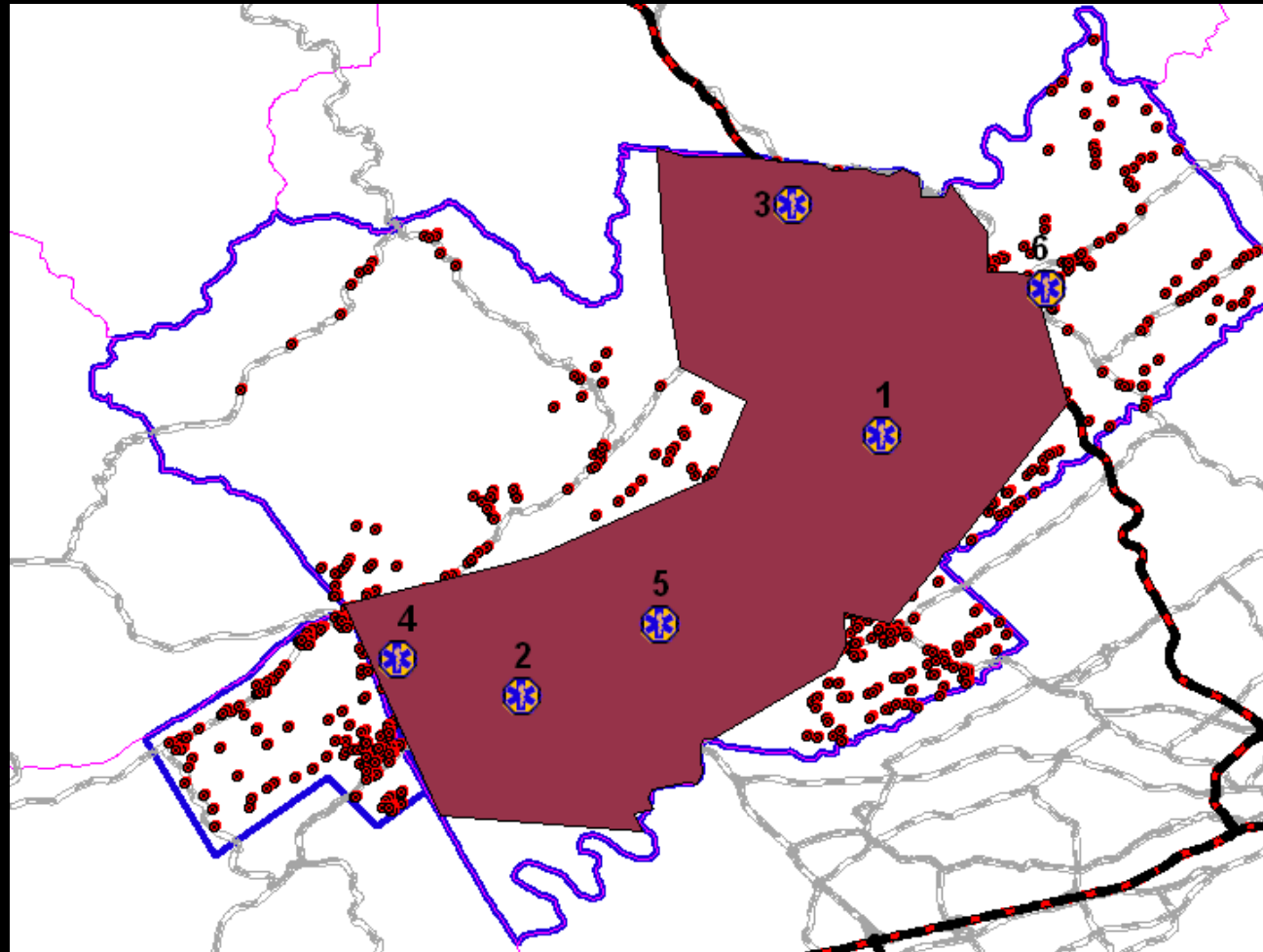


# Five available units

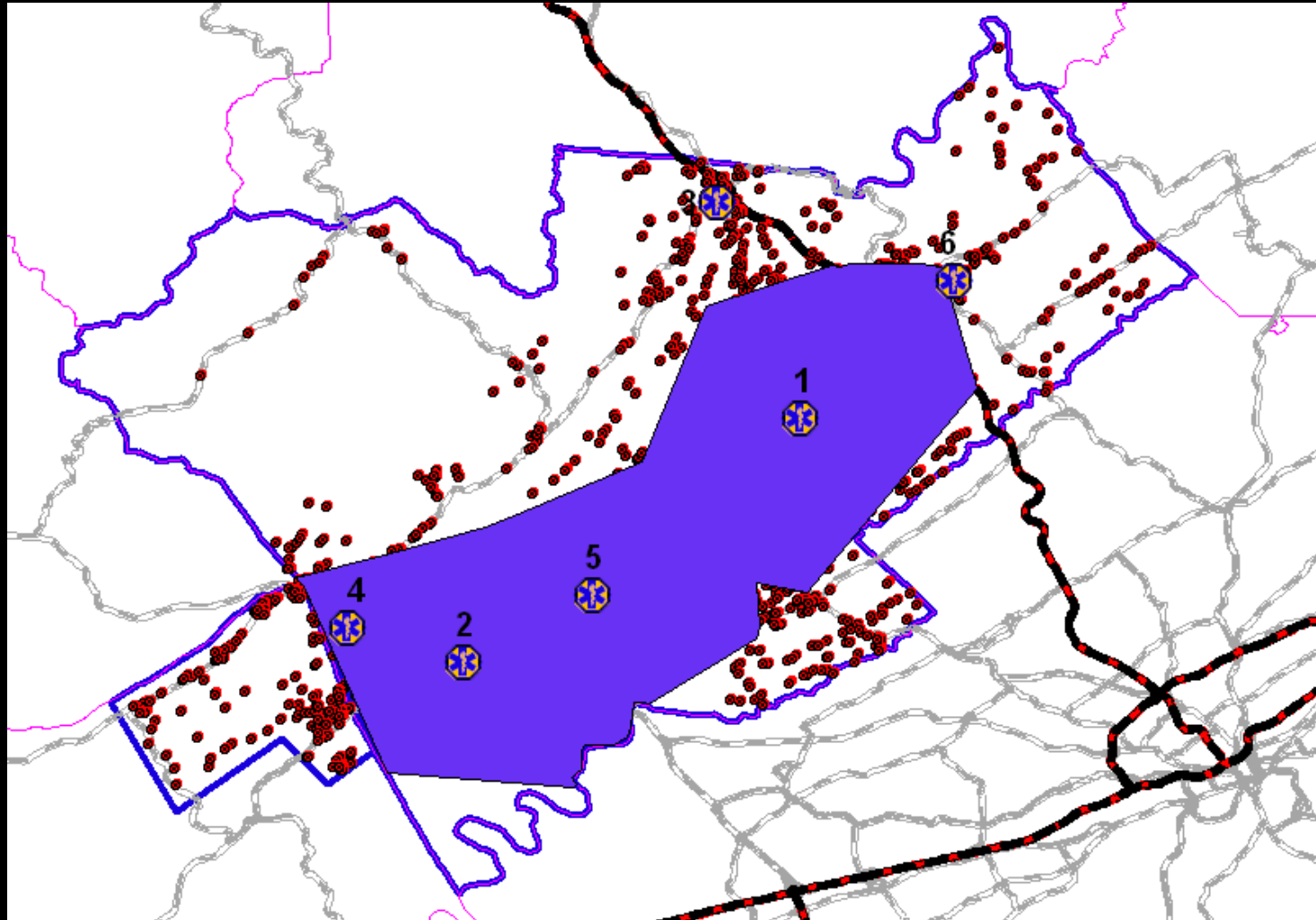




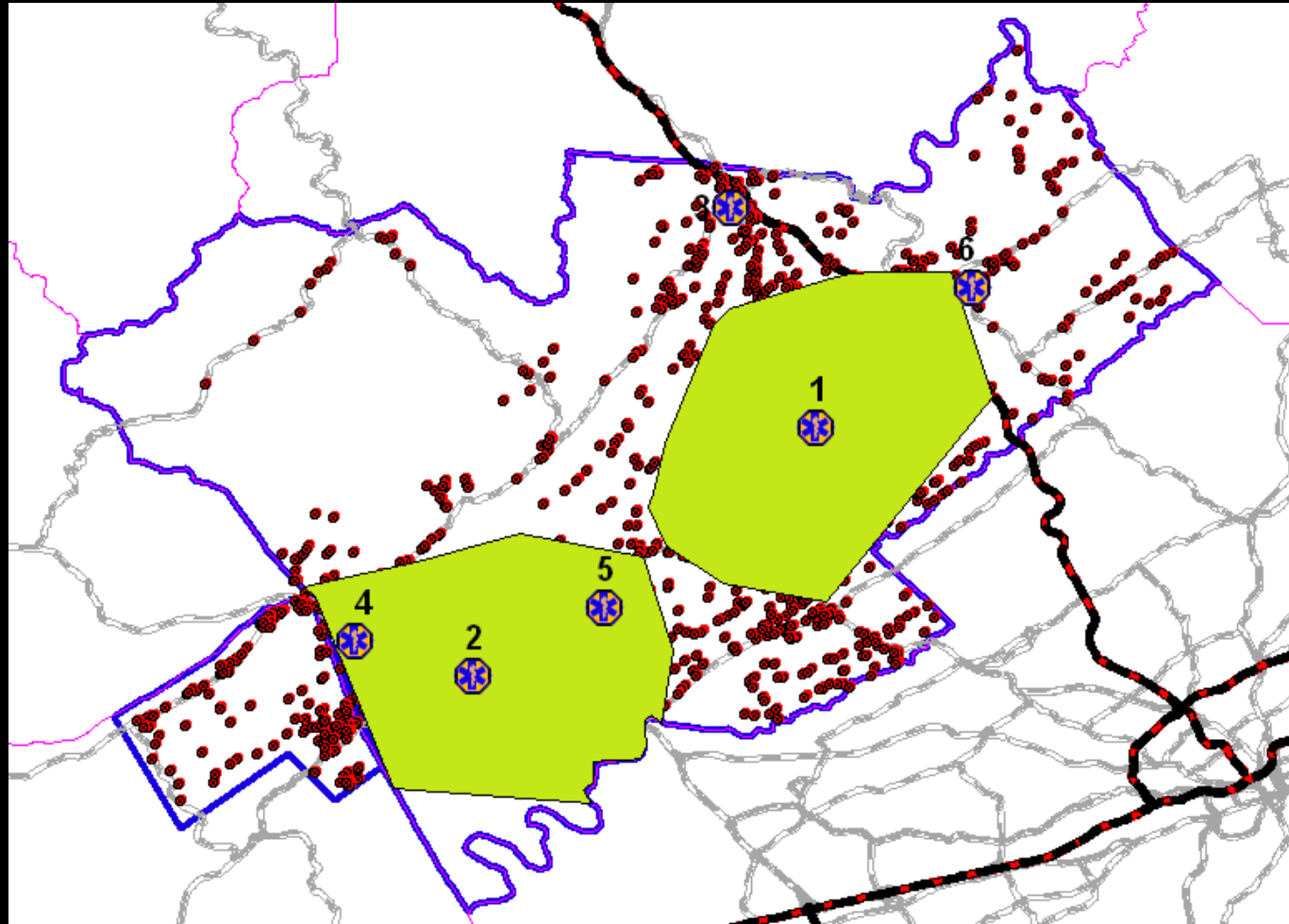
# Four available units



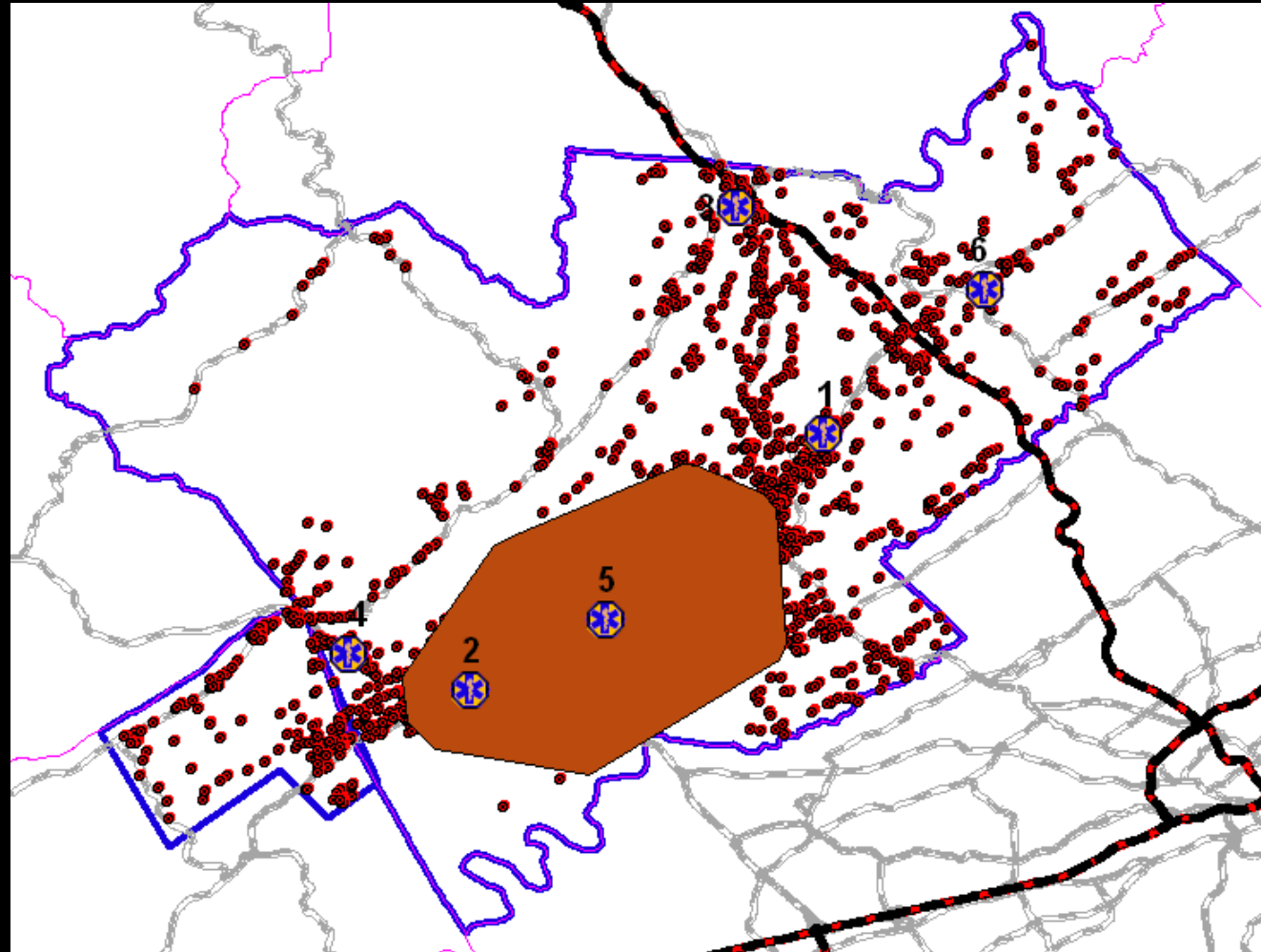
# Three available units



# Two available units



# One available unit



# Medium Priorities

- Cancel contracts that are below cost or below Medicare
- Increase involvement of Medical Director
- Replace aging stretchers
- Bariatric ambulance
- Salary study
- Discontinue “dead body” transports
- Ambulance coverage for Briceville – New River – Claxton areas
- Leadership Development and Field Training and Evaluation Programs
- Improve medical necessity information-gathering at dispatch

# Lower Priorities

- New uniform policy
- Improve P-card documentation (work with County administration)
- Explore working with County Buildings and Grounds, Information Technology, other county departments
- Station location study
- Relief/staffing factor analysis
- Mark and equip staff vehicles
- Explore opportunities for preventative/community paramedic programs



# Note – Fiscal Planning

- First issue is “catch up” capital funding – vehicles and monitors
- Second issue is adequate operational funding
  - Annual budget, NOT to include capital purchases
  - Do not change operations based on changes in revenue stream
- At the same time – planned savings for capital replacement
  - \$250K-\$400K per year
  - Sequestered so that it can not be spent for operations
  - To be used ONLY for vehicles, monitors, stations



# Management practices

- ***Stop chasing revenue!***
  - Set an annual operating budget and stick with it.
- Never spend capital funds on operating expenses
  - Good county financial practices will prevent that
- If the annual operating budget is not sufficient to provide the service, reduce service levels.
  - ***Caution – service levels are already pretty low!***

# In closing.....

No one person or decision is responsible for ACEMS's current financial situation and no one person or decision can resolve all of the issues noted in this report. It will take a concerted and long-term effort involving the commitment of county leadership and the community, to develop and agree upon goals and strategies in order to improve Anderson County's EMS system.

An overarching recommendation is that the Mayor and EMS Director develop an immediate and long-range strategic plan that can be brought to the County Commission for review, approval, and funding.

In the end it will fall to the County Commission to adequately fund the level of service required by the citizens of Anderson County.

**Thank you!**

**FITCH**

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**& ASSOCIATES**