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Effects of Emergency Medical Service Funding Policies in Kentucky

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Effects of Emergency Medical Service Funding Policies in Kentucky

UNIVERSITY OF KENTUCKY, MARTIN SCHOOL OF PUBLIC
POLICY AND ADMINISTRATION

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Executive Summary

Emergency medical services is a complicated component in local Kentucky governments. Emergency Medical Services (EMS) operated and managed by local government have various funding mechanisms and each have different methods of reporting. This paper reviews the various ways EMS is funded in Kentucky along with the impact these different funding strategies have on quality and delivery of emergency medical services.

Introduction

Emergency medical services (EMS) in Kentucky are systems that entail several components. An EMS system involves fire departments, first responders, dispatchers, ambulance agencies, emergency departments, and the Kentucky Board of Emergency Medical Services (KBEMS). Those involved with an EMS system are saving lives, it's a critical component within all communities. EMS was developed under the Department of Transportation instead of the Department of Health, this is due to it being viewed as a transportation service instead of a medical service. EMS systems are not considered an essential service by the Federal Government which means it is not required, by law, to supply its citizens. "The Omnibus Budget Reconciliation Act of 1981 restructured the funding for EMS and integrated EMS programs into the Health Prevention Block Grants. This has further decentralized EMS activities and direction to each state, and has resulted in a decrease in governmental funding to EMS."¹ Not all state governments consider EMS an essential service. When EMS systems are determined by the government to be essential, they provide funding however for the states that do not deem EMS essential, it's up to local governments to support and provide the service. Presently only Connecticut, Delaware, Hawaii,

Indiana, Louisiana, Nebraska, Nevada, Oregon, Pennsylvania, Tennessee, Virginia, and West Virginia consider EMS as essential services. That leaves a large responsibility up to local governments and communities to provide this service. Basic public services must be provided by local governments and emergency medical services fit into that category. “Paul Peterson (1981) calls these basic services “allocative” and theorizes that they are provided by a government priori. Bird (1993) notes the main task of local government is to give its constituents what they want and are willing to pay for. And, Lorenz (2001) finds that local government taxes are returned to citizens in the form of services.”ⁱⁱ It’s a large undertaking for local governments to support a complicated system like EMS with little or no support from the state.

This paper will investigate how the funding policies within Kentucky affect emergency medical services and their communities. It will examine if there are better funding models available. Issues affecting funding can include tax bases, reimbursement rates, and alternative models that would support new ideas such as transportation not directly associated with or related to a hospital but a mental health facility, social services, or substance abuse treatment facilities. According to the National EMS Advisory Council (NEMSAC) “With the growing sophistication of EMS Systems, pilot programs have shown that EMS crews can deliver definitive care at the scene of the emergency, thus obtaining the need for transport. Proactive patient EMS evaluation, response, assessment, treatment and referral at the scene by EMS personnel without transport to an emergency department and transportation to alternative destinations by ambulance are often viable options to safely care for the general public”ⁱⁱⁱ This creates an issue for the public as this may come at a 100% cost to the patient or their insurance provider.

Legislative History in Kentucky

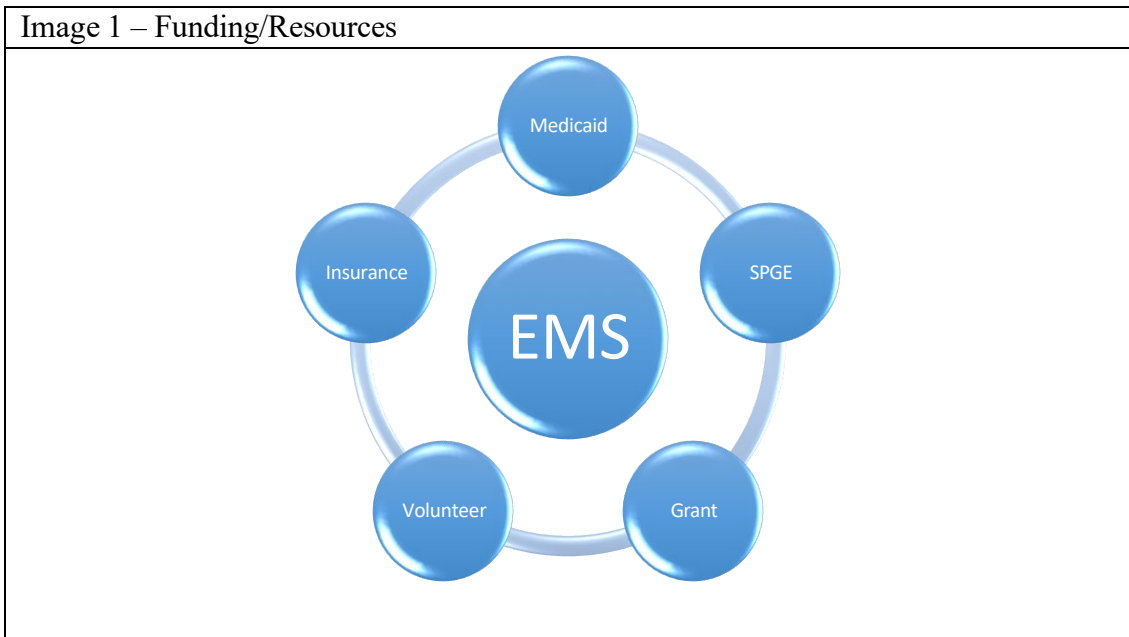
In Kentucky EMS is regulated by several levels of law, including Kentucky Revised Statutes (KRS) 311A and Kentucky Administrative Regulation (KAR) 7:202. These establish a Governance Board control as well as specific guidelines for oversight and implementation. For example, under KRS 65.660 “(1) A fiscal court in a county with a county-wide fire protection district formed under KRS Chapter 75 with an interlocal agreement to provide fire service to the largest city in the county may, through the adoption of an ordinance in accordance with KRS 67.075 and 67.077, merge the boards of the following special districts that are wholly contained within the county:

- (a) Ambulance districts created under KRS 108.080 to 108.180;
- (b) Fire protection districts created under KRS 75.010 to 75.260; and
- (c) Local rescue squad districts created under KRS Chapter 39F.”^{iv}

KRS 65.670 allows for the levy of ad valorem tax on property tax for emergency services as well as user charge fees to contribute to the costs of operations. Revenues received via fees and taxes are only to be used for the services that fall under KRS 65.660 and KRS 65.662. In addition to these statutes KRS.676 allows for counties with ambulance and fire districts that are created separately to have the ad valorem tax however the tax cannot exceed the limits of KRS 65.670 “(\$0.10) per one hundred dollars (\$100) of the assessed valuation of all property in the district.”^v

See image 1 for a representation of EMS in relation to support types. Medicaid is a support type which the program will pay for the majority or a large portion of an EMS transport service.

Each local government, including city or county governments, within the state determines how funding is provided. Local communities have options ranging from volunteer delivery models, paid services, or a hybrid model. These are based on the resources available and can include federal grants, local tax base within a municipal budget as well as insurance billing. Special Purpose Government Entity (SPEG) is formation of local governments that may or may not tax the citizens for the service. Grants are funding mechanisms awarded to EMS agencies that qualify based on different requirements. Volunteer resources are individuals who offer their time and their expertise to support the community, this can include funding donations from the public. Insurance funding is a reimbursement revenue where they are invoiced for the service provided.



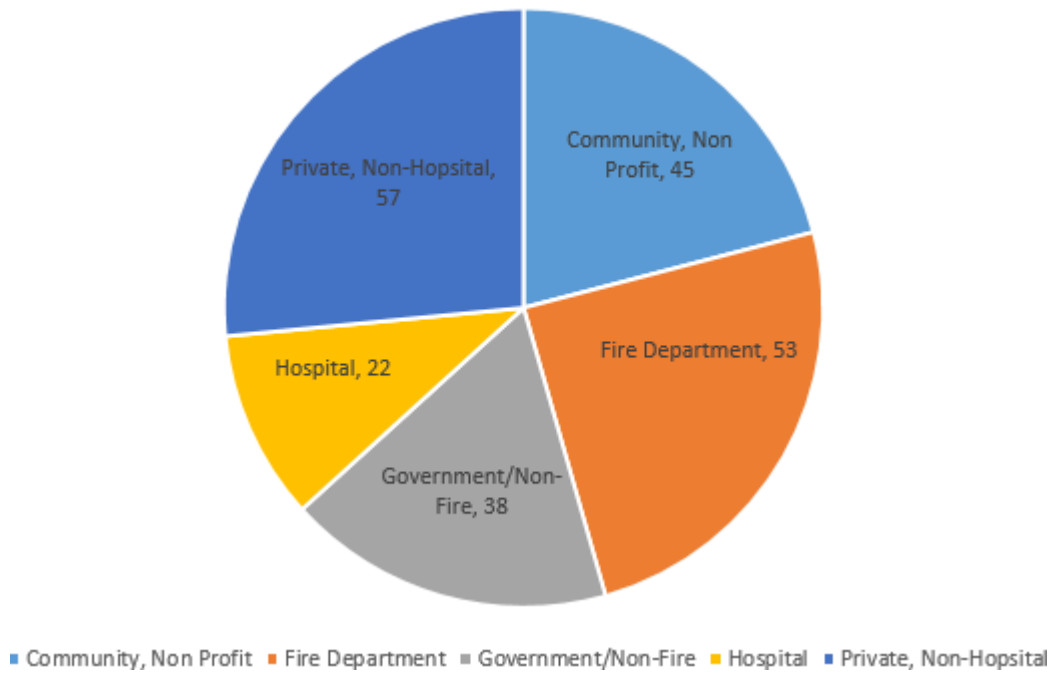
An important fact about EMS is that some agencies do not receive funding for providing patient care, across the country funding is only received upon patient transport. An example of this is EMS responding to a 911 dispatch call, providing life saving measures but the patient refusing

to be transported to the hospital. In this scenario, EMS does not receive funding for the services provided: had the patient agreed to be transported to an emergency department, EMS could invoice for the services provided.

In Kentucky via KRS Chapter 311A, those involved within EMS systems are regulated and monitored by the Kentucky Board of Emergency Medical Services (KBEMS). The 2019 KBEMS Annual Report lists 215 licensed Kentucky agencies - see Graph 1 for a count of each type. The KBEMS Annual Report also includes a graph of monthly incidents, see Graph 2. The report cites that of the total encounters “69% of 911 response patients were transported to a hospital and/or emergency department”.^{vi} The 69% of those transport EMS calls can be billed however the remaining 31% of responding calls may not be billed for due to current policy. KBEMS provided an advisory opinion on July 15, 2013 that states “A Class I ground ambulance service may not refuse to provide basic life support (BLS), advanced life support (ALS), or medically necessary transportation for indigent patients in emergency situations based solely on the fact that no one has guaranteed payment prior to the delivery of services.”^{vii}

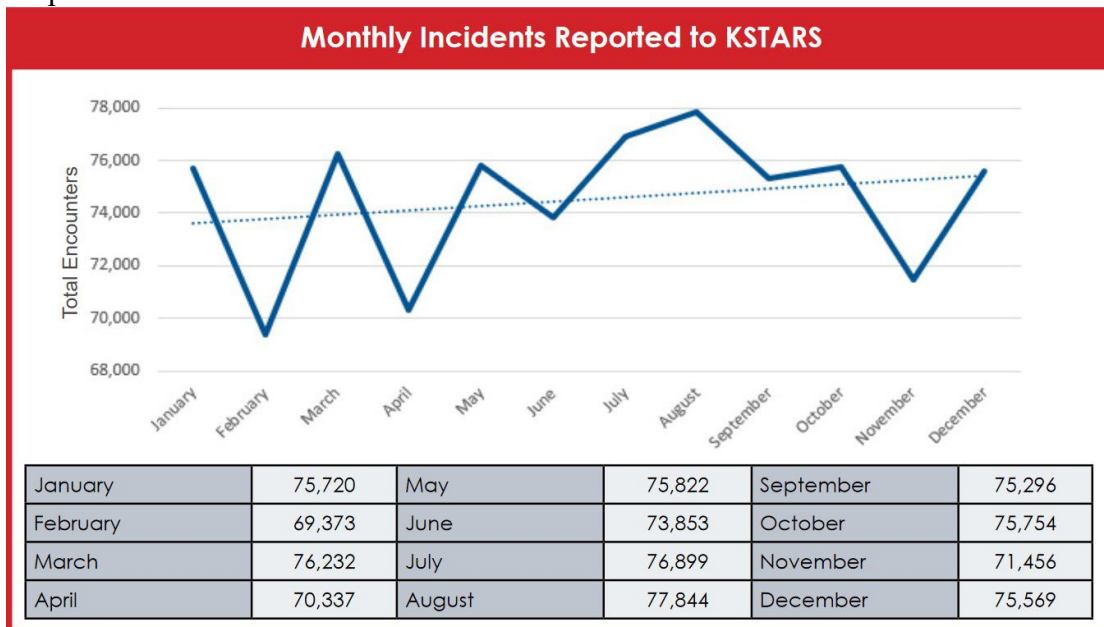
Graph 1

Agency Organization Type



Source: <https://kbems.kctcs.edu/media/annual-reports/2019-kbems-annual-report-full.pdf>

Graph 2



Source: KBEMS – Annual Report 2019.
<https://kbems.kctcs.edu/media/annual-reports/2019-kbems-annual-report-full.pdf>

Kentucky has a specific block grant program that provides funding to Kentucky agencies providing \$10,000 to compliant applicants. “KRS 311A.155 authorizes the Kentucky Board of Emergency Medical Services to maintain a block grant fund program for the purpose of assisting units of local government in the provision of emergency medical services. This administrative regulation establishes standards and criteria governing the allocation of emergency medical services funding assistance to eligible applicants.”^{viii} KBEMS distributed a reported \$1,080,000 in 2019 to Kentucky local governments, this number decreased to \$1,030,000 in 2020 according to the 2020 KBEMS Annual Report.

Literature Review

This literature review investigates the current policies for funding Emergency Medical Services in Kentucky. There are a number of methods used to fund services within cities and counties including taxing districts, grant programs, refund mechanism, and direct bill or user fees. There are also privately-owned EMS companies within Kentucky however this review will focus on government-owned and operated services.

Without proper analysis and consideration of new funding options, county and city-owned EMS may face a funding crisis. Research suggests that states should identify new funding methods to better support emergency medical services. This issue is not restricted to Kentucky. In a June 2010 article, Pittsburgh PA Comptroller Michael Lamb stated “many local emergency medical services are running deficits because their primary revenues are Medicare and private insurance payments that cover only about 50 percent of the cost of ambulance trips.”^{ix} In some instances the ambulance service is solely considered a transportation benefit and is not reimbursed for the care received by patients. In order to receive any compensation for its service, EMS must transport the

patient to a hospital. As a result of this situation, the National Highway Traffic Safety Administration (NHTSA) suggested a performance-based funding and reimbursement model. Based on this the National Emergency Medical Services Advisory Council (NEMSAC) studied EMS systems and associated reimbursements. The NEMSAC suggested a plan to improve funding mechanisms with a more sustainable approach. The recommendations include:

1. Develop and adopt a comprehensive list of EMS functions and activities
2. Standardize language used to define EMS functions, specifically as it relates to EMS finance building on prior industry work in this area
3. Develop a national set of performance standards for ground and air ambulance minimum levels of service in urban, suburban, rural, and remote regions, taking into consideration factors such as varying levels of response and demographic distribution
4. Develop economic models to determine the cost of the defined EMS functions at a level necessary to achieve the identified performance standards
5. Develop sustainable funding models that incorporate all of the EMS functions and that adequately recognize the contributions of EMS systems to health care, public health, public safety, and emergency medical preparedness; and
6. Identify necessary actions to effectively implement funding models based on performance.^x

Previous studies suggest that giving EMS systems the ability to transport to alternate designations could save governments millions. This would mean transporting low-acuity patients to facilities other than emergency departments such as drug facilities, urgent care, or even primary

physicians. The NEMSAC suggest a national policy change is critical to adjust for uncompensated care from EMS.

In recent news Kentucky is making headway in federal Medicaid payments which would assess a fee for emergency medical services. House Bill 8 (HB) is currently being discussed as a part of the legislative process in Kentucky. It aims to provide Kentucky EMS agencies, providing ground ambulance services, enhancements from federal Medicaid payments. While this will only address reimbursement for those with Medicare, it can provide additional support to an underfunded EMS system. Currently “non-emergency patients are covered only if they’re confined to a bed or if they have to be moved using a stretcher — a status that only applies to about 7% of all emergency calls, according to Jim Duke, who serves on the reimbursement committee for the Kentucky Ambulance Providers Association (KAPA), which represents roughly 130 emergency providers.”^{xi} This bill will help address a significant area of underfunding. It’s designed to establish an ambulance service revenue fund and submit a self-imposed provider tax. “The legislation is expected to result in thousands, “if not millions,” of additional dollars for Kentucky based on experiences in states like Tennessee.”^{xii}

Research Methodology

This research study focuses on funding strategies and trends in those strategies for Emergency Medical Services in Kentucky. It addresses the various ways EMS is funded in Kentucky and how it affects services by asking the following questions.

1. How are Emergency Medical Services funded in Kentucky?
2. What are the effects on service based on EMS funding models?

As previously noted Kentucky uses multiple funding models to support EMS, these include Special Purpose Governmental Entities (SPEG), grants, reimbursements, as well as volunteer-based methods. Within each community, the government decides how the services will be funded. “In a typical scenario, EMS responds to a medical need, the patient is assessed, treated and transported to the emergency department, insurance is billed, the service is covered (decreasing the patient’s out-of-pocket costs), and the ambulance agency is generally compensated for the care it provided”^{xiii}. However, if transportation to an emergency department is denied by the patient, family or others, the provider may receive no funding for its services. An example of this scenario is if EMS responds to a motor vehicle accident and treats on site or provides a lifesaving Narcan treatment for an overdose but the patient denies transport to an emergency department. As a point of reference “In 2020, nearly 2,000 Kentuckians died from a drug overdose, which was a 49% increase from 2019”^{xiv}. While the state is addressing this directly by giving away free Narcan to several counties via a HEALing Communities Study, first responders still have a responsibility to act and assess the situation which uses time and resources.

Kentucky agency policies vary in regards to billing for services without transport. Many cities and counties in Kentucky operate a joint fire and EMS department. This makes it difficult to distinguish funding for each service. According to the KBEMS annual report of the licensed Kentucky agencies 53 fall under a Fire Department organization type, see Graph 1. Each agency can report under a different fund. For example, within Special Purpose Governmental Entities, agencies report using fund accounting. A fund is “an accounting entity with its own set of financial records for recording and reporting assets, liabilities, fund balance, and changes in fund balance.”^{xv} Fund accounting is a “system of separate financial records and controls; the assets of the

organization are divided into distinct funds with separate sets of financial records.”^{xvi} Archival data and information used in this paper was gathered from known resources such as Kentucky Association of Counties, Kentucky Board of Emergency Medical Services website, the Department for Local Government, and other sources.

Kentucky Funding Models

Special Purpose Governmental Entities

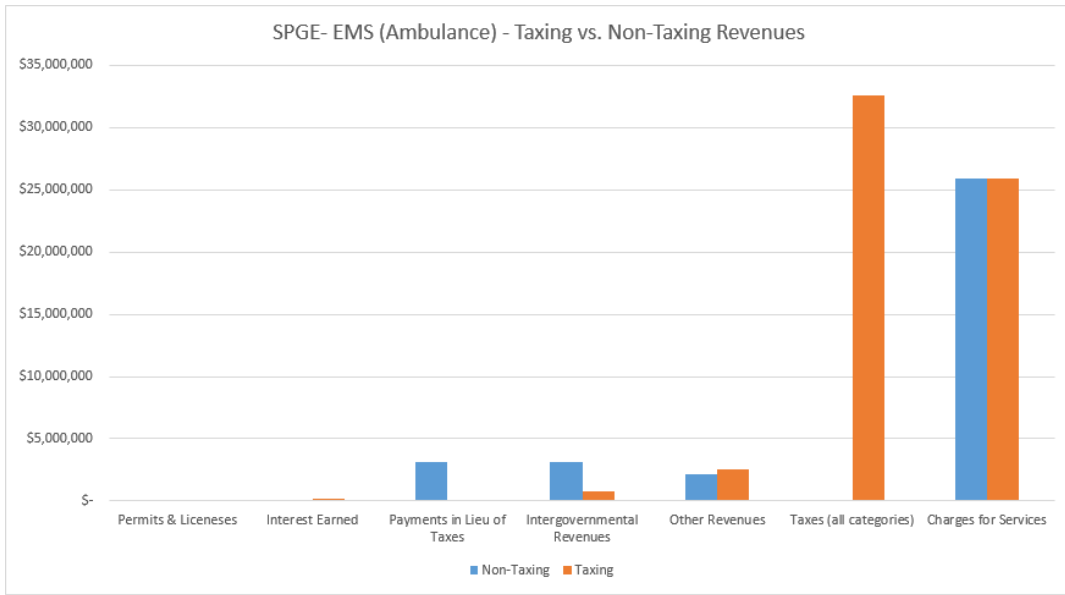
Most oversight of publicly funded EMS falls under counties and/or taxing districts overseen by independent boards within a county. Special Purpose Governmental Entities are considered a special district within the state of Kentucky. “They exercise less than statewide jurisdiction and are organized for the purpose of performing governmental or other prescribed functions within limited boundaries. Special districts are created to fill the gaps that may exist in the services counties provide and the services the residents may desire.”^{xvii} Each district determines its own EMS funding model resulting in a wide variety of approaches. Tax revenue limitations set forth under KRS 65.660 restrict the amount of ad valorem tax allowable. This presents a problem in counties and cities where multiple agencies exist. It limits the tax revenue and the entities that may receive it. To receive the tax revenue, the agency must be deemed the primary service provider for example a city may have several SPGE’s however the one deemed “primary” is the only one that can receive tax revenues. For example, Louisville is trying to fight that policy due to lack of funding in other agencies. In a recent Louisville Kentucky article the question arose “Can suburban fire districts charge a tax for ambulance services when their residents are also paying a tax to Louisville Metro for those services?”^{xviii} Assistant Attorney General Taylor

Payne responded with “a fire protection district may establish an emergency ambulance service ‘only if’ any portion of the district does not receive emergency ambulance services from the city or county government.”^{xix} The limitation on the taxation to citizens is good, it doesn’t allow for double taxation for the same service however it limits needed revenues for agencies responding to community emergencies.

Data from the Department for Local Government for year ending 2019 indicates counties with taxes specifically for EMS (Ambulance) have higher year-end actuals for the service. This means that taxing district with specific EMS funds have higher revenues for the year ended than those without an EMS tax. See Graph 3 for a representation of non-taxing (blue) district revenues versus taxing (orange) district revenues. In the 2022 regular session, House Bill 475 is being proposed to provide county tax leaders opportunities to diversify local tax revenue options. This is a necessary measure to provide the services community members expect while giving local governments more control.

From local budget to local budget, fund numbers for specific activities may vary. Within local governments most should report under the Fund 09 Ambulance Fund for accounting purposes. However, each local government are report funding in various categories, specifically they use multiple funds for revenues. Some agencies report ambulance revenues within the 09 Ambulance Fund while others report revenues under Fund 75 or 76 which both fall under special funds. Categories that fall under both funds 75 and 76 include 911 services. Additionally, some agencies, those with merged fire departments, may report under fund 17 specifically for Fire Departments. See Appendix II for an outline of agencies reporting under Fund 09. Of note, there are serious limitations in this data is it is self-reported by each entity which means variations exist.

Graph 3



Tax Type	Permits & Licenses	Interest Earned	Payments in Lieu of Taxes	Intergovernmental Revenues	Other Revenues	Taxes (all categories)	Charges for Services	Year-End Actuals for 2019
Non-Taxing	\$ 25.00	\$ 41,683.39	\$ 3,178,025.30	\$ 3,169,890.00	\$ 2,144,311.29	\$ -	\$ 25,922,611.40	\$ 34,456,546.38
Taxing	\$ -	\$ 158,880.61	\$ -	\$ 768,144.00	\$ 2,555,867.94	\$ 32,628,677.19	\$ 25,939,420.70	\$ 62,050,990.44
	\$ 25.00	\$ 200,564.00	\$ 3,178,025.30	\$ 3,938,034.00	\$ 4,700,179.23	\$ 32,628,677.19	\$ 51,862,032.10	

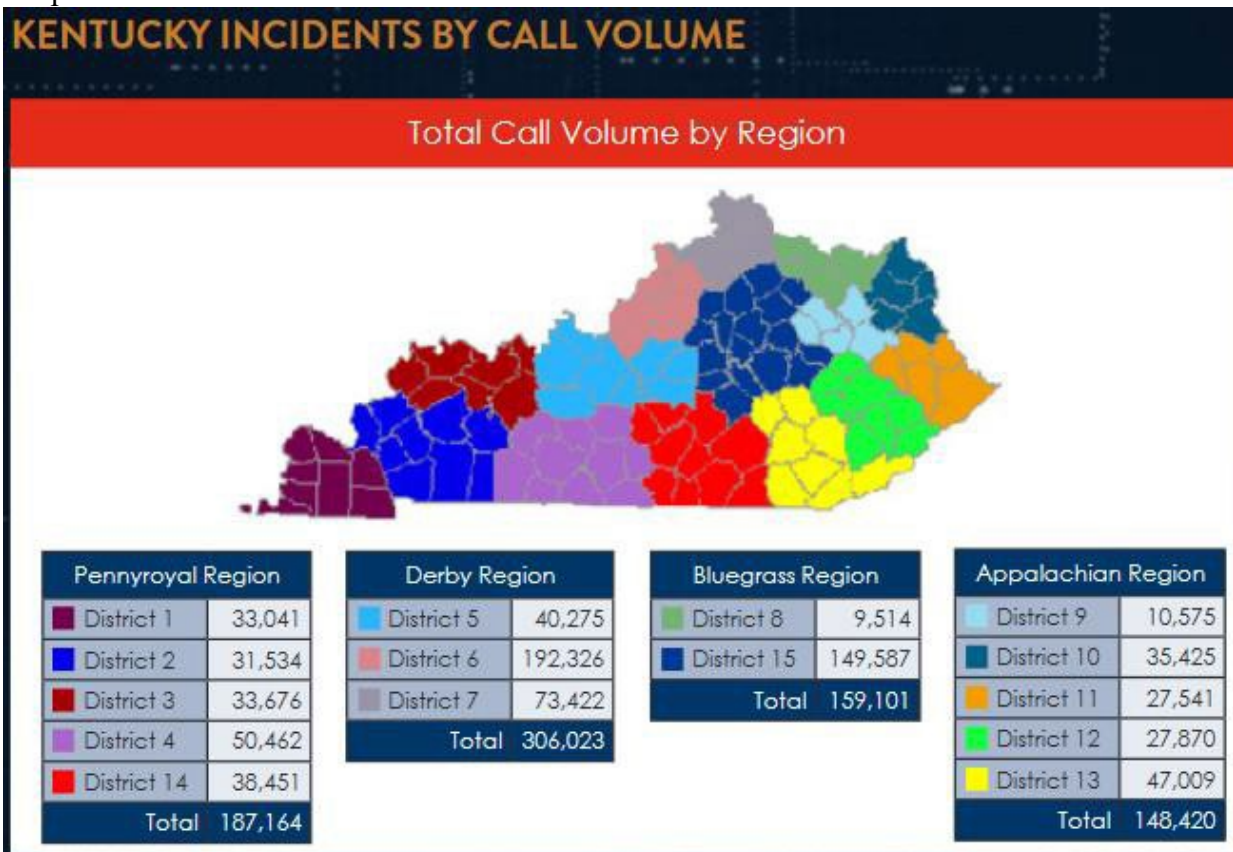
Source: http://kydlgweb.ky.gov/Entities/16_SpgeHome.cfm

Kentucky Board of Emergency Medical Services Grant

“KRS 311A.155 authorizes the Kentucky Board of Emergency Medical Services (KBEMS) to maintain a Block Grant fund program for the purpose of assisting units of local government in the provision of emergency medical services. This administrative regulation establishes standards and criteria governing the allocation of emergency medical services funding assistance to eligible applicants. An annual grant allocation in the amount of \$10,000.00 is distributed to each applicant county that complies.”^{xx} KBEMS awarded over one million in grant money for the year 2020. This grant program helps provide needed equipment to local governments like power stretchers, training equipment, and hazmat equipment.

KBEMS also provides data related to compliance with licensing for each agency as well as data from the agencies in relation to call responses and type. Graphs 3 shows the call volumes by region, indicating large service needs.

Graph 3



Source: <https://kbems.kctcs.edu/media/annual-reports/2020-kbems-annual-report.pdf>

Volunteer/Under-Compensated Care

Several Emergency Medical Service agencies in Kentucky work on a volunteer basis and/or the agency does not bill for their services. A volunteer emergency medical profession typically means they are provided no or little compensation for their time. In a 2011 National EMS

report one-third of states rely on Volunteer EMS Agencies. A NEMSAC 2016 final report estimated “the current magnitude of uncompensated care delivered by the nation’s ground ambulance service as follows: \$1.542 billion Charity Care and \$1.327 billion in Under-compensated Care for a total EMS System Uncompensated Care in U.S at \$2.869 billion.”^{xxi} Even though the volunteer system alleviates some cost, the reality is there is always a cost. Donations from community members and private organizations can help to support equipment needs but the credentials and time from a qualified EMS worker are essential. Volunteer EMS workers face difficult decisions related to when and where they can respond. Time, training requirements, and financial stability often times are barriers for volunteers. As a result, it is becoming increasingly difficult to maintain volunteers within the EMS profession. According to the National Rural Health Association Policy Brief “A national survey of local EMS directors in rural and urban areas finds rural agencies were more likely to be staffed by volunteers only (53% for isolated small rural vs. 14% for urban. In some rural parts of the country (tending to be those more sparsely populated) it is estimated that volunteers cover more than 90 percent of EMS calls. More than two-thirds (69%) of rural EMS directors surveyed in 2015, reported that they have a problem recruiting and/or retaining volunteers, with more than half (55%) reported that recruitment and retention problems are the same or are getting worse.”^{xxii} Kentucky is ultimately facing the same crisis in a need for EMS workers. Keith Sanders, head of ambulance services in Edmonson County told Kentucky lawmakers “Without measures to get more people to train as EMTs and paramedics and stay in the field, the EMS system in Kentucky “is in danger of collapsing.”^{xxiii}

Reimbursement

Reimbursement is another method of funding for Kentucky EMS systems. Upon transport of patient, the EMS agency can then bill for services. They bill insurance companies, citizens, as well as Medicaid. Under KRS 311A.032 ambulance providers are required to meet the following requirements:

“Post in a conspicuous area of the main office, any satellite location, and on the company Web site, if the company hosts or otherwise maintains a Web site itself or through contract with another party, a comprehensive fee schedule of all services provided that is consistent with the Healthcare Common Procedure Coding System (HCPCS). The fee schedule shall:

1. Clearly identify fees for services including base rates, mileage, disposable supply fees, and any other potential fees for services provided; and
2. Be documented in understandable language with sufficient explanation to allow consumers to draw meaningful comparisons of fees among licensed ambulance providers.”

All licensed ambulance agencies are required to submit fee information to the KBEMS under KRS. 311A.032 and 202 KAR 7:575. These regulations not only hold the agency accountable but KBEMS as well for regulating standards that govern the fees. See Table 1 for a sample of these fees from Louisville Kentucky’s EMS system website. The KBEMS report of annual fee schedule is also available, in Table 2.

Table 1

LMEMS Services

Basic Life Support (BLS)	\$610.00
Advanced Life Support (ALS)	\$760.00
Advanced Life Support II (ALS II)	\$1,030.00
Mileage	\$14.00
Treated – No Transport	\$150.00

Source: <https://louisvilleky.gov/government/emergency-services/emergency-medical-services>

Table 2

Service Name	Service Number	Shipping Street 1	Shipping Street 2	Shipping City	Shipping County	Shipping Postal Code	Shipping State	Other Charges Used	Other Charge Name	Current Fee Charged To Recipient
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J1610 GLUCAGON/GLUCAGEN	250.50
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J1820 INSULIN	192.70
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J1885 KETOROLAC TROMETHAMINE/TORADOL	7.04
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J1940 FUROSEMIDE/LASIX	7.04
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J2001 LIDOCAINE	13.41
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J2001 LIDOCAINE 2%	14.08
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J2060 LORAZEPAM/ATIVAN	13.41
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J2060 MAGNESIUM SULFATE	7.04
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J2250 MIDAZOLAM/VERSED	7.04
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J2270 MORPHINE	7.04
American Medical Response - Northern Kentucky	1487	30 KENTON LANDS ROAD	STE C	ERLANGER	KENTON	41018	Kentucky	True	J2310 NALOXONE/NARCAN	54.97

Source: <https://kbems.kctcs.edu/legal/2021-december-ambulance-fee-schedule.pdf>

Medicaid benefits via ambulance services works slightly different from state to state. In Kentucky ambulance services are a covered benefit. See Table 3 for a 2018 view comparison of Kentucky with its border states and the difference in ambulance service Medicaid coverage. According to the 2019 Kentucky Legislative Committee document 7^{xxiv}, \$145 was the average reimbursement in 2018 for a Medicaid member to receive emergency response and transport however the actual provider cost was normally \$350 - \$750 per run. This essentially places the

cost difference on local governments. The same document provides an example for Madison County EMS, a top five patient resident county for EMS, it indicates that in 2018 cost for a case was approximately \$350 which means the county had to subsidize the care for Medicaid patients in the amount of \$676,396.

Table 3

Location	Benefit Covered	Coverage Code	Copayment Required?	Limits on Services
Illinois	NR	NR	NR	NR
Indiana	Yes	CN	No ¹	No
Kentucky	Yes	CN	No	No
Missouri	Yes	CN	MO HealthNet is required to pay for all Medicare cost-sharing (coinsurance and deductibles) for QMB-eligible participants. ²	No
Ohio	Yes	CN	No	No
Virginia	Yes	CN	No	NR
West Virginia	Yes	CN	No	No

Source: <https://www.kff.org/medicaid/state-indicator/ambulance-services/>

Comparison to Other State’s Approaches or Models

Comparing other states’ EMS funding approaches to Kentucky is difficult because there is not standard procedure to how states fund emergency services. The Last Week Tonight host, John Oliver said “there is absolutely no consistency when it comes to EMS in this country, as EMS refers to nearly 19,000 locally run providers with different structures. In Houston, for example, EMS is provided by firefighters cross-trained as paramedics or EMT’s; New York’s EMS is a separate department under the fire department umbrella. EMS in rural Wyoming is provided by teams of volunteer departments”.^{xxv} In the 2016 National Association of State Emergency Medical

Service Officials (NASEMSO) survey report, “64% of state EMS offices do not receive Dedicated Funds while 7% of states, the dedicated funds comprise 100% of the EMS office’s annual budget.”^{xxvi} Dedicated funds are from revenue sources restricted by law for a particular activity like EMS. See Image 2 for the 2016 NASEMSO report for state funding sources.

Tennessee has recently deemed EMS an essential service of the state. In contrast with Kentucky, the state of Tennessee allocates state funding for ambulance services. In a March 2022 article Tennessee is funding additional gas costs for EMS agencies saying “county commissioners approved a budget amendment last week to move \$100,000 from EMS’s ending fund balance to their fuel line item to make ends meet,”^{xxvii} in an effort to maintain effective services. The agency is able to take prior year fund balance and use for increased costs in the new year. Having a guideline to allocate funding specifically for EMS provides the state with mechanisms to support the service financially through its standard procedures. This could be more difficult for Kentucky since funding is typically in smaller funded pools within local governments, if funding exists at all. Indiana is another surrounding state which identifies EMS as an essential service. According to the Indiana State Budget Agency expenses are tracked consistently with the state standard format. Revenues and expenses are difficult to find for Kentucky since local agencies report differently.

Image 2

State Funding Sources

What is the most recent annual budget (in dollars) for the state EMS office from each of the following state sources?

- State general fund
- State dedicated fund
- Ambulance vehicle fees
- EMS agency licensure fees
- EMS professional licensing fees
- Traffic tickets/motor vehicle related fees
- Other fees
- Private grants/donations
- Other state grants/contracts
- Other special state funds



Total Funding Amounts by State

Table 60

State	Total Amount	State	Total Amount	State	Total Amount	State	Total Amount
AK	\$4,067,600	DE	\$13,964,566	KS	\$2,350,000	MP	\$0
AL	\$3,570,879	FL	\$8,231,430	KY	\$2,444,000	MS	\$2,541,423
AR	\$153,000	GA	\$4,064,637	LA	\$868,985	MT	\$1,739,100
AS	No Response	GU	\$0	MA	\$3,940,000	NC	\$4,800,000
AZ	\$3,219,700	HI	\$105,673,929	MD	\$16,202,500	ND	\$0
CA	\$15,300,000	IA	\$1,172,565	ME	\$1,287,881	NE	\$2,710,668
CO	\$10,409,600	ID	\$2,523,000	MI	\$5,850,000	NH	\$0
CT	\$250,000	IL	\$6,491,377	MN	\$4,874,000	NJ	\$0
DC	\$220,000	IN	\$745,935	MO	\$318,216	NM	\$800,000
NV	\$896,581	PA	No Response	TN	Unknown	VT	No Response
NY	\$5,755,000	PR	No Response	TX	\$3,958,490	WA	\$8,940,000
OH	\$6,900,000	RI	\$306,706	UT	\$3,871,610	WI	\$2,271,600
OK	\$2,114,431	SC	\$5,884,691	VA	\$144,000,000	WV	\$1,329,915
OR	\$4,538,710	SD	\$422,000	VI	\$4,046,737	WY	\$2,000,000

Source: https://nasemso.org/wp-content/uploads/2020-National-EMS-Assessment_Reduced-File-Size.pdf

2021 Legislative Actions

Using the National Conference of State Legislatures' searchable database, a legislative review of actions during 2021 identified that the state of Illinois has added section (i) under Public Act 102-0623 which states:

“When a patient has been determined by EMS personnel to (1) have no immediate life-threatening injuries or illness, (2) not be under the influence of drugs or alcohol, (3) have no immediate or obvious need for transport to an emergency department, and (4) have an immediate need for transport to an EMS System-approved mental health facility, the EMS personnel may contact Online Medical Control or his or her EMS Medical Director or Emergency Communications Registered Nurse to request bypass or diversion of the closest emergency department, as outlined in paragraph (5) of subsection (c) of Section 3.20, and request transport to the closest or appropriate EMS System-approved mental health facility. In addition, EMS personnel may transport a patient to an EMS System-approved urgent care or immediate care facility that meets the proper criteria and is approved by Online Medical Control or his or her EMS Medical Director or Emergency Communications Registered Nurse.”^{xxviii}

Also found in the database was a new bill within the state of Oklahoma which assesses an ambulance service provider fee. The state of Oklahoma enacted Bill Number 2950 which includes a direct statement regarding funding “Net operating revenue means the gross revenues earned for providing emergency and nonemergency transports in Oklahoma excluding revenues earned for providing air ambulance services and amounts refunded or recouped, offset or otherwise deducted by a patient or payer for ground medical transportation.”^{xxix} The Oklahoma bill lists specific upper

payment limits as well as exemptions from the ambulance service provider access fee. Kentucky could benefit from a bill similar to this since its funding has no standing of funding or limits.

Affects in the Community

Due to high costs associated with EMS transportation, often times patients will deny transport. In what a patient may deem as a non-emergency situation, they can deny transport, which means that EMS professionals have been dispatched to a call, used resources and time however they may ultimately receive no compensation for the service provided. Some patients are weary of calling emergency services as they aren't sure if they can afford to pay. The patient ultimately has no say in where they are transported how they are charged in many cases and aren't sure if their private insurance will pay. "Most ambulance companies bill according to the level of skill of the team on board, rather than the medical needs of the patients they collect."^{xxx} In 2018 a woman made headlines as her leg was caught in a train platform and she feared she couldn't afford an ambulance trip to the emergency room. Although significant damage was done to her leg, fellow onlookers reported "She made it a point to say 'you don't understand, I have terrible insurance'"^{xxxi}.

An additional affect on the community is staffing shortages not only with volunteer professionals but paid professionals as well. The requirements of preparation for EMS positions are many training hours and come with a cost. "In a letter to congressional leaders, the American Ambulance Association along with the National Association of Emergency Medical Technicians wrote "Our nation's EMS system is facing a crippling workforce shortage, a long-term problem that has been building for more than a decade. It threatens to undermine our emergency 9-1-1 infrastructure and deserves urgent attention by the Congress."^{xxxii} EMS professionals are seemingly underpaid for the service they provide especially with the rigorous credentials required

in order to be able to respond to a call. To emphasize this, a 2021 headline should have gained attention: “Kentuckians are dying because their local emergency medical services can’t find enough employees to staff the ambulances.”^{xxxiii} The American Ambulance Association conducted a survey and reported “turnover among paramedics and EMTs ranges from 20 to 30 percent annually, resulting in an unsustainable 100 percent turnover every four years.”^{xxxiv} Without the skillset to provide the service, communities will be faced with a dangerous situation. The lack of staffing and high turnover can be anecdotally connected to the lack of funding to pay wages and salaries that are attractive to the work force.

Limited equipment can also be a side affect of funding shortages. Responders and their equipment must ready to quickly respond to dispatch calls however ambulances could be on other accidents or transporting patients. This means that another district, further away would need to respond. Not having an equipped ambulance nearby for citizens could result in time delays for life saving measures.

Recommendations

The National Conference of State Legislators states EMS agencies “integrate public health, public safety and health care across a coordinated network of public and private agencies and organizations, communications and transportation providers, health care facilities and highly trained professionals to respond to medical emergencies”^{xxxv}, it is a crucial service for the community. Due to the importance of services EMS agencies provide, I recommend that further research is recommended for determining standard care and essential service response costs, regardless of transportation destination. In order for Kentucky to reach a good standard of funding Emergency Medical Services, the Kentucky Government should create standard operating

procedures in categorizing funds within revenues and expenditures. It should also consider a model in which fire and ambulance services are sharing not only funding resources but responding to incidents with the same knowledge base for each agency's responsibility. Upon changing such a large-scale project "The fiscal process must avoid the seductions of both cynic and sentimentalist to understand that reasonable choice entails both value and what must be paid, and although good ideas are limitless, to recognize that resources to finance those good ideas are not. Choices cannot be made solely on either cost or solely on value but should be made on the basis of comparing cost and value."^{xxxvi} Creating a process that's easier for cities and counties to follow will help relieve some confusion as well as provide for better efficiencies.

Decision makers must reconsider funding methods for EMS services in Kentucky. While reviewing and disseminating revenues local government agencies need to consider the costs. Looking at actual cost as well as the National Association of Emergency Medical Technicians (NAEMT) Cost Collection Guide for EMS Agencies will be critical to gauge what resources are needed to cover costs and provide services. "NAEMT has published a new Cost Collection Guide to help EMS agencies gain the full scope of costs involved in operating their ground ambulance service."^{xxxvii}

As a result of the information gathered for this paper I recommend Kentucky use the NAEMT Cost Collection guide for each agency to determine actual cost and provide needed budget allocations to agencies in need. Additionally, Kentucky citizens and the government should pass HB475 "which seeks to provide more options to diversify county tax revenue options, this is a necessary first step toward modernizing funding options for counties."^{xxxviii} Kentucky should consider a deep dive into data analysis and study the unique methods of reimbursement and charge

rates. Within the study, recommendations should be made to standardize care service costs. The state should consider fund accounting policy requirements where local government reporting methods are established. Kentucky should also address the ad valorem tax limitations set forth in KRS 65.670 to evaluate shared revenues between ambulance and fire districts.

As a final recommendation, I suggest that the Kentucky government establish an agency to take the lead as an EMS oversight agency and assign EMS as an essential service. In addition, I recommend dedicating a funding source to support counties within Kentucky for these services.

Conclusion

The capabilities of each local government EMS agency is ultimately determined by the funding and resources available. “Variations exist in all aspects of EMS, including standards, ambulance staffing, availability of medications, financial support, and organizational structure. As a result, “best practices” are not necessarily rapidly evaluated and implemented.”^{xxxix} Counties and cities in Kentucky may ultimately face a funding crisis if current EMS funding methods aren’t analyzed and updated. The assessment of injury and care to citizens within the State if Kentucky is a critical component of community and population health. Uncompensated or reimbursements below-cost can hinder local government budgets. There are significant limitations in gathering good data to analyze for service and affect. It is a confusing process to follow especially since entities are self-reporting and no true standards exist. The Kentucky Board of Emergency Medical Services offers a well-designed Board to ensure compliance however additional efforts should be made to standardize funding methods across agencies. Special Purpose Government Entities self-report data which limits the accuracy. The SPEG’, in some circumstances, combine Fire and EMS data proving to further complicate findings. For Kentucky to gain a meaningful understanding of

Emergency Medical Service system costs in comparison to their benefits, an in-depth analysis into further reporting regulations to standardize taxes, fees, and reporting methods is essential. This would provide for cleaner data in order to do a true cost benefit analysis. Government leaders must acknowledge the current variations in funding structure and examine models that represent stable funding mechanisms that support a lifesaving service in their communities.

Appendix I – IRB Process

“The IRB reviews research studies involving human subjects. The IRB is federally mandated to ensure that proper safeguards are in place to protect human subjects enrolled in research studies.” The purpose of an IRB process is to protect human research subjects. The Belmont Report has three principles that include respect for persons, beneficence, and justice. These are put in place to protect the human subjects. Informed consent is when a participant has volunteered and includes a statement of participation. The study of funded methods in Kentucky doesn’t fit into the category as there are no human research subjects involved. If my study did have human subjects involved it would need to be reviewed by an IRB committee and approved prior to me working with participants.

Appendix I – 2020 Census Receipts – Fund 9 Only

Commonwealth of Kentucky
 Department for Local Government
 County Reports - 2020 Census-Receipts

Code_MajorFund 9

County	Description	Total
Anderson	AEMS COLLECTIONS	\$1,492,000
	AEMS EMT and PARAMEDIC CLASSES	\$0
	AMERICAN HEART ASSOCIATION	\$40,000
	BORROWED MONEY	\$0
	CASH BALANCE, JULY 1 *	\$0
	EMS STATE GRANT	\$10,000
	INTERFUND TRANSFERS IN	\$230,086
	INTERFUND TRANSFERS OUT	\$0
	OTHER RECEIPTS	\$0
STATE AMBULANCE GRANT	\$0	
Anderson Total		\$1,772,086
Ballard	AMB DONATIONS	\$0
	AMB EMT CLASS	\$2,500
	AMBULANCE DELINQUENT TAX	\$5,000
	AMBULANCE INSURANCE TAX	\$0
	AMBULANCE MISCELLANEOUS	\$1,000
	AMBULANCE RUNS	\$385,000
	Borrowed Money	\$0
	CASH TRANSFER IN	\$208,100
	CD INTEREST	\$500
	GRANTS	\$10,000
	Interest	\$1,000
	INTEREST ON KACO LOANS	\$0
	PERSONAL PROPERTY - AMB TAX -	\$60,000
	PRIOR YEAR ADJUSTMENT	\$0
	Prior Year Carryover	\$50,000
	REAL PROPERTY AMB TAX - SHERIF	\$300,000
Reimbursements	\$1,000	
Transfer Out	\$0	
Ballard Total		\$1,024,100

County	Description	Total
Bell	Collections	\$775,000
	Miscellaneous Revenue	\$20,000
	Prior Year Carryover	\$50,383
	Prior Yrs. Void Checks	\$0
	State Grant	\$10,000
	Transfers In	\$405,000
	Transfers Out	\$0
	Bell Total	\$1,260,383
Bullitt	EMERGENCY MED SERVICE	\$3,400,000
	Insurance Reimbursement	\$1,000
	Miscellaneous	\$1,000
	PRIOR YEAR ADJ	\$0
	Prior Year Carryover	\$0
	Reimbursement	\$500
	State Grant	\$10,000
	Surplus Property Sale	\$1,500
	Transfer In	\$2,502,275
	Transfer Out	\$0
Bullitt Total	\$5,916,275	
Carlisle	AD VALOREM TAX	\$25,000
	AMB RUN FEES	\$315,000
	AMBULANCE BUILDING	\$0
	C-A INTEREST	\$50
	CABLE TV FRANCHISE	\$2,400
	CARRYOVER	\$0
	CERT OF DEP INT	\$0
	DELINQUENT TAX	\$1,200
	Donations	\$0
	EXTENSION PORTION PRINC-INT	\$41,984
	LEASE PROCESS	\$0
	MSCL	\$0
	PROPERTY TAX	\$185,000
	State Grants	\$0
	TANG PER PROP TAXES	\$27,500
	TRANS OUT	\$0
	Transfer In	\$9,106
VOID CHECK PRIOR YEAR	\$0	
Carlisle Total	\$607,240	

County	Description	Total
Carroll	ADJ PRIOR YR SURPLUS	\$0
	AMBULANCE SERVICE FEES	\$650,000
	CASH TRANSFER IN FR OTHER FUNDS	\$474,274
	INTEREST ON CHECKING ACCOUNTS	\$25
	Miscellaneous Revenue	\$2,500
	SURPLUS, PRIOR YEAR	\$400,000
Carroll Total		\$1,526,799
Clinton	AMBULANCE SERVICE	\$600,000
	INTEREST ON CHECK	\$50
	Other Receipts	\$8,000
	PRIOR YEAR CARRY	\$10,000
	Prior Year Carry Over	\$0
	PRIOR YEAR WARR	\$0
	SERVICE FEE	\$0
	Timberland Tax	\$0
	Transfer In	\$586,250
Transfer Out	\$0	
Clinton Total		\$1,204,300
Gallatin	ADJUSTMENTS TO PRIOR YEAR SURPLUS	\$0
	AMBULANCE SERVICES	\$400,000
	AMBULANCE SURPLUS	\$60,000
	CD INTEREST	\$25
	CKING ACCT INTEREST	\$25
	COVID 19-RELIEF FEDERAL REIMB	\$0
	Miscellaneous Income	\$100
	STATE GRANT - KY BD OF EMS	\$10,000
	TRANSFER FROM OTHER FUNDS(GENERALandLGEA)	\$483,750
Transfer to Other Funds	\$0	
Gallatin Total		\$953,900
Hickman	Interest	\$15
	Miscellaneous	\$0
	State Grant	\$10,000
	SURPLUS-PRIOR YEAR	\$10,340
	Transfer In	\$1,200
Hickman Total		\$21,555
Jessamine	AMBULANCE RUNS (INSURANCE)	\$1,700,000
	CLASS FEE REIMBURSEMENT	\$1,000
	Interest	\$500
	KIDS DAY DONATIONS	\$1,000
	MEDICARE AMBULANCE COST COLLECTION	\$50,000
	PRIOR YEAR VOIDED CHECK	\$0
	REFUNDS-REIMB	\$500
	SENATE BILL No.66	\$10,000
	Surplus Prior Year	\$40,255
TRANSFERS IN FROM GENERAL FUND	\$2,120,000	
Jessamine Total		\$3,923,255

County	Description	Total
Lee	Ambulance Fees	\$436,000
	AMBULANCE FUND CHECKING, INTEREST	\$10
	AMBULANCE FUND SURPLUS	\$42,149
	AMBULANCE FUND-DONATIONS	\$0
	APAP ENHANCED PAYMENTS	\$0
	Insurance Reimbursement	\$0
	KEBEMS-AMBULANCE GRANT	\$10,000
	STEVE MCINTOSH, MCINTOSH AMB SETTLEMENT	\$25,000
	Transfer In From Other Funds	\$470,985
	Transfers Out to Other Funds	\$0
USDA GRANT- PURCHASE OF MONITORS	\$0	
Lee Total		\$984,144
Marion	Adjustments to Prior Year	\$0
	Ambulance Service	\$650,000
	CASH TRANSFER IN	\$761,000
	CASH TRANSFER OUT	\$0
	Governmental Leasing Proceeds	\$0
	Interest Income	\$0
	Miscellaneous Revenue	\$1,000
	Money Borrowed	\$0
	Prior Year Carryover	\$20,000
	Reimbursement	\$10,000
State Grant	\$10,000	
Marion Total		\$1,452,000
McCreary	Interest	\$10
	Miscellaneous Revenue	\$0
	SURPLUS PRIOR YEAR	\$19,050
	Transfer In From Other Funds	\$60,000
McCreary Total		\$79,060
McLean	AMBULANCE DEBT REPAYMENT	\$0
	AMBULANCE REIMBURSEMENT	\$570,000
	AMBULANCE- TRANSFER IN (CARES)	\$0
	BANK ACCOUNT EARNED INTEREST	\$50
	Borrowed Money	\$0
	MEDICAID APAP and ASPP REVENUE	\$0
	OTHER RECEIPTS-GRANT	\$500
	PRIOR YEAR ADJUSTMENT	\$0
	PRIOR YEAR SURPLUS	\$100,000
	Transfer In	\$186,250
Transfer Out	\$0	
McLean Total		\$856,800
Menifee	BANK SERVICE FEE	\$0
	DEBT SERVICE PAYMENTS	\$21,633
Menifee Total		\$21,633

County	Description	Total
Metcalfe	ADJUSTMENT-PRIOR YEAR	\$0
	Delinquent Taxes	\$10,000
	FRANCHISE CORPORATION	\$55,000
	INTEREST-CD	\$10,000
	INTEREST-CHECKING ACCOUNT	\$3,000
	Lease Proceeds	\$0
	MISCELLANEOUS REVENUES	\$0
	MO-TAX OTHER COUNTIES	\$2,000
	MOTOR VEHICLE TAXES - COUNTY CLERK	\$17,000
	OMITTED TANGIBLE TAX	\$1,000
	OTHER FRANCHISE	\$0
	Real Estate - Sheriff	\$155,000
	RENTAL AND LEASES	\$0
	State Grant	\$10,000
	Surplus Prior Year	\$1,400,000
	TANGIBLE PERSONAL PROPERTY-SHERIFF	\$15,000
	TRANSFERS FROM OTHER FUNDS	\$0
	TRANSFERS TO OTHER FUNDS	\$0
	TRANSFERS, DISTRICT	\$250,000
Metcalfe Total		\$1,928,000
Muhlenberg	AMBULANCE SERVICE	\$100
	CERT OF DEPOSIT-INTEREST	\$0
	CHECKING INTEREST	\$0
	Prior Year Carryover	\$0
Muhlenberg Total		\$100
Nelson	EMS APAP Medicaid Assessment	\$0
	EMS Grant	\$10,000
	EMS Patient Fees	\$2,195,500
	EMS Training Fees	\$2,000
	Insurance Proceeds	\$0
	Local Contributions	\$0
	Prior Year Carryover	\$67,000
	Transfers from General	\$325,000
Transfers from OLF	\$730,000	
Nelson Total		\$3,329,500
Powell	ADJUSTMEDNT TO PRIOIR YR SURPLUS	\$0
	AMBULANCE SERVICE BILLING	\$850,000
	AMBULANCE SERVICES (MTN. DRAGWAY)	\$0
	AMBULANCE-EMERGENCY SERVICES INTEREST	\$100
	EMT-AMBULANCE SURPLUS PRIOR YEAR	\$22,942
	Insurance Reimbursement	\$0
	Other Receipts	\$0
	STATE GRANT-AMBULANCE-EMERGENCYSERVICES	\$10,000
	TRANSFERS FROM OTHER FUNDS	\$355,730
	TRANSFERS TO OTHER FUNDS	\$0
Powell Total		\$1,238,772

County	Description	Total
Rowan	Adjust Prior Year Surplus	\$0
	AMBULANCE BOND PROCEEDS	\$0
	Ambulance Fees	\$900,000
	BLOCK GRANT (EMS)	\$10,000
	COVID-19 GRANT (CARES)	\$0
	Interest	\$200
	Miscellaneous	\$1,000
	Prior Year Carryover	\$40,000
	TRANSFER FROM GENERAL FUND	\$602,618
	TRANSFER IN (CITY)	\$188,000
	TRANSFERS IN (1-2% P and O TAX)	\$250,000
	USDA GRANT (AMBULANCE REMOUNT)	\$0
Rowan Total	\$1,991,818	
Shelby	EMS ADJUST FOR PRIOR YEAR SURPLUS	\$0
	EMS DONATIONS	\$500
	EMS FEDERAL GRANTS	\$0
	EMS FEES	\$1,600,000
	EMS INTEREST EARNED ON ACCT	\$50
	EMS MISC REVENUE	\$500
	EMS REIMBURSEMENTS	\$1,000
	EMS STATE GRANTS	\$10,000
	EMS SURPLUS FROM PRIOR YEAR	\$50,000
	EMS TRAINING FEES	\$30,000
	EMS TRANSFER TO OTHER FUNDS	\$0
	TRANSFER FROM GENERAL FUND	\$2,389,000
Shelby Total	\$4,081,050	
Todd	Ambulance Adjustments	\$0
	Ambulance Reimbursements	\$7,000
	Ambulance SB66	\$10,000
	Ambulance Transfer In	\$238,600
	Ambulance Transfer Out	\$0
	CARES Reimbursement	\$0
	Prior Year Carryover	\$0
Todd Total	\$255,600	

County	Description	Total
Whitley	AMBULANCE SERVICE	\$2,300,000
	CONTRACTED COLLECTIONS	\$100
	GOVERNMENTAL LEASING RECEIPTS	\$0
	Interest	\$3,000
	Miscellaneous Income	\$1,000
	Reimbursements	\$1,000
	State Grant	\$10,000
	Surplus Prior Year	\$50,000
	SURPLUS PROERTY	\$0
	TRAINING CLASS - EMR	\$100
	TRAINING CLASS - EMT	\$100
	Transfer In	\$175,000
	Transfer Out	-\$175,000
Whitley Total		\$2,365,300
Grand Total		\$36,793,670

Source: https://kydlgweb.ky.gov/Counties/16_CountyHome.cfm

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