



# EMS STRATEGIC PLANNING STUDY:

# MONTGOMERY COUNTY, INDIANA

Ritter Strategic Services, LLC

May 10, 2022

Barry Ritter



## Table of Contents

Executive Summary.....	2
Summary of Recommendations.....	2
Introduction.....	3
Demographics.....	4
Prehospital Emergency Medical Services.....	6
EMS Environment.....	7
EMS Service / System Overview.....	8
Option No. 1.....	12
Option No. 2.....	13
Option No. 3.....	17
Conclusions.....	18
Appendix A EMS Certification Descriptions.....	19
Appendix B STAR Agreement.....	24
Appendix C EMS Dispatch Data.....	28



## Executive Summary

Ritter Strategic Services, LLC (“RSS”) respectfully submits this report, Emergency Medical Services (EMS) Strategic Planning Study, to the Montgomery County Commissioners and the Montgomery County Council, (“the County”).

In January 2022, RSS was retained to conduct a study to evaluate Emergency Medical Services (EMS) available to Montgomery County citizens. RSS was asked to evaluate 3 options for elected officials to consider for future EMS services. The 3 options include:

1. The County contracts with the City of Crawfordsville (fire department) to provide EMS Services
2. The County establishes their own EMS department within county government
3. The County contracts with one or more private EMS Services

To best understand the options, it was necessary to first develop a detailed understanding of the people (agencies) and processes currently offered for ambulance service in the County, and to hear what each stakeholder group believes is the best option for the future. The RSS team conducted an operational review of existing services and analyzed 911 calls for services for a three-year period.

RSS recognizes the high level of commitment and concern among stakeholders in Montgomery County. The RSS team is confident that these key stakeholders are committed to making needed changes in EMS Service(s) and operations in the county. Stakeholder’s commitment is a necessary first step to ensure an improved level of service to both the residents of, and visitors to Montgomery County and to the public safety agencies providing that service.

Options 1 is presented without estimated costs being provided by CFD because the City would consider responding to the County’s Request for Proposal in Option 3.

Option 2 cost estimates are included for known expenditures if the county established a county EMS department.

Option 3 is presented without estimated costs because the process has not occurred.

## Recommendation

RSS found no insurmountable barriers to stakeholders working together in developing an EMS program in the County. RSS believes that EMS will be improved by adopting a program from any one of the options considered.

1. EMS service should have the immediate attention of elected officials and informed decisions made in a timely manner.
  - a. Option 1 provides an expedited process with another governmental entity.
  - b. Option 2 provides more control by the County at a higher cost to the taxpayers.
  - c. Option 3 provides a competitive process that may be less expensive.



## Introduction

On January 24, 2022, the Montgomery County Board of Commissioners entered into an agreement with Ritter Strategic Services, LLC (RSS), a public safety consulting firm, to assess the County's EMS System. Pursuant to this engagement RSS was to develop the strategic planning study by facilitating focus groups, interviewing stakeholders, and reviewing data provided by the County and EMS System providers. RSS also considered best practices and industry standards for EMS Systems.

RSS was tasked with evaluating (3) three options for the County to consider for future EMS Services. The County's consideration for countywide EMS Services excludes the City of Crawfordsville service area.

- The County contracts with the City of Crawfordsville (fire department) to provide EMS Services
- The County establishes their own EMS department within county government
- The County contracts with one or more private EMS Services

Methodologies used to develop the strategic planning study (i.e., citizen's forum, stakeholder meetings, and data analysis) have inherent limitations. Stakeholder input, while important to the strategic plan, naturally tends to reflect built-in biases and political considerations of stakeholders. Any assumptions or options presented on available data will inevitably depend upon the accuracy of the data provided. RSS analyzed emergency 911 calls dispatched to existing EMS Services in Montgomery County to gain a better understanding of the call volume, which helps determine the number and types of resources required moving forward. RSS has not analyzed other run data (e.g., non-emergency call volume, response time, transport and out of service time).

## Demographics

The County has a total area of 505 square miles which includes approximately 835 road miles. There are four major highways, I-74, US 136, US 231, and State Road 25, that traverse the county. The Indiana Department of Transportation's 2020 Traffic Data Report estimated the daily vehicle miles traveled in the county to be 1.2 million miles. Commercial vehicles add an additional 205,000 daily miles. In 2019, there were a reported 161 motor vehicle collisions with personal injury and five with fatalities

According to the US Census Bureau the population in Montgomery County as of April 1, 2020 was 37,936. The City of Crawfordsville was approximately 16,306.

The County is divided into eleven townships, with Union Township being the largest, encompassing the City of Crawfordsville.



**Table 1.** Estimated Population by Township Dispatched EMS Calls for Service

<b>Township</b>	<b>Pop.</b>
Brown	1,710
Clark	1,839
Coal Creek	1,555
Franklin	1,923
Madison	1,274
Ripley	972
Scott	823
Sugar Creek	444
Union	24,857
Walnut	1,383
Wayne	1,585

The county’s population, visitors to the county, and the motoring public are potential patients for an EMS service and should be considered as stakeholders consider station locations, ambulances, staffing, and station locations.

## Methodology

The methodology for the EMS project included the following:

- Kick-off meeting with key stakeholders
- Virtual meetings with Township Trustees and Board Members
- On-site and virtual citizens forum
- On-site individual stakeholder interviews
- On-site Volunteer Fire Chiefs meeting
- On-site and virtual interviews with current EMS providers
- Review of data and documentation provided by various stakeholders
- Review of data from external sources

The RSS team began this project with a kick-off meeting in January 2022 with key stakeholders from the County. RSS used this meeting to review the project; begin formulating a project plan and schedule; establish lines of communication with stakeholders; confirm expectations; discuss data needs; and address any additional concerns relevant to the project. County officials prioritized transparency and community involvement as the cornerstone of the Project. RSS managed the project to meet the County’s expectations. Throughout the month of January and February RSS facilitated in-person and virtual meetings with various stakeholder groups and individuals.

On March 7, 2022 RSS hosted a citizens’ forum at Fusion 54 to hear from the community. The forum was held in-person and on Facebook Live. There were 19 citizens who attended the in-person meeting and more than 20 who joined virtually. RSS provided an overview of the strategic planning study and introduced the three options the County was considering. Citizens were provided the opportunity to ask questions and voice their concerns regarding EMS Service.



RSS has received information from more than 75 interested citizens throughout the project. These citizens represented various stakeholder groups that have a role in EMS public safety. Table 2 identifies key stakeholders that RSS received information from.

**Table 2.** Montgomery County EMS Stakeholders

<b>Name</b>	<b>Position</b>
Mr. Tom Klein	County Administrator
Mr. John Frey	County Commissioner
Mr. Jim Fulwider	County Commissioner
Mr. Dan Guard	County Commissioner
Mr. Tom Mellish	County Council
Ms. Sherri Henry	Director 911
Ms. Shari Harrington	Director EMA
Mr. Todd Barton	Mayor City of Crawfordsville
Mr. Scott Busenbark	Fire Chief Crawfordsville Fire Department
Mr. Paul Miller	EMS Chief Crawfordsville Fire Department
Mr. Matt Peck	C.O.O. STAR Ambulance
Mr. Anthony Hedge	Lodoga Rescue
Mr. Mike Davis	Mapping Director
Ms. Jennifer Andel	County Auditor
Mr. Ryan Needham	Sheriff

**Table 3.** Townships whose Trustee and/or Township Board Member(s) Provided Input

Madison Township
Wayne Township
Union Township
Town of Ladoga
Town of New Ross
Coal Creek Township
Scott Township
Clark Township
Ripley Township

On March 8, 2022 RSS attended the Montgomery County Fire Chief’s meeting to review the EMS project and discuss their contributions through volunteer emergency medical responder programs. Participants voiced their concerns related to past service levels, reliability of EMS units and the future of EMS depending on the decisions made by elected officials. These first responders were adamant that Crawfordsville Fire Department would provide the highest level of pre-hospital care in their communities. Some communities have EMS contracts with CFD that expire December 31, 2022. Table 4 identifies the agencies represented.



**Table 4. Emergency Medical Responders**

Coal Creek VFD
New Market CVFD
Darlington VFD
Waynetown VFD
Madison Township VFD
Ripley Township VFD
Waveland VFD

RSS analyzed EMS calls for service dispatched by the Montgomery County Emergency Communications Center in 2019, 2020, 2021. The data is relative to Township and not to a particular responding EMS agency. The data does not include calls for service in the City of Crawfordsville.

**Table 5. Dispatched EMS Calls for Service**

<b>Township</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Brown	108	121	138
Clark	292	267	108
Coal Creek	78	117	140
Franklin	155	178	173
Madison	102	114	124
Ripley	50	61	50
Scott	58	106	157
Sugar Creek	14	10	23
Union N	382	678	414
Union S	306	379	350
Walnut	129	212	201
Wayne	116	206	199
<b>Total Dispatches</b>	<b>1,674</b>	<b>2,449</b>	<b>2,077</b>

### Prehospital Emergency Medical Services

The Indiana Emergency Medical Services (EMS) Commission is responsible for the establishment and maintenance of an effective system of emergency medical services. This includes the necessary equipment, personnel, and facilities to ensure that all emergency patients receive prompt and adequate medical care. The Commission’s Administrative Code (rules) establishes the responsibilities for all EMS service providers, including personnel, service levels, performance, and equipment.

In January 2019, the National Highway Traffic Safety Administration (NHTSA) and the National EMS Advisory Council released “EMS Agenda 2050: A People Centered Vision for the Future of Emergency Medical Services” report. NHTSA’s abstract describes the report as *“Building on the foundation established by the landmark 1996 EMS Agenda for the Future, EMS Agenda 2050 lays out a vision for*



*EMS systems that serve the needs of patients, families, clinicians, and communities. To achieve that goal, EMS Agenda 2050 describes six guiding principles that need to be at the heart of efforts to implement the vision. EMS systems must be: inherently safe and effective, integrated, and seamless, reliable and prepared, socially equitable, sustainable and efficient, and adaptable and innovative”.*

<https://ems.gov/projects/ems-agenda-2050.html>

The EMS Agenda 2050 contains best practices for EMS and is followed by many ambulance service provider organizations all over the world. The 6 guiding principles include:

1. Socially equitable
2. Reliable and preparedness
3. Adoptable and innovative
4. Sustainable and efficient
5. Integrated and seamless
6. Inherently safe and effective

When citizens contact 911 to request an ambulance, they have an expectation that one will respond, provide treatment, and transport them to the hospital. What they do not understand is all the rules that EMS must follow to have an operating ambulance. As an example, the accepted standard for when an ambulance should arrive after being dispatched is within 13 minutes in a rural area and 9 minutes in an urban area. The ambulance should maintain this standard 90% of the time. It should be noted that while some organizations like the NFPA and the EMS Agenda 2050 talk about standards, there currently is no Federal or State law that mandate specific response standards.

### EMS Environment

The State of Indiana recognizes four levels of emergency responder certifications and licensure. Each level of care includes a specific number of topics and skills that are required to become certified in each discipline. The certification levels are:

1. Emergency Medical Responder (EMR)
2. Emergency Medical Technician Basic (EMT-B)
3. Emergency Medical Technician Advanced (EMT-A)
4. Emergency Medical Paramedic (EMT-P)

Each level of certification or licensure prepares and authorizes responders to deliver specific types of medical care as outlined in the State of Indiana EMS Scope of Practice. A list of requirements for each level of certification or licensure is included in APPENDIX A.

The following is a general example of each practical application regarding the different levels of training.

- Emergency Medical Responder (EMR) is usually utilized by volunteer fire departments. EMRs may respond in private vehicles or department apparatus and are usually the first on the scene. They provide the initial level of emergency care to those in need. They do not have the





capabilities of transporting patients. They work alongside the EMTs and Paramedics when they arrive and continue to provide emergency care.

- Emergency Medical Technicians (EMT-B), Advanced EMTs (EMT-A), and Paramedics all respond with the capabilities of transporting patients. The Department of Homeland Security EMS Division licenses ambulances. In some systems, Paramedics may respond in a non-transporting vehicle and EMTs (2) will respond in the ambulance. Based on the level of care that is required, the Paramedic may or may not be needed to continue the ALS level of care on the ambulance during transport.

Across the United States, including Indiana, the levels of responder certification or licensure are similar. The distinct types of EMS delivery services include, but are not limited to the following:

- Volunteer ambulance services
- Paid ambulances services including
  - Privately owned
  - Government/Municipality owned and operated
    - Ambulance only operated (EMS service)
    - Fire Department based Ambulance service
  - Hospital owned and operated
    - BLS
    - ALS
    - MICU (Specialty Adult)
    - NICU (Specialty Pediatric)
  - Air Medical
    - Helicopter
    - Fixed wing

Montgomery County is served by a combination of these services.

## EMS Ambulance Classifications

In the State of Indiana ambulance service provider organizations can be classified as either Basic Life Support (BLS) or Advanced Life Support (ALS). Certifications and service levels are defined by statute and the Emergency Medical Services Commission's Administrative Code.

## EMS Service/System Overview

EMS emergency ambulance response is currently provided by (4) four agencies in Montgomery County. These agencies include Crawfordsville Fire Department (CFD), Ladoga Rescue, STAR Ambulance, and Walnut Township Fire Department. Certification levels (basic life support or advanced life support) vary by agency, as does the hours of availability and response areas. BLS certified services are not required to report their hours of operation to the State. ALS services are required to operate 24/7/365. In recent months, first responders and elected officials have recognized that the organizational structure for countywide EMS service does not exist and therefore an equal level of service is lacking.



It is important to understand that the EMS agencies in the County and identified in this report have dedicated themselves to providing the best EMS response available by their agency but recognize there is room for improvement. These agencies have met the requirements of their certification levels in Indiana.

**Table 6.** EMS Agencies and Certification Levels

<b>EMS Provider</b>	<b>Certification Levels</b>
Crawfordsville Fire Department	Basic Life Support, Advanced Life Support
Ladoga Rescue	Basic Life Support
STAR Ambulance	Basic Life Support, Advanced Life Support
Walnut Township FD	Basic Life Support

The information provided in this report will allow elected officials to make informed decisions regarding EMS response in the future.

### **Crawfordsville Fire/EMS**

The City of Crawfordsville Fire Department (CFD) includes a full-time Emergency Medical Service Division that provides EMT and Paramedic level prehospital emergency medical services. The Division, overseen by Chief Paul Miller, staffs 21 firefighter/Paramedics and eight firefighter/EMTs. The agency's immediate goal is to add civilian Paramedics and EMTs who's only responsibility is to provide EMS.

CFD/EMS currently owns six ALS ambulances with in-service ambulances being staged at two fire stations in the City of Crawfordsville. The Department maintains a strict fleet program, replacing ambulances on a predetermined schedule. In addition to their daily fleet, the City maintains two additional ambulances awaiting the County's decision for EMS. Should CFD be a participating agency in the County's decision, they would not need to purchase additional EMS equipment.

CFD specializes in rescue services that are also utilized throughout the county when requested by other county services. The department also has a large staff of trained instructors in both the Fire Service and the EMS training programs, which include Indiana State Certified Primary Instructors that can deliver both EMR and EMT training and certification. The staff can also provide Advanced Life Support training for current staff and other agencies. This department has offered free Emergency Medical Response (EMR) training to all volunteer departments in the county.

CFD/EMS contracts with Union, Brown, Clark, Franklin, Ripley, Sugar Creek, and Walnut Townships for emergency ambulance services. Information provided by Mayor Todd Barton states that the township contracts (excluding Union Township) expire in December 2022 and will not be renewed. CFD contracts fire service to Union Township that includes rescue and EMS services.

Mobile Integrated Healthcare (MIH) is a patient-centered medical care system designed to provide service in a patient's home or in a mobile environment, including the use of telehealth. CFD has four community Paramedics providing MIH services in Montgomery County. It is the intent of CFD to continue this



program countywide. This system provides patient follow-up after being discharged from the hospital or emergency department to improve patient care and avoid readmittance to the hospital with 30-days. Chief Miller believes that CFD could provide countywide EMS while housing their ambulances in the City.

Response times vary based on unit availability, distance traveled, weather, and traffic conditions. Depending on location of the ambulance upon dispatch, the time, mileage, and drive time calculations could vary as much as 2 miles in distance traveled and 4 minutes in travel time.

**Table 7.** Response times from CFD headquarters with ideal travel conditions

<b>Town</b>	<b>Distance (in miles)</b>	<b>Estimated Response Time (in minutes)</b>
Alamo	14	22
Darlington	8.2	11
Ladoga	11.5	17
Linden	11.9	17
New Market	8.5	15
New Richmond	14.6	22
New Ross	10.4	15
Waveland	16	23
Waynetown	11	17
Wingate	11	17

CFD Fire Chief Scott Busenbark stated that the City would consider a direct contract with the County or respond to a Request for Proposal if the County chooses that option.

**Ladoga Rescue**

Ladoga Rescue is a volunteer ambulance service operating in Clark Township. Ladoga has one ambulance that operates with EMTs providing BLS emergency services. The Ladoga ambulance currently has eight rostered EMTs with only two active. This limited manpower means the ambulance is not always available for an emergency response. Currently in the State of Indiana, there are no requirements for a Basic Life Support Ambulance to be in service 24/7 or report when their ambulance is out of service. Ladoga is experiencing the same issues as many volunteer departments across the state and throughout the U.S., a lack of membership and trained personnel. They are having difficulty staffing EMTs and are unable to provide the recertification training that is required for the certifications every two years. Ladoga’s inability to staff the ambulance 24/7/365, as well as the dispatch center not receiving notification that the ambulance was out of service, this has resulted in delayed response times. RSS learned that, in these situations, a response can be delayed as much as 9 minutes. Ladoga has entered into a dual response agreement with CFD that removes that delay. If the Ladoga ambulance is available to respond and the call for service is BLS, CFD is disregarded.



Ladoga Rescue operations are funded by a variety of sources. Primarily funded by private pays, the Town of Ladoga pays for the truck's repairs and fuel. Ladoga Rescue averages 50-60 calls for service each year.

Stakeholders associated with Ladoga Rescue are considering closing their ambulance service and implementing an emergency medical first responders' program. Ladoga's stakeholders stated that the County's EMS program in the future will influence their decision.

### **Walnut Township EMS**

The Walnut Township Volunteer Fire Department maintains a fully equipped and certified ambulance to provide BLS service in Walnut Township. The Walnut Township ambulance currently has three rostered EMTs supported by five EMRs. The current EMRs are preparing to start EMT training.

Walnut Township VFD operates with a mutual aid agreement with Ladoga Rescue which establishes a mutual aid response in Clarke Township. As noted above, Ladoga Rescue is not always available, which means there is no guarantee that an ambulance will respond. As stated, in the State of Indiana there are no requirements for a BLS certified service to report their hours of operation to the State.

In 2021, Walnut Township EMS responded to approximately 323 emergency calls for service, resulting in approximately 34 patient transports. The service's budget is funded by private billings. The town and township provide money for fuel and insurance.

Walnut Township Fire and EMS Chief stated that as of January 1, 2022 their ambulance has been out of service at the direction of the Township. The Township has contracted with CFD for ambulance services.

### **STAR Ambulance**

Statewide Transfer Ambulance and Rescue (STAR) was founded on April 1, 1982 in Crawfordsville, Indiana. Over the past thirty-five years, STAR has expanded the number of ambulances, service levels, employees, and geographic locations served. Their current ambulance staffing patterns have both Basic Life Support (BLS) ambulances and Advanced Life Support (ALS) ambulances in service. The RSS team interviewed Chief Operating Officer Matt Peck regarding STAR's service history and his plans for the future. Mr. Peck verbalized his dedication to his community and STAR's desire to provide the best prehospital medical care possible. Mr. Peck stated that STAR would consider responding to a Request for Proposal if the County chooses that option.

In 1990, Montgomery County Commissioners entered into an agreement with STAR to provide ambulance services to the citizens of the County. The Agreement does not require the County to compensate STAR and does not require STAR to dedicate ambulances to the County. STAR relies upon self-pay and insurance billing to support the services provided. This arrangement has resulted in STAR's available ambulance to respond from outside the County, delaying patient care. The 32-year agreement has served its purpose well at a cost savings to the County, however it lacks the necessary elements for providing emergency prehospital medical care in 2022, e.g. number of ambulances available, certification levels, response time. *Appendix B*



When elected officials began discussing the availability of ambulances and whose responsibility it was to respond, STAR Ambulance was not included in those discussions. Mr. Peck sent notification of STAR's intent to terminate the long-standing agreement. Mr. Peck has extended his commitment termination date to the citizens of Montgomery County and will continue service through the County's EMS project.

STAR houses ambulances and personnel at two locations in Montgomery County. Those locations are at the intersection of 61E and 150S and 2303 Lafayette Rd. STAR staffs a total of four ambulances at these locations, however those ambulances are not dedicated solely to Montgomery County.

Mr. Peck estimates response times from these locations to furthest points across Montgomery County anywhere between 12 to 21 minutes, dependent upon unit availability, distance, weather, and traffic conditions. Notably, these response times are comparable to RSS' estimates for CFD.

STAR ambulance has a large staff of recognized state Certified EMS Primary Instructors. STAR is recognized as a state Certified EMS Training Institution at the BLS level. They are also planning a Paramedic (ALS) training program in the future. They are currently able to offer continuing education at both the BLS and ALS level. Mr. Peck expressed his desire to work with EMRs and EMTs in the county and provide training.

In 2021, STAR responded to approximately 585 emergency 911 calls for service in the County resulting in 477 patient transports.

### **Fiscal Responsibility**

Elected officials are working with the County's financial advisor to review their options for funding. As the County considers their options for EMS service, additional consideration will be given to the funding mechanism. Costs for to Option 1 and 3 are unknown at this time. Costs related to Option 2 could increase or decrease based on the extent of services provided.

Option 2 provides the County a source of revenue to financially support a county EMS department. If the County were to choose Option 2, RSS recommends the County use a third-party vendor who specializes in ambulance billing, ensuring billing is coded correctly and the County is paid accordingly.

The available options are detailed below.

### **OPTION 1-The County contracts with the City of Crawfordsville to provide EMS Services countywide.**

Pursuant to I.C. § 36-1-7 the Board of Commissioners enters an Interlocal Agreement with the City of Crawfordsville for the purpose of EMS. Specifically, the City of Crawfordsville Fire Department would provide EMS services countywide in consideration of certain terms and conditions.



The terms and conditions should include the critical elements required for EMS service, quality assurance programs, and financial support as mutually agreed. The Agreement would not include service inside the City of Crawfordsville or a Township who independently contracts with the City of Crawfordsville. City officials have internally estimated the cost to expand their service countywide, however it is not included in this report because Option 3 is a competitive process where the City may be a respondent.

**OPTION 2-The County establishes their own EMS department within county government**

For purposes of this Report, RSS subject matter experts have estimated costs to establish and operate a County EMS department. RSS identified several fixed costs that can be calculated at this time. Certain equipment costs are figured on current market value, the need for the equipment, the environment in which the equipment is being utilized, and level of service that is being delivered. Personnel costs are estimated on the County’s existing personnel policies. Costs associated with facilities, infrastructure, utilities, maintenance, etc. are not included. As such, RSS estimates the cost exceeds \$2.4 million.

EMS Station locations should be centralized in the county taking into consideration the major roadways and the ambulances’ ability to travel in each direction. Understanding the response times of CFD and STAR Ambulance from their existing stations is valuable information as the County considers station location with all options in this report.

The following is a general outline of startup costs for a countywide service in Montgomery County. All equipment estimates are based off of the State of Indiana required equipment list. While cost may vary between brands, this is a good estimate. The following sections will reflect those costs. RSS recommends the County establish the EMS service at the Advanced Life Support level with both Paramedic and EMT staffing.

**Equipment**

Based on the number of ambulance runs that are dispatched each year, the travel time to various parts of the county, and the standard used for ambulance responses, RSS recommends the County staff and equip three ambulances 24/7/365. RSS recommends a fourth ambulance as a standby unit to be used during scheduled maintenance, emergency situations, mileage rotation, or dedicated events.

Proposed ambulances are type 1 model (450 style chassis with 4x4 capabilities and a large ambulance box on each. The cost of each ambulance is approximately \$250,000. These ambulances are designed to take care of critical care patients and accommodate power load systems.

**Ambulances**

4 Type 1 manufactured ambulances \$ 1,000,000

**Durable Supplies**

The list of durable goods for all ALS certified ambulances include but are not limited to (each ambulance plus back up equipment):



• 5 Hare Traction Splints	\$ 2,000
• 5 KED Splints	\$ 2,000
• 5 Board Splint sets	\$ 500
• 20 backboards and straps	\$ 8,000
• 20 oxygen tanks and regulators (portable)	\$ 6,000
• 5 main oxygen tanks (ambulance onboard system)	\$ 1,200
• 5 portable suction units	\$ 2,500
• 5 EMS bags (carry equipment needed for patient care)	\$ 1,700
• 5 oxygen carry bags (portables)	\$ 1,500
• 4 portable ventilators (breath for patients)	\$ 96,000
• 4 Advanced cardiac monitors with 12 lead capabilities	\$100,000
• 5 AED'S	\$ 5,000
• 5 drug boxes	\$ 2,200
• 4 stair chairs	\$ 12,000
• 4 power load cots and power load systems	\$148,000
• 4 glidascope (advances airway equipment)	\$ 10,000
• 4 sets of back up intubation equipment	\$ 5,000
• 4 EZIO sets (advanced IV into bone)	\$ 2,800
• 4 IV heating systems	\$ 1,500
• 5 BP cuffs and stethoscopes	\$ 1,000
• Glucometers and strips	\$ 1,000
• 5 portable spO2 machines	<u>\$ 4,000</u>

SUBTOTAL \$ 413,900

**Consumables**

The following is a general list of items that shall be on each ambulance and used in the general treatment of patients. These items have a one-time use only. These items include the following but are not limited to:

- 4x4's
- Bandages
- Trauma dressings
- Tape
- Ice Packs
- Heat Packs
- Oxygen supplies
- Advanced airway supplies
- Slings
- Test strips
- Coban



- General IV supplies
- Medications
- ECG pads and electrodes
- Disposable straps
- Sam splints
- Pelvic binders
- Sheets
- Blankets
- Pillows
- Cleaning supplies
- Miscellaneous supplies

The estimated start-up cost to stock 4 ambulances for certification and in service readiness as well as sufficient replacement supplies is approximately \$ 25,000.

### **Personnel**

RSS estimates that the County would need to hire a minimum of eleven full-time employees (FTE) to staff a county EMS department. The number of FTE's could increase depending on the County's personal leave schedule, training, sick leave, etc. The County could backfill positions as needed with either part-time employees or overtime for FTE, the cost of either is not included in this report. Uncontrollable situations (e.g., out of county transports, patient unload wait times, and travel time) will all impact available ambulances in the County for emergency response.

Personnel estimates are based on the traditional 24-hour shift schedule. If the County chose 12-hour shifts, the number of personnel would need to double.

The following is a list of staff that is needed to operate a 24/7/365 ALS service.

- 4 full-time Paramedics (3 primary and 1 float)
- 4 full-time EMT's (3 primary and 1 float)
- 1 Director of EMS
- 1 Assistant Director/Training and Education
- 1 Office Manager/Billing

EMS services across the country are facing staffing shortages for Paramedics and EMTs. The pandemic has amplified the shortage as trained personnel have been afforded the opportunity to deploy in other areas of the country. Competition for trained Paramedics is causing services to reexamine salaries and benefits to retain or attract personnel.

Current average pay rates are as follows based on in state and out-of-state data.

- EMT \$15.00-19.00 per hour
- Paramedic \$27.00-30.00 per hour





- Director Salary of \$70,000.00
- Assistant director / Education Salary of \$65,000.00
- Office Manager \$20.00-25.00 per hour

The starting salary for a civilian Paramedic at CFD is \$60,000 and EMTs are \$50,000. For purposes of this Report, RSS will use these salaries for estimating personnel costs at the County.

**Table 8. Estimated Personnel Costs**

<b>Budget</b>	<b>Positions</b>	<b>Expense</b>
Paramedic salaries	\$60,000	\$240,000
EMT salaries	\$50,000	\$200,000
Director	\$75,000	\$75,000
Assistant Director/Education	\$65,000	\$65,000
Office Manager	\$41,600	\$41,600
	<b>Subtotal</b>	<b>\$621,600</b>
INPRS		\$69,700
SS		\$38,600
Medicare		\$9,013
Health Insurance	\$17,925	\$197,175
HSA	\$750	\$8,250
HRA	\$2,000	\$22,000
Life Insurance	\$2.99/month	\$395
Short term disability	\$19.61/month	\$2,589
Long term disability	\$10.28/month	\$1,357
	<b>Total</b>	<b>\$970,679</b>

**Table 9. Estimated Budget Totals**

Ambulances	\$1,000,000
Durable Supplies	\$ 413,900
Consumable Supplies	\$ 25,000
Personnel	\$ 970,000
<b>Start Up Total</b>	<b>\$2,408,900</b>

**Station Location Costs**

While we believe 3 station locations is ideal for this system, we do not know the current costs associated with a station build or lease. Many factors must be considered when looking at a station location and build. The factors include but are not limited to:

- Real Estate
- Construction
  - Station with two bays
  - Equipment/supply storage
  - Training area
  - Living quarters



- Sleeping rooms (male and female)
- Showers and restrooms
- Kitchen

Centralizing each ambulance in the north corridor, the central corridor, and the south corridor (along main road access) will help to achieve the industry standard of response times.

Other Costs not included in the Report include:

- Fuel
- Maintenance
- Capital Projects

**OPTION 3-The County contracts with one or more EMS Services to provide ambulance service.**

It is important to the stakeholders that all options be considered for providing EMS services in the County, including contracting with one or more public or private agencies.

In accordance with I.C. 5-22-9 the County may issue a Request for Proposal (RFP) for countywide ambulance services. The RFP process allows the County to develop the Specifications for Service that a responsible offeror will review. The specifications will be written to ensure local ambulance needs are met while adhering to Commission rules, industry standards and best practices.

During RSS' research for this report, we interviewed certified ambulance providers operating in central Indiana to determine the level of interest in Option 3. RSS provided an overview of the County's project and identified basic specifications that may be required. The basics include, but not limited to:

- ALS level of service
- A minimum of 2 or 3 dedicated ambulances 24/7/365.
- Access to a 3<sup>rd</sup> or 4<sup>th</sup> ambulance to serve as a backup
- Shall comply with all EMS Commission Rules for operating in Indiana

RSS received a commitment from 4 ambulance services (public and private) to review the Specifications and consider submitting a response.

Specifications for Service is the County's quality assurance program to ensure the ambulance provider is operating as required by Commission Rules, industry standards, best practices, and contract. Examples of specifications include:

- Certified Ambulances in the state where the contract covers
- KKK-A-1822 Specifications for ambulance build Star of Life Ambulance
- Insurance on ambulances
- Required equipment on ambulance based to meet certification level
- Trained personnel on ambulance per state guidelines
- Insurance (liability) on the service at appropriate minimums
- Proper communication equipment per state requirements



- Dispatch requirements
- Number of ambulances needed to provide adequate coverage to the contracted area
- Back up ambulances required for the contract
- Staffing needed to provide coverage
- Certification updates provided for staff as needed / required
- Response times
- Transport areas (in county / out of county)
- Quality Assurance / Audits and Review
- Ambulance markings
- Staffing uniforms
- Contract extension / contract termination clause

## Conclusions

1. Citizens and visitors in Montgomery County do not receive an equal level of EMS response.
2. The existing structure has resulted in delayed response and patient care.
3. Contracts between CFD and Townships expire on December 31, 2022.
4. CFD will not respond outside of Crawfordsville and Union Township as the primary response agency.
5. CFD is prepared to meet the County's EMS needs under contract.
6. STAR Ambulance announced they will terminate their long-standing Agreement and no longer respond as a primary EMS agency to emergency calls for service.
7. STAR Ambulance is prepared to meet the County's EMS needs under contract.
8. Ladoga Rescue is considering placing their ambulance out of service and providing EMR level of service.
9. As of January 1, 2022 the Walnut Township VFD ambulance was taken out of service by the Township. Walnut Township is considering providing EMR level of service.
10. At least four EMS agencies will consider responding to the County's RFP.
11. County action is required to ensure ambulance service is available beginning January 1, 2023.



APPENDIX A

Indiana Emergency Medical Services Commission Levels of EMS Personnel Certification

Level of Certification Title	Minimum Initial Training Hours	Hospital and Clinical Experience	Scope of Treatment Skills	Required Continuing Education
Emergency Medical Responder	50.5 Hours	N/A	Oral airway BVM Head tilt chin lift Jaw thrust Modified chin lift Obstruction- manual Oxygen therapy Nasal cannula non-rebreather face mask Upper airway suctioning Manual BP  Unit dose auto- injectors for self or peer care (MARK I)  Unit does auto-injectors Epi for anaphylaxis Hemorrhage control  Emergency moves for endangered patients Eye irrigation CPR AED  Assisted normal delivery  <i>Additional module on proper            use of Blood Glucose            Monitoring</i> <i>Additional module on proper            use of Tourniquet</i> <i>Additional module on proper            way to Splint Extremities</i> <i>Additional module on proper            use of Cervical Collars</i> <i>Additional module on proper            use of Long Spine Board and            Spinal immobilization</i>	20 hours in 2 years



			<p><i>Additional module on proper use of Pulse Ox/Carbon Monoxide monitoring</i></p> <p><i>Additional modules assigned by the Indiana EMS Commission if required beyond the standard</i></p>	
Emergency Medical Technician	<p>151-159 Hours.</p> <p>This includes the 16 hours of mandatory ride time.</p>	<p>Students should observe emergency department operations for a period of time sufficient to gain an appreciation for the continuum of care.</p> <p><b>Students must perform 10 patient assessments.</b> These can be performed in an ED, ambulance, clinic, nursing home, doctor's office, or on standardized patients if clinical settings are not available.</p> <p><b>~8 hours ambulance</b>  <b>~8 hours hospital</b></p>	<p><b>All skills of EMR (above) plus:</b></p> <p>Humidifiers          Partial Rebreathers          Venturi Mask Automatic Transport Ventilator (ATV)          Oral and nasal airways          Manual and auto BP          Manually Triggered Ventilator (MTV)</p> <p><b>Assisted Medications</b>          Assisting a patient in administering his/her own prescribed medications, including auto-injection</p> <p><b>Medication Administration – Routes</b>          Buccal Intramuscular (EPI)</p> <ul style="list-style-type: none"> <li>• Oral</li> </ul> <p><b>Administered Medications</b>          Physician–approved over the counter medications (oral glucose, ASA for chest pain of suspected ischemic origin)</p> <ul style="list-style-type: none"> <li>• Epinephrine for anaphylaxis (syringe &amp; ampule)</li> </ul> <p><b>Trauma Care</b></p> <ul style="list-style-type: none"> <li>• Seated spinal immobilization</li> <li>• Traction splinting</li> <li>• Mechanical patient restraint</li> <li>• MAST/PASG</li> </ul>	<p>40 hours didactic plus verification of skill competency every 2 years</p>



			<ul style="list-style-type: none"> <li>• Rapid extrication</li> </ul> <p><b>Cardiac Care</b></p> <ul style="list-style-type: none"> <li>• Mechanical CPR</li> <li>• Assisted complicated delivery</li> <li>• Additional module on Esophageal, tracheal, Multi-Lumen and Supraglottic Airway</li> <li>• Additional modules assigned by the IN-EMS Commission if required beyond the curriculum</li> </ul>	
Advanced EMT	162.5 Hours	<p>~Properly <b>administer medications to at least 15 live patients</b></p> <p>~Successfully <b>perform all steps and access venous circulation at least 25 times on live patients</b> of various age groups</p> <p>~<b>Ventilate at least 20 live patients</b> of various age groups</p> <p>~Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with <b>chest pain</b></p> <p>~Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with</p>	<p><b>All Skills of EMT (above) plus</b></p> <p>Esophageal Tracheal Multi-lumen Airways Blood glucose monitor</p> <p>Peripheral IV insertion</p> <ul style="list-style-type: none"> <li>• IO</li> </ul> <p>IV fluid infusion</p> <ul style="list-style-type: none"> <li>• Sublingual</li> <li>• Intranasal</li> <li>• IV push of D50</li> <li>• Narcotic antagonist only</li> </ul> <p><b>Medicine Administration - Routes</b></p> <ul style="list-style-type: none"> <li>• Aerosolized</li> <li>• Subcutaneous</li> <li>• Intramuscular</li> <li>• Nebulized</li> </ul> <p><b>Administered Meds</b></p> <ul style="list-style-type: none"> <li>• SL Nitroglycerine for chest pain of suspected ischemic origin</li> <li>• SQ or IM epinephrine for anaphylaxis</li> </ul>	54 hours didactic plus verification of skill competency every 2 years



		<p><b>respiratory distress</b>          ~Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with <b>altered mental status</b>          ~Demonstrate the ability to perform an adequate assessment on <b>pediatric, adult, and geriatric</b> patients</p>	<ul style="list-style-type: none"> <li>• Glucagon and IV D50 for hypoglycemia</li> <li>• Inhaled beta agonist for dyspnea and wheezing</li> <li>• Narcotic antagonist</li> <li>• Nitrous oxide for pain relief</li> <li>• <b>Additional module on Adult IO</b></li> <li>• <b>12 lead Application and Transmission ONLY</b></li> <li>• <b>Additional modules assigned by the Indiana EMS Commission if required Beyond the standard curriculum</b></li> </ul>	
Paramedic	<p>452 Hours.           Including internship, which should range between 1000-1300 Hours</p>	<p>~No fewer than fifty (50) attempts at airway management across all age levels, with a 90% success rate utilizing endotracheal intubation in their last ten (10) attempts.          ~Must be 100% successful in the management of their last 20 attempts at airway management.          ~Clinical experience <b>must</b> include the operating room, recovery room, ICU, coronary care department, labor and delivery room, pediatrics, and ER.          ~All students must have adequate exposure, as determined by the</p>	<p><b>All skills of ADV EMT (above) plus:</b></p> <ul style="list-style-type: none"> <li>• BIPAP/CPAP</li> <li>• Needle chest decompression</li> <li>• Chest tube monitoring</li> <li>• Airway obstruction removal by direct laryngoscopy PEEP</li> <li>• EKG interpretation</li> <li>• Interpretive 12 Lead</li> <li>• Blood chemistry analysis</li> <li>• Central Line Monitoring</li> <li>• Venous blood sampling</li> <li>• IV (push and infusion)             <ul style="list-style-type: none"> <li>• Rectal</li> <li>• Topical</li> </ul> </li> <li>• Percutaneous cricothyrotomy</li> <li>• ETCO2/Capnography</li> <li>• NG/OG tube</li> <li>• Nasal and oral Endotracheal intubation</li> </ul>	<p>72 hours didactic plus verification of skill competency every 2 years</p>



		<p>program medical director and advisory committee, to pediatric, obstetric, psychiatric, and geriatric patients. ~All students must complete Field <b>Internship</b> and successfully manage, assess, and treat patients. <b>Minimum Team Leads</b> must be established by the program medical director and advisory committee and completed by every student.</p>	<p><b>Medication Administration – Routes</b></p> <ul style="list-style-type: none"> <li>• Endotracheal</li> <li>• NG</li> <li>• IO</li> <li>• Accessing implanted central IV port</li> </ul> <p><b>Administered Medications</b></p> <ul style="list-style-type: none"> <li>• Physician–approved medication</li> <li>• Maintenance of blood administration</li> <li>• Thrombolytic initiation</li> </ul> <p><b>Trauma Care</b></p> <ul style="list-style-type: none"> <li>• Morgan Lens</li> </ul> <p><b>Cardiac Care</b></p> <ul style="list-style-type: none"> <li>• Cardioversion</li> <li>• Manual defibrillation</li> <li>• TC Pacing</li> <li>• Carotid Massage</li> </ul> <p>Additional modules assigned by the IN-EMS Commission if required beyond the curriculum</p>	
--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--





Ritter Strategic Services, LLC  
115 South Woodpecker Road  
Hagerstown, Indiana 47346

---

## **APPENDIX B**



AGREEMENT

This Agreement is entered into between Statewide Transfer Ambulance and Rescue, Inc., an Indiana corporation ("S.T.A.R."), and the County of Montgomery, State of Indiana ("County"), by its duly elected, qualified and acting Board of Commissioners.

WHEREAS:

1. S.T.A.R. operates a fleet of ambulances and provides ambulance service and emergency medical treatment in and about Montgomery County, State of Indiana.
2. The County desires to secure ambulance service and emergency medical treatment for its citizens wherever located in Montgomery County, State of Indiana.
3. S.T.A.R. is prepared to provide ambulance service and emergency medical treatment to citizens of Montgomery County, State of Indiana, and the County desires to secure said services for its citizens.

WHEREFORE, in consideration of the premises, S.T.A.R. and the County agree as follows:

1. S.T.A.R. agrees to provide ambulance service and emergency medical treatment to the citizens of Montgomery County at no charge to the County. Charges for services shall be the liability and responsibility of the patient using the services of S.T.A.R.
2. S.T.A.R. shall provide its vehicles, equipment, maintenance of vehicles and equipment, facilities and personnel at no cost or expense to the County.
3. S.T.A.R. shall assume all risk and responsibility for accident, injury or damage to person and property arising from its activities and shall insure such risk by carrying standard liability insurance in such amounts as deemed necessary.
4. S.T.A.R. shall provide transportation and medical treatment for any County police officer injured in the line of duty at no cost or expense to the County.
5. S.T.A.R. shall provide CPR classes and first aid classes to County police officers at no cost or expense to the County.
6. S.T.A.R. shall coordinate with local civil defense personnel in disaster planning and management for the County of Montgomery.



7. S.T.A.R. shall provide its own billing, record keeping and filing of insurance claims.

8. S.T.A.R. shall provide ambulance service and emergency medical treatment for any person located in Montgomery County, Indiana. The patient will be directly charged for services rendered by S.T.A.R. The patient will be subject to a base fee, procedure fee and equipment usage fee. The sum of Ninety Dollars (\$90.00) shall be charged as the basic life support base fee and the sum of One Hundred Fifty Dollars (\$150.00) shall be charged as the advanced life support base fee. Procedure fees and equipment fees shall be charged in addition to the base fees. For transportation of persons outside the city limits of Crawfordsville, Montgomery County, Indiana, S.T.A.R. shall also charge the patient the sum of Three Dollars (\$3.00) per loaded mile. The schedule of charges for procedures and equipment usage is attached hereto as Exhibit "A" and made a part hereof by reference.

9. S.T.A.R. shall transport prisoners from the Montgomery County Jail to AMI-Culver Union Hospital for the sum of Ninety Dollars (\$90.00) for basic life support and the sum of One Hundred Fifty Dollars (\$150.00) for advanced life support. The County shall pay S.T.A.R. for such services. No equipment or procedure fees shall be charged unless said prisoners are transported outside the city limits of Crawfordsville, Montgomery County, Indiana, in which case, S.T.A.R. shall also charge the County the sum of Three Dollars (\$3.00) per loaded mile.

10. The term of this Agreement shall be from the date of its due execution by the parties through the 30th day of June, 1991, and may be extended by the parties on such terms and conditions as deemed appropriate. However, this Agreement may be terminated upon sixty (60) days written notice by either party.

11. The County shall give notice to its citizens of the fact that S.T.A.R. and the County have entered into this Agreement and that S.T.A.R. is prepared to provide ambulance service and emergency medical treatment upon call.



Dated this 2nd day of ~~June~~ <sup>July</sup>, 1990, at Crawfordsville, Indiana.

STATEWIDE TRANSFER AND  
AMBULANCE RESCUE SERVICE,  
INC.

THE BOARD OF COMMISSIONERS OF  
THE COUNTY OF MONTGOMERY,  
STATE OF INDIANA

By: Samuel D. Peck  
Samuel D. Peck, President

Samuel Kusler  
Richard M. Thompson  
James M. Kirtley

Attest:

Attest:

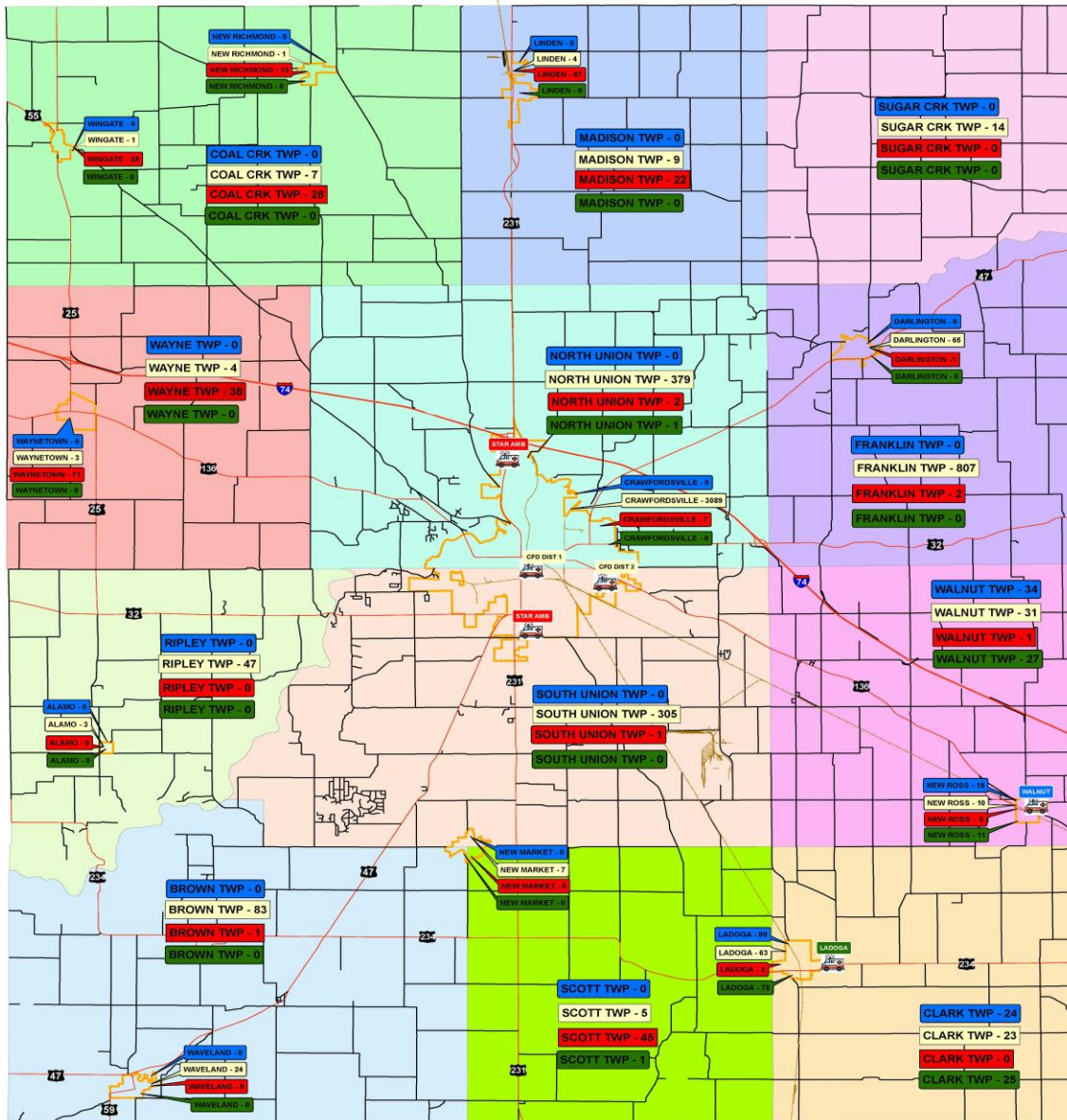
Linda M. Peck  
Linda M. Peck, Secretary

Nelda J. Hester  
Nelda J. Hester, Montgomery  
County Auditor

This instrument prepared by James D. Collier, Attorney at Law,  
300 Ben Hur Building, Crawfordsville, IN 47933.



### 2019 EMERGENCY RUNS



#### AGENCIES

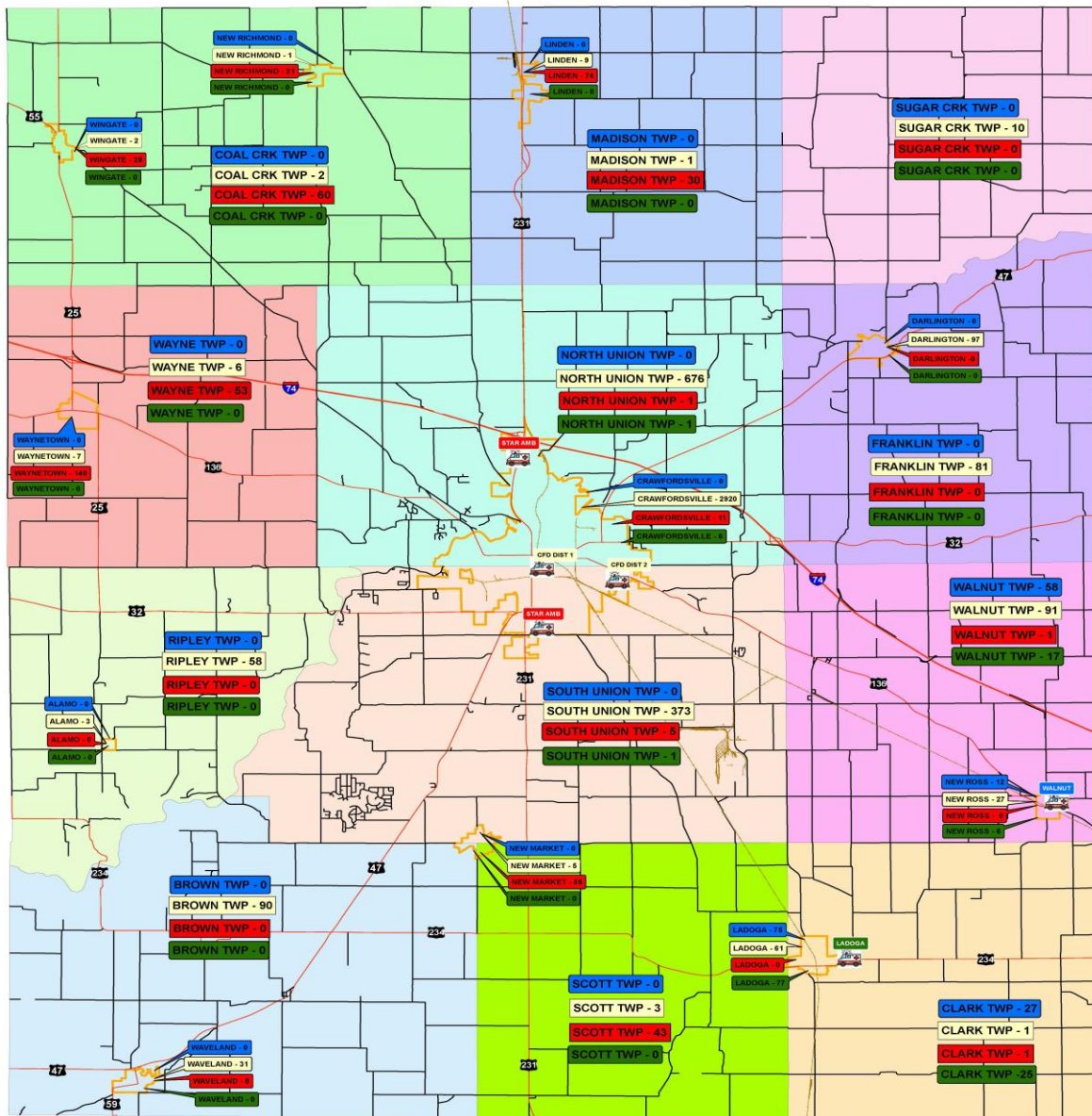
- WALNUT EMS
- CRAWFORDSVILLE FIRE DEPT
- STAR AMBULANCE
- LADOGA EMS







## 2020 EMERGENCY RUNS



### AGENCIES

WALNUT EMS

CRAWFORDSVILLE FIRE DEPT

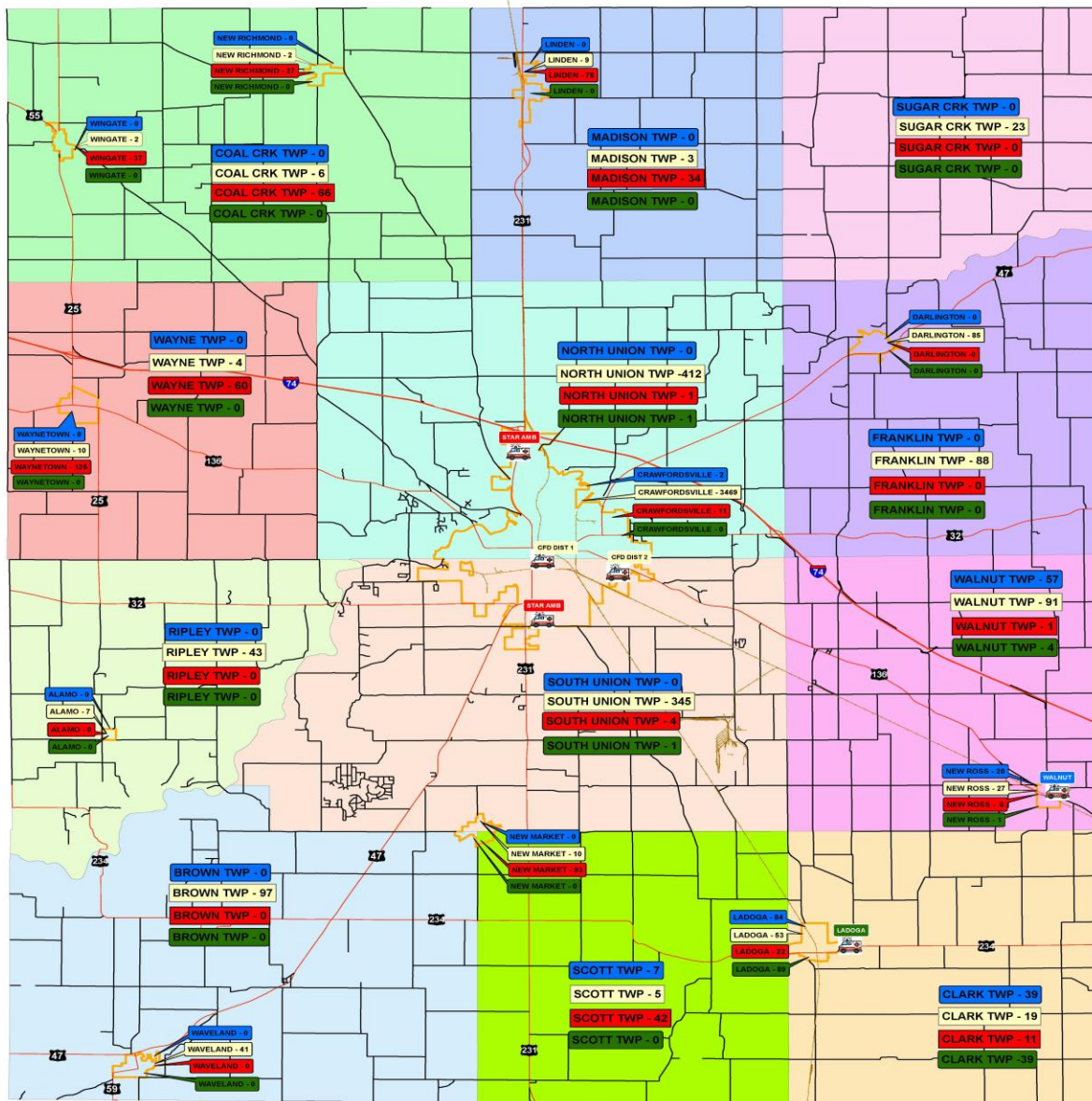
STAR AMBULANCE

LADOGA EMS





### 2021 EMERGENCY RUNS



#### AGENCIES

- WALNUT EMS
- CRAWFORDSVILLE FIRE DEPT
- STAR AMBULANCE
- LADOGA EMS

