

# Essex County EMS Strategic Plan Update: Looking to the Future after Five Years of Progress

Prepared by Paul Bishop, MPA, NRP

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# Summary

Essex County Emergency Medical Services has undergone a rapid evolution since 2017. Although there has been substantial progress along the path to improve the provision of this essential service, there remains much additional work to be accomplished before the EMS system is sustainable and providing the best possible care it can. This report is intended to provide an overview of the progress made towards the goals that were set seven years ago and identify new priorities that the EMS community should consider going forward.

## Accomplishments

Since 2017, there have been a number of key accomplishments made because of the hard work and dedication of the political leadership, the EMS and Emergency management staff of Essex County and the volunteers in the community. These accomplishments are listed below and described in greater detail in the report:

- Creation of EMS Fly -Car and Staff Leasing Model;
- Installation of a new computer aided dispatch program to improve reporting;
- Development of a paramedic education program;
- Transition to a new model of EMT education;
- Creation of a county wide ambulance operating authority;
- Establishment uniform response targets for ambulances; and
- Investment in EMS Operations with State grant, and County and local funds.

In addition to the accomplishments through the County, several of the Towns and other EMS services have made improvements to their operations in the last few years. Nearly all of the ambulance services in the County now have some paid staff to improve the likelihood of a prompt EMS response.

There are about 15 calls per day for EMS in the County. The top four busiest agencies (Ticonderoga, Lake Placid, Essex County EMS and Moriah) account for about 53% of the calls in the County.

EMS is funded from several sources including towns, villages, and fire districts for about \$1.4 million. The non-profit ambulance companies that provide most of the service in the County have annual expenses of about \$4.9 million. The County has a net cost of about \$1.4 million for its EMS service and we estimate that the costs for other EMS services, excluding interfacility, is about \$500,000. The total cost of providing EMS in the County from all providers is about \$6.8 million.

## Current Challenges

While there have been a number of key accomplishments, the EMS system in Essex County is still facing challenges that could impact the ability to respond to 911 calls and serve the residents of the county. The challenges below are identified as being the most pronounced:

- Recruitment and retention of paid staff
- Retention of volunteers
- New York State will sunset the AEMT – Critical Care level of certification on July 1, 2027
- Overlap of the administrative responsibilities of operating an EMS agency is a burden on volunteers
- Funding for the current Essex County EMS is supported by a grant and will revert to a mix of the County and municipalities when the grant is over
- Effective use of employees between calls for service

### **Opportunities for Action**

The suggestions below are a mix of immediate actions for the County to consider implementing and longer-term strategies that will need to be acted upon by a number of organizations.

- Allow more than 40 hours as base schedule for EMS Staff
- ALS at time of dispatch should be standard for high priority calls
- Develop specific retention strategies for EMS
- Lobby for county level EMS district
- Institute a full time EMS Coordinator position without patient care responsibilities
- Evaluate other potential funding sources
- Expand the Advanced EMT level of care
- Support AEMT-CC to paramedic transition
- Develop a youth recruitment strategy
- Arrange a medic exchange program for EMS call volume
- Develop a performance dashboard
- Distance learning for all levels of EMS training is essential
- Identify down time value contributions

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# Introduction

Essex County Emergency Medical Services has undergone a rapid evolution since 2017. There has been substantial progress along the path to improve the provision of this essential service but there remains much additional work to be accomplished before the EMS system is sustainable and providing the best possible care it can. This report is intended to provide an overview of the progress toward the goals that were set seven years ago and identify new priorities that the EMS community should consider going forward.

The Essex County Board of Supervisors, with the support of funding from the New York State Municipal Restructuring Fund, engaged CGR to conduct a comprehensive EMS assessment and strategic plan in 2016<sup>1</sup>. This led to a series of recommendations to improve the EMS service that were shared with the Board of Supervisors in September 2017.

As part of the planning process in 2017, a committee of EMS providers adopted mission and vision statements. The mission of Essex County EMS is to “provide timely, high quality, professional, out of hospital emergency medical care and transport to residents and visitors throughout Essex County.” The vision statement that the agencies, providers and officials should work toward is to “establish a sustainable cohesive evolvable system for emergency medical care in Essex County.”

The stated goals that were presented in 2017 were:

- Adopt Countywide EMS Response Targets:
  - Establish goals for response times and service.
- Revise Dispatch Protocols to Ensure Help is Responding Quickly:
  - Revise dispatching policies for serious calls to ensure help is responding quickly.
- Expand EMS Educational Offerings
  - Offer more EMS certification and continuing education courses.
- Expand Support for Existing EMS Agencies
  - Appoint a part time assistant EMS coordinator and compensate regional deputy coordinators to improve effectiveness of office and support expanded program.
- Establish an Ambulance Operating Certificate.
- Deploy a county operated ambulance to areas of need in southeast portion of the county.
- ALS First Response and Staff leasing is a potential solution for some services.
- Facilitate Cooperation and Consolidation among agencies.

<sup>1</sup> The initial project materials are available at [www.cgr.org/essex-ems](http://www.cgr.org/essex-ems)

- Consider a long-term model of a single county wide operations.

Our methodology for this engagement was to conduct in person and phone interviews with key EMS stakeholders that represented a broad perspective of the EMS service in Essex County and to review key agency response information and budgetary data. This information was used to assess progress toward the state goals from 2017 and to identify new challenges facing the EMS system.

By way of context, in the ensuing years since the plan was developed, Essex County EMS has had to respond to the COVID 19 Pandemic and cope with two changes in the position of EMS coordinator. During this time, the operating environment for EMS services statewide has worsened substantially as costs have grown and the number of EMS providers in the state has dropped by at least 20%. Another significant challenge has been the reorganization of the EMS program agency which has led to a reset of some key initiatives, although the new program agency seems to be very supportive.

## Key Accomplishments

There have been a number of key accomplishments that relate directly to the mission and vision of the Essex County EMS System as well as the specific goals of the strategic plan. These accomplishments have occurred because of the hard work and dedication of the political leadership, the EMS and Emergency management staff of Essex County and the volunteers in the community.

- Creation of EMS Fly -Car and Staff Leasing Model
  - Essex County employs 20 full time staff and 8 part time employees of varying EMS levels.
  - This staff supports the operation of three ALS fly cars, primarily staffed during day time hours, seven days a week.
  - The county has purchased five ALS fly cars and one ambulance with all of the requisite equipment.
  - They also provide staff leasing to seven of the twelve 911 ambulance services with a focus on day-time operations and other times as needed.
  - The County bills the municipality or ambulance service for the hours worked and uses grant funds to cover the employee benefits including health and retirement.
  - The table below indicates how many employee hours by category are under agreement to the involved agencies.

	EMT	AEMT	AEMT-CC	Paramedic	Total
Elizabethtown-Lewis EMS	40		40		80
Moriah EMS	80	40		0	120
Newcomb EMS				104	104
Schroon Lake EMS	80				80
Ticonderoga EMS	160				160

	EMT	AEMT	AEMT- CC	Paramedic	Total
Westport EMS		72			72
Willsboro-Essex EMS	20			40	60
<b>Total</b>	<b>380</b>	<b>112</b>	<b>40</b>	<b>144</b>	<b>676</b>

- Installation of a new computer aided dispatch program to improve reporting
  - Essex County 911 center completed an upgrade to their dispatching software that was completed in January 2024. This new software program will expand the capability of the County to track the performance of its agencies to appropriately respond to EMS calls. Two benefits of the new software include integrated EMS call triaging software and the capability of GPS tracking of EMS units.
- Development of paramedic education program
  - Elizabethtown Community Hospital has established a paramedic education program. This program has had five cohorts, including one that is currently underway. The program is supported by the UVM Health Network and has recently added satellite locations for student convenience although all the other locations are in neighboring counties or Vermont. The program will be starting a cohort every January.
  - The program has reported some initial success. However, there are challenges related to tuition costs, clinical opportunities for students, recruitment of new students, and staff retention.
- Transition to a new model of EMT education
  - North Country Community College has become an EMS Course Sponsor and has taken on the primary role of offering EMT original education in the County.
  - North Country Community College has also started a new AEMT program. The initial class has 14 students started in September will be paid for by grant funds.
  - As an EMT course sponsor, they have traditionally offered one EMT class in the county and a second one at the Saranac Lake Campus (just outside the county) each semester.
- Creation of county wide ambulance operating authority
  - Essex County has established a county wide ambulance operating authority that is the basis of its regular ALS first response efforts. They also periodically staff their ALS ambulance for large events, stand bys and to supplement the other services.
- Establishment of uniform response targets for ambulances
  - Essex County has established that first calls in a district should have a crew and ambulance enroute in eight minutes or a mutual aid ambulance will be dispatched. For second calls in a district, mutual aid will be dispatched at the time of the call. The



“home agency” can always choose to respond to a call if a crew is available, even if mutual aid has been dispatched.

- Investment in EMS Operations
  - Essex County has increased their expenditures directly related to EMS. This funding, including a state grant and reimbursements for service from Towns, has led to an increase in EMS funding from \$100,000 in 2018 to \$1,255,000 in 2023. The 2024 budget includes nearly \$2 million in total funding for EMS operations.
  - Essex County EMS is funded out of two separate funds in the County budget. The primary EMS fund focuses on the oversight and coordination of the EMS system. That fund has increased each of the last three years and is budgeted at \$127,000 for 2024. This is 48% more than the 2022 actual expenditures. It is funded fully out of the County’s General Fund.
  - The larger EMS budget is the portion of budget dedicated to the operations of the ALS first response vehicles and the contract staffing with a half dozen of the County’s ambulance services (list). This budget includes revenue from the Town’s reimbursing the County for the wages of the EMS personnel and the funding from the Municipal Restructuring Grant that the County received in 2019. In 2024, this budget was \$1.9 million with about 2/3rds coming from the grant, 1/3 from Town’s and a small share (\$25,000) coming from patient billing revenue. About 80% of the budget in 2024 is planned for staff expenses and about 16% for capital purchases. The remainder is to support the operations. Budget details are included in **Appendix B**.

## EMS Operating Environment

In addition to the accomplishments through the County, several of the Towns and other EMS services have made improvements to their operations in the last few years. Nearly all of the ambulance services in the County now have some paid staff to improve the likelihood of a prompt EMS response.

Agency	Staffing	Avg. Annual 911 Calls
AuSable Forks EMS	Primarily own paid, 24/7	464
Elizabethtown Community Hosp. Ambulance	Paid – focused on interfacility transfers	Does not respond to 911
Elizabethtown-Lewis EMS	Mix of own and County staff paid, some volunteers	414
Essex County EMS	Paid	495
Keene EMS	Fully Volunteer	71
Keene Valley EMS	Fully Volunteer	103



Agency	Staffing	Avg. Annual 911 Calls
Lake Placid EMS	Own Paid	792
Lamoille EMS	Own Paid	346 (911 Only)
Moriah EMS	Mix of Own Paid, County Paid, and Volunteers	567
Newcomb EMS	Mix Of Own Paid, County Paid and Volunteer Drivers	91
Saranac Lake EMS	Primarily own paid, 24/7 with some volunteers	Not dispatched by Essex County
Schroon Lake EMS	Mix of Contract Staffing from E5 and County Paid	407
Ticonderoga EMS	Mix of Contract Staff from Keena, County Paid and Volunteers	757
Westport EMS	County Paid and Volunteer	175
Willsboro-Essex EMS	County Paid and Volunteer	414
Wilmington EMS	Town Employees and Volunteer	182
Full County		5,460

## Local Government Cost of EMS

Several Towns have also created special ambulance districts to have dedicated funding sources for the EMS services that provide response to their towns. Additionally, other towns and villages are providing funding to the EMS services from their general funds. Reviewing data from the New York State Comptroller, towns, villages and fire districts spent at least<sup>2</sup> \$1.4 million in tax dollars to support the operations of local ambulances in 2023 or 2022. For the agencies that pay their staff, this likely doesn't include the benefits.

<sup>2</sup> This table only includes expenses that were indicated on the Annual Update Document that is submitted by the municipality to the NYS Comptroller and labeled as being for EMS or Ambulance. This table did not have expenses indicated for the Towns of Wilmington and Newcomb that both have municipal paid EMS providers.

Town	Most Recent Year Reported	Account Code	Amount
Crown Point	2022		None Reported
Chesterfield	2022		None Reported
Elizabethtown	2023		None Reported
Essex	2023	SM45404	\$22,833
Jay	2023	SM45404	\$242,100
Keene	2023		None Reported
Lewis	2023	A4504	\$50,750
Moriah	2023	A4504	\$59,044
Newcomb	2023		None Reported
North Elba	2023		None Reported
North Hudson	2022	A4504	\$84,823
Saint Armand	2023	A4504	\$37,279
Schroon	2024	District <sup>3</sup>	\$319,261
Ticonderoga	2022	A36254	\$71,500
Westport	2023	none	\$0
Willsboro		Not Avail	Not Reported
Wilmington	2023	none	\$0
<b>Village</b>			
Lake Placid	2023	none	\$0
Saranac Lake	2023	A36254	\$45,212
Keesville		Not Avail	Not Reported
<b>Fire District<sup>4</sup></b>			
Ausable-Chesterfield Keesville	2023	A4504	\$175,000
Keene Valley			Included in fire expense
Westport Fire District	2022	a4504	\$32,258
Keene Fire District	2023	A4504	\$12,000
<b>Budgeted Expenses</b>			<b>\$1,394,160</b>

<sup>3</sup> The Town of Schroon created an ambulance district that went into effect in 2024 to support their local EMS service.

<sup>4</sup> The list of fire districts only includes those that have an ambulance.

## Organizational Cost of EMS

Most of the EMS providers in Essex County are non-profit organizations that are required to file IRS-990 Tax Forms annually. The table below shows the information reported for either 2022 or 2023. The total expenditures for the non-profit EMS Agencies that serve Essex County is \$4.9 million. Nearly all of the agencies reported that their expenses exceeded revenue in that reporting year meaning that they had to use reserves to meet operating expenses. Some of the costs on the table below are supported by revenue from the tax districts above. Where that is identified on the forms, it is included in the separate column of Government Revenue.

Organization	Year	Government Revenue	All Revenue	All Expenses
Ausable Forks Vol Amb. Corp	2022	\$35,467	\$517,000	\$563,062
Elizabethtown Lewis Emergency Squad	2022	\$129,250	\$373,950	\$388,619
Keene EMS Inc	2022	\$0.00	\$54,034	\$22,689
Lake Placid Volunteer Amb. Service	2022	\$173,158	\$739,537	\$772,049
Moriah Ambulance Squad	2023	\$16,139	\$267,038	\$306,899
Saranac Lake Vol Ambulance	2022	\$311,037	\$1,204,503	\$1,473,689
Schroon Lake Emergency Squad	2023	\$77,064	\$713,070	\$703,593
Ticonderoga Emergency Squad	2022	\$70,000	\$324,306	\$427,802
Willsboro-Essex EMS	2021	\$50,700	\$343,150	\$194,027
<b>Total Reported</b>		<b>\$862,815</b>	<b>\$4,536,588</b>	<b>\$4,852,429</b>

The Keene Valley Fire District, LaMoille Ambulance, the Newcomb Volunteer Fire Department and the county itself do not report information to the IRS in this format.

## Total Cost of Operating EMS

The total cost of operating EMS in Essex County is difficult to determine for a single year. The best estimate would be to tally up the expenses of the non-profit ambulances (\$4.9 million), add the expense of the Essex County EMS system less the agency reimbursements for staff (\$1.4 million) and add an estimate for the services not included in the above (\$500,000) for a total of about \$6.8 million.

## Pay for EMS Providers

Increasingly, the people answering emergency medical calls for service are paid. Across the region and Country, there is significant competition for high quality EMS employees. The EMS employees for Essex County are represented by the CSEA and are paid according to a wage scale established by collective bargaining. Essex County employees have the highest hourly wages for AEMT, AEMT-CC, and EMT positions. They trail a few paramedic agencies that are in counties adjacent to Essex, but it appears to have the highest paramedic wages in the County.

The table below shows pay rates advertised in job openings, listed in contracts or provided by several agencies that operate in the County or an adjacent county. Several agencies asked for anonymity so only Essex County is shown specifically.

Employer	Position	Base Rate	Top Rate
Essex County	EMT	\$24.51	\$27.02
Private Agency	EMT	\$22.50	\$23.25
Non-Profit	EMT	\$19.00	
Hospital	EMT	\$18.54	\$30.44
Private Agency	EMT	\$18.00	\$24.00
Non-Profit	EMT	\$18.00	\$25.96
Private Agency	EMT	\$17.25	\$20.25
Hospital	EMT	\$17.08	\$26.46
Private Agency	EMT	\$15.75	
Essex County	AEMT	\$25.53	\$28.13
Private Agency	AEMT	\$23.50	\$24.25
Non-Profit	AEMT	\$21.35	
Essex County	AEMT-CC	\$26.55	\$29.29
Non-Profit	AEMT-CC	\$22.35	
Hospital	AEMT-CC or Paramedic	\$26.77	\$38.82
Private Agency	Paramedic	\$31.00	\$37.00
Private Agency	Paramedic	\$28.00	\$40.00
Essex County	Paramedic	\$27.57	\$30.39
Private Agency	Paramedic	\$26.25	\$27.00
Hospital	Paramedic	\$23.57	\$35.35
Non-Profit	Paramedic	\$23.35	

The above table does not include the value of the benefit package. In general, the benefit package offered by Essex County is more generous than those offered by any of the private agencies. The estimated living wage<sup>5</sup> in Essex County ranges from \$21.85 for a single adult without children to \$42.13 for a single working adult in a two-adult household with three children.

<sup>5</sup> This data comes from the MIT Living Wage calculator at <https://livingwage.mit.edu/counties/36031>

## Current Challenges

While there have been a number of key accomplishments, the EMS system in Essex County is still facing challenges that could impact the ability to respond to 911 calls and serve the residents of the county. The challenges below are identified as being the most pronounced.

- Recruitment and retention of paid staff
  - The pool of trained and certified EMS professionals in Essex County has dropped in the last seven years based on information from New York State EMS. During interviews, it was mentioned by several EMS employers that they struggle to find qualified applicants, particularly at the paramedic level. As an example, Essex County EMS has had a full time paramedic position open for more than a year with no qualified applicants.
  - Other agencies have chosen to use personnel that are not certified as EMTs to work with EMTs or paramedics to complete an ambulance crew.
- Retention of volunteers
  - While there are two noticeable exceptions in the Town of Keene, the remainder of volunteer EMS workforce is dwindling to the point that communities have added paid staff to ensure that they have adequate responders.
- New York State will sunset the AEMT – Critical Care level of certification on July 1, 2027
  - There are still several AEMT-CC that provide key staffing at the career and volunteer level in Essex County. There are opportunities for the individuals to upgrade their certification to become paramedics using distance learning education with limited to no clinical training. However, there is still the cost of tuition and the time needed to attend these courses.
- Overlap of administrative responsibilities of operating an EMS agency is a burden on volunteers
  - There are a dozen EMS agencies in the County that are led by volunteers. The administrative and financial tasks necessary to operate an EMS agency have increased significantly with additional reporting, a growth in regulations and continued financial challenges. The overall burden on the EMS system would be reduced if agencies consolidated their administrative functions
- Funding for the current Essex County EMS is supported a grant and will revert to a mix of the County and municipalities when the grant is over.
  - The Department of State awarded a \$6.5 million grant to Essex County that has helped fund the implementation of the new EMS program over the last five years. That grant funding will likely run out in 2025. It has been used to offset the costs of the EMT, AEMT-CC and paramedic staff for the municipalities. The money has been used to pay for employee benefits while the municipalities have paid for the employee's wages.

- Effective use of employees between calls
  - The employee utilization for responding to EMS calls is relatively low. For some of the stations, it is not unusual for an EMS provider to work an entire 12-hour shift (or several shifts) without receiving a call. While the employees do have some responsibilities related to checking the equipment, training, completing paperwork and maintaining their workspace, there is often downtime that might be turned into an activity that benefits the organization.

## Opportunities for Action

The suggestions below are a mix of immediate actions for the County to consider implementing and longer-term strategies that will need to be acted upon by a number of organizations.

- Allow more than 40 hours as base schedule for EMS Staff
  - It is common among EMS agencies to build a certain amount of overtime into the base schedule of its employees. Currently employees in the field are only scheduled for 40 hours. If they were voluntarily scheduled for 48 hours as a base, this would immediately provide a bump in available staff to help meet the community demands and help provide a better wage for the employees.
  - This will require an addendum to the CSEA agreement for this classification of workers.
  - This recommendation is given based on the continuous struggle to find qualified providers and could be revisited if staffing levels later increased.
- ALS at time of dispatch should be standard for high priority calls
  - The 911 center has instituted a call triage system for all EMS calls. However, the decision of whether or not an ALS provider is needed to respond is often left up to the discretion of the responding BLS providers. When ALS is available, the 911 center should assign it to a call at the time of dispatch. For agencies that have periodic ALS, they should establish a plan to ensure that ALS is dispatched from another agency promptly if they do not have the personnel available.
- Develop specific retention strategies for EMS
  - Retaining a skilled workforce is a challenge across the area. Essex County has quickly become one of the largest EMS employers in the region and is competing with a variety of employers for the EMS workforce. The benefit package and pay rates are at or near the top for the area. Studies of EMS workforce retention indicate that in addition to competitive pay, top priorities include a healthy work/life balance, opportunities for advancement and a supportive work environment. The County should conduct regular surveys of its workforce to gauge their engagement and job satisfaction to address concerns as early as possible.
  - Essex County EMS has among the highest pay scales in the County and it will need to remain at or near the top to continue to retain its staff.

- The development of a career ladder from a non-certified person interested in EMS to EMT and then paramedic should be developed for County employees. The traditional path in EMS requires that a person pay for their own education at the paramedic level and undergo the training on their own time. One potential solution is to identify qualified people who are committed to the area and support them as they move up the career ladder.
- One area that was identified in interviews was the need for workforce support such as childcare available into the evening and weekends. Also, there was concern about the availability of housing for all life stages.
- Lobby for county level EMS district
  - In New York, counties remain unable to create EMS districts that would allow them to segment the costs to the areas that receive the most direct benefit. Essex County should continue to work with the New York State Association of Counties to have appropriate legislation enacted. There are now more than twenty counties in the state that provide direct EMS care to the community. Many of them have varying levels of service based on the community needs and would benefit from being able to charge properties at different levels based on the EMS service they receive.
- Institute a full time EMS Coordinator position without patient care responsibilities
  - Leading a workforce of nearly thirty employees, managing a budget of \$2.0 million and supporting numerous educational activities requires a full time staff member. The current staffing model requires the EMS Coordinator to be available to staff a fly car regularly, up to 40 hours per week. While the EMS Coordinator should be available to respond to support other providers or during a high call volume, this should be an exception not a routine practice so that they can undertake leadership of some of the initiatives outlined in this report and others as they develop.
- Consider other revenue sources to support EMS
  - Across New York, County EMS services are most often funded through the General Fund budgets based heavily on property and sales taxes. Some counties have developed unique revenue streams based on vehicle registrations or parcels. An argument can be made in Essex County that a strong EMS system is essential to keep that County a viable tourist destination and therefore a portion of the hotel and short term rental taxes could be considered to support EMS.
- Expand the Advanced EMT level of care
  - While paramedic is the highest level of care in New York, the Advanced EMT level provides some key advantages and opportunities for improved patient care of the EMT. Essex County is offering the AEMT class in the Fall 2024 and this program could serve as a key strategy to fill the gap when the AEMT-CC program expires. This first course was paid for by grant funding and should continue to be supported by county funds.
- Support AEMT-CC to paramedic transition



- The County should strongly consider supporting its employees and the other AEMT-CCs in the county with financial incentives and tuition support to encourage them to become paramedics. This will likely involve only a half dozen or so individuals that wish to continue. Supporting them in this transition is an opportunity to invest in individuals that are already experienced professionals, most with years of service.
- Develop a youth recruitment strategy
  - Many of the current EMS workers started their careers as volunteers or through family connections. As the number of volunteers in the County is reduced, there will be few opportunities for the next generation of workers to enter through this pathway. There have been some efforts toward recruiting EMS staff from area high schools. There needs to be a concerted effort to encourage and incentivize new EMS staff at the high school level.
- Arrange a medic exchange program for EMS call volume
  - An anecdotal concern relates to newly certified EMTs that leave the profession shortly after they complete their certification because they do not feel ready to function as an EMT independently. One potential solution for this issue is to establish an exchange program where EMTs from lower volume agencies can ride with busier agencies to gain the requisite experience. Additionally, they could gain experience observing in one of the emergency departments after they become certified.
- Create a performance dashboard
  - Essex County EMS and the 911 Center already track the essential information related to agency performance. However, it is not shared with constituents on a regular basis. Now that the new CAD system has been implemented, it is easier to gather the data and translate it into a report that lets agencies and residents know how their EMS system is performing. Data points should include percent of calls covered by home agency, response time to serious calls, transport percentage, age distribution, transport destination, and ALS utilization.
- Distance learning for all levels of EMS training is essential
  - North Country Community College has the technology to conduct much of the EMS training remotely and the ECH Paramedic program uses a satellite location for some course work. This technology must be supported and expanded to ensure that distance to a class is not a barrier for EMS education.
- Identify down time value contributions
  - By the nature of EMS, there is always uncertainty about the call volume and in rural areas there is often substantial periods of downtime. When there are staff being paid to be ready, there can be a desire by the community to ensure that they are getting maximum value from the workforce. Beyond traditional activities such as training, equipment checks, and station maintenance, the EMS workforce should explore providing other value to the community through blood pressure clinics, wellness visits

to infirm residents, and prevention activities. They could also be considered for non-traditional tasks for other aspects of County government.

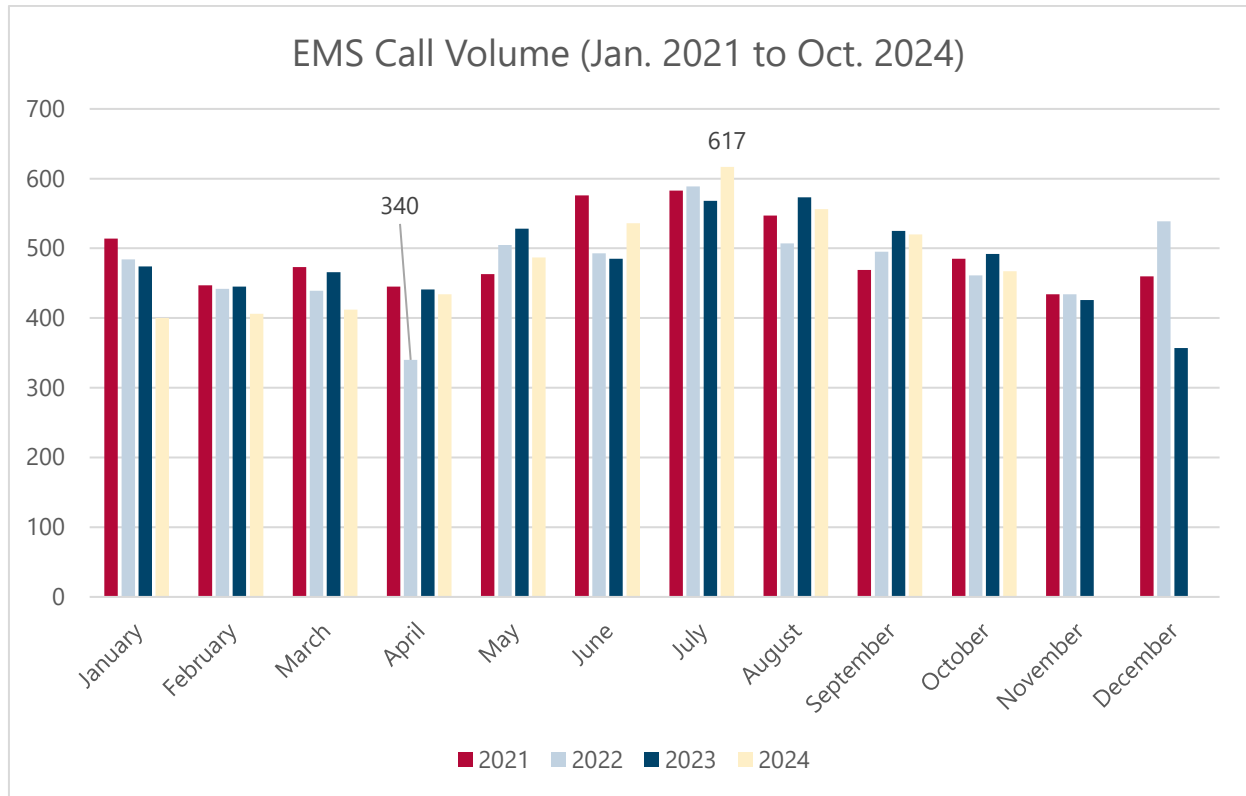
The opportunities for action will require the continued investment of time and money from the County and other EMS partners to continue to improve the EMS system. The Essex County Board of Supervisors, the communities they serve, the County Staff and the EMS providers all have a stake in improving EMS. The accomplishments of the last seven years are worth celebrating, but there remains a need for leadership and adequate funding to ensure that progress continues.

## Appendix A: Calls for Service Details

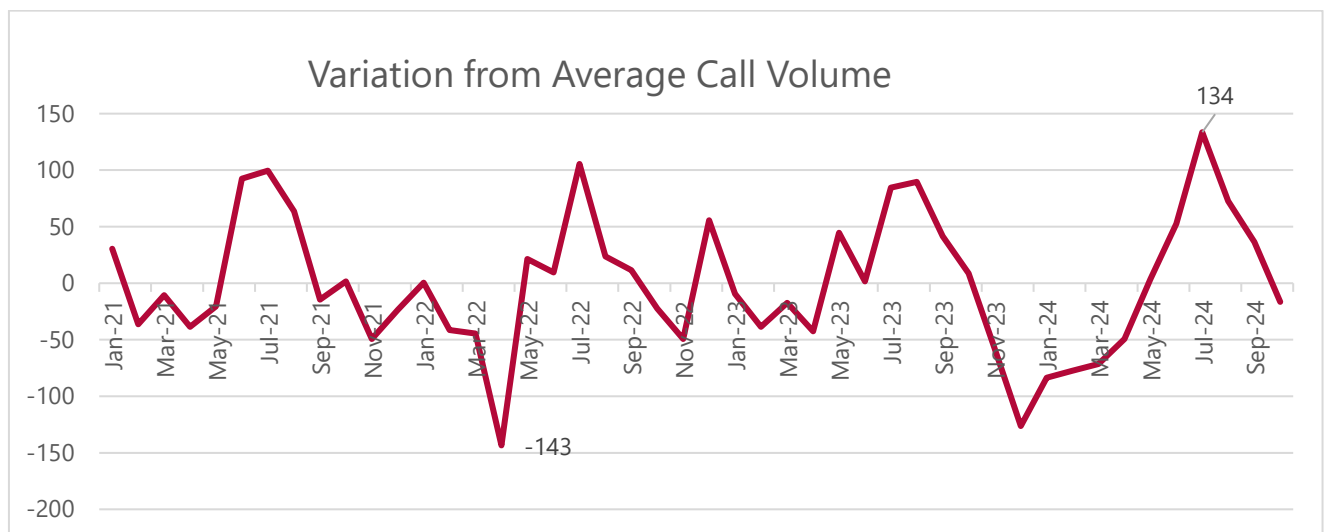
The call volume for Essex County has been relatively level over the last several years with 2024 on track to have similar totals to the last three years with a total call volume of about 5,800. The totals row includes some events that were dispatched to agencies out of the County(Long Lake) or are no longer in service (Crown Point and Minerva).

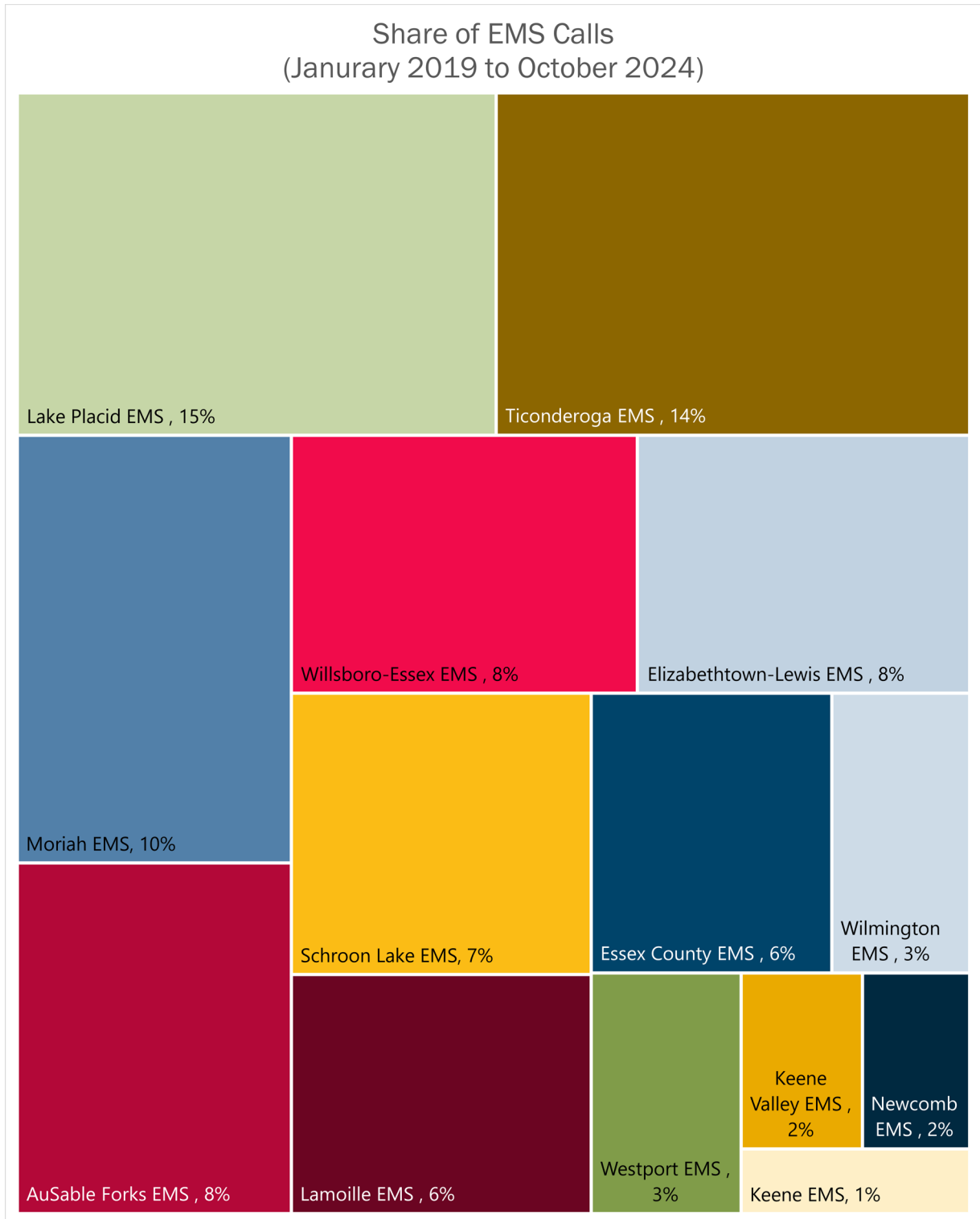
	2019 Annual	2020 Annual	2021 Annual	2022 Annual	2023 Annual	2024 Thru October	Monthly Avg	Annual Avg.
AuSable Forks EMS	449	465	442	488	490	375	38.7	464.4
ECH Ambulance	9	8	7	4	0	0	0.4	4.8
Elizabethtown-Lewis EMS	355	407	527	416	360	349	34.5	413.8
Essex County EMS			388	405	587	517	41.2	494.9
Keene EMS	77	56	61	87	66	69	5.9	71.3
Keene Valley EMS	125	93	91	90	107	96	8.6	103.2
Keeseville EMS	11	12	7	1	66	0	1.4	16.6
Lake Placid EMS	783	711	756	801	769	804	66.1	792.7
Lamoille EMS	543	311	351	408	226	183	28.9	346.6
Moriah EMS	541	534	615	612	598	405	47.2	566.6
Newcomb EMS	72	80	123	97	94	66	7.6	91.2
Schroon Lake EMS	295	252	429	480	506	416	34.0	407.7
Ticonderoga EMS	722	680	700	698	962	809	65.3	783.6
Westport EMS	180	165	164	194	176	138	14.5	174.3
Willsboro-Essex EMS	356	365	456	450	454	434	35.9	431.1
Wilmington EMS	168	185	179	211	171	174	15.5	186.5
Total Row	5213	4437	5896	5728	5780	4835	455.6	

The call volume in Essex County typically increases during the summer months. The busiest single month over the last four years was July 2024 at 647 calls and the slowest was April 2022 at 340.



Over the prior 46 months, Essex County has averaged about 455 calls per month or about 15 calls per day. However, there is noticeable variation from the average ranging from 143 calls lower to 134 calls over. While there are some seasonal trends, it is difficult to predict the changes in the volume.





The chart above shows the share of calls over a nearly five-year period. Essex County EMS was only fully functioning for four years. Chart doesn't total 100% because of out of county agencies and agencies that have gone out of business.

This engagement was not focused on a detailed review of the operations. However, we did analyze calls for service for the first five months of 2024. This limited sample was based on the availability of reliable information from the new dispatch system. The table below shows the distribution of calls by time of day. Of note, Essex County EMS is not on duty during overnight hours.

Department	Overnight 00:00- 03:59	Early Morning 04:00- 07:59	Morning 08:00- 11:59	Afternoon 12:00- 15:59	Evening 16:00- 19:59	Night 20:00- 23:59	Total	Daily Avg
AuSable Forks EMS	18	24	44	36	34	18	174	1.1
Elizabethtown Lewis EMS	15	19	31	23	27	17	132	0.9
Essex County EMS		17	90	71	56	5	239	1.6
Keene EMS	1		12	4	4	3	24	0.2
Keene Valley EMS	4	7	14	6	5	5	41	0.3
Lake Placid EMS	34	34	87	69	68	67	359	2.4
Lamoille EMS	7	13	11	8	16	18	73	0.5
Moriah EMS	20	16	45	34	33	28	176	1.2
Newcomb EMS	1	4	1	4	4	4	18	0.1
Schroon Lake EMS	11	24	41	36	58	35	205	1.3
Ticonderoga EMS	36	40	83	81	73	58	371	2.4
Westport EMS	4	8	16	12	12	5	57	0.4
Willsboro Essex EMS	17	24	40	39	38	22	180	1.2
Wilmington EMS	3	7	30	28	12	5	85	0.6
<b>Total</b>	<b>171</b>	<b>237</b>	<b>545</b>	<b>451</b>	<b>440</b>	<b>290</b>	<b>2,134</b>	<b>14.0</b>
<b>Share of Total</b>	<b>8%</b>	<b>11%</b>	<b>26%</b>	<b>21%</b>	<b>21%</b>	<b>14%</b>		

One frequent measure of an EMS system is the response time. Response times in the table below were calculated from the time that the agency received the call to the time they were reported to be on scene. There is no response time standard at a national or state level, but rather each organization and community consider what is appropriate. In rural and extremely rural areas, there are calls that will naturally have very long response times. Looking at all

calls in the sample, an ambulance was on scene 50% of the time in less than 9.2 minutes and 90% of the time in less than 21.4 minutes. Some agencies performed better, such as Ticonderoga and Essex County EMS. Others had longer response times that could be driven by the nature of their staffing or the size of their district. Lamoille, for example, responds to calls all over the county and often after the home agency has already been dispatched and is unavailable to respond.

Department	Calls - 1/1/2024 to 5/31/2024	50th Percentile	90th Percentile
Ausable Forks EMS	174	10.4 mins	24.4 mins
Elizabethtown Lewis EMS	132	9.7 mins	29.4 mins
Essex County EMS	239	7.8 mins	17.2 mins
Keene EMS	24	10.9 mins	16 mins
Keene Valley EMS	41	10.5 mins	15.2 mins
Lake Placid EMS	359	Not Avail	Not Avail
Lamoille EMS	73	12.5 mins	27.6 mins
Moriah EMS	176	10.2 mins	16.4 mins
Newcomb EMS	18	10 mins	22 mins
Schroon Lake EMS	205	8 mins	15.8 mins
Ticonderoga EMS	371	7.5 mins	18.8 mins
Westport EMS	57	12.9 mins	29.8 mins
Willsboro-Essex EMS	180	12.3 mins	25.5 mins
Wilmington EMS	85	9.5 mins	20.6 mins
<b>Total</b>	<b>2,134</b>	<b>9.2 mins</b>	<b>21.4 mins</b>

For critical calls, a quicker response is better, but in most cases a response of 20 to 30 minutes does not negatively impact the patient. The system does need to ensure that it is responding to critical calls in a timely manner through regular review of response times based on dispatch severity. In the future, the County and individual agencies should evaluate their response times to calls for service based on severity and time of day to ensure that the most serious patients . It is also reasonable to set response time targets for agencies to compare themselves to on a regular basis.



## Appendix B: EMS Budget Details

Essex County EMS is funded out of two separate funds in the County budget. The primary EMS fund focuses on the oversight and coordination of the EMS system. That fund has increased each of the last three years and is budgeted at \$127,000 for 2024. This is 48% more than the 2022 actual expenditures. It is funded fully out of the County's General Fund. The larger EMS budget is the portion of budget dedicated to the operations of the ALS first response vehicles and the contract staffing with a half dozen of the County's ambulance services (list). This budget includes revenue from the Town's reimbursing the County for the wages of the EMS personnel and the funding from the Municipal Restructuring Grant that the County received in 2019. In 2024, this budget was \$1.9 million with about 2/3rds coming from the grant, 1/3 from Town's and a small share (\$25,000) coming from patient billing revenue. About 80% of the budget in 2024 is planned for staff expenses and about 16% for capital purchases. The remainder is to support the operations.

### Fund 4540 EMS

Lines	Category	2022 ACTUAL	2023 REVISED BUD	2024 Approved
510010	WAGES	\$60,220.80	\$45,982.00	\$72,009.00
510101	H/I SICK VACATION CONTRACT	\$0.00	\$0.00	\$0.00
520011	TECHNICAL EQUIPMENT	\$0.00	\$0.00	\$0.00
520110	FEE < \$5,0000/INVENTORY Capital	\$0.00	\$2,600.00	\$2,600.00
541001	AUTO SUPPLIES AND REPAIR	\$17.68	\$0.00	\$0.00
541005	BOOKS AND PERIODICALS	\$0.00	\$117.00	\$200.00
541205	OFFICE SUPPLIES	\$0.00	\$1,000.00	\$1,000.00
541026	OTHER SUPPLIES	-\$58.75	\$0.00	\$0.00
541027	POSTAGE	\$0.00	\$100.00	\$100.00
541019	PRINTING	\$8.00	\$200.00	\$200.00
541033	SOFTWARE	\$0.00	\$287.00	\$0.00
541039	CLOTHING	\$0.00	\$750.00	\$750.00
542008	TELEPHONE	\$310.86	\$296.00	\$700.00
543001	GENERAL INSURANCE	\$189.00	\$273.00	\$287.00
546002	dues	\$0.00	\$100.00	\$100.00
546003	ADVERTISE	\$0.00	\$200.00	\$200.00
546006	Training Schools Conventions	\$125.00	\$4,500.00	\$4,500.00
546007	EDUCATION	\$0.00	\$500.00	\$500.00
546008	travel	\$278.62	\$3,500.00	\$3,500.00
546011	TRAVEL -MILEAGE	\$0.00	\$500.00	\$500.00
546040	Equip Repair	\$570.00	\$700.00	\$700.00
546041	Maintain	\$0.00	\$150.00	\$150.00
58100	Retirement	\$5,860.45	\$6,174.00	\$6,841.00

Lines	Category	2022 ACTUAL	2023 REVISED BUD	2024 Approved
581001	RETIRE Amortization	\$782.09	\$909.00	\$421.00
58200	Social Security	\$4,591.55	\$5,190.00	\$5,510.00
583000	Workers Compensation	\$100.00	\$100.00	\$100.00
584000	DISABILITY Insurance	\$42.00	\$72.00	\$72.00
585000	Health Insurance Premium	\$11,720.40	\$22,738.00	\$24,528.00
586300	586300 LIFE Insurance	\$78.00	\$0.00	\$0.00
	Total	\$84,835.70	\$96,938.00	\$125,468.00

### Fund 4541 EMS Consolidation

Lines	Category	2022 ACTUAL	2023 REVISED BUD	2024 Approved
A4541	EMS CONSOLIDATION Revenue			
416400.0	19-2 Fees	\$17,101.92	\$10,000.00	\$25,000.00
422100.0	19-2 Town Reimbursement	\$337,863.13	\$550,000.00	\$615,000.00
427010.0	Refund Prior Year	\$789.28	\$0.00	\$0.00
430890.0	HWB 22 State	\$28,000.00	\$0.00	\$0.00
434890.0	State	\$0.00	\$73,000.00	\$0.00
434890.0	19-2 State	\$0.00	\$1,037,547.00	\$1,286,502.00
440890	Federal Aid Other	\$7,535.50		
	Total Revenue	\$391,289.83	\$1,670,547.00	\$1,926,502.00
A4541	EMS CONSOLIDATION Expenses	2022 ACTUAL	2023 REVISED BUD	2024 Approved
510010	REG WAGES	\$54,122.89	\$0.00	\$0.00
510010	REG 19-2 WAGES	\$573,153.28	\$870,114.00	\$845,778.00
510010	REG ARA WAGES-ARA	\$5,000.00	\$0.00	\$0.00
510010	Reg HWB22 WAGES	\$0.00	\$0.00	\$0.00
510010	REG HWB23 WAGES	\$0.00	\$0.00	\$0.00
510020	PT WAGES	\$393.37	\$0.00	\$25,796.00
510020	PT 19-2 WAGES	\$11,316.50	\$136,578.00	\$267,032.00
510020	PT ARA WAGES-ARA	\$2,000.00	\$0.00	\$0.00
510030	Overtime 19-2 WAGES	\$46.10	\$0.00	\$0.00
510050	On call wages	\$189.00	\$0.00	\$0.00
510060	Longevity WAGES	\$0.00	\$200.00	\$0.00
510060	Longevity 19-2 WAGES	\$0.00	\$0.00	\$1,000.00
510090	H/I Buy Out WAGES	\$14,583.33	\$0.00	\$0.00
510090	H/I Buy Out 19-2 WAGES	\$0.00	\$8,000.00	\$8,000.00
520008	Auto Equip CAPITAL	\$0.00	\$73,000.00	\$0.00
520008	19-2 CAPITAL	\$6,932.65	\$50,000.00	\$300,000.00
520013	OTHER FFE 19-2 CAPITAL	\$40,541.01	\$0.00	\$0.00
520110	< \$500019-2 CAPITAL	\$0.00	\$2,000.00	\$0.00

Lines	Category	2022 ACTUAL	2023 REVISED BUD	2024 Approved
541001	Auto Supplies & Repair 19-2 REPAIRS	\$3,153.39	\$8,000.00	\$8,000.00
541002	AUTO-GAS	\$0.00	\$0.00	\$0.00
541002	Auto-Gas/Oil 19-2 SUPPLIES	\$6,051.23	\$15,000.00	\$15,000.00
541023	19-2Medical Supplies	\$6,427.26	\$15,000.00	\$15,000.00
541025	19-2 Office Supplies	\$128.00	\$0.00	\$0.00
541027	19-2 POSTAGE	\$143.80	\$0.00	\$300.00
541033	19-2 SOFTWARE	\$4,500.00	\$3,000.00	\$3,000.00
541039	19-2 CLOTHING	-\$1,801.99	\$5,000.00	\$5,000.00
543001	19-2 INSURANCE	\$4,076.00	\$1,448.00	\$1,521.00
546005	Med Fees EE Exams 19-2 EXAMS	\$0.00	\$1,000.00	\$1,000.00
546003	Advertising 19-2 FEES	\$745.50	\$1,000.00	\$1,000.00
546006	TRAINing	\$0.00	\$0.00	\$0.00
546006	19-2 TRAIN	\$2,040.00	\$5,000.00	\$5,000.00
546008	TRAVEL	\$0.00	\$0.00	\$0.00
546008	19-2 TRAVEL	\$890.06	\$1,000.00	\$1,000.00
546040	19-2 REPAIRS	\$95.00	\$5,000.00	\$2,500.00
547001	19-2 MISC	\$193,665.14	\$55,000.00	\$10,000.00
581000	RETIRE	\$6,095.04	\$19.00	\$0.00
581000	Retire 19-2 FRINGE	\$61,110.30	\$91,980.00	\$102,772.00
581001	Retire Amort 19-2 FRINGE	\$8,968.73	\$8,006.00	\$4,832.00
582000	Social Security	\$5,286.15	\$16.00	\$1,975.00
582000	19-2 FRINGE	\$43,144.41	\$75,377.00	\$83,560.00
582000	ARA FRINGE-ARA	\$535.50	\$0.00	\$0.00
582000	HWB22 FRINGE	-\$2,196.19	\$0.00	\$0.00
582000	HWB23 FRINGE	\$0.00	\$0.00	\$0.00
583000	Workers Comp 19-2 FRINGE	\$1,800.00	\$1,800.00	\$1,800.00
584000	DISABILITY INSURANCE	\$55.30	\$1.00	\$72.00
584000	19-2 DISABILITI	\$945.05	\$1,447.00	\$1,663.00
585000	Health Insurance Current	\$6,260.52	\$0.00	\$0.00
585000	Health Ins 19- 2 FRINGE	\$126,603.42	\$236,561.00	\$213,901.00
585100	Pharmacy 19-2 FRINGE	\$11,507.80	\$0.00	\$0.00
586100	BENEFIT -	\$0.00	\$0.00	\$0.00
586300	Met LIFE Premium	\$68.25	\$0.00	\$0.00
586300	Met Life 19-2 FRINGE	\$767.00	\$0.00	\$0.00
	Total Expense	\$1,199,342.80	\$1,670,547.00	\$1,926,502.00