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Essex County EMS Strategic Plan: Baseline Report and Strategic Priorities

Presented to County Board of Supervisors and EMS Community
April 24, 2017

Presentation Outline

- Project Background
- Baseline Report
- Strategic Planning
 - Mission and Vision
 - Priorities
 - Clinical Care
 - Education
 - Maintaining Workforce and Volunteers
 - Fiscal Management
 - Operational Support

Project Background

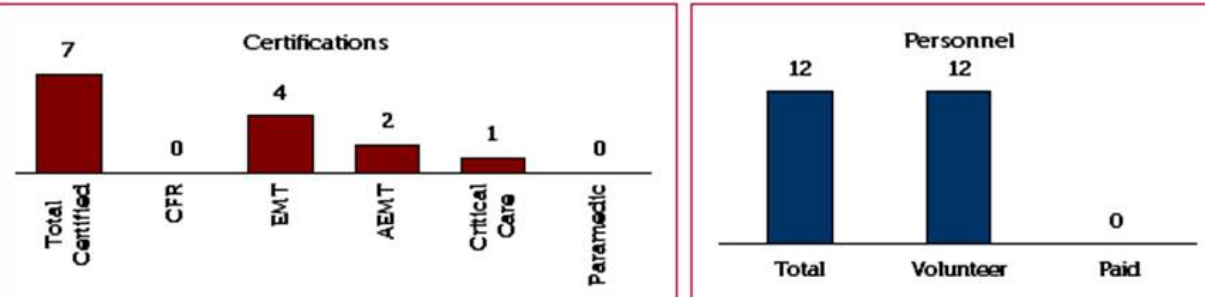
- Funded through Municipal Restructuring Fund Grant
- CGR was selected in July 2016 and began work in August
- Project scheduled to last 18 months
- Five visits Essex County to meet with stakeholders and learn about the EMS system
 - Met with someone from every agency
 - Visited all but 4 bases
 - Spoke with other key people such as medical directors, hospital staff, regional EMS program agency and county employees
- Not done yet, but moving to action phase

Baseline Report

- 80 page report that documents what exists for the EMS system in Essex County today
- County Overview of population and topography
- EMS System Overview regarding communications, coordination, education and hospitals
- EMS Agency Profiles describes the common characteristics of each agency
- Calls for Service in 2015 (from agencies)
- EMS Workforce Survey
- Findings, Immediate Actions and Next Steps

Keene Rescue Squad

Service Area <input type="text" value="Town of Keene"/>	Agency/Org Type <input type="text" value="Nonprofit, Corporation"/>
Bills for Service <input type="text" value="yes"/>	Org Structure <input type="text" value="Board of Directors"/>
Level of Service <input type="text" value="AEMT-CC"/>	Staff Type <input type="text" value="Volunteer"/>
	Membership Trend <input type="text" value="steady"/>



# EASVs or First Response Vehicles <input type="text" value="0"/>	# Ambulances <input type="text" value="1"/>
Cardiac Monitor Type(s) <input type="text" value="Zoll X"/>	Stretcher Type(s) <input type="text" value="Stryker Power"/>
Defib/PAD <input checked="" type="checkbox"/>	EpiPen <input checked="" type="checkbox"/>
Albuterol <input checked="" type="checkbox"/>	Glucometry <input checked="" type="checkbox"/>
Naloxone <input checked="" type="checkbox"/>	CPAP <input checked="" type="checkbox"/>

Population of Service Area (POSA) <input type="text" value="1,105"/>	Sq. mi. of Service Area <input type="text" value="156"/>
% POSA >= 65 <input type="text" value="18.8"/>	% POSA >= 85 <input type="text" value="5.0"/>

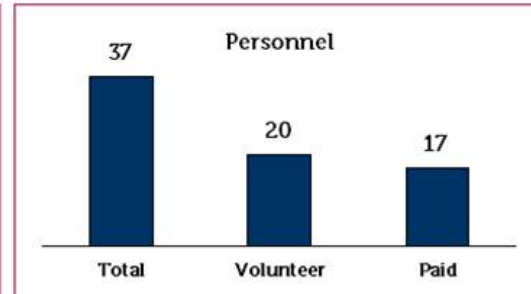
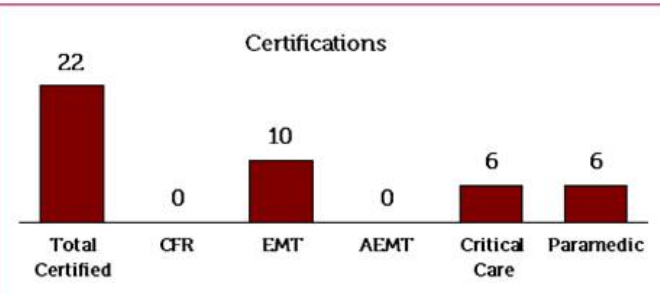
Total Calls Reported by Agency:

Service Times (hh:mm)	Chute	Response	Transport	Total Call
Median	<input type="text" value="0:06"/>	<input type="text" value="0:09"/>	<input type="text" value="0:15"/>	<input type="text" value="1:13"/>
80th Percentile	<input type="text" value="0:08"/>	<input type="text" value="0:13"/>	<input type="text" value="0:19"/>	<input type="text" value="1:29"/>
90th Percentile	<input type="text" value="0:09"/>	<input type="text" value="0:20"/>	<input type="text" value="0:21"/>	<input type="text" value="1:49"/>
Count* (n)	<input type="text" value="63"/>	<input type="text" value="63"/>	<input type="text" value="45"/>	<input type="text" value="58"/>

* Times are based on call data provided. Not all fields were completed for each call.

Lake Placid Vol Amb Svc, Inc

Service Area Lake Placid Village and Town of North Elba Bills for Service? yes Level of Service Paramedic	Agency/Org Type Nonprofit, Corporation Org Structure Board of Directors Staff Type Combo Membership Trend declining, had to hire vo
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# EASVs or First Response Vehicles 1	# Ambulances 3
Cardiac Monitor Type(s) Zoll M	Stretcher Type(s) Stryker Power and Manual
Defib/PAD <input checked="" type="checkbox"/> EpiPen <input checked="" type="checkbox"/> Albuterol <input checked="" type="checkbox"/>	Glucometry <input checked="" type="checkbox"/> Naloxone <input checked="" type="checkbox"/> CPAP <input checked="" type="checkbox"/>

Population of Service Area (POSA) 8,957	Sq. mi. of Service Area 152
% POSA >= 65 15.2	% POSA >= 85 3.1

Total Calls Reported by Agency 1071				
Service Times (hh:mm)	Chute	On Scene	Transport	Total Call
Median	0:03	0:07	0:18	0:57
80th Percentile	0:06	0:11	0:21	1:28
90th Percentile	0:08	0:15	0:23	1:55
Count* (n)	1067	986	870	1071

* Times are based on call data provided. Not all fields were completed for each call.

Top 20 Calls by Chief Complaint, 2015

<u>Breathing Problem</u> Count:410	<u>Chest Pain</u> Count:258	<u>Transport Only</u> Count:150	<u>Patient Fell</u> Count:144	<u>Syncope</u> Count:122	<u>Back Pain</u> Count:119
<u>Other-Not Specified by Agcy</u> Count:322	<u>Abdominal Pain (GI Distress)</u> Count:246	<u>Major Trauma</u> Count:110	<u>Frac- ture/Dis- location</u> Count:98	<u>Seizure/C onvul- sions</u> Count:88	<u>Head Injury</u> Count:84
<u>Pain</u> Count:304	<u>General Illness/ Malaise</u> Count:239	<u>Weakness</u> Count:103	<u>No Signs or Symptoms</u> Count:72	<u>Bleeding</u> Count:58	<u>Standby</u> Count:56
		<u>Mental/Psych/Behavior- ial</u> Count:101	<u>Unresponsive</u> Count:72		

Key Findings (1/2)

- The EMS system responded to 4,128 events in 2015, 11.3 responses per day countywide
- Only the five busiest EMS agencies respond to calls at a rate greater than one call per day and no agency averages more than two calls per day.
- Nearly all agencies meet the goal of having an ambulance responding to calls in less than 10 minutes 90 percent of the time and have ALS available
- No non-commercial ambulance reports being able to cover all their operational costs based on patient billings. More than half the agencies have a substantial reliance on property tax revenue.

Key Findings (2/2)

- Based on 2015 NYS DOH data, there are 215 certified EMS providers living in Essex County. 3 are CFRs, 159 are EMTs, 5 are Advanced EMTs, 37 are AEMT-Critical Care, and 10 are paramedics.
- Based on interviews, the share of calls covered by paid staff has increased in each of the previous 5 years.
- A majority of the key EMS providers are over 50 with a substantial percentage planning to leave the field in the next five to ten years.

Immediate Recommendations

- Shorten time interval for mutual aid
- ALS for serious calls, first response for critical calls
- Develop data dashboards and exception reporting to manage EMS
- Alert neighboring agencies to assist with mutual aid
- Develop a no fault QI process for critical events
- Work with REMSCO to develop training for low frequency skills

Essex County EMS Mission and Vision

- **Mission**

Provide timely, high quality, professional, out of hospital emergency medical care and transport to residents and visitors throughout Essex County

- **Vision**

Establish a sustainable cohesive evolvable system for emergency medical care in Essex County

Strategic Priorities

- Clinical Care Improvement
- EMS Education
- Maintaining Existing Workforce including Volunteers
- Fiscal Management
- Operational Support

Strategic Priority: Clinical Care

- Dashboard for System Management
- First Response to Echo Calls
- ALS to Calls that Need It
- Quality Improvement Process
- Community EMS
- Hands Only CPR Initiative
- CPR App Dispatch

Strategic Priority: Education

- Paramedic Program at Elizabethtown Hospital
- BOCES/High School EMT Training
- Flexible EMT Course Delivery
- Faculty In Residence program
- Next Generation Instructor Development
- State Funding of EMS Training
- CME Training
- Explore common record keeping

Strategic Priority: Maintaining Workforce

- Leadership Development
- Flexible scheduling
- Retirement
- Recruitment
- Volunteer Specific
 - Property Tax vs. Income Tax Credit
 - Bonuses (up to IRS rules)
 - Tuition reimbursement
- Recruit Volunteers for Auxiliary Jobs
 - Administration
 - Special Events

Strategic Priority: Fiscal Management

- Ambulances – group bidding
- Building Maintenance
- Information Technology
- Medical Supplies and Medications
- Uniforms
- Billing for Calls, where appropriate

Strategic Priority: Operational Support (1 /7)

- Goals of System
 - Chute time of 90 seconds for staffed, 8 min for volunteer
 - ALS to all serious calls and quick response to critical calls
 - System management with standard SOPs, strong leadership, admin support, effective training, integration with hospitals
 - Financially sustainable with tax for some services but leverage transport revenue as far as possible
 - Personnel
 - Career with living wage, retirement, benefits, path for advancement
 - Recognition and support to retain volunteers

Strategic Priority: Operational Support (2 /7)

- Base Service Model
 - Administration
 - 911 and dispatching
 - Training for both initial and continuing education
 - Purchasing of supplies
 - Mutual Aid Coordination
 - Quality assurance
 - Centralize billing/IT/ telecom

Strategic Priority: Operational Support (3 /7)

- EMS Response Models (Range of Options)
 - Status Quo can continue
to
 - Single agency providing all ambulance and ALS response services
- One Option to Consider –
 - Single agency providing primary ambulance and ALS response services to any municipality that elects to use them
 - Single agency would also provide mutual aid and support services (such as staff leasing) to any agency/municipality that would like it
 - Scalable to meet the demands of the community

Strategic Priority: Operational Support (4/7)

- Model developed based on 4 of 5 busiest agencies and 6 other agencies. Excludes 2 community, both commercial and the industry ambulance
- About 73 percent of population and 68 percent of 911 calls
- Respond to on average 7.7 calls per day
 - ALS = 4 x 24hr, 1 x 16 hr, 1 x 12 hr, 1 x 12 hr fly car
 - BLS = 1 x 24, 1 x 16 hr, 2 x 12 hr
- 388 hours of paid staffing each day/ 10 stations
 - 136 ALS hours
 - 252 BLS hours
 - Some hours could be volunteer
 - Currently, about 140 paid hours daily

Strategic Priority: Operational Support (5/7)

- Average wage = \$15.80 per hour
- Benefits at 60 % of wages
- Wages per day =\$5095
- Wages + Benefits per day = \$8407
- Operational Costs
 - \$82 per ambulance per day for \$820
 - \$30 for medical supplies per call for 7 calls for \$210
 - \$150 per day for station space
- Estimated Daily Cost of Model
 - \$9600 per day
 - For 5 transports per day, about \$3200 in revenue (\$640 per call)

Strategic Priority: Operational Support (6/7)

- Variations of Services
 - Staff Leasing to Agencies
 - The agencies remain in operation, but hire the resource to meet regular or temporary demands for staffing
 - Home agencies still responsible for all aspects of the business, except staffing is provided by agreement
 - Could be used for “respite” when key volunteers go on vacation or are injured/ill
 - Central agency provides services for defined time periods
 - For example, the central agency would provide services from 7:00 am to 5:00 pm weekdays, but the agency’s volunteer staff would handle other time periods
 - Or, the central agency would provide staffing for a special event

Strategic Priority: Operational Support (7/7)

- Potential methods to pay for the services
 - Revenue recovery by billing all patients
 - Service district
 - Whole county pays for basic level of service
 - Separate district for those receiving EMS response service
 - Communities are charged based on formula that may include:
 - Requests for service
 - Assessed value
 - Unit hours and type in community
 - Residential Population
 - Number of visitors
 - Presence of call generators such as senior living, health clinics, camps, parks

Strategic Planning Next Steps

- Work with Essex County EMS to implement some action items
- Further develop options models with ability to dynamically estimate costs and revenues
- Articulate benefit statement of model
- Identify other revenue streams to support EMS
- Work with steering committee and others to gauge support of different operational models
- The Baseline Report and Strategic Plan Document need to be shared with key constituents
 - All relevant documents will be posted on the project website:
 - www.cgr.org/essex-ems

Questions for Agencies and Communities

- Where will your agency be in 1, 5, and 10 years?
- How viable is current staffing model? Can it handle the stress of retirement, illness or moving away?
- How are the agency finances? Will it remain a “going concern”?
- How is the EMS response? Is it timely? Is it reliable?
- How is your clinical care? Is it measured? Would you trust them with your loved ones?

Going Forward

- Essex County EMS is faced with a variety of challenges from personnel retention and recruitment to the challenging finances of operating this essential service.
- This is a once in a generation opportunity to create a high performance EMS system that will be sustainable, cohesive, and evolvable for all residents and visitors in Essex County

Essex County EMS Strategic Plan

The creation of a strategic plan for Essex County EMS operations, to create a self-sustaining EMS system that provides excellent service to the residents and visitors to the county.

[HOME](#)[ABOUT THE STUDY](#)[MEETINGS](#)[DOCUMENTS](#)[GET INVOLVED](#)[MAP](#)[LINKS](#)

This website is designed to facilitate community engagement during the development of a strategic plan and specific action plans for the several agencies that provide EMS in Essex County.

Please check back often for updates, and be sure to sign up online to receive email alerts as new information is added.

[SUBSCRIBE TO ALERTS](#)[EMAIL STUDY TEAM](#)

The Process

The project will conduct a baseline survey of the existing EMS system in Essex County through a series of in-person interviews with key stakeholders, and data requests. Each transport agency will be asked to be a full participant and non-transporting first responders will be asked to provide limited information. CGR will present the gathered

The Advisory Committee

The process is being overseen by the Essex County EMS Advisory Committee, with the assistance from [CGR](#), a nonprofit management consulting organization with expertise in government management, public finance and municipal consolidation processes. The baseline report, Strategic Plan and Action Plans developed by CGR for the long-term

Feedback

The Essex County EMS Advisory Committee and CGR encourage public engagement in this process. Please submit your comments, questions and other feedback by [clicking here](#) and visiting the [public engagement page](#).