DUTCHESS COUNTY

EMERGENCY MEDICAL SERVICES TASK FORCE



FINAL REPORT March 2017

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EXECUTIVE SUMMARY

In his 2016 State of the County Address, Dutchess County Executive Marcus Molinaro announced the forming of an Emergency Medical Services Task Force to study the current state of, and to provide recommendations for improvement in, the delivery of Emergency Medical Services (EMS). He charged the Task Force specifically to identify, develop, and recommend county coordinated solutions for an EMS system with the attributes of being *Patient Centered, Consistent, Reliable, Affordable,* and *Sustainable.*

At the core of various challenges facing EMS that the ensuing Task Force report reviews, is the lack of a legal mandate that the provision of emergency medical care is an essential service, as are fire protection and law enforcement. Since its inception in the 1960s, EMS has evolved into an expected public service. The entity taking responsibility varies from jurisdiction to jurisdiction. Fire Districts direct most EMS activity in Dutchess County. However, in some areas, the local municipal government manages contractual relationships with commercial EMS providers. The New York Department of Health regulates an agency's certificate of need, authorizes patient care protocols, and certifies ambulances and EMS providers.

A multitude of providers, volunteer fire departments, career fire departments, volunteer ambulance corps, and commercial EMS agencies deliver EMS in Dutchess County. They vary in level of care from Basic Life Support Services (BLS) to Advanced Life Support Services (ALS). Some fire districts have contracts with commercial providers to provide ALS Services to assist their BLS Services, or use them as their primary response agency.

When experiencing an emergency, the level of care a patient receives in the county depends upon several factors, including their location, time of day, and day of the week. Some agencies utilize ALS crews on weekdays from 9am to 5pm, or roster their BLS crews only in the evenings and on weekends, or are unable to provide more than one ambulance at a time. A person therefore could receive very different care if calling for help at 4pm versus 6pm, or on weekends or evenings, or if they are the second or third person calling for help at the same time.

EMS in the county is severely strained, as demonstrated by lengthening response times and reduced levels of care, and in some cases, has failed the community as local services no longer exist or cannot respond, even if they appear on paper that they can. In early-2016, Dutchess County lost a commercial ALS ambulance provider, and a mere few months later lost a volunteer BLS fire department ambulance. In early 2017, a municipal fire department ALS transport ambulance service has changed to an ALS first response service only, and utilizes a commercial ALS provider for their transport needs.

The EMS Task Force report describes the complex challenges that have created the current state of pre-hospital care in the county, which is inefficient, inconsistent, non-standardized, fragmented and not patient centered. The same problem exists from state to state throughout the nation. At the federal level, EMS is not a mandated service, there exists no national authority, there is a lack of dedicated funding, and a lack of insurance reimbursement regulation. At the state level, the laws of 'home-rule' impede collaboration and shared-services, there exists insufficient funding and reimbursement, and a lack of standardized systems design. At the local level, there is inadequate operational coordination and

decision making, no standard acceptable level of service county-wide, poor public knowledge and perception, significant decrease in volunteer providers, and poor surge capability.

As detailed throughout this report, Dutchess County Government does not have specific jurisdictional authority to directly address all of the aforementioned issues and provide this important service. However, mechanisms and potential statutory options do exist to allow for this service to be provided from a county perspective which would require local agency and/or municipality relinquishment of authority. At this time, the EMS Task Force does not recommend this option.

The EMS Task Force has made several recommendations included in the report, the final being the consideration of an Emergency Service Authority. If the community agrees the establishment of an authority is the desired solution, the EMS Task Force recommends contracting with a consultant to develop the strategy and the implementation plan for creating the Emergency Service Authority. The consultant may identify challenges to overcome such as legal requirements and barriers, institute tactics for gaining political and emergency services community support, define authority powers and organizational structure.

ACKNOWLEDGEMENTS

Many thanks to the following people for their participation and contributions to the EMS Task Force from sectors such as Emergency Medical Services, Fire Services, and Public Health; county and local government; strategic planning within Dutchess County; county, town and village legal issues; finance and administration; and the historical context and significance of a variety of organizations as they relate to critical public services. Those members marked with an asterisk are on the EMS Task Force steering committee:

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Special Note

Marist College provided unwavering and exceptional support to the work and mission of the EMS Task Force and Steering Committee. The college, Dr. David Gavin and students from the School of Management spent countless hours analyzing millions of data points from the Dutchess County Office of Central and Information Services to create manageable and meaningful information, tables and infographics. Additionally, Dr. Gavin provided support as an advisor, guide, and mentor to the Task Force and Steering Committee. The Marist community demonstrated the integrity of their values in action: excellence in education, a sense of community, and a commitment to service.

GLOSSARY OF ACRONYMS

ACA Affordable Care Act

ACLS Advanced Cardiac Life Support

ACR Ambulance Call Report

AED Automated External Defibrillator

AEMT Advanced Emergency Medical Technician

AEMT-P Advanced Emergency Medical Technician - Paramedic

AHA American Heart Association

ALS Advanced Life Support

AMA Against Medical Advice

AMI Acute Myocardial Infarction

AMLS Advanced Medical Life Support

AMPDS Advanced Medical Priority Dispatch System

AMS Altered mental status
AVL Auto Vehicle Locator
BCLS Basic Cardiac Life Supp

BCLS Basic Cardiac Life Support

BEMS Bureau of Emergency Medical Services

BLS Basic Life Support

BNE Bureau of Narcotics and Exchange

BSI Body Substance Isolation
CAD Computer Aided Dispatch

CCU Critical Care Unit

CDC Centers for Disease Control

CE County Executive

CFR Certified First Responder

CIC Certified Instructor Coordinator

CLI Certified Lab Instructor

CME Continuing Medical Education

CMS Centers for Medicare and Medicaid Services

CON Certificate of Need

CPR Cardio-Pulmonary-Resuscitation
CVA Cerebro-Vascular Accident
DCC Dutchess Community College

DCDER Dutchess County Department of Emergency Response
DCEMSCO Dutchess County Emergency Medical Services Council

DCMAC Dutchess County Medical Advisory Committee

DNR Do Not Resuscitate

DOH Department of Health

DOT US Department of Transportation

DSRIP Delivery System Reform Incentive Payment Program (NYS)

GLOSSARY OF ACRONYMS Continued

EAP Employee Assistance Program

ECG (EKG) Electro-Cardio-Gram

ED Emergency Department

EMD Emergency Medical Dispatch

EMS Emergency Medical Services

EMT Emergency Medical Technician

EOC Emergency Operations Center

ePCR Electronic Pre-Hospital Care Report

ER Emergency Room

ETA Estimated Time of Arrival

FCC US Federal Communications Commission

FD Fire Department

FEMA Federal Emergency Management Agency

FR First Response (Agency)
HAZMAT Hazardous Materials

HVREMAC Hudson Valley Regional Medical Advisory Committee

HVREMSCO Hudson Valley Regional Emergency Medical Services Council

IAFC International Association of Fire Chiefs

ICU Intensive Care Unit
ITR Inability to Respond
IOM Institute of Medicine

IV Intravenous

LOSAP Length of Service Award Programs

MC Medical Control

MCI Multiple (Mass) Casualty Incident

MD Medical Doctor

MHRH Mid-Hudson Regional Hospital of Westchester Medical Center

MI Myocardial Infarction

MLSS Mobile Life Support Services, Inc.

MOI Mechanism of Injury

MOU/MOA Memorandum of Understanding/Agreement

Muni-CON Municipal Certificate of Need

MVA(C) Motor Vehicle Accident (Collision)

NAEMSE National Association of EMS Educators

NDP Northern Dutchess Paramedics

NEMSIS National Emergency Medical Services Information Systems

NFPA National Fire Protection Association

NHTSA National Highway Traffic Safety Administration

GLOSSARY OF ACRONYMS Continued

NICU Neonatal Intensive Care Unit

NP Nurse Practitioner

NREMT National Registry of Emergency Medical Technicians

NYS New York State
OB Obstetrics
OD Overdose

OEM Office of Emergency Management
OFPC Office of Fire Prevention and Control

PA Physician's Assistant

PAD Public Access Defibrillation

PALS Pediatric Advanced Life Support

PCR Patient Care Report
PD Police Department

PHTLS Pre-Hospital Trauma Life Support

PIO Public Information Officer

PPE Personal Protective Equipment

QA / QI Quality Assurance / Improvement

REMAC Regional Medical Advisory Committee

REMSCO Regional Emergency Medical Services Council
RHIO Regional Health Information Organization

RMA Refused Medical Assistance

RN Registered Nurse

RSI Rapid Sequence Intubation SCT Specialty Care Transport

SEMAC State Emergency Medical Advisory Committee
SEMSCO State Emergency Medical Services Council

SSM System Status Management

SWOT Strength Weakness Opportunity Threat

TAG Technical Advisory Group
TIA Transient Ischemic Attack
TOA Transfer of Authority

TQM Total Quality Management

VBMC Vassar Brothers Medical Center

WHO World Health Organization

WMD Weapons of Mass Destruction

EVOLUTION OF EMS

The current essential mission of Emergency Medical Services (EMS) is to treat and transport the ill and injured in the peri-hospital environment¹. EMS Systems (EMSS) are the complex sum of interconnected components working together to provide communities with emergent and comprehensive healthcare, given available operational, financial, legal, and political resources². EMS is a relatively new profession: the pre-hospital and post-hospital treatment and transport components only received recognition within the last 50 years; and 'community paramedicine' is a new model of integrated care utilizing facets of primary, social service, elder, specialized, and alternative care, treatment and transport³ fulfilling the vision from the 1990s that the profession would be community-based health management fully integrated with the overall health care system⁴. While EMS may fall under a variety of jurisdictions including public safety, public health, and others, the vision was that it would be an integrated agency among them⁴.

Just as communities vary greatly, so do their healthcare systems. EMS agencies in such systems may be different in organization and structure, and may provide more or less service based on their aforementioned resources. Historically, volunteers made up local EMS services, typically housed within fire departments, and organizations supplied a varying mix of either or both to their communities. Organizations provided essential services and also served as cultural and social centers, funded largely through donations. At the time, as is largely the practice today, local government recognized volunteer fire departments and first-aid squads as organizations providing such services to their municipalities. Today, however, a broader mix is more prevalent among organizational types (private, municipal, or non-profit), make up (career and/or volunteer), level of service, and funding (private pay or ability to bill for service, tax-based, or contract). Additionally, each combination of organizational type, make-up, level of service, and funding ability may have a slightly different mission / vision while purporting to fall under the umbrella of 'public safety', 'public health', or other similar designation.

For many reasons (a reduction in volunteerism; increased operating costs, training requirements, regulation, and/or demand for services) many of the current EMS organizations within the county operate inefficiently (high cost to service ratio), are not effective (provide inconsistent service that is dependent upon staffing and equipment – which varies among agencies) and do not provide equal coverage of services across the entire county. Some agencies, because of a lack of support from volunteers, have closed completely leaving entire populations without essential services. As such, throughout New York State there are many small, ineffective, inefficient, expensive agencies delivering EMS care.

In Dutchess County, 64 separate volunteer fire stations and 47 separate volunteer EMS stations exist. Each station is different in ability to respond, personnel coverage and availability, training, equipment, apparatus and services. All certified personnel and agencies, however, must meet a variety

¹ National Highway Transportation Safety Administration. (2013). *What is EMS?* Retrieved on January 28, 2014 from http://www.ems.gov/whatisEMS.htm.

² Gunderson, M. (2015). Principles of EMS system design. *Emergency Medical Services: Clinical Practice and Systems Oversight, Second Edition*, 1-16.

³ O'Meara, P., Stirling, C., Ruest, M., & Martin, A. (2016). Community paramedicine model of care: an observational, ethnographic case study. *BMC health services research*, 16(1), 1.

⁴ National Highway Transportation Safety Administration. (1996). *EMS Agenda for the Future*. (DOT Publication No. HS 808 441) Washington, DC: U.S. Government Printing Office.

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of minimum national and state standards and regulations to maintain operational status, regardless of efficiency or effectiveness. Responsibility for providing Fire and EMS services in New York State resides in local political subdivisions (county, city, town, or village). General municipal law requires cities and villages to provide fire protection, and allows towns and counties to provide fire protection directly or indirectly through contracted services or by recognition of service by a city or village⁵.

Regarding EMS, New York State General Municipal Law indicates political subdivisions of county, town, city or village *may* provide prehospital emergency medical services but does not implicitly indicate a municipality must or shall⁶. New York State Public Health Law grants the ability for an agency to provide EMS service by providing an operating certificate and regulates such services through Article 30, regardless of the type of service (municipal, private, not-for-profit) or level of service (First Response only – CFR, Basic Life Support – BLS, or Advanced Life Support – ALS). As such, an EMS agency may possess an operating certificate that covers a range of political subdivisions while a fire service may only operate, aside from mutual aid agreement, in a local political subdivision such as a village or city, or special district as subdivided by a town or county. To that end, New York State Constitution Article IX 'Municipal Home Rule Law' gives local municipalities the power to enact local law⁷, which can lead to a dramatic variance of service across larger political subdivisions. These are complex issues wherein fragmentation is fostered and there exist few subject matter experts at local levels to advocate for integration into a larger and more comprehensive system of care.

EMS DATA ANALYSIS

The Task Force found it necessary to determine the trend of certain data, as some of the objective tools in assessing the ability of an agency to meet the charge as set forth by the County Executive for a "County coordinated solutions for an EMS system must demonstrate the attributes of being *Patient Centered, Consistent, Reliable, Affordable,* and *Sustainable.*" To meet these guiding principles, the Task Force analyzed trends of data related to emergency requests; demographic data including population density and geographic location; distance and travel time in miles and minutes to area hospitals; inability to respond (ITR) and subsequent use of another agency's resources; and use of other services.

The Task Force utilized data from the Dutchess County Department of Emergency Response (DCDER) to ensure a reliable and standardized set of information for statistical analysis. The data were analyzed with Marist College in conjunction with Dutchess County Office of Central and Information Services. It was analyzed using Microsoft Excel and IBM SPSS Statistics 24 software. The components of the data sets listed in the Town-By-Town tables in the addendum reflect the following information:

At Scene: This is the time it takes an agency to arrive at a scene. It is calculated from the time of dispatch to the time the agency calls 'on-scene'. Some agencies may demonstrate lower response times because the agency 'rosters' crews at the station, because crews are already in

⁵ New York State Commission on Local Government Efficiency and Competitiveness. (2008). 21st Century Local Government. Retrieved on January 28, 2014 from http://www.nyslocalgov.org.

⁶ N.Y. GMU Law §122-b (n.d.). General Ambulance Services. Retrieved on January 28, 2014 from https://www.osc.state.ny.us

⁷ New York State Department of State. (1998). Adopting Local Laws in New York State. Retrieved on January 28, 2014 from http://www.dos.ny.gov/lg/publications.

ambulances and ready to respond, or because the alarms are closer to the locations where agencies staff ambulances or are physically located.

In Service: This is the time it takes an agency to call 'back in service' after the completion of an alarm. Alarm times for this data vary for a variety of reasons. Some agencies do not call 'back in service' until the crew returns to the border of their jurisdiction; in such a case their average inservice time may seem longer comparatively. Some agencies, especially commercial agencies, will call 'back in service' as soon as they arrive at the hospital; in such a case their average inservice time may seem shorter comparatively. Other factors include but are not limited to: the distance to a hospital (the further from a hospital the longer the in-service time), weather, traffic, road conditions, time of day, geography, patient condition, hospital acuity/capacity, and others.

Inability to Respond: This data presents the times that DCDER dispatches an agency and the agency does not respond to the alarm. Reasons vary but include the inability to staff ambulances, or crews are already on other alarms. In such a case, resources from other agencies must handle the alarm.

It should be noted, at no time did our data indicate a call went unanswered. If an agency could not respond another agency had to respond to the scene.

The Task Force compiled the data in the tables so that the reader could see a five-year trend of alarm time averages by year, and alarm volume by year. An additional column in the alarm time table presents a total average alarm time, while the addition column in the alarm volume table represents the total volume of alarms over the five-year timeframe.

The agency listed at the bottom of the sheet represents the 'home' agency in the town and other tables on the sheet represent mutual-aid agencies that responded to an alarm in the 'home' agency area. Such agencies could have responded because of a failure of the primary/home agency to crew, to manage multiple patients at a single incident alongside the primary agency, or to provide an additional level of care to a patient as requested by the primary agency (ex: advanced life support). The tables reflect the data of those mutual-aid agencies involved in responses out of their primary response area, into a neighboring agency's area, and do not reflect data for such agencies within their own response areas.

EMS TASK FORCE DESCRIPTIVE FINDINGS

Nationally

- EMS is not a mandated public service under federal law.
- There is no single federal agency guiding EMS.
- Multiple federal agencies set varying standards (Department of Transportation, Health and Human Services).
- There is no significant or dedicated funding similar to fire, law enforcement and emergency management.
- There are no national standards or benchmarks for the delivery of EMS; there are national standards to obtain and maintain provider certification/licensure.
- There is little to no knowledge across federal agencies regarding EMS.
- The national populace has little knowledge regarding EMS.
- As a result there is little acknowledgement of professional value to society and minimal influence for policy making, as in fire and law enforcement services.
- There is poor, inconsistent, and declining reimbursement from insurance companies.
- The Affordable Care Act may continue to negatively impact reimbursement.

New York State

- EMS is not a mandated public service under state law.
- EMS is housed in NYS Department of Health (NYS DOH), which has less than optimal funding and staff dedicated to EMS programs.
- NYS DOH promulgates patient protocols, baseline administrative and equipment requirements, and provider education. This does not sufficiently address the 5 attributes as outlined by County Executive Marcus Molinaro.
- NYS DOH does not have a centralized training arm similar to NYS Office of Fire Prevention and Control.
- NY is a Home Rule State, local agencies and municipalities set most of the service standards. This creates wide variations in service delivery between jurisdictions.
- Quality and consistency benchmarks are inconsistent across service boundaries.
- There is little to no oversight on quality or consistency of service delivery.
- There is little to no agreement on standardization/benchmarks for service delivery.
- The community-at-large has a lack of knowledge about EMS (i.e. "Ambulance Drivers").
- As a result there, is little acknowledgement of professional value to society and minimal influence for policy making, as in fire and law enforcement services.
- There are no consistent or dedicated funding or grant opportunities for EMS as compared to fire, law enforcement and emergency management.
- There is poor, inconsistent, and declining reimbursement from insurance companies.
- The Affordable Care Act may continue to negatively impact reimbursement.

County and Locally

- EMS is not a mandated public service under any local law.
- Since the local entities individually address (Home Rule) EMS there is not a systems approach
 which impacts delivery and quality of EMS.

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- Many local officials lack the experience and knowledge regarding EMS to make corporate or operational decisions.
- Most local decisions and solutions are developed without collaboration of local partners.
- Lack of acceptable standards for delivery of EMS.
- Inconsistent levels of service and response between jurisdictions.
- No centralized body to set standards and oversee delivery/operations, service is fragmented and inconsistent.
- Significant variation in agreements, in formality and standards, between fire districts and municipalities with commercial agencies (from verbal, handshake, to written contracts with variances in deliverables).
- These variations can and do result in inadequate coverage in some areas.
- Areas that have formal agreements, set response standards, dedicated units, responsibility and accountability processes in place, subsequently, have proven to have more reliable and consistent EMS coverage from commercial agencies.
- Based on the descriptive findings noted here and numerous societal changes, the previous model
 of strictly volunteer only service is extremely challenged at best. In some cases, the challenges are
 so significant; the service is no longer operational.
- The challenges and societal changes are likely to continue
- Every BLS Volunteer agency in the County has some type of prearranged response coverage.
- Automatic or prearranged aid should not be considered mutual aid
- Geography and demographics significantly impact the delivery of service and the quality/operations (i.e. rural vs. suburban)
- Delivery of EMS is traditionally fire based in Dutchess County, which creates unique challenges.
- The delivery of EMS has been supplemented by commercial services.
- Fire Districts are prohibited by NYS law from billing for services.
- County citizens have little knowledge regarding EMS.
- As a result there is little professional value to society and minimal influence for policy making.
- Varied sources, inconsistent, no dedicated funding.
- Poor or no reimbursement from insurances companies; impact of ACA.
- Limited understanding of usefulness of advances in information technology tools and lack of funding to implement new technologies.
- Limited to no healthcare system collaboration.
- Limited and inconsistent information on patient outcomes.
- No capacity for increase in volume or multi casualty event (surge).
- Fragmented and decentralized training for providers.
- No systemic approach to Quality Assurance/Quality Improvement.

Future

- The predicted increase in the aging population will increase EMS call volume.
- Data shows a 17% increase over the last 6 years (2011-2016)
- Projected change in geographical population density across the County.
- Continued decrease numbers of available volunteers county-wide.
- Decrease in EMS certified provider recruitment pool.
- EMS and emergency healthcare delivery changes (i.e. ACA, DSRIP, NYS regulations).

CONCLUSIONS

The EMS Task Force has developed the following conclusions concerning the provision of emergency medical care in Dutchess County. The conclusions drawn were guided by the 5 principles set forth by the County Executive: that an EMS system should be *patient centered, reliable, consistent, affordable and sustainable.*

Patient Centered

Many of the Task Force descriptive findings identified impact EMS operations specifically, with less impact on patient care. The NYS Basic Life Support and collaborative Advanced Life Support (ALS) protocols along with certification training and continuing education allow dedicated providers to provide excellent patient care. Evaluating patient care outcomes is disjointed due to the decentralized and fragmented nature of the current EMS system.

Regulatory Deficiencies

At the national, state and local level there are a variety of comparable circumstances that impact the delivery and effectiveness of EMS. The major influencer for the fragmentation and decentralization of the current EMS system is the lack of a federal agency responsible for EMS and that it is not a mandated public safety service. Other significant influencers include no dedicated funding, no agreed upon standard of response capability, level or quality of care, and no adopted benchmarks to evaluate delivery. All of these factors result in EMS having to be addressed at the local level. Current standards address baseline treatment protocols, administrative regulations and minimal equipment requirements at the state level. Moreover, there is little acknowledgement of the professional value to society and minimal influence for policy making, as in fire and law enforcement services.

Fragmented Delivery

There has been little to no collaboration between agencies or municipalities on EMS delivery leading to fragmented operations conducted at the local level. Decisions are based on the immediate individual community or agency need. There has been very minimal consideration for addressing the provision of emergency medical care from a regional or a multi-jurisdictional systems approach. Since there are no agreed upon standards and no central authority to enforce standards, the ensuing service often lacks effectiveness, especially involving the 5 guiding principles.

Diminishing Volunteer Capacity

Traditionally, EMS in Dutchess County has been provided by local fire department based volunteers. Over the last 20 years volunteer based services have seen a decline in the number of volunteers coupled with an increasing call volume. This trend has resulted in volunteer based services being supplemented by either career staff hired through the home agency or through formal and informal agreements with commercial ambulance services. Most volunteer agencies have experienced an increased reliance on commercial services to meet daily demand and in some departments the hiring of career staff has occurred. Each volunteer-based agency in the County has some form of prescheduled coverage every day.

Challenges for Career and Commercial Agencies

In the departments where volunteer resources have been replaced or supplemented by career staff, the ability to increase staffing has a significant impact on budgets and on the tax burden for the local taxpayer.

Commercial ambulances services operational costs continue to rise, while reimbursement from insurance carriers has not increased at the same pace. In fact, some insurance companies have actually decreased reimbursement rates and reimbursement is negatively impacted by the Affordable Care Act.

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The decreasing reimbursement has contributed to two commercial agencies ceasing operations in Dutchess County in recent years. Out of necessity, commercial agencies today require a financial subsidy from most municipalities or agencies they provide service to. The agencies and municipalities that are not providing a financial subsidy, for the most part, have no guarantee of response.

No Standards on Coverage

Within Dutchess County, there are various arrangements for supplemental EMS response between municipalities, fire departments and commercial EMS agencies.

The following are the types of variances that exist:

- No formal agreement or contract with a supporting agency: Agencies or municipalities that have no formal agreement in place are faced with response inconsistencies. At any given time, it is not known if a unit is available to respond. While commercial agencies make reasonable efforts to be available, there is no contractual mandate they do so. The void created by lack of committed resources has a direct negative impact on neighboring communities. Resources are pulled from another jurisdiction and must travel a greater distance to get to the patient. Thus, increasing the void in response capabilities.
- A formal written agreement with no subsidy for a supporting agency: Agencies or municipalities that have an agreement but no subsidy generally have an improved supporting response. However, without a subsidy there is no financial support or compensation for the agency to keep units available to respond.
- A Less than 24 hour coverage agreement and subsidy with a supporting agency: Agencies or municipalities that have an agreement with non-24 hour coverage with subsidy have a predictable response during the contract hours. For the most part, at least one unit is dedicated to that community. The challenge is a consistent response from either agency during the non-contracted hours. There are inconsistencies for the home agency and the supplemental agency in providing predictable and consistent service. The timeliness of the response and the level of care vary greatly based on the day of the week and time of the day.
- 24 hour coverage agreement and subsidy with a provider: Agencies or municipalities with 24 hour coverage whether through career staff or via contract with a commercial agency with subsidy, have consistent and reliable service for the routine EMS call volume in their community.

The Descriptive Findings and Conclusions noted in this Task Force report demonstrate that the current provision of emergency medical care is minimally patient centered, unreliable, inconsistent, fiscally costly and unsustainable. Moreover, the lack of a comprehensive systems approach produces inequitable levels of care and response to County residents. All of these attributes jeopardizes public safety and the overall well-being of our community.

THE VISION

In order for movement towards an EMS *system* we must first define the vision of a system that is *Patient Centered, Consistent, Reliable, Affordable* and *Sustainable*.

Patient Centered is the concept that the process for making decisions places the patient at the very core, not just in clinical care but in operational tactics as well. The focus is on the individual patient's needs and concerns not what may be the most convenient, fastest or least expensive for the provider or agency.

The requisite need for *Consistent, Reliable, Affordable* and *Sustainable* are self-evident as the descriptive findings describe an absence of these attributes. Essentially, the EMS system should have quality assurance, dependability to respond 24/7/365 with equitable level of care across the county and expenditures are strategically anticipated, accounted for and monitored.

The *system* exists for the patient, these attributes are not independent tenets, and they are intimately intertwined as in interlocking circles and should function as such.

OPTIONS AND RECOMMENDED SOLUTIONS

Current State of the System

Today the provision of EMS is fragmented, and the lack of effective coordination and accountability stand in the way of further progress and improved quality of care. In its current state, the EMS infrastructure will continue to degrade and the attributes of being patient centered, consistent, reliable, affordable, and sustainable will not be attainable. All stakeholders in the EMS system have an opportunity to move toward a more integrated and accountable system through fundamental systemic changes. The Task Force developed immediate, short-term, and long-term recommendations as identified below:

Immediate: Coordination of EMS Provider Education and Training

The Task Force recognized an immediate solution to a concurrent strength, weakness, and opportunity identified by the SWOT analysis as related to education. Many reputable organizations, course sponsors, and institutions provide necessary and quality education throughout the county, typically at low or no cost. However, providers have no centralized or standardized venue to access information about the availability of such education. As such, and through the work of Task Force members, Dutchess County EMS and Regional EMS committees, the Hudson Valley Regional EMS Council (HVREMSCO) approved the purchase and implementation of a new region-wide calendar system available to all providers and educators. The system will allow educators to post their training programs, and give providers access to find any training throughout the Region. This solution is currently being implemented across the six-county area of the Hudson Valley Region.

Immediate: Conduct Public Forums as well as Emergency Service Forums

There has been displayed interest on this subject expressed by members of the general public. Providing an opportunity to gather the input of the public, the user of the service, and **to** present the findings and recommendations of the taskforce is paramount. We are recommending a series of public forums spread throughout Dutchess County.

We are also recommending a separate series of presentations with the Fire and EMS community to discuss the findings and review the recommendations. The greater Fire and EMS community needs to be engaged and support the process of establishing a centralized EMS system

Intermediate: Political and Public Safety Education

EMS is highly regulated, has many complex nuances, and can be quite expensive to operate in order to provide quality service in a community. Too often, local leaders are forced by finances, limited knowledge, crisis, or urgent need to make quick and sometimes uninformed decisions. Local leaders may not have the ability to develop or implement a strategic long-term plan. Recent history demonstrates that circumstances force such personnel to identify the most convenient resource available at the least expensive cost, or completely cease operations which may negatively impact residents within the jurisdiction. Regulations and laws regarding EMS do not address, and there is limited impetus to find a solutions that are, patient centered, consistent, reliable, affordable and sustainable.

The current EMS infrastructure experiences significant changes to operations, educational requirements, and clinical care. Moreover, leaders in the EMS change regularly because individuals advance their careers by moving onto other professions or to other organizations and the voting public or agency membership (i.e. FD) elect new leaders.

As such, there exists a tremendous lack of legitimate guidance for such leaders. The Task Force recommends that the county develop a comprehensive standardized EMS leadership educational program inclusive of, but not limited to, the following, and available for all persons involved in the delivery, decision-making, guidance, and responsibility of providing EMS:

- History and development of EMS
- The governing structure for EMS
- Pertinent laws and regulations, including the CON and municipal CON process
- Major concepts in delivery of high quality EMS
- Service delivery models
- Funding models
- Challenges facing the clinical and operational delivery of EMS
- Collaboration/shared service and regionalization
- RFP and contract development

Dutchess County EMS Task Force Final Report

Intermediate: Citizens Advisory Committee

The Emergency Medical Services (EMS) Task Force is recommending the establishment of a Citizens Advisory Committee for EMS. The mission of the committee would be to collaborate work with local municipalities, providers, and the community at large to develop and implement solutions for EMS that are patient centered, reliable, consistent, affordable and sustainable.

The objectives for the Citizens Advisory Committee include:

- Identify community and provider expectations for the delivery of EMS
 - o do they expect an ambulance with trained personnel; what level of training (BLS, ALS)
 - o importance or value on the quality on the care provided
 - Identify local communities ability/desire to establish and maintain an effective EMS response that is equitable
- Provide education and guidance for local leaders on current laws, regulations, mission of EMS
- Identify models for the improvement of the provision of EMS that may be feasible within Dutchess County
 - Inclusive of regulatory considerations
 - Identify shared services opportunities
- Provide recommendations to local and county leaders to the most appropriate method/model for EMS provision in Dutchess County
 - consideration of an Emergency Services Authority

Long Term: Consideration of an Emergency Services Authority

In order to address the myriad of issues within the county's current delivery of EMS, a potential solution is the creation of an Emergency Services Authority. The objective of the authority would be to provide a coordinated solution for the delivery of EMS among its members, which could include individual agencies, and local municipalities, that is *Patient Centered, Consistent, Reliable, Affordable, and Sustainable*. Such an authority would allow those organizations involved in the delivery of EMS to continue their service to their community, and become an interdependent and symbiotic partner with the authority as well. It could be created, as an autonomous governmental agency, under an act of New York and Dutchess County Legislatures.

A countywide Emergency Services authority with a Board of Directors, Governance Board, Executive Officer, and employees, guided by a mission statement, would be able to set the direction for participating agencies to provide quality EMS⁸. Additionally, the authority will have the ability to create a vision of excellence in the delivery of emergency services, ability to be progressive and agile to meet the evolving needs of stakeholders in Dutchess County.

Adequate funding will drive the ability to provide EMS and potentially other essential services. Ultimately, the authority would need to be designed to receive and generate (billing) revenue and distribute resources based on regulations, procedures and policies as determined by the authorities Bylaws. Municipalities and agencies agreeing to participate in the authority would be required to meet minimum standards as outlined by the authority.

⁸ Public Authorities Law; PBA 2824 retrieved from: http://codes.findlaw.com/ny/public-authorities-law/pba-sect-2824.html on October 16, 2016

Dutchess County EMS Task Force Final Report

The process of creating the authority will start by providing education and information to stake holders on the benefits of creating an authority to provide a better and more sustainable service. The support of our local and state level elected officials so that effective legislation can be enacted, is imperative. Goals for engaging and informing elected officials include creating a proposed charter that will identify the mission, how the authority will receive funding, the services the authority will provide, and the makeup of the Board of Directors and/or Governance Board.

The Taskforce recommends contracting with a consultant to develop the strategy and the implementation plan for creating the Emergency Service Authority. The consultant may identify challenges to overcome such as legal requirements and barriers, institute tactics for gaining political and emergency services community support, define authority powers and organizational structure.

APPENDICIES

Agreements or contracts in place for EMS by agency/municipality

No contract in place:

- East Clinton
- Milan
- Pine Plains
- Stanford
- Tivoli
- Red Hook
- Rhinebeck
- West Clinton

Contract but no subsidy:

- Beacon
- City of Poughkeepsie
- Roosevelt
- Fairview
- Arlington Fire

Partial Coverage-Contract and subsidy in place:

- East Fishkill
- Pleasant Valley
- Union Vale
- Millbrook/Town of Washington

Contract with Subsidy-24/7 coverage

- Amenia (01/01/2017)
- Beekman
- Dover
- Fishkill-Town
- Fishkill-Village
- Hyde Park (Staatsburgh and Hyde Park Districts)
- LaGrange- career fire
- North East
- Pawling
- T/Poughkeepsie- New Hamburg Fire District
- Wappinger-Town
- Wappinger-Village

SWOT Analysis

LEVERAGING STRENGTHS			
SWOT	Comment on Current Strategy	Gap or No Gap	
Training	Numerous and frequent educational sessions. Sufficient instructors/lecturers Sufficient sponsors/hosts Sufficient labs/classroom space	Central coordination group Accessible training calendar Include specialize businesses (Laerdal)	
Radio System/911 Dispatch	Centralized 911 CAD – data and uniformity EMD	Share CAD data with EMS community – collate and make accessible. Standardized report per each agency New queries for specific data to drive decisions New technologies. Is 911 up to date and prepared for future?	
EMS Providers	Dedicated; collaborative; experienced; professional	Public recognition of value and knowledge of providers Engage providers throughout county. Conduct survey as to what motivates them and retains their services	
Hospitals	EMS liaisons; Medical Control	Bring hospital decision makers into discussions to identify ways they enhance & support EMS (i.e. support career path through scholarships, internships)	
Equipment	Sufficient; meet regulations, MCI trailers	Adequately distributed throughout county? Standardized throughout county (ePCRs)?	

MITIGATING WEAKNESSES			
SWOT	Comment on Current Strategy	Gap or No Gap	
Staffing	Insufficient number of providers, especially in volunteer sector; Lack of 24/7 coverage for entire county; pockets of areas with poor availability.	Educate county residents and politicians on major EMS challenges. Set minimum standard for entire county (i.e. 24/7 BLS transport for every resident with ALS intercept). Then develop plan to meet the standard.	
Coverage	See above - combined		
Financial: Cost Revenue Recovery	Tax base funding – costs increasing Some volunteer agencies operate on donations only FD unable to bill insurance (this alone will not solve funding issues)	Legislative changes – educate community, politicians, and policy makers (NYS DOH) Link volunteer agencies that rely on donations to FD tax base? Regionalization/consolidation evaluated for efficacy	
Interagency Relations (willingness to merge)	Agencies/departments unwilling to share resources for the greater good.	Share data to highlight issues/problem. Clearly identify issues and project future outcomes if not solved (potential impact to community and integrity/reputation of the agency).	

TAKING ADVANTAGE OF OPPORTUNITIES			
swot	Comment on Current Strategy	Gap or No Gap	
Political Influence	Community and politicians are beginning to become engaged	Increase outreach to Community & politicians. Invite to Task Force forums. Develop White paper and Task Force report.	
Technology	ePCR; data analysis; websites; social media	Assist all agencies to obtain ePCR capability Develop/use current technology to collate data Leverage technology in the provision of patient care	
Redesign EMS System: Community Paramedicine Regionalization /Shared Services		Enhance career options that support residents needs and work alongside current healthcare professions (i.e. home care; discharge planners, public health) Use current and predictive data to identify weaknesses, set a minimum standard for the community; and to support regionalization/consolidation/share d services	
Public Relations and Education on EMS		Increase PR to highlight the value of EMS, providers, and Community needs. Educate politicians and residents on EMS. Engage private businesses to help (Laedral, colleges, healthcare facilities) – have a fund to support a PR person?	

MITIGATING THREATS		
SWOT	Comment on Current Strategy	Gap or No Gap
Availability Recruitment / Retention	Time constraints Training requirements Requirements to maintain "active" status Work-family life balance Other commitments (volunteer for other organizations) If career – multiple jobs to make living wage.	Look to agencies with adequate volunteers for the community & membership demographics for their service area; why are they doing ok? County-wide recruitment effortsunified approach to highlight benefits and requirements. Ensure all volunteers have minimum "benefits" (LOSAP, insurance coverage or low cost group coverage).
Aging Population Increased Call Volume Healthcare Trends		Census projections for next 10-20 years? May not have pool of people to volunteer (aging population). May have to go to all paid staff EMS system. Healthcare trendsaging in place and effects on community resources (healthcare, public health and social services) – Community Paramedicine. Collaborate with homecare agencies and public health.
Finance: Funding Sources Revenue Recovery Taxes		Mid to long term goal would be legislative changes to support EMSFD billing, Federal/State funding stream, county wide –multiagency collaborative grant applications
Value of EMS: Status/Worth		Increase PR and political influence to ensure EMS providers at same level (status and access to support service/funds) to FD/PD.

Dutchess County EMS Task Force Final Report

Recommended Reading

Previous Dutchess County reports:

Changing Times in the Fire Service; 2003 Paving the Way to the Future Symposium; 2006

Other NYS County EMS reports:

Greene County

http://www.gccatf.org/pdf/Final%20CGR%20Report.pdf

Madison County

https://www.madisoncounty.ny.gov/sites/default/files/madisoncty_finalfinal_june2016_rev.pdf

National publications:

Innovations in EMS:

http://dot.sinaiem.org/

Emergency Medical Services: Decreasing Revenue and the Regulated Healthcare Environment: http://healthfinancejournal.com/index.php/johcf/article/view/51

National EMS Assessment:

http://www.ems.gov/pdf/2011/National_EMS_Assessment_Final_Draft_12202011.pdf

EMS Agenda for the Future:

http://www.ems.gov/pdf/2010/EMSAgendaWeb 7-06-10.pdf

Accidental Death and Disability:

https://www.ems.gov/pdf/1997-Reproduction-AccidentalDeathDissability.pdf

Town by Town Infographics and Agency Alarm Data

The following pages present the data gathered by the Task Force, compiled and summarized as explained in the EMS System Data and Analysis section above. The Task Force arranged the following pages alphabetically by township and then by agency within the township. Any abbreviations within the following pages correlate as follows:

14024	City of Poughkeepsie	MIFD	Milan
AMFD	Amenia	MNFD	Millerton
ARFD	Arlington	NHFD	New Hamburg
BEFD	Beekman	NKFD	New Hackensack
BNFD	City of Beacon	PAFD	Pawling
CHFD	Chelsea	PPFD	Pine Plains
CPFD	Castle Point	PVFD	Pleasant Valley
DEC	NYS DEC Property	RBFD	Rhinebeck
DJFD	Dutchess Junction	RCFD	Rhinecliff
DOFD	Dover	RHFD	Red Hook
ECFD	East Clinton	RMFD	Rombout
EFFD	East Fishkill	ROFD	Roosevelt
FAFD	Fairview	SBFD	Staatsburg
FIFD	Fishkill	STFD	Stanford
GLFD	Glenham	TIFD	Tivoli
HIFD	Hillside	UVFD	Unionvale
HPFD	Hyde Park	WAFD	Wappinger
HUFD	Hughsonville	WCFD	West Clinton
LAFD	Lagrange	WPFD	Wappingers
MBFD	Millbrook		

The committee provided notes within each of the following pages, to assist the reader in understanding the complex and diverse nuances among the various townships and agencies and how they address the provision and delivery of emergency medical care.

Infographic Key of Symbols:

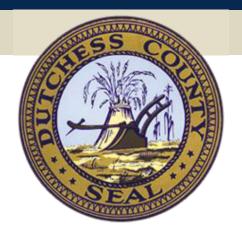


EMS Basic Life Support Agency (Squad or Corp)

EMS Basic Life Support Agency (Fire Department Based)

EMS Advanced Life Support Agency (Commercial)

EMS Advanced Life Support Agency (Fire Department Based)



Town by Town Infographics

Town by Town Infographics and Agency Alarm Data

The following pages present the data gathered by the Task Force, compiled and summarized as explained in the EMS System Data and Analysis section. The Task Force arranged the following pages alphabetically by township and then by agency within the township. Any abbreviations within the following pages correlate as follows:

•	14024	City of Poughkeepsie
•	AMFD	Amenia
•	ARFD	Arlington
•	BEFD	Beekman
•	BNFD	City of Beacon
•	CHFD	Chelsea
•	CPFD	Castle Point
•	DEC	NYS DEC Property
•	DJFD	Dutchess Junction
•	DOFD	Dover
•	ECFD	East Clinton
•	EFFD	East Fishkill
•	FAFD	Fairview
•	FIFD	Fishkill
•	GLFD	Glenham
•	HIFD	Hillside
•	HPFD	Hyde Park
•	HUFD	Hughsonville
•	LAFD	Lagrange
•	MBFD	Millbrook

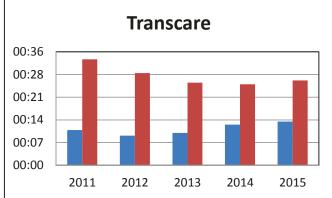
•	MILD	Millan
•	MNFD	Millerton
•	NHFD	New Hamburg
•	NKFD	New Hackensack
•	PAFD	Pawling
•	PPFD	Pine Plains
•	PVFD	Pleasant Valley
•	RBFD	Rhinebeck
•	RCFD	Rhinecliff
•	RHFD	Red Hook
•	RMFD	Rombout
•	ROFD	Roosevelt
•	SBFD	Staatsburg
•	STFD	Stanford
•	TIFD	Tivoli
•	UVFD	Union Vale
•	WAFD	Wappinger
•	WCFD	West Clinton
•	WPFD	Wappingers

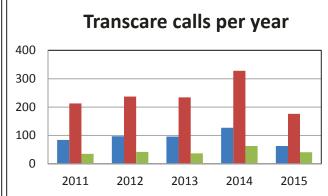
Milan

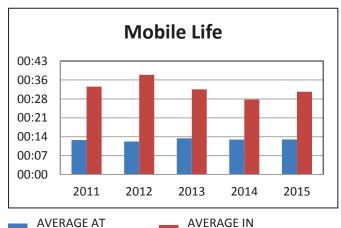
- The committee provided notes within each of the following pages, to assist the reader in understanding the complex and diverse nuances among the various townships and agencies and how they address the provision and delivery of emergency medical care.
- Infographic Key of Symbols:
- HOSPITAL
- EMS Basic Life Support Agency (Squad or Corp)
- EMS Basic Life Support Agency (Fire Department Based)
- EMS Advanced Life Support Agency (Commercial)
- EMS Advanced Life Support Agency (Fire Department Based)

Castle Point

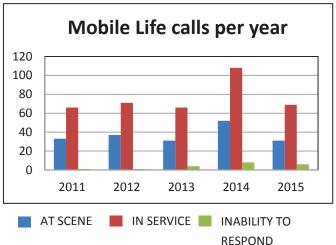
SCENE TIME

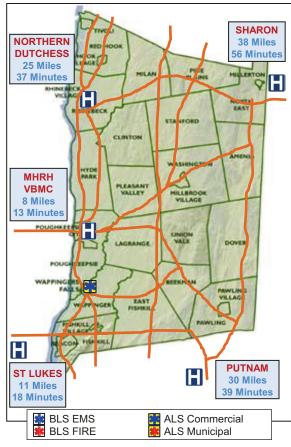






SERVICE TIME

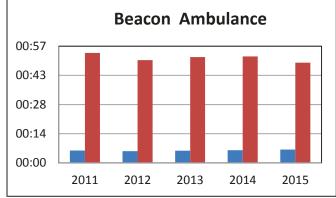


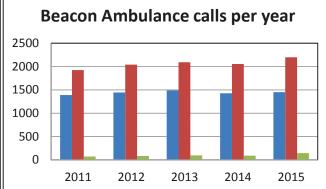


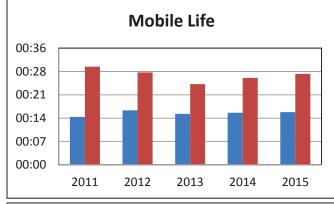
Population	5,522
Square Miles	1.2
Population Density (0-7500)	4,983

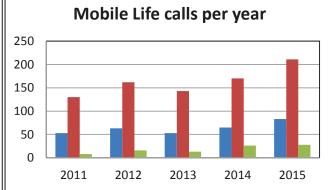
EMS Providers		
Mobile Life	Commercial	ALS AMB

City of Beacon

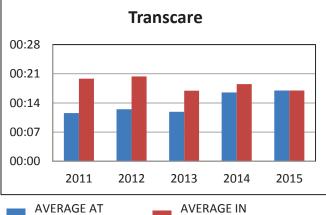






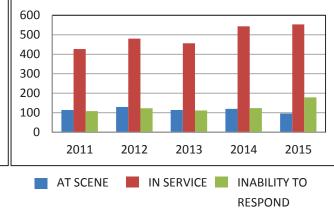


Transcare calls per year



SERVICE TIME

SCENE TIME



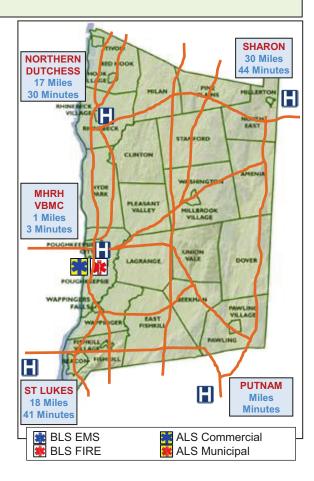


Population	15,541
Square Miles	4.9
Population Density (0-7500)	3,333

EMS Providers		
Beacon Ambulance Career +Volunteer BLS AMB		
Beacon FD	Career	No TXP
Mobile Life	Commercial	ALS AMB

City of Poughkeepsie

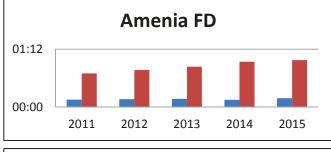
Pending data coordination with the City of Poughkeepsie.

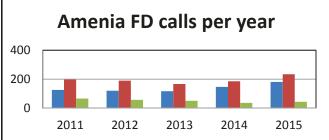


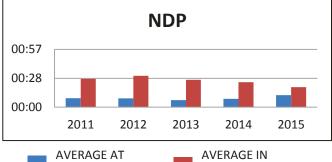
Population	32,736
Square Miles	5.7
Population Density (0-7500)	6,418

EMS Providers		
Mobile Life	Commercial	ALS AMB
Poughkeepsie FD	Career	No TXP

Town of Amenia (1 of 2) Amenia

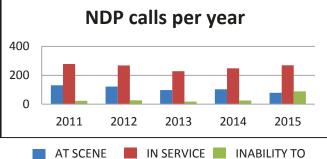






SERVICE TIME

SCENE TIME



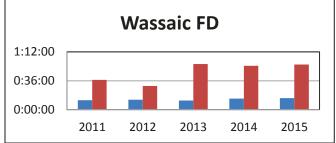
RESPOND

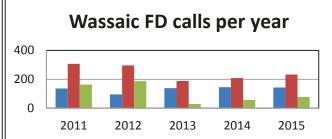


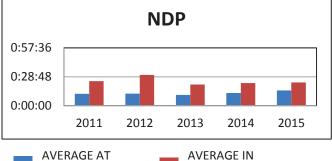
Population	4,436
Square Miles	43.6
Population Density (0-7500)	103

EMS Providers		
Amenia FD	Volunteer	BLS AMB
Wassaic FD	Volunteer	BLS AMB (until Aug. 2016)
NDP	Commercial	ALS AMB

Town of Amenia (2 of 2) Wassaic

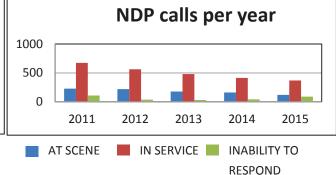


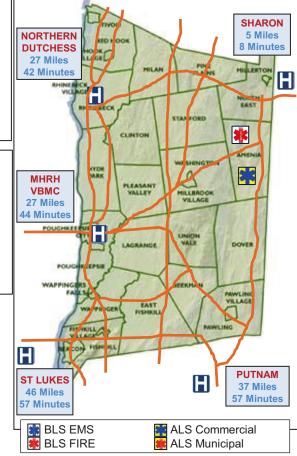




SERVICE TIME

SCENE TIME

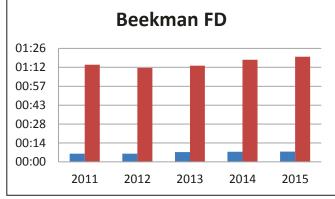


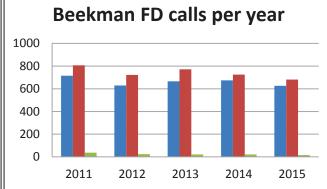


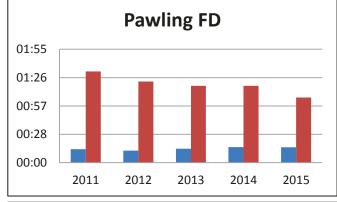
Population	4,436
Square Miles	43.6
Population Density (0-7500)	103

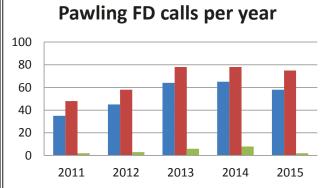
EMS Providers		
Amenia FD	Volunteer	BLS AMB
Wassaic FD	Volunteer	BLS AMB (until Aug. 2016)
NDP	Commercial	ALS AMB

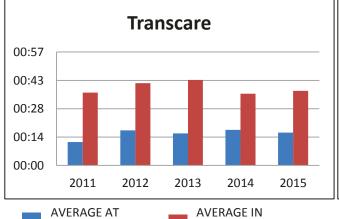
Town of Beekman





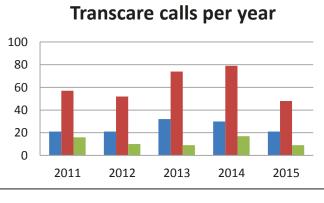






SERVICE TIME

SCENE TIME



IN SERVICE

INABILITY TO

RESPOND

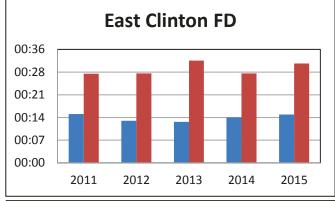
AT SCENE

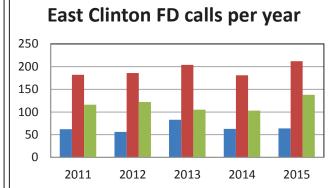
NORTHERN DUTCHESS 36 Miles 45 Minutes MHRH VBMC 16 Miles 30 Minutes POUGHTEFFE WAPPINGES LAGRANGE WALLEY WALLEY MALLENTON LAGRANGE MALLENTON LAGRANGE POUGHTEFFE WAPPINGES 24 Miles 33 Minutes PUTNAM 20 Miles 34 Minutes
BLS EMS ALS Commercial ALS Municipal

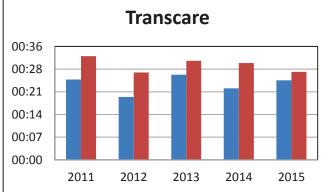
Population	14,621
Square Miles	30.3
Population Density (0-7500)	490

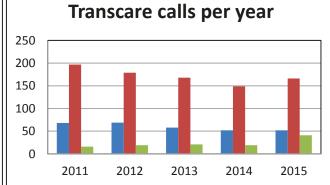
EMS Providers		
Beekman FD	Volunteer	BLS AMB
EMSTAR	Commercial	ALS AMB

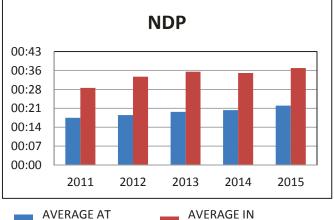
Town of Clinton (1 of 2) East Clinton





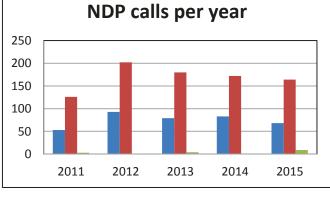






SERVICE TIME

SCENE TIME



IN SERVICE

INABILITY TO

RESPOND

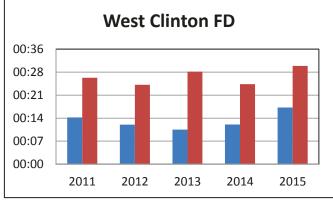
AT SCENE

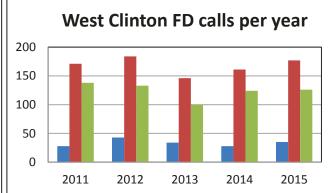
NORTHERN DUTCHESS 19 Miles 24 Minutes HEAN HEA
MHRH VBMC 15 Miles
POUGHEEPSIE WAPPINGERS FAST WAPPINGERS FAST FISHELL FRANCING FAWLING FAWLING FAWLING FAWLING FAWLING FAWLING FAWLING FAWLING FAWLING
ST LUKES 38 Miles 42 Minutes ALS Commercial
↓ BLS EMS ♣ ALS Commercial ★ BLS FIRE ♣ ALS Municipal

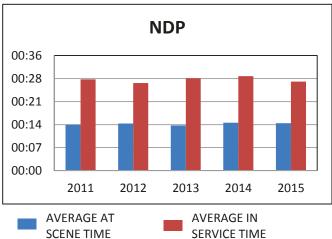
Population	4,312
Square Miles	38.8
Population Density (0-7500)	113

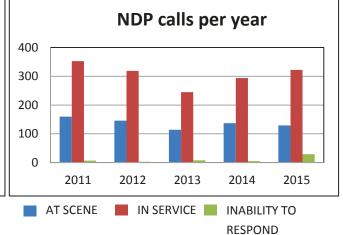
EMS Providers			
East Clir	nton FD	Volunteer	BLS AMB
West Cl	inton FD	Volunteer	BLS AMB
NDP		Commercial	ALS AMB

Town of Clinton (2 of 2) West Clinton







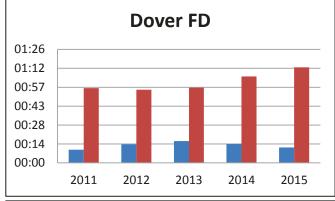


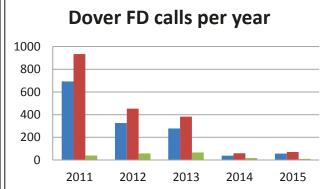


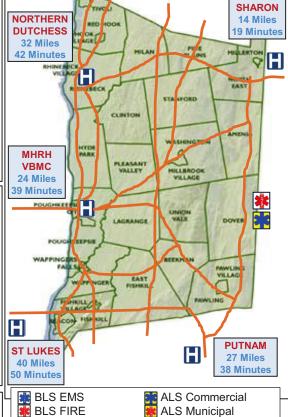
Population	4,312
Square Miles	38.8
Population Density (0-7500)	113

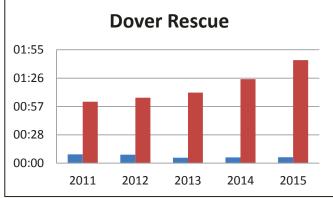
EMS Providers				
East Clinton FD Volunteer BLS AMB				
West Clinton FD	Volunteer	BLS AMB		
NDP	Commercial	ALS AMB		

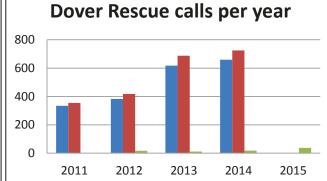
Town of Dover

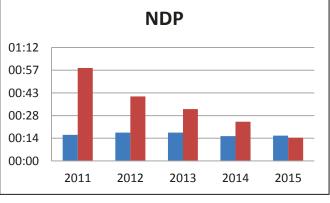


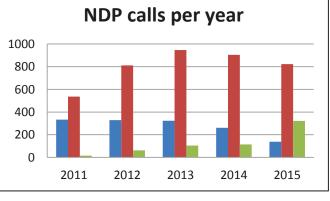












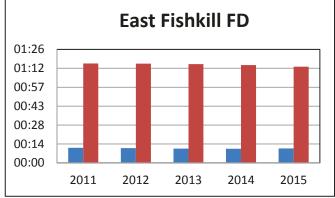
Population	8,699
Square Miles	56.3
Population Density (0-7500)	158

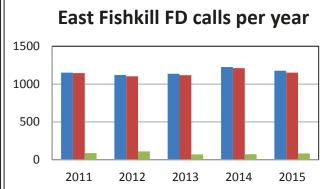
EMS Providers			
Dover FD	Volunteer	BLS AMB	
NDP	Commercial	BLS +ALS AMB	

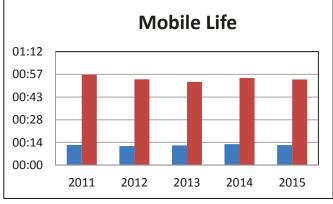
AVERAGE AT	AVERAGE IN
SCENE TIME	SERVICE TIME

AT SCENE IN SERVICE INABILITY TO RESPOND

Town of East Fishkill





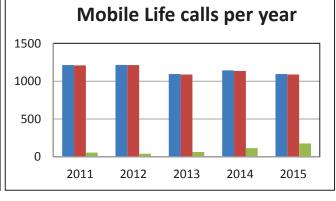


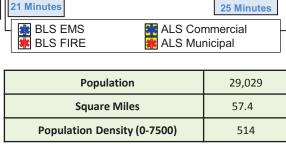
AVERAGE IN

SERVICE TIME

AVERAGE AT

SCENE TIME





CLINTON

NORTHERN

DUTCHESS

37 Miles

43 Minutes

MHRH

VBMC

15 Miles 29 Minutes SHARON

35 Miles

49 Minutes

EAST

HILLEROOK VILLAGE

H

PUTNAM

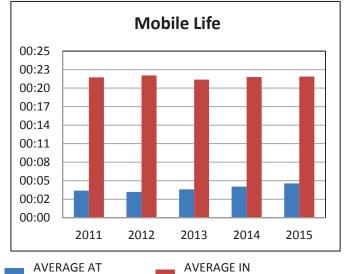
19 Miles

	EMS Providers			
E	East Fishkill FD	Volunteer	BLS AMB	
ľ	Mobile Life	Commercial	ALS AMB	

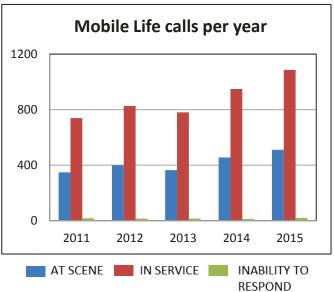
1500						POUGHER
1000						A Principal of the Prin
500						
0	2011	2012	2013	2014	2015	ST LUKES 16 Miles 21 Minutes
ļ.	AT SCENE	IN S	ERVICE		LITY TO	BLS EMS BLS FIR
				RESPO	טמנ	

	Population Density (0-7500)	514
	EMS Providers	
- 1		

Town of Fishkill (1 of 5) Village of Fishkill



SERVICE TIME

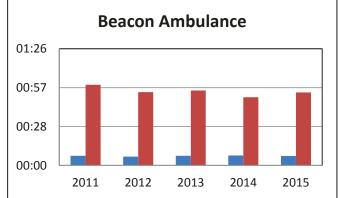


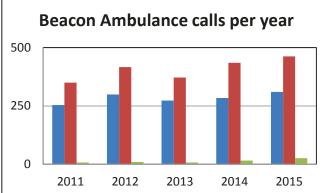


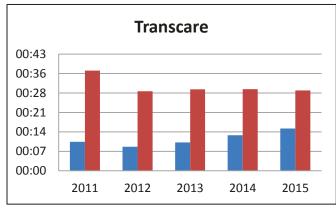
Population	22,107
Square Miles	32.0
Population Density (0-7500)	809

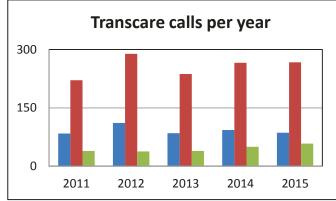
EMS Providers			
Beacon Ambulance	Career +Volunteer	BLS AMB	
Glenham FD	Volunteer	No TXP	
Mobile Life	Commercial	ALS AMB	
Dutchess Junction FD	Volunteer	No TXP	
Chelsea FD	Volunteer	No TXP	

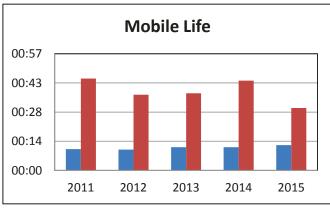
Town of Fishkill (2 of 5) Glenham







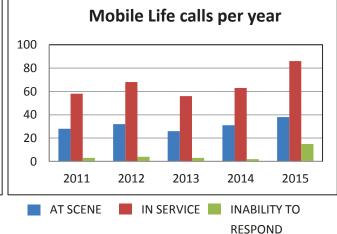


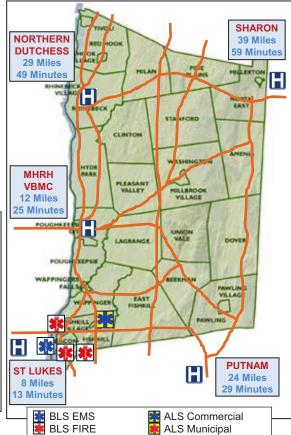


AVERAGE AT SCENE TIME

AVERAGE IN

SERVICE TIME

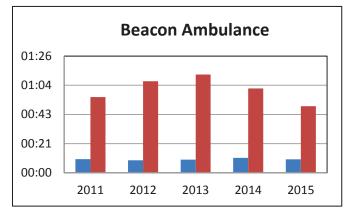


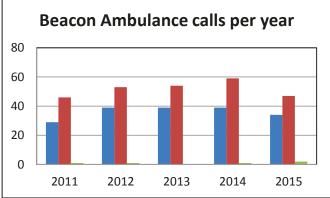


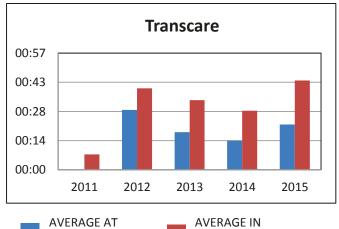
Population	22,107
Square Miles	32.0
Population Density (0-7500)	809

EMS Providers			
Beacon Ambulance	Career +Volunteer	BLS AMB	
Glenham FD	Volunteer	No TXP	
Mobile Life	Commercial	ALS AMB	
Dutchess Junction FD	Volunteer	No TXP	
Chelsea FD	Volunteer	No TXP	

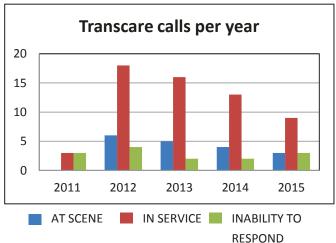
Town of Fishkill (3 of 5) Dutchess Junction

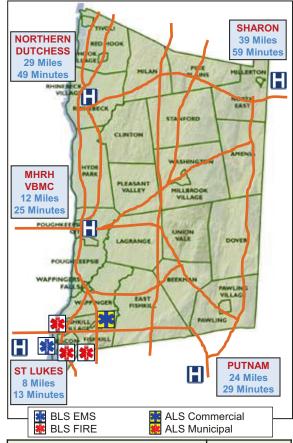






SERVICE TIME

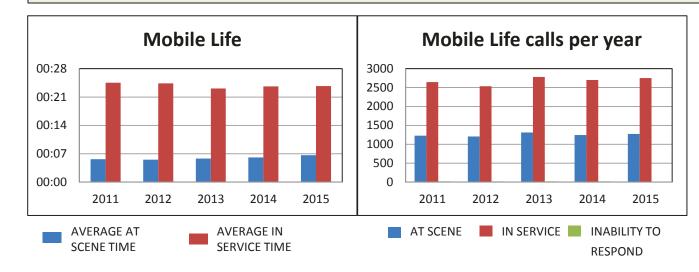




Population	22,107
Square Miles	32.0
Population Density (0-7500)	809

EMS Providers		
Beacon Ambulance	Career +Volunteer	BLS AMB
Glenham FD	Volunteer	No TXP
Mobile Life Support	Commercial	ALS AMB
Dutchess Junction FD	Volunteer	No TXP
Chelsea FD	Volunteer	No TXP

Town of Fishkill (4 of 5) Rombout





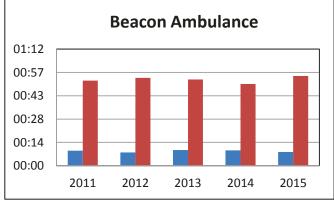
Population	22,107
Square Miles	32.0
Population Density (0-7500)	809

EMS Providers		
Beacon Ambulance	Career +Volunteer	BLS AMB
Glenham FD	Volunteer	No TXP
Mobile Life	Commercial	ALS AMB
Dutchess Junction FD	Volunteer	No TXP
Chelsea FD	Volunteer	No TXP

Town of Fishkill (5 of 5) Chelsea

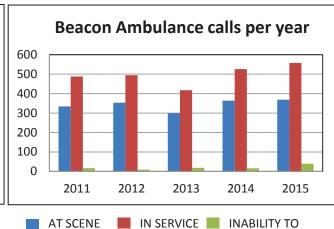
AVERAGE IN

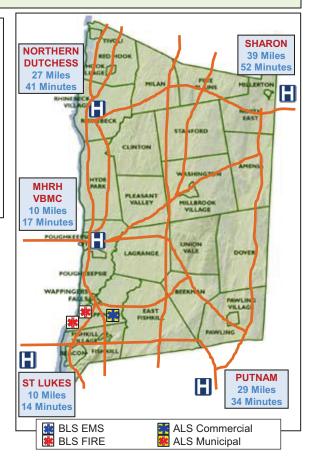
SERVICE TIME



AVERAGE AT

SCENE TIME

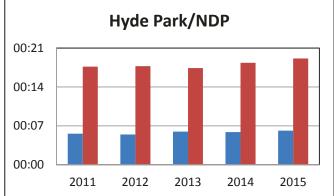


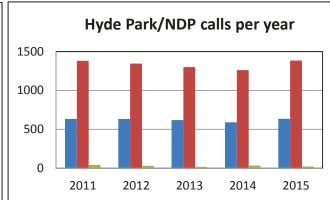


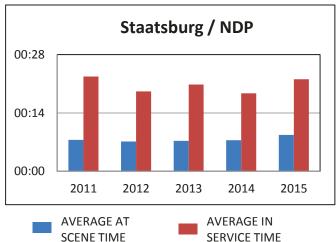
Population	27,048
Square Miles	28.5
Population Density (0-7500)	1,000

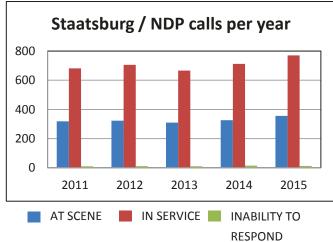
Beacon Ambulance	Career +Volunteer	BLS AMB
Glenham FD	Volunteer	No TXP
Mobile Life	Commercial	ALS AMB
Dutchess Junction FD	Volunteer	No TXP
Chelsea FD	Volunteer	No TXP

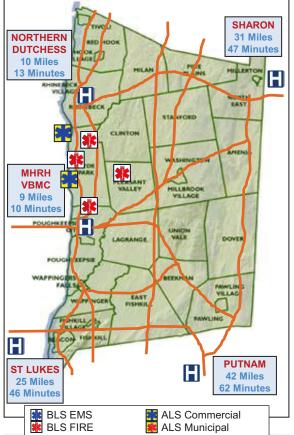
Town of Hyde Park (1 of 2) Hyde Park/Staatsburg







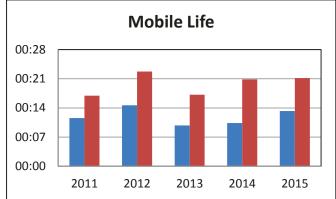


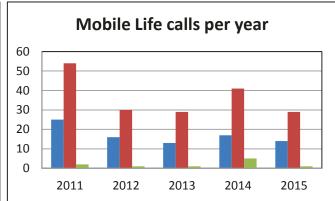


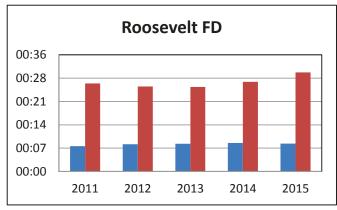
Population	21,571
Square Miles	39.8
Population Density (0-7500)	588

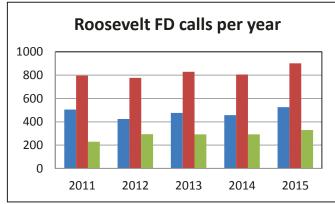
EMS Providers		
NDP	Commercial	ALS AMB
Staatsburg FD	Volunteer	No TXP
Roosevelt FD	Volunteer	BLS AMB
Mobile Life	Commercial	ALS AMB
Pleasant Valley FD	Volunteer	BLS AMB
Pleasant Valley FD	Career	No TXP
Fairview FD	Career+ Volunteer	BLS AMB
Hyde Park FD	Volunteer	No TXP

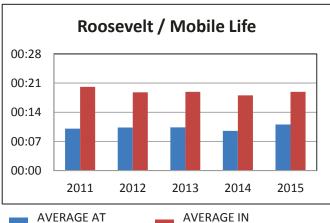
Town of Hyde Park (2 of 2) Roosevelt



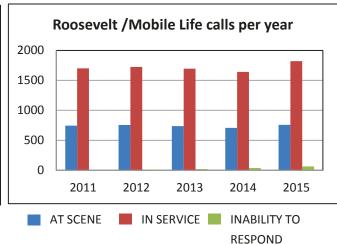


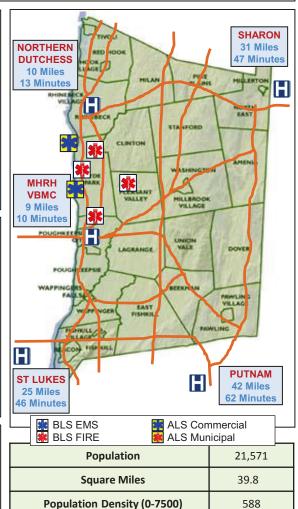






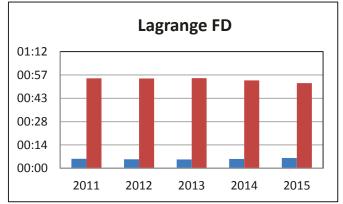
SERVICE TIME

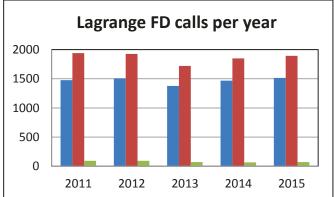


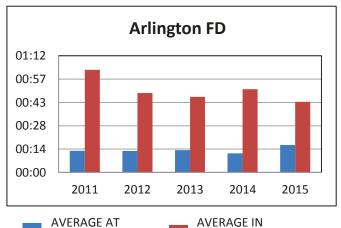


EMS Providers		
NDP	Commercial	ALS AMB
Staatsburg FD	Volunteer	No TXP
Roosevelt FD	Volunteer	BLS AMB
Mobile Life	Commercial	ALS AMB
Pleasant Valley FD	Volunteer	BLS AMB
Pleasant Valley FD	Career	No TXP
Fairview FD	Career +Volunteer	BLS AMB
Hyde Park FD	Volunteer	No TXP

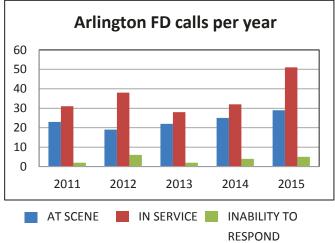
Town of LaGrange







SERVICE TIME

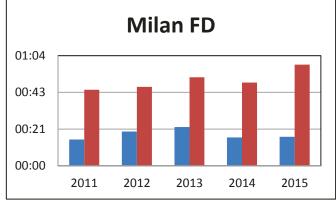


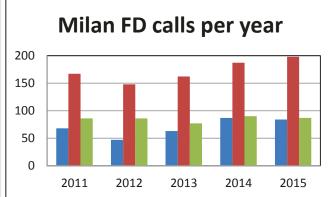


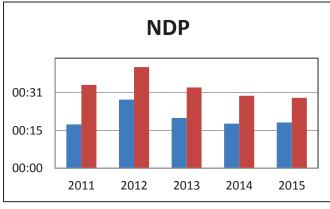
Population	15,730
Square Miles	40.3
Population Density (0-7500)	394

EMS Providers		
LaGrange FD	Career	ALS AMB

Town of Milan





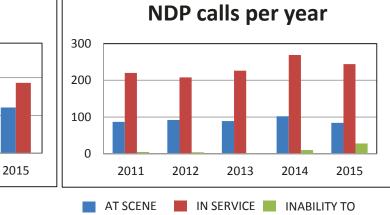


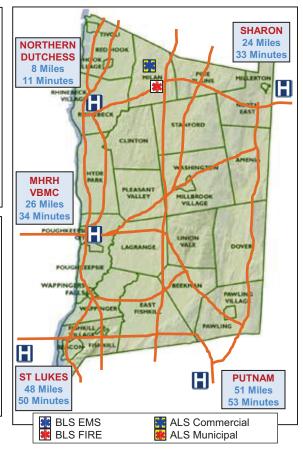
AVERAGE IN

SERVICE TIME

AVERAGE AT

SCENE TIME

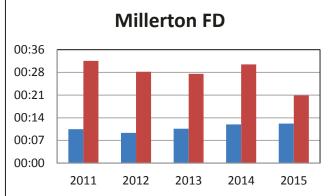


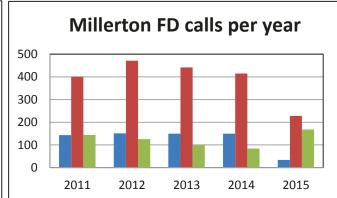


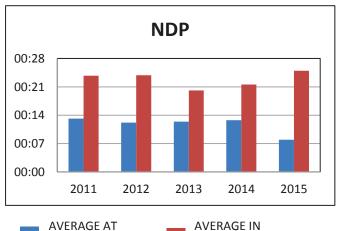
Population	2,370
Square Miles	36.6
Population Density (0-7500)	74

EMS Providers			
Milan FD Volunteer BLS AMB			
NDP Commercial ALS AMB		ALS AMB	

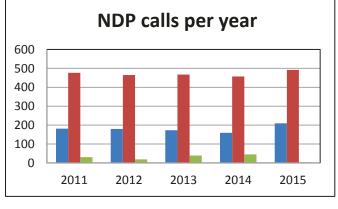
Town of Northeast







SERVICE TIME



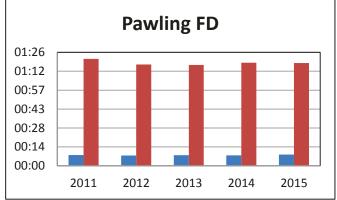


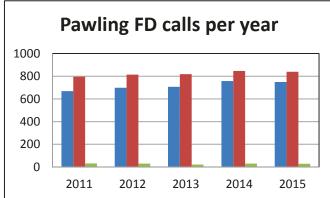


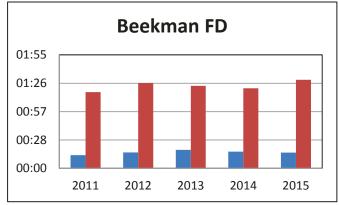
Population	3,031
Square Miles	43.7
Population Density (0-7500)	74

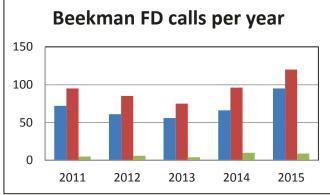
EMS Providers			
Millerton FD Volunteer BLS AMB			
NDP Commercial ALS AMB			

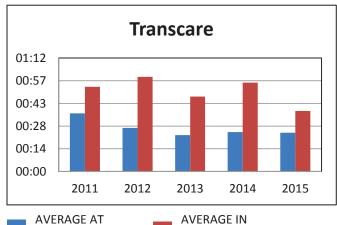
Town of Pawling





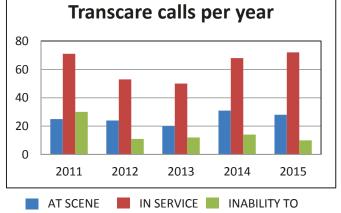






SERVICE TIME

SCENE TIME

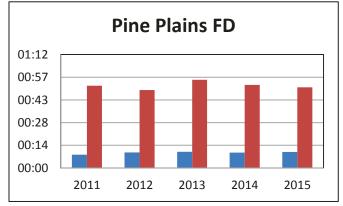


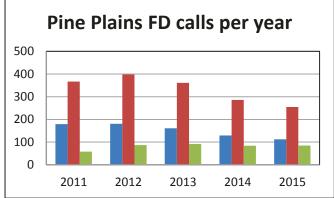


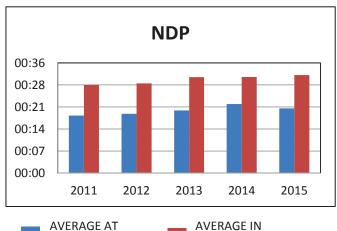
Population	8,463
Square Miles	45.0
Population Density (0-7500)	170

EMS Providers				
EMSTAR	EMSTAR Commercial ALS AMB			

Town of Pine Plains

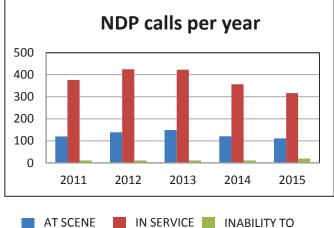






SERVICE TIME

SCENE TIME

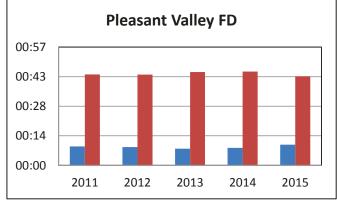


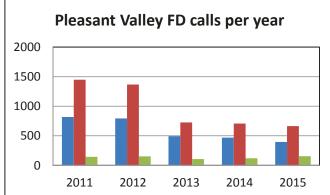


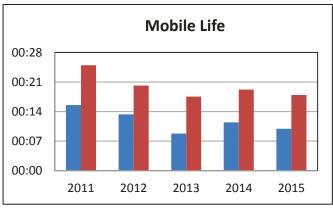
Population	2,473
Square Miles	31.2
Population Density (0-7500)	81

EMS Providers		
Pine Plains FD Volunteer BLS AMB		
NDP Commercial ALS AMB		ALS AMB

Town of Pleasant Valley





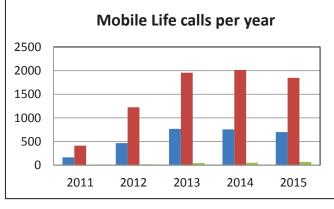


AVERAGE AT

SCENE TIME

AVERAGE IN

SERVICE TIME



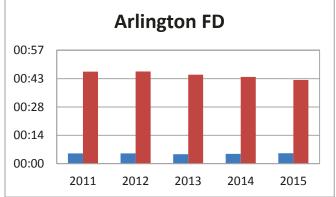


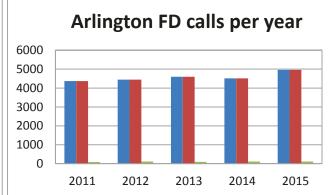
MHRH VBMC 8 Miles 16 Minutes FOUGHTITE ST LUKES 32 Miles 39 Minutes	CLINTON HYDR NARX PLEASANT VALLEY VALLEY FISHER RILLAND FISHER FISHE	STANFORD WISHINGTON HILLIAROOK VILLAGE LUNION VALE BEERNAN	PUTNAM 35 Miles 42 Minutes
BLS E		ALS Comme ALS Municip	

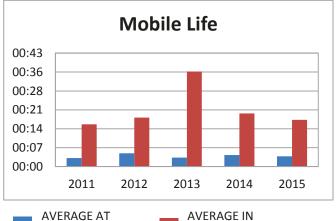
Population	9,672
Square Miles	33.1
Population Density (0-7500)	297

EMS Providers		
Pleasant Valley FD	Volunteer	BLS AMB
Pleasant Valley FD	Career	No TXP
Mobile Life	Commercial	ALS AMB

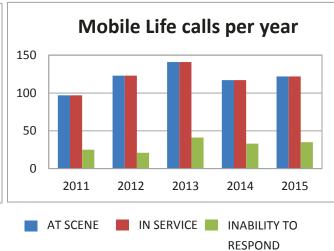
Town of Poughkeepsie (1 of 3) Arlington







SERVICE TIME

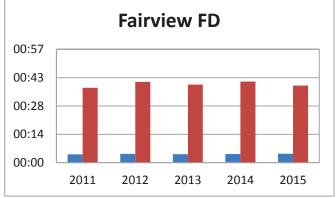


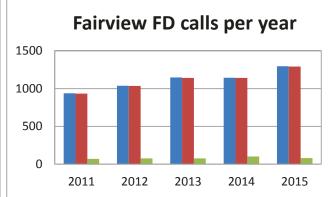


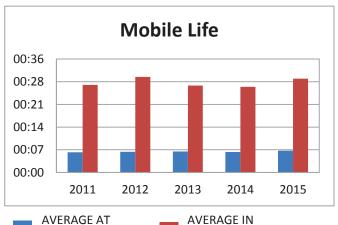
Population	43,341
Square Miles	31.2
Population Density (0-7500)	1,520

EMS Providers		
Arlington FD	Career +Volunteer	ALS No TXP
Fairview FD	Career +Volunteer	BLS AMB
Mobile Life	Commercial	ALS AMB
New Hamburg FD	Volunteer	No TXP

Town of Poughkeepsie (2 of 3) Fairview

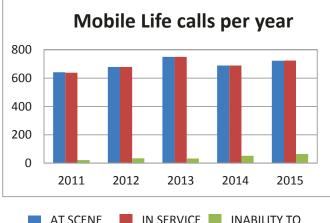




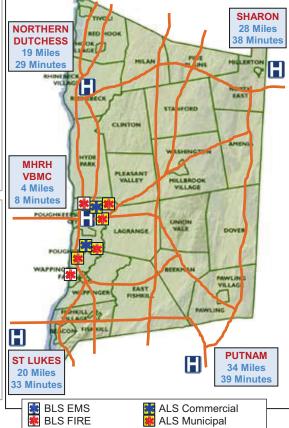


SERVICE TIME

SCENE TIME



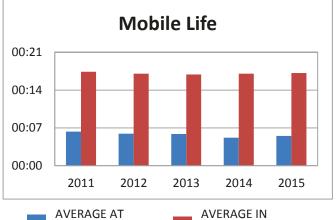
AT SCENE IN SERVICE INABILITY TO RESPOND



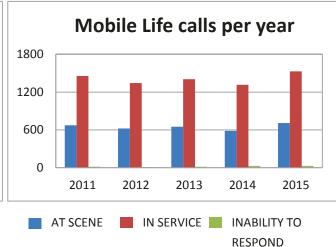
Population	43,341
Square Miles	31.2
Population Density (0-7500)	1,520

EMS Providers			
Arlington FD	Career +Volunteer	ALS No TXP	
Fairview FD	Career +Volunteer	BLS AMB	
Mobile Life	Commercial	ALS AMB	
New Hamburg FD	Volunteer	No TXP	

Town of Poughkeepsie (3 of 3) New Hamburg



SERVICE TIME

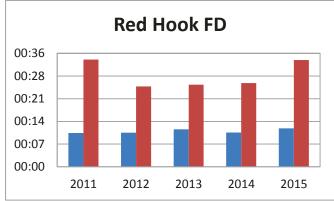


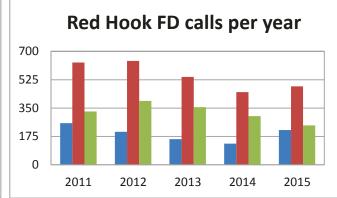


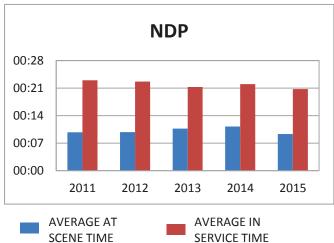
Population	43,341
Square Miles	31.2
Population Density (0-7500)	1,520

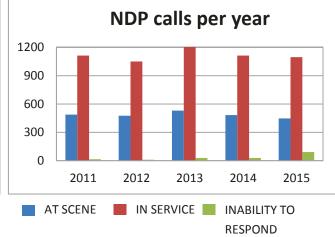
EMS Providers			
Arlington FD	Career +Volunteer	ALS No TXP	
Fairview FD	Career +Volunteer	BLS AMB	
Mobile Life	Commercial	ALS AMB	
New Hamburg FD	Volunteer	No TXP	

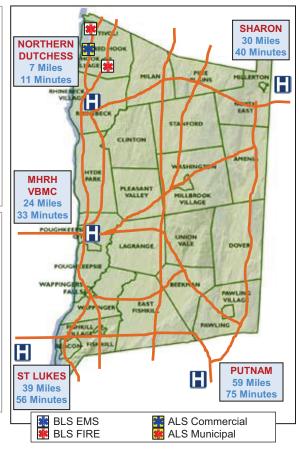
Town of Red Hook (1 of 2) Red Hook







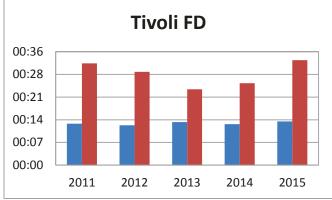


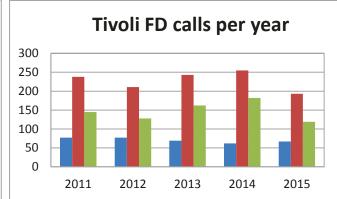


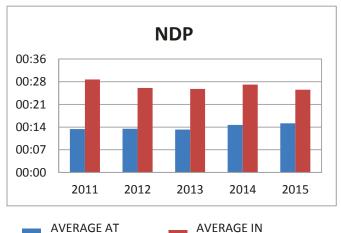
Population	11,319
Square Miles	40.0
Population Density (0-7500)	313

EMS Providers			
Red Hook FD Volunteer BLS AMB			
Tivoli FD	Volunteer	BLS AMB	
NDP	Commercial	ALS AMB	

Town of Red Hook (2 of 2) Tivoli

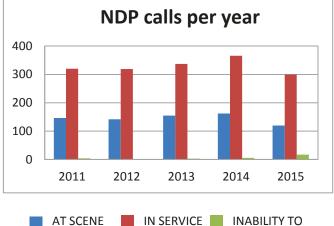






SERVICE TIME

SCENE TIME

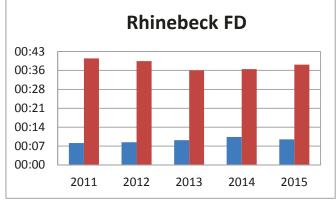


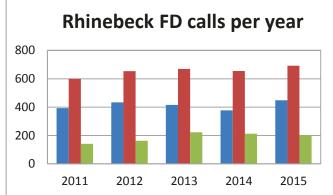


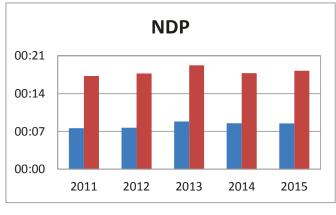
Population	11,319
Square Miles	40.0
Population Density (0-7500)	313

EMS Providers		
Red Hook FD	Volunteer	BLS AMB
Tivoli FD	Volunteer	BLS AMB
NDP	Commercial	ALS AMB

Town of Rhinebeck (1 of 2) Rhinebeck





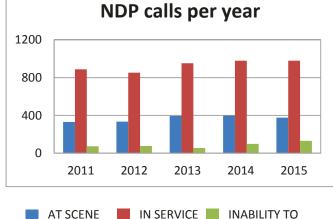


AVERAGE IN

SERVICE TIME

AVERAGE AT

SCENE TIME

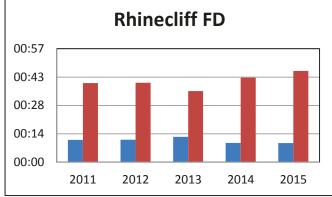


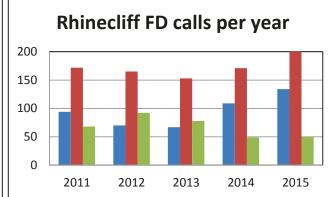


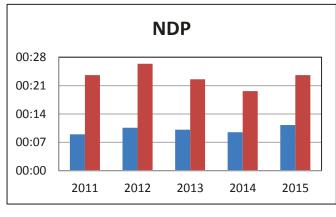
Population	7,548
Square Miles	39.7
Population Density (0-7500)	212

EMS Providers		
Rhinebeck FD	Volunteer	BLS AMB
Rhinecliff FD	Volunteer	BLS AMB
NDP	Commercial	ALS AMB

Town of Rhinebeck (2 of 2) Rhinecliff





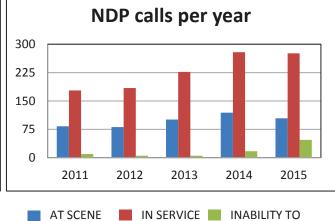


AVERAGE IN

SERVICE TIME

AVERAGE AT

SCENE TIME

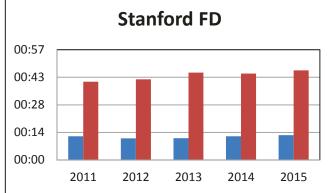


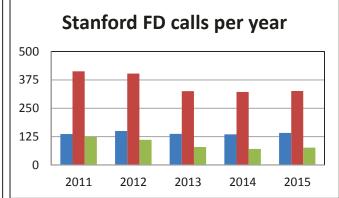


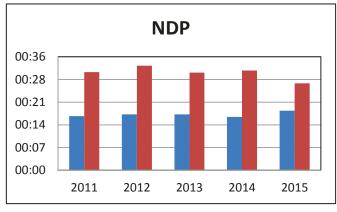
Population	7,548
Square Miles	39.7
Population Density (0-7500)	212

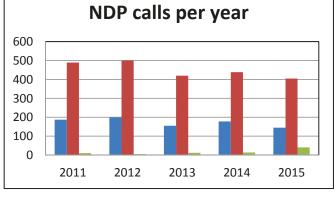
EMS Providers		
Rhinebeck FD	Volunteer	BLS AMB
Rhinecliff FD	Volunteer	BLS AMB
NDP	Commercial	ALS AMB

Town of Stanford

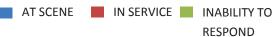


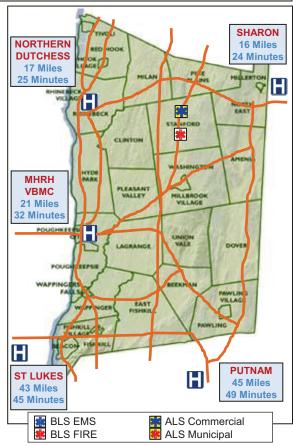








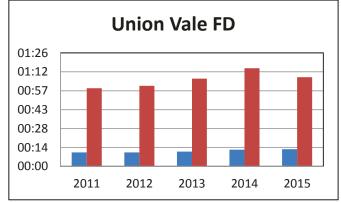


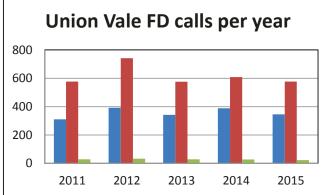


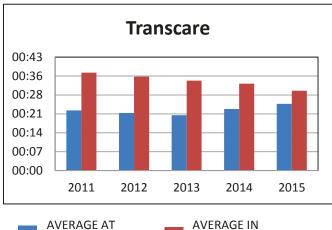
Population	3,823
Square Miles	77.0
Population Density (0-7500)	77

EMS Providers		
Stanford FD	Volunteer	BLS AMB
NDP	Commercial	ALS AMB

Town of Union Vale

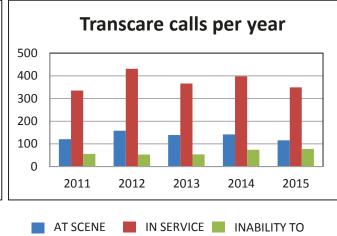


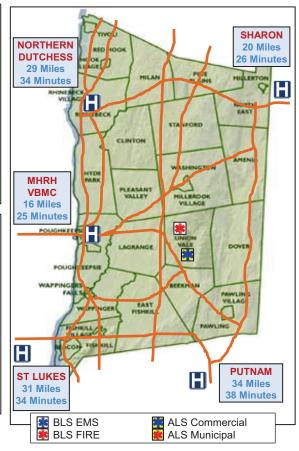




SERVICE TIME

SCENE TIME

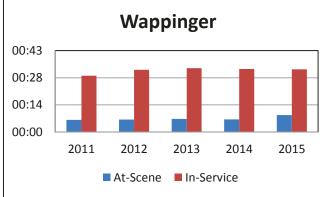


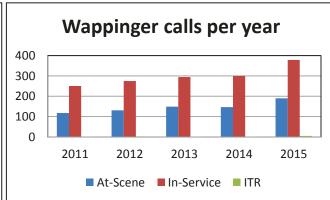


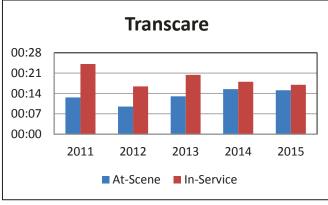
Population	4,877
Square Miles	37.8
Population Density (0-7500)	130

EI		
Union Vale FD	Volunteer	BLS AMB
EMSTAR	Commercial	ALS AMB

Town of Wappinger (1 of 3) Chelsea

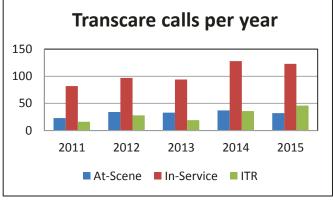






AVERAGE IN

AVERAGE AT



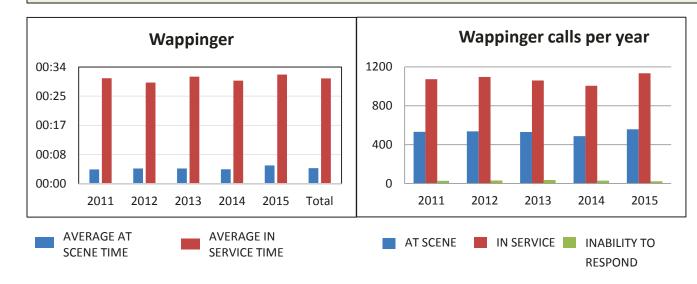


NORTHERN DUTCHESS 27 Miles 41 Minutes AHNHER CONTROL WAFFINGERS POUGHETER WAFFINGERS FOUGHETER FOUGHETER WAFFINGERS FOUGHETER WAFFINGERS FOUGHETER WAFFINGERS FOUGHETER WAFFINGERS FOUGHETER FOUGHETER WAFFINGERS FOUGHETER F	STA SFORD WASHINGTON WALE LINION WALE DOVER PAWLING WILLAGE
ST LUKES 10 Miles 14 Minutes	PUTNAM 29 Miles 34 Minutes
BLS EMS BLS FIRE	ALS Commercial ALS Municipal

Population	27,048
Square Miles	28.5
Population Density (0-7500)	1,000

EMS Providers		
Hughsonville FD	Volunteer	No TXP
Chelsea FD	Volunteer	No TXP
EMSTAR	Commercial	ALS AMB

Town of Wappinger (2 of 3) Hughsonville

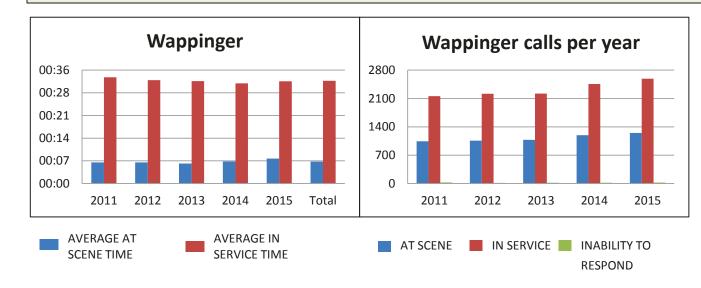


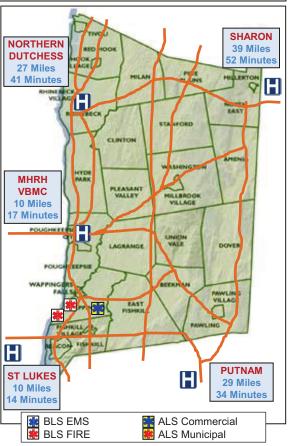


Population	27,048
Square Miles	28.5
Population Density (0-7500)	1,000

EMS Providers		
Hughsonville FD	Volunteer	No TXP
Chelsea FD	Volunteer	No TXP
EMSTAR	Commercial	ALS AMB

Town of Wappinger (3of 3) New Hackensack

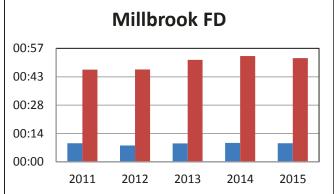


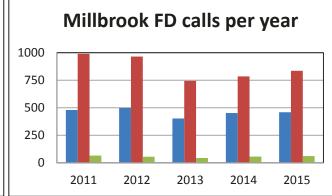


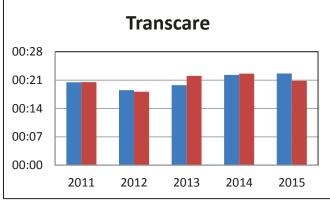
Population	27,048
Square Miles	28.5
Population Density (0-7500)	1,000

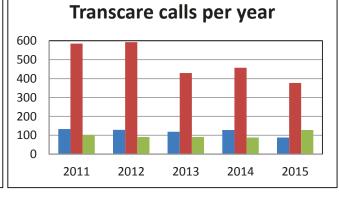
EMS Providers		
Hughsonville FD	Volunteer	No TXP
Chelsea FD	Volunteer	No TXP
EMSTAR	Commercial	ALS AMB

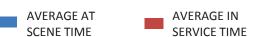
Town of Washington











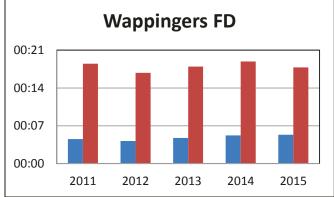
AT SCENE	IN SERVICE	INABILITY TO
		RESPOND

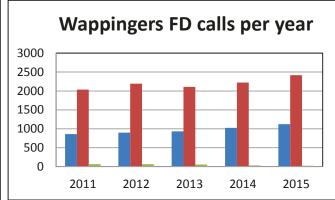
NORTHERN DUTCHESS 26 Miles 31 Minutes WAPPINGER POUGHETER WAPPINGER WAPPINGER WAPPINGER WAPPINGER WAPPINGER WAPPINGER ST LUKES 38 Miles 40 Minutes PUTNAM 38 Miles 43 Minutes
BLS EMS ALS Commercial ALS Municipal

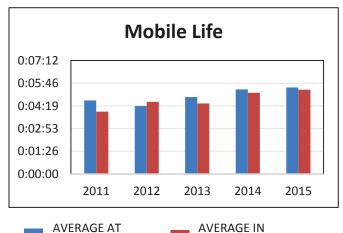
Population	4,741
Square Miles	58.9
Population Density (0-7500)	82

EMS Providers		
Millbrook FD	Volunteer	BLS AMB
NDP	Commercial	ALS AMB
East Clinton FD	Volunteer	BLS AMB

Village of Wappingers Falls

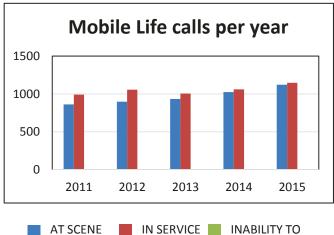


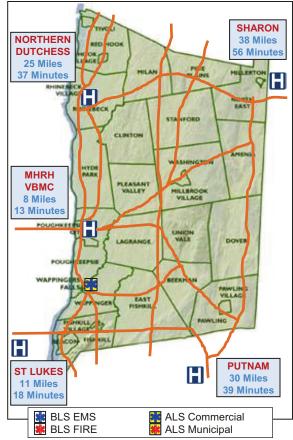




SERVICE TIME

SCENE TIME



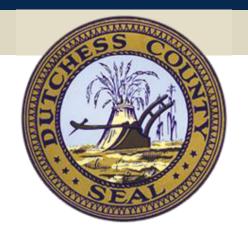


Population	5,522
Square Miles	1.2
Population Density (0-7500)	4,983

EMS Providers		
Mobile Life	Commercial	ALS AMB



- Transcare Ambulance ceased operations on February 26, 2016.
- Town of Amenia contracted with NDP for 24 hour coverage effective January 1, 2017.
- Arlington Fire District began ALS first response on January 1, 2017, contracting with Mobile Life Support as their transporting agency.



Dutchess County EMS calls per year:

2011: 27,198

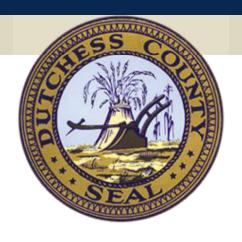
2012: 27,832

2013: 28,002

2014: 28,624

2015: 30,546

2016: 31,903 (not included in the data)



Agency Alarm Data

"The data used for these graphs were derived from only the primary EMS provider in each district."

Town by Town Infographics and Agency Alarm Data

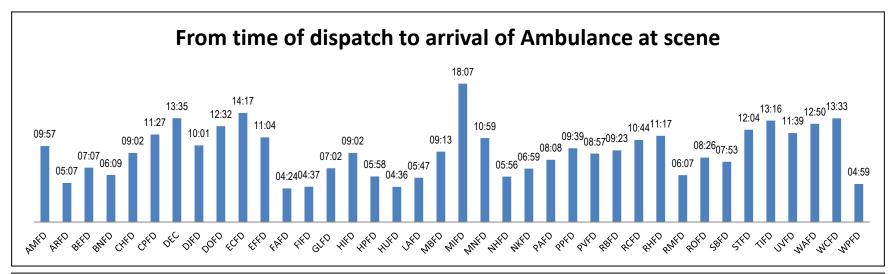
The following pages present the data gathered by the Task Force, compiled and summarized as explained in the EMS System Data and Analysis section. The Task Force arranged the following pages alphabetically by township and then by agency within the township. Any abbreviations within the following pages correlate as follows:

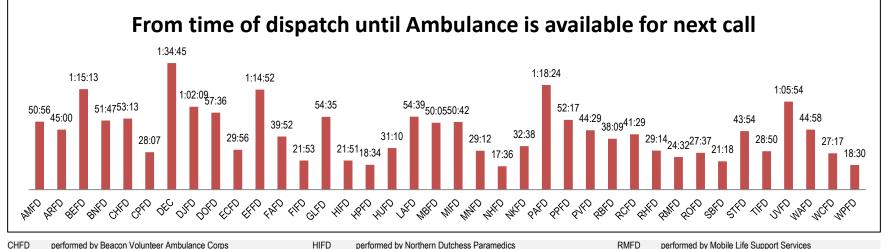
•	14024	City of Poughkeepsie
•	AMFD	Amenia
•	ARFD	Arlington
•	BEFD	Beekman
•	BNFD	City of Beacon
•	CHFD	Chelsea
•	CPFD	Castle Point
•	DEC	NYS DEC Property
•	DJFD	Dutchess Junction
•	DOFD	Dover
•	ECFD	East Clinton
•	EFFD	East Fishkill
•	FAFD	Fairview
•	FIFD	Fishkill
•	GLFD	Glenham
•	HIFD	Hillside
•	HPFD	Hyde Park
•	HUFD	Hughsonville
•	LAFD	Lagrange
•	MBFD	Millbrook

•	MIFD	Milan
•	MNFD	Millerton
•	NHFD	New Hamburg
•	NKFD	New Hackensack
•	PAFD	Pawling
•	PPFD	Pine Plains
•	PVFD	Pleasant Valley
•	RBFD	Rhinebeck
•	RCFD	Rhinecliff
•	RHFD	Red Hook
•	RMFD	Rombout
•	ROFD	Roosevelt
•	SBFD	Staatsburg
•	STFD	Stanford
•	TIFD	Tivoli
•	UVFD	Union Vale
•	WAFD	Wappinger
•	WCFD	West Clinton
•	WPFD	Wappingers

- The committee provided notes within each of the following pages, to assist the reader in understanding the complex and diverse nuances among the various townships and agencies and how they address the provision and delivery of emergency medical care.
- Infographic Key of Symbols:
- HOSPITAL
- EMS Basic Life Support Agency (Squad or Corp)
- EMS Basic Life Support Agency (Fire Department Based)
- EMS Advanced Life Support Agency (Commercial)
- EMS Advanced Life Support Agency (Fire Department Based)

DUTCHESS COUNTY COMPARISON of TIMES (average 2011 – 2015)





CHFD CPFD DEC DJFD GLFD performed by Beacon Volunteer Ambulance Corps performed by Transcare performed by Beacon Volunteer Ambulance Corps

performed by Beacon Volunteer Ambulance Corps performed by Beacon Volunteer Ambulance Corps performed by Beacon Volunteer Ambulance Corps performed by Northern Dutchess Paramedics performed by Northern Dutchess Paramedics performed by Wappinger performed by Mobile Life Support Services performed by Wappinger

HPFD

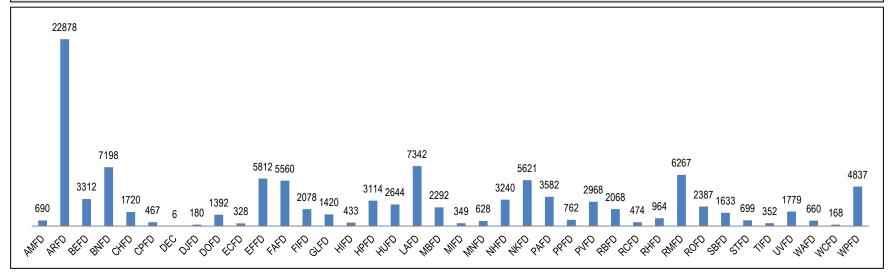
HUFD

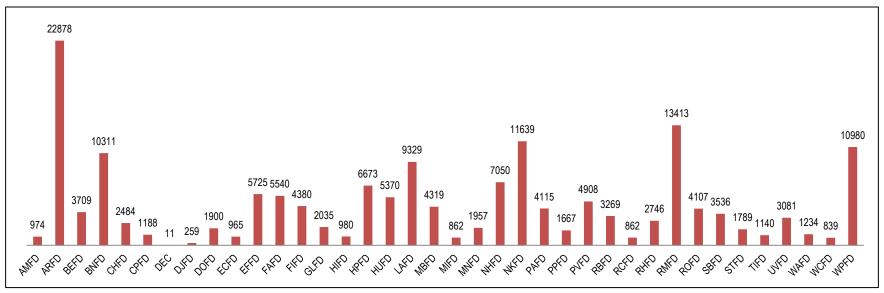
NHFD

NKFD

RMFD SBFD WPFD performed by Mobile Life Support Services performed by Northern Dutchess Paramedics performed by Mobile Life Support Services

DUTCHESS COUNTY COMPARISON of ALARM NUMBERS (total count 2011-2015)

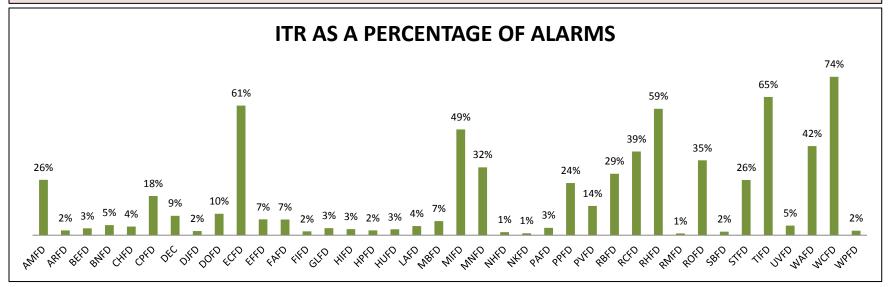


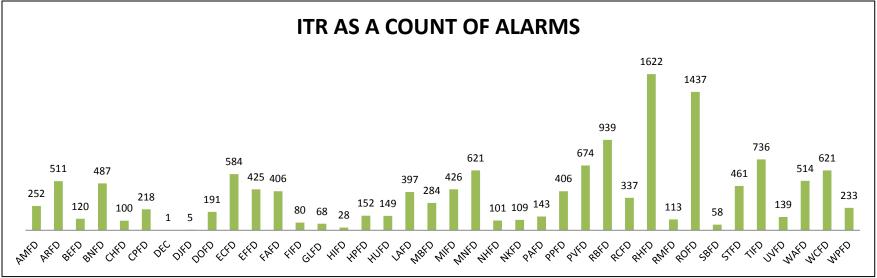


AT SCENE

IN SERVICE

DUTCHESS COUNTY COMPARISON of 'INABILITY TO RESPOND' (2011-2015)





It should be noted, at no time did our data indicate a call went unanswered. If an agency could not respond another agency had to respond to the scene.