

Fire Department

2019 ANNUAL REPORT

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Scope of Department Services

KEY SERVICES AND FUNCTIONS

The Fire Department provides fire suppression, emergency medical service (EMS), specialty rescue, and educational services for the Village’s residents and businesses. In 2018 the Department responded to 10,329

calls. Each year the ratio of EMS to fire calls continues to increase. In 2008 66% of the Department's calls were for EMS; for 2018 that figure is 73%.

The Department has a Class 1 public protection rating from the Insurance Services Office. Only a few hundred of the more than 46,000 fire departments in the country have achieved this rating.

All Firefighters have achieved Basic Firefighter Operations certification; all Lieutenants are Fire Officer I certified; Chief Officers are Fire Officer II certified. Fire Chief Andrew Larson, Deputy Chief Pete Ahlman, and Division Chiefs Richard Manthy and Dwayne Wood have completed the Chief Fire Officer program, making them eligible for the highest certification conferred by the Office of the State Fire Marshal. Two Battalion Chiefs are currently enrolled in the program.

The Public Education/Fire Prevention office works to meet the safety needs of our Firefighters, and the safety and educational needs of Village residents through programs like the Katie Project smoke detector initiative and CARE, the Village's program to address the opioid epidemic. In addition, the Public Education Lieutenant reviews construction documents in the Village review process, identifying operational issues.

Thirty-four members of the Department are members of one of the Department's four specialty teams and have received additional training and certification in those disciplines - hazardous materials mitigation; water rescue; technical rescue; and fire investigation.

ORGANIZATIONAL OVERVIEW

The Fire Department has a staff of 108 sworn Firefighters and three administrative support personnel (two part time). There are eight Command Staff positions, 16 Lieutenants, and 84 Firefighters assigned as shown on the attached organizational chart. The Command Staff is made up of the Fire Chief, two Deputy Chiefs (one administrative; one operational), two Division Chiefs (one EMS; one Training), and three Battalion Chiefs (one for each of the three 24-hour shifts).

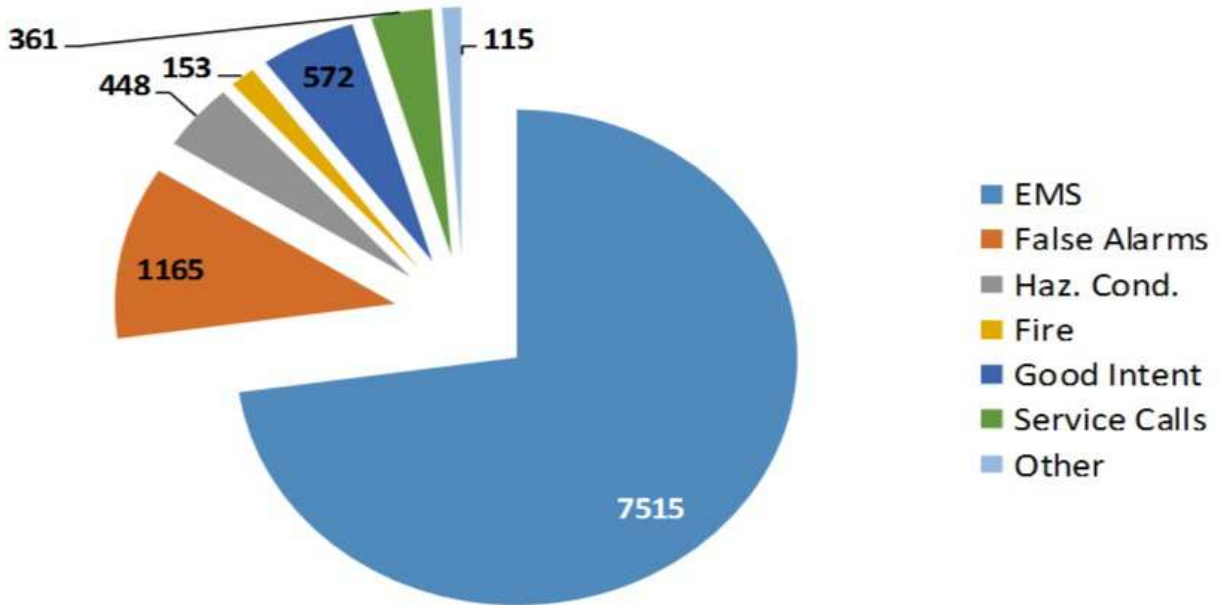
The Department operates out of four state-of-the-art fire stations with two ladder towers (one reserve), five fire engines (two reserve), six ambulances (two reserve), and three rescue squads (one reserve). There are also miscellaneous response/service vehicles.

MABAS (Mutual Aid Box Alarm System) is a multi-state cooperative providing fire, EMS and specialized incident responses in an efficient, coordinated manner. Our Department is one of 12 northwest suburban departments in MABAS Division 1. The MABAs system requires coordination, standardization, reliability, and partnering to achieve faster and better response to emergencies. Members of our specialty teams, who respond to incidents in Arlington Heights, also respond to incidents in other areas and states as members of MABAS Division 1 specialized incident operational teams.

WORKLOAD AND PERFORMANCE DATA

Our call volume in 2018 was the highest in our history – 10,329 calls; 2,814 fire and 7,515 emergency medical service calls, broken down as follows:

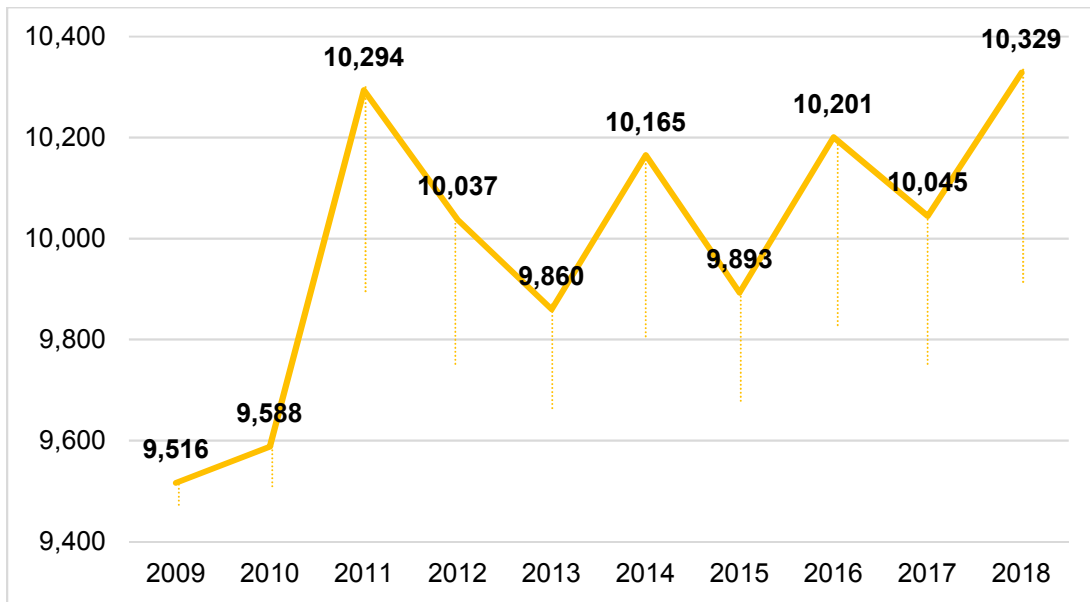
FIRE CALLS		EMS CALLS	
Structure fires–Arlington Heights	26	EMS calls, excluding vehicle accidents	7,066
Other fires	127	Vehicle accidents with injuries	281
Service calls	361	Motor vehicle/pedestrian accidents	16
Hazardous conditions	448	Medical assist, assist EMS crew	18
Good intent	572	Other	134
False alarms	1,165		
Other	115		
FIRE CALLS TOTAL	2,814	EMS CALLS TOTAL	7,515
COMBINED TOTAL – 10,329 CALLS			



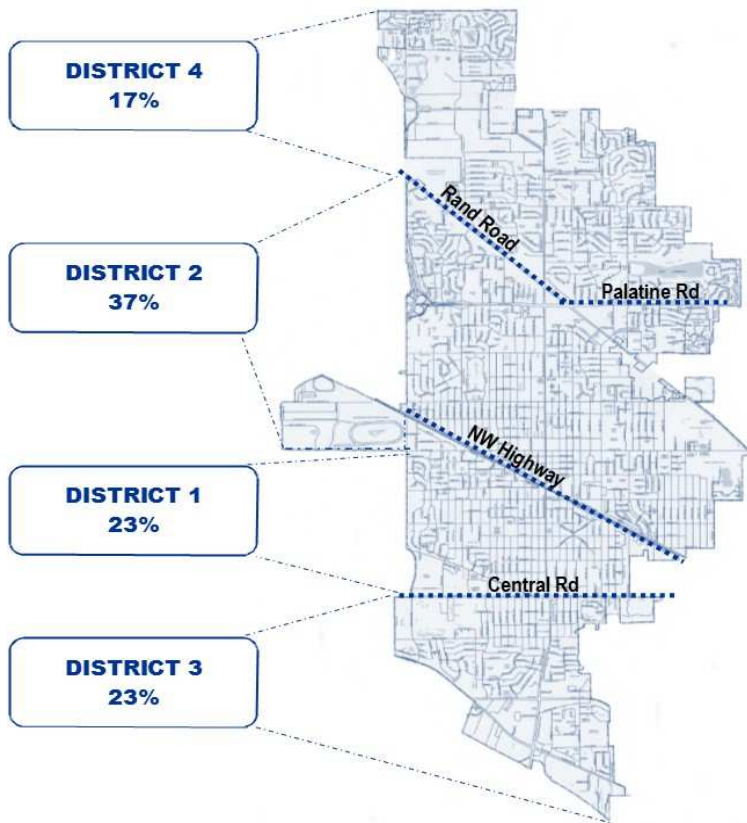
We continue to be the busiest and most efficient fire department in the area in terms of call volume, as shown below by our ratio of Firefighters to number of calls.

Town	Population	# of Shift Personnel	Total 2018 Calls	No. of Calls divided by
Arlington Heights	75,101	102	10,329	101
Rolling Meadows	24,021	42	4,027	96
Palatine	68,766	87	8,080	93
Mt. Prospect	54,171	69	6,079	88
Buffalo Grove	41,346	54	4,704	87
Schaumburg	74,446	120	9,428	79
Streamwood	40,166	48	3,730	78
Elk Grove Village	32,931	84	6,035	72
Hoffman Estates	51,738	90	5,790	64

TOTAL CALLS – 10-YEAR TREND



2018 CALLS BY DISTRICT (excluding auto and mutual aid)



We had continued success in 2018 balancing the giving and receiving of automatic and mutual aid from other fire departments:

2018	AUTO/MUTUAL AID GIVEN	AUTO/MUTUAL AID RECEIVED
EMS	688	617
FIRE	413	462
TOTAL	1,101	1,079

Key Accomplishments during the 2018-19 Period

RESCUE TASK FORCE

The Rescue Task Force (RTF) concept was formed to increase the survivability of viable patients during active shooter incidents. RTF responders work with the first-arriving police officers to deliver immediate medical care for readily treatable injuries, like severe bleeding and airway compromise. The RTF responds with police into dangerous areas to find victims, even as other officers engage and neutralize the suspect. This patient-centric and lifesaving model is in contrast to the historical tactic of fire department personnel waiting until the entire scene is secured by police.

In 2018 The Fire Department purchased ten sets of equipment (ballistic vests, helmets, and goggles) to be carried on Department vehicles. Our personnel have trained over a 12-week period with members of the Police Department to be ready to respond when an RTF is called for at an incident.

BALANCED AUTOMATIC/MUTUAL AID RECEIVED FROM AND GIVEN TO OTHER TOWNS

In 2018 we achieved a good balance between the automatic aid/mutual aid we give to other towns and what we receive from them (1,101 given; 1,079 received). This is accomplished through careful monitoring of statistics and negotiating modifications to agreements when necessary.

Firefighter Fitness

The Functional Movement Screening and Fit Responder fitness programs are ongoing. They are designed specifically for public safety personnel with ergonomic design and job-specific exercises to address preventing the kinds of injuries firefighters often suffer. Twenty-three Firefighters incurred on-duty injuries (IOD) in 2018 resulting in a total loss of 203 shift days.

RESCUE SQUADS

In 2018 a Squad Committee was formed to research and write specifications for two new rescue squads. It is anticipated that they will be in service in the fall of this year.

New Fire Engine Design/Purchase

In June of 2018, new Engine 114, a Pierce Velocity, was put into service. An Engine Committee was formed to work with Pierce Manufacturing to design a fire engine that combines firefighting

power with the safety features we need. This engine has a considerable reduction in the “step off” height, as well as lowered hosebeds and pre-connected attack hose.

Review of Current and Anticipated Challenges

OPIOID EPIDEMIC

Opioid overdose EMS calls have been increasing for several years. However, in 2018 we did see a reduction in these calls, due at least in part to availability of the reversal drug, Narcan, and the willingness of people to administer the drug. We are carefully monitoring this year’s incidents, as it appears from the limited data we have that the number of calls could again be on the rise.

Narcan (naloxone) Administration – Number of Incidents

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019 to date</u>
January	1	4	5	0	4
February	0	2	3	2	7
March	1	6	1	3	
April	3	2	8	4	
May	1	2	3	3	
June	1	5	7	1	
July	2	3	2	3	
August	0	5	3	1	
September	0	5	2	4	
October	1	5	4	5	
November	0	3	3	1	
December	1	3	4	3	
Totals	11	45	45	30	

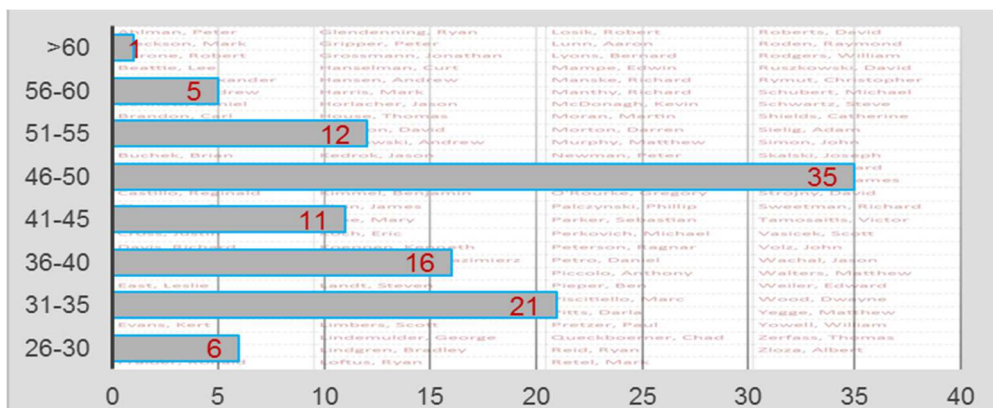
SUCCESSION PLANNING

A current challenge for us and the fire service in general is recruiting capable people to fill job openings created by retirements. The potential exists for 46% of our personnel to retire within

the next five years as 49 of the Department’s current 108 personnel will have met the necessary minimum time and age requirements. Of those 49, nearly 88% are Department officers.

- Average age of current personnel – 42.3 years
- Average number of years of service – 14.8 years
- 16 personnel meet age/service requirements to retire now (15% of Department)
- 18 personnel will meet age/service requirements to retire in next 1-3 years (17%)
- 15 personnel will meet age/service requirements to retire in next 4-5 years (14%)
- 49 personnel will meet age/service requirements to be able to retire in the next five years (46.2%).

Fire Department Personnel by Age Group



To ensure that we have capable personnel to step into key roles, we will continue to focus on effective succession planning. In addition to internal training practices, e.g., personnel “acting” as supervisors (spending a shift acting in a Lieutenant or Battalion Chief capacity), we are boosting efforts to get personnel through the State of Illinois enhanced Company Fire Officer program (COFO), which is designed for Firefighters working toward promotion to Lieutenant.

In addition, five of our Chief Officers have completed or are in the process of completing the Illinois Chief Fire Officer (CFO) program. CFO certification is the highest certification for a Fire Officer, and very difficult to attain. In addition to a full year of classes, candidates must present detailed evidence of knowledge, education and experience to a very demanding review board.

Candidates are put through the rigors of oral examination by members of the review board as well.

A new and unique challenge presents itself in succession planning in today's fire service. It is estimated that millennials will make up 75% of the U.S. work force by 2025. As baby boomer firefighters retire and the millennials move into the workforce, traditional officer development programs may not be optimal. Millennials quite often have formal education and little or no exposure to the skilled trades of former generations. Unlike previous programs which focused on Company Operations and Building Construction, new programs will likely need to focus on areas such as Organizational Structure, Building Components, Decision Making and Leadership Qualities.

We have increased our allocation for employee development in the current budget from \$17,700 to nearly \$20,000, including an increase for mid-level management training.

STANDARD OPERATING GUIDELINES AND GENERAL ORDERS

The Department's 30 Standard Operating Guidelines and 23 General Orders need to be reviewed and modified as needed.

FIREFIGHTER MENTAL HEALTH

The mission of the Peer Support Program is to provide emotional wellness resources for firefighters in a non-judgmental, confidential setting. Our program is an adjunct to the Village's Employee Assistance Program, and has been expanded to include immediate family members of our personnel as well. Three of our Firefighters were trained in Peer Support in 2016. In March of this year three additional employees were trained to offer this service to our firefighters.

STRATEGIC PLAN

The Department's current Strategic Plan is outdated and needs to be rewritten. A committee will be formed to outline the long-term vision for Department operations as well as the short-term or tactical goals required to accomplish this vision. In addition to these objectives, the Plan will include a reaffirmation of the Department's mission and values.

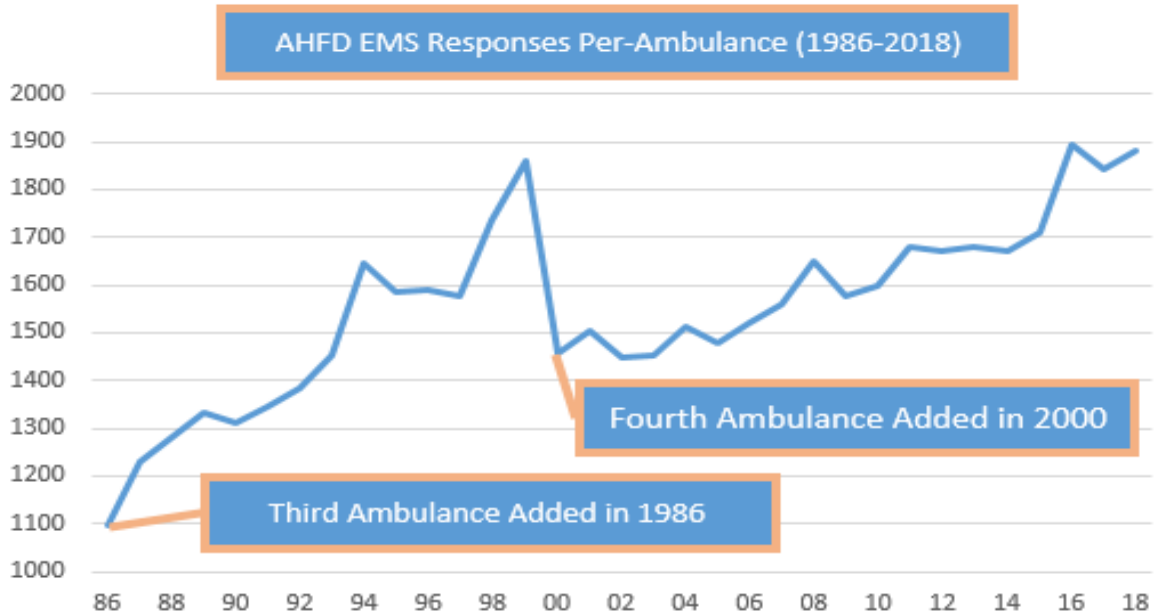
Potential New Initiatives to Explore in the future

PUTTING A FIFTH AMBULANCE IN SERVICE

Justification

Increased EMS Responses - The Fire Department has been studying the need to put a fifth ambulance in service. Over the years, ambulances have been added based on demand. In 1986

a third ambulance was added when ambulance responses averaged 1,100 a year. In 1999 that number exceeded 1,800 each, so in 2000 a fourth ambulance was added, bringing average responses down to approximately 1,500 per year. In 2018 average ambulance responses had climbed again, to nearly 1,900 each.



The chart below represents the ratio of calls to minimum daily staffing. It shows that historically Arlington Heights has responded to more calls per staff per day than all of our neighboring fire departments.

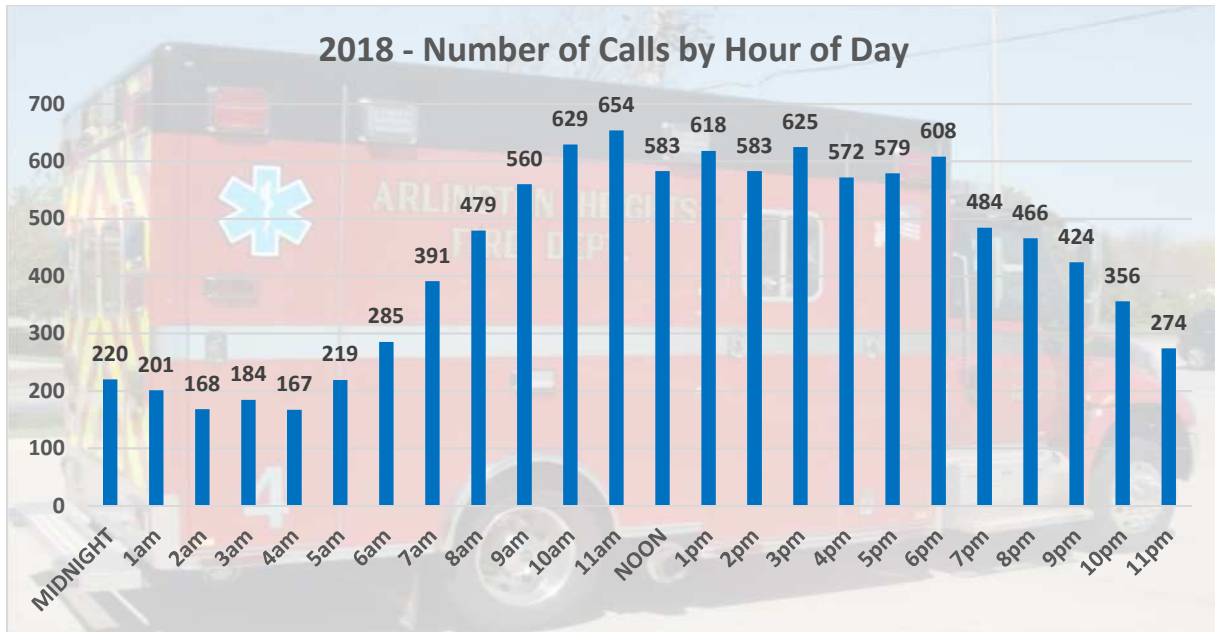
Staffing Compared To Neighboring Communities

	2010	2012	2014	2016	2018	Minimum
Northwest Central	Total	Total	Total	Total	Total	Daily
Dispatch Towns	Runs	Runs	Runs	Runs	Runs	Staffing

Arlington Heights	9,587	10,036	10,064	10,202	10,329	25
Schaumburg	8,362	8,861	9,081	9,305	9,428	27
Palatine	7,233	7,680	8,009	7,853	8,080	23
Mt. Prospect	5,353	5,777	5,908	5,902	6,079	16
Elk Grove Village	4,898	5,042	5,686	5,735	6,035	22
Hoffman Estates	5,813	5,672	6,028	6,052	5,790	22
Buffalo Grove	4,741	4,656	5,116	4,748	4,704	14
Rolling Meadows	3,599	3,510	3,541	3,996	4,027	11
Streamwood	3,385	3,457	3,642	3,715	3,730	11

In response to our increasing ambulance demands, the Fire Department puts a fifth ambulance in service (using a reserve vehicle) when daily manning permits, but not on a regular schedule. As noted in the chart below, ambulance demand is greatest between the hours of 8 and 8. The Department continues to investigate different staffing models to meet this ever-increasing demand.

Requests for our ambulances from neighboring communities through mutual/automatic aid also peak during the day, with highest demand between 9:00 A.M. and 4:00 P.M.



MOBILE INTEGRATED HEALTHCARE

Mobile Integrated Healthcare (MIH) continues to be a potential initiative for the Fire Department. MIH is the provision of healthcare using patient-centered, mobile resources in the out-of-hospital environment, including community paramedic care. Northwest Community Hospital currently has a pilot MIH program in place with the Palatine, Palatine Rural and Rolling Meadows Fire Departments. Northwest Community’s initiative would have Paramedics, when not on shift, visit patients to ensure medications are being taken correctly, wounds are being cared for, and the patient’s recovery is progressing as planned. In theory, this would reduce hospital readmissions, ambulance calls, and emergency room visits by a significant number. The pilot program is moving forward and, hopefully, it will answer many questions we still have about implementing such a program, e.g., who pays for the program, what liabilities are involved, how it would be staffed with our 24 on/48 off schedule, etc.

EMERGENCY TRIAGE, TREAT AND TRANSPORT MODEL (ET3)

ET3 is a Medicare initiative for developing and testing new payment and service delivery models. The benefit for Medicare would be to reduce avoidable transports to hospital emergency rooms and the sometimes subsequent hospitalizations. The potential benefit for us would be the ability to bill Medicare for treating patients we do not transport (we currently do not bill for non-transports). The ET3 model will have a five-year performance period. The anticipated start date is January 2020, and we hope to be part of the pilot program.