

# King and Queen County

2017 VACo Achievement Award  
Best Small County Achievement

Rural Emergency Medical Services Program



# EMS Demographics

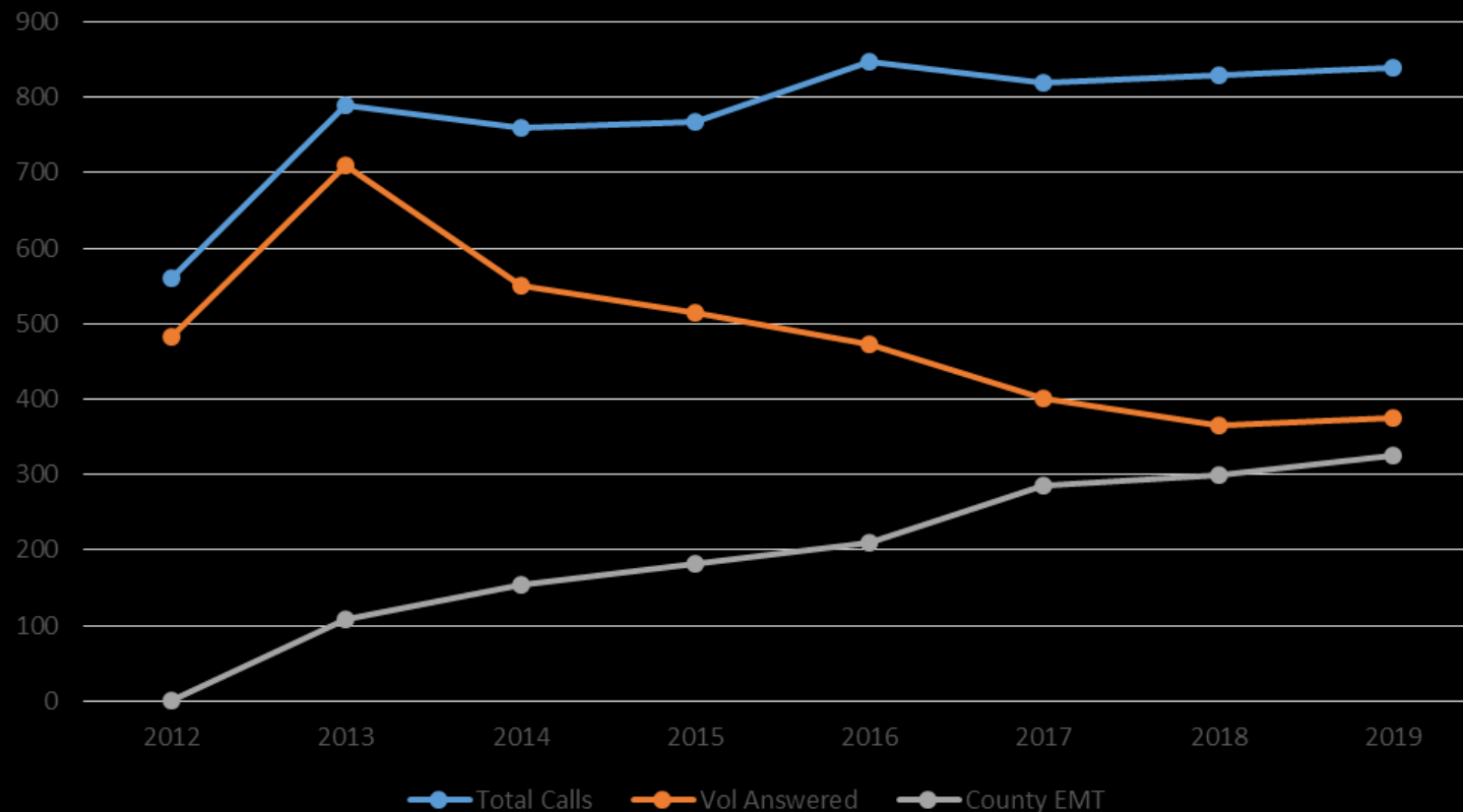


- Census 2010 Population - 6,945
- King & Queen is approximately 316 square miles, 70 miles long and 16 miles wide
  - Cannot cover EMS service from one location
- Two major transportation corridors at both ends of the county (US Route 360 & VA Route 33)
  - Route 14 is not a straight travel path limiting travel from upper to lower end
- Served by three independent all volunteer EMS agencies
  - Volunteer base provided by approximately 30 EMS volunteers system-wide
- No hospital or urgent care facilities in King & Queen County

# THE PROBLEM: A 5 year EMS FORECAST (2013)



EMS System Projection Estimate

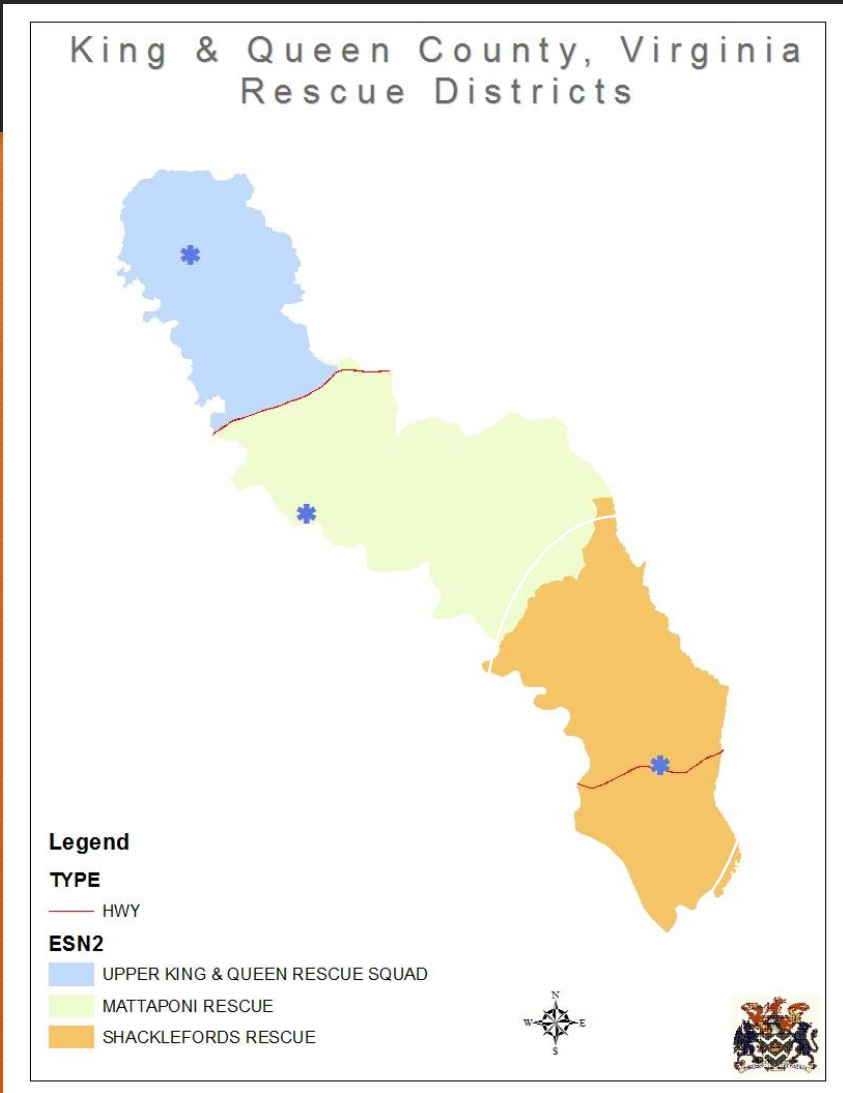


- Model Data based on volunteer membership trends and 10 year historical call volume changes
- Request for service anticipated to follow population and aging trends
- Decline in volunteers based on population trend and rate of volunteer loss in prior 5 years

# THE PROBLEM: EMS COVERAGE/RESPONSE TIMES



## Volunteer EMS Coverage



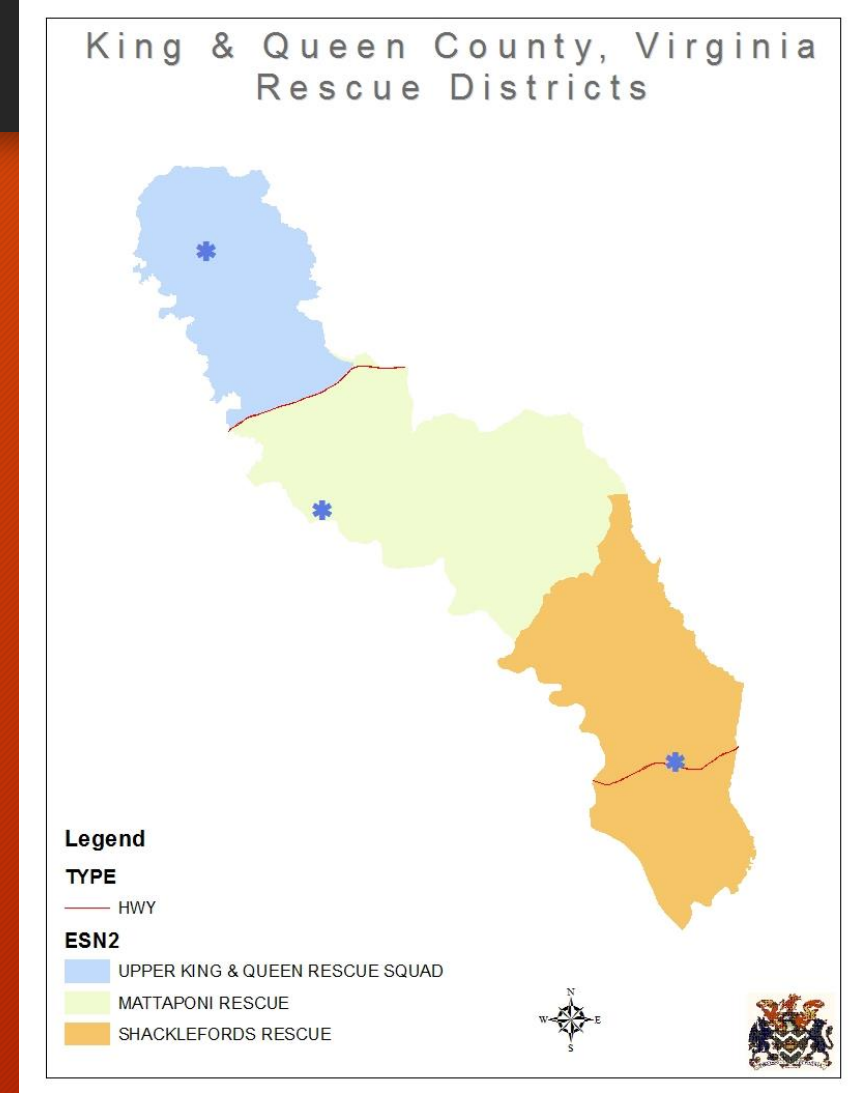
←  
2 Volunteer  
Stations Pre- 2011

1 NEW Volunteer  
station added  
2010 (Lower KQ)

→  
2 NEW County  
staff locations  
2013

Maximize reduced  
response time

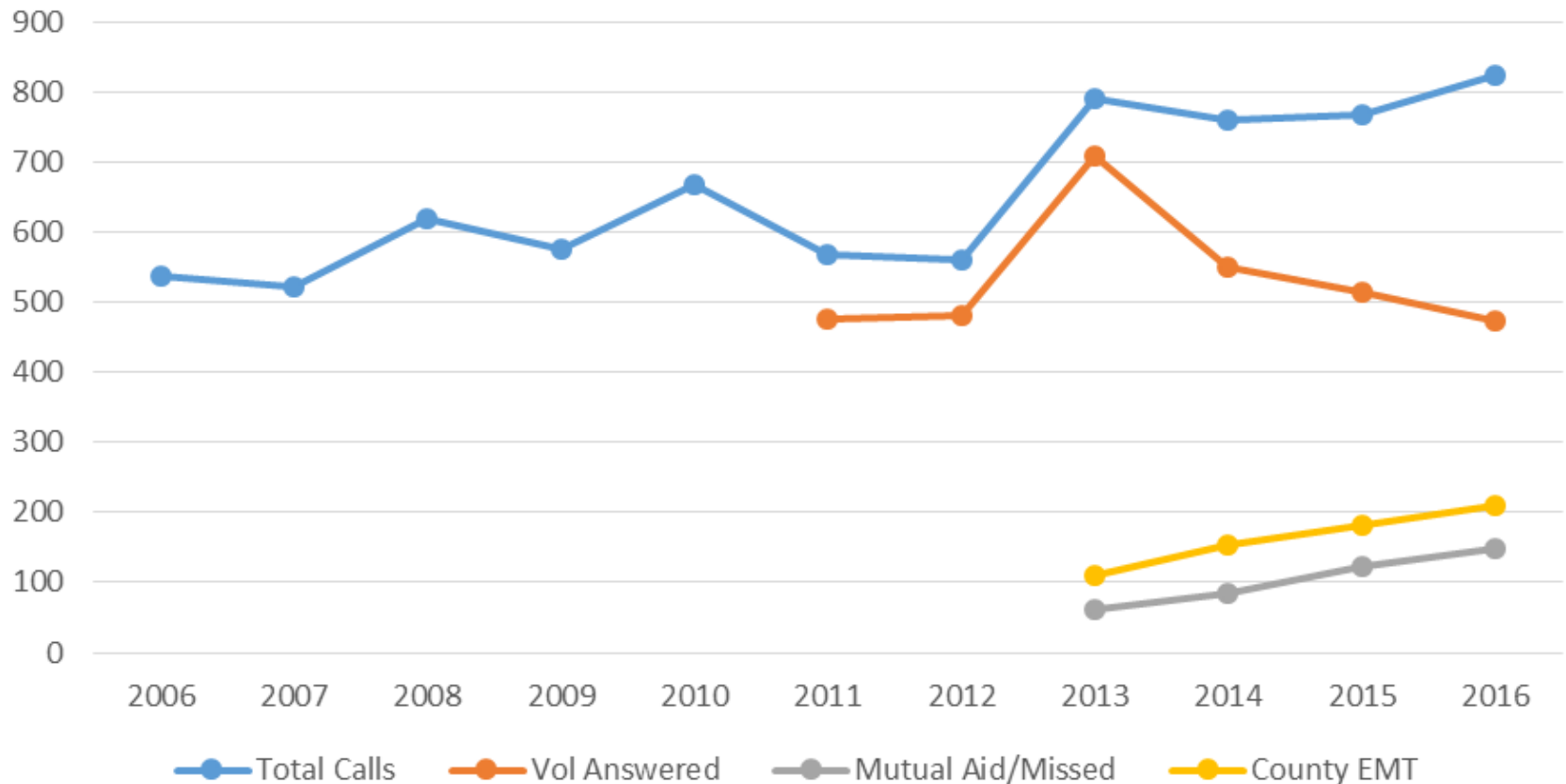
## Added EMS Coverage



# The problem: A 10 Year EMS Response Analysis



EMS System Responses



- Call volume increased
- Volunteer base decreases yet volunteers covering approximately 50% of calls
- 25% of calls answered by total county staff
- 25% covered by mixed career/volunteer crews

# Plan in action

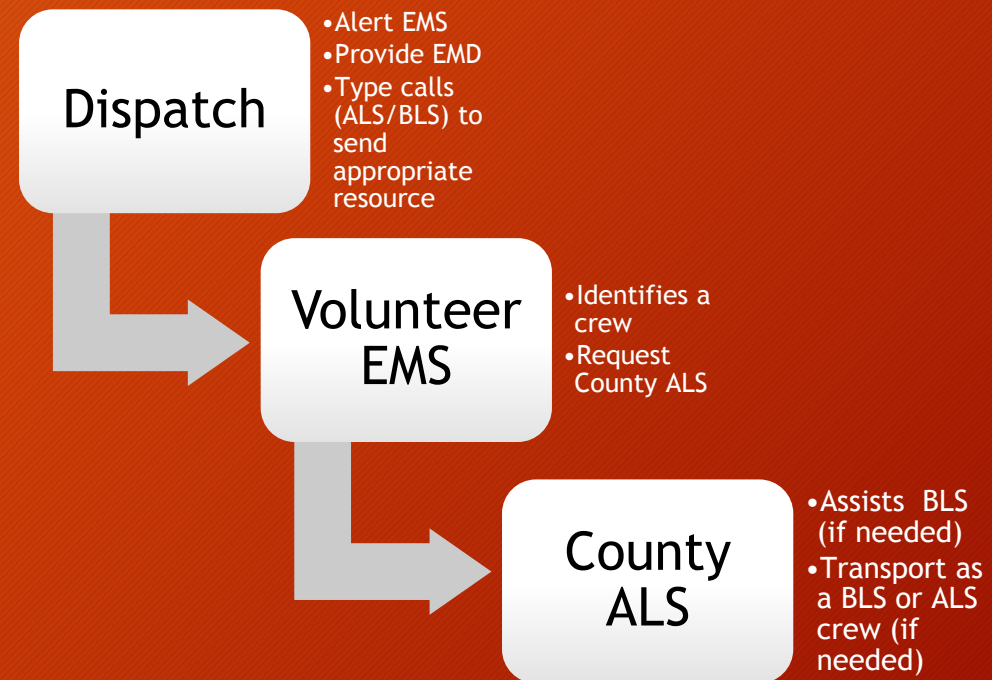


- In 2013, Department of Emergency Services hired two ALS providers to assist the volunteer organizations
  - Support the volunteer based Basic Life Support EMS System
  - Improve Response time and service delivery
  - Provide higher level care capability(ALS) efficiently
- King & Queen utilized grant funding to deploy Emergency Medical Dispatch
- Purchased a county owned ambulance to fill a response gap
- Grant funds were used to purchase 7 Philips MRX 12 lead cardiac monitor/defibrillators, 15 Philips AEDs, and 5 Physio Control Lucas-2 CPR devices countywide among EMS agencies & Sheriff's Deputies to provide a COMPREHENSIVE CARDIAC CARE PROGRAM

# How it all works



- 911 call is placed to dispatch
- First due EMS & County ALS is toned
- Dispatch provides pre-arrival instruction until help arrives (Emergency Medical Dispatch)
- Patient is taken to closest hospital based on need



# Results of Program



- The relationships of the county staff and volunteer staff were embraced by both entities as a partnership.
- Saved \$590,000 in annual savings for the past 3 years.
  - No need to “take over” service. Supplement when and where needed
- Response times were improved from an average of over 50 minutes to approximately 20 minutes or less
  - Main impact to response time was travel time and coverage area
- Equipment savings of approximately \$10,000 annually among EMS agencies due to standardized purchasing.
  - Standardized purchases allow shared resources, reducing expired items that are disposed of without use (County staff rotate stock among agencies)
- Better patient care and service delivery to our citizens & visitors.
  - Crews assembled faster and ALS is available on scene within 20 minutes of dispatch countywide





## ANY QUESTIONS?

King & Queen County Board of Supervisors and EMS Staff and Volunteers accepting the Award from VACO

