Town of South Kingstown
Emergency Medical Services (EMS)

EMS Facility Information Session

MARCH 28, 2022
Town of South Kingstown
Emergency Medical Services (EMS)

Agenda

Introduction and Project History:
Terry Murphy, Town Manager, Town of South Kingstown

SK Land Trust Mission and Involvement:
Julia Landstreet, Executive Director South Kingstown Land Trust

Overview of South Kingstown EMS Services:
Craig Stanley, Chief of Emergency Medical Services(EMS), Town of South Kingstown
Town of South Kingstown
Emergency Medical Services (EMS)

Agenda (continued)

Project Overview:
James D. Rabbitt, AICP, Planning Director

Public Comment:

Next Steps:
Terry Murphy, Town Manager, Town of South Kingstown
Town of South Kingstown
Emergency Medical Services (EMS)

Introduction – Project History

Terry Murphy, Town Manager

2017

- Documented increase in annual call volume resulting in lengthy response times.
- Recommendation to change Paramedic 3 at South Station to 24-hour unit.

2019

- Demand for EMS services continues
  - EMS projects need for third transport unit in the next two years and possibly a fourth transport unit in the next three to five years

2020

- Paramedic 3 at the Public Services location moves from a 12-hour operation to a 24-hour operation
Welcome – Introduction (continued)

2020 (Fall)
- UFD approached SKEMS about joint project at the new proposed Matunuck Fire station (Matunuck School House Road).

2021 (Summer)
- Proposed MOU with UFD for a joint project to build an EMS facility at the Matunuck Fire Station.

2021 (Summer/Fall/Winter)
- UFD goes through permitting process and receives permits to construct at Mantunuck School House Road site. Approvals include SK-EMS Facility
  - Expansion options are limited.
- November/December – possibility of Ministerial Road Site as EMS site is discussed. Town evaluates site for possible facility.

2022
- January - Town Council authorizes Town Manager to enter into a Purchase and Sales Agreement with SK Land Trust.
South Kingstown Land Trust
Mission and Involvement

Julia Landstreet, Executive Director South Kingstown Land Trust

Mission:
- The mission of the South Kingstown Land Trust is to protect and steward the natural resources, open spaces and cultural landscapes for the benefit of our communities now and forever.

Historic involvement with the Town:
- The Land Trust maintains a long standing working relationship with the Town. This relationship has resulted in and investment of over $3.4 million by the Town for the purpose of protecting over 3,000 acres in South Kingstown.
Overview of South Kingstown (SK) - EMS Services:

Craig Stanley, Chief of Emergency Medical Services (EMS)

OPERATIONS – PARAMEDIC LEVEL SERVICE

21 fulltime paramedic personnel and 10 per diem

Paramedic 1 – Transport Ambulance
- Located at the Public Safety Building at 1790 Kingstown Road
- Hours of operation are 24/7

Paramedic 3 – Transport Ambulance
- Located at the Public Services Building at 509 Commodore Perry Highway
- Hour of operation are 24/7

Paramedic 2 – Non-transport intercept (Supervisor)
- Located at the Public Safety Building at 1790 Kingstown Road
- Hours of operation are 24/7
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OPERATION CHALLENGES

- Increase call volume
- Response times
- Limited resources (only two transport ambulances)
- Aging population
- Geography of the Town
  - SK is 57.1 square miles (land mass)
  - Coventry, is the largest (land mass) Town in Rhode Island at 59 square miles
INCREASE IN CALL VOLUME – FACTORS

- Equals increase in workload for two ambulances
- More time out of service on calls - not able to respond
- Dependent on mutual aid from surrounding departments
  - 2021 mutual aid into SK was 173 (Narragansett 87 and Charlestown 64)
  - 2021 SKEMS provided mutual aid outside of SK is 186 (Exeter, URI, Narragansett, Charlestown, North Kingstown)
  - Historically the numbers are constant with mutual aid coming in and going out
INCREASE IN CALL VOLUME - FACTORS

- Seeing increase in average calls per shift increase
- 11 to 14 per average in 24 hour period spiking to 17-23
- Averaging 60 extra calls per month with some months are at 82 to 111 extra compared to previous years
- 2019 average per month 275
- 2020 average per month 259*
- 2021 average per month 314

* COVID decrease in volume in 1st quarter of 2020
Town of South Kingstown
Emergency Medical Services (EMS)

SK-EMS Annual Call Volume

<table>
<thead>
<tr>
<th>Year</th>
<th>Call Volume</th>
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<tbody>
<tr>
<td>2015</td>
<td>3,006</td>
</tr>
<tr>
<td>2016</td>
<td>2,837</td>
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<tr>
<td>2017</td>
<td>3,052</td>
</tr>
<tr>
<td>2018</td>
<td>3,301</td>
</tr>
<tr>
<td>2019</td>
<td>3,301</td>
</tr>
<tr>
<td>2020</td>
<td>3,117</td>
</tr>
<tr>
<td>2021</td>
<td>3,767</td>
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RESPONSE TIMES

- Recognized standard response time for Advance Life Support (paramedic level) for an urban setting is reaching the scene within 8 minutes and 59 seconds from the time the 911 call is answered. In litigation, experts cite 8:59 as defined as community standard of care.
  - The goal is to meet this standard 90% of the time.

- For cardiac arrest cases, the American Heart Association’s scientific position is that chances of survival decrease 7%-10% with every minute defibrillation is delayed and that few resuscitation attempts are successful after 10 minutes.
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RESPONSE TIMES

- South Kingstown is considered an urban community based on the population data from 2017 U.S. Census Bureau and the Centers for Medicare & Medicaid Services – EMS Billing.

- The standard for response times can range from community to community
  - A community must consider the following:
    - What is the community willing to accept for response times?
    - What is the community willing to pay to obtain a desired response time?
RESPONSE TIMES

- Importance of response times
- Quick treatment for those experiencing a medical or traumatic emergency
- Provide life saving treatment
- Quicker response times provide quicker transport times to designated hospitals for the treatment of heart attacks, strokes, trauma or pediatric emergency
  - Rhode Island Hospital* (stroke, trauma or pediatrics emergency)
  - Kent Hospital* (heart attack)

* Per RIDOH EMS Protocol
RESPONSE TIMES

Challenges of response times

- Lack of adequate resources
- High call volume and limited units to response
- Hospital diversion
- Ambulances on calls or returning to zone from out of town hospitals
- Weather
- Population surges – seasonal/traffic
- Geography to cover (you just cannot get there from here)
- Going as fast as you can is dangerous and does not make up for geography
RESPONSE TIMES

2021, South Kingstown EMS met the 8:59 response time threshold 55% of the time.
### Age Demographics (Treated and Transported)

<table>
<thead>
<tr>
<th>Patient Age in Range In Years</th>
<th>Percent</th>
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<tbody>
<tr>
<td>&lt;1</td>
<td>0.64</td>
</tr>
<tr>
<td>1 to 9</td>
<td>2.54</td>
</tr>
<tr>
<td>10 to 19</td>
<td>5.51</td>
</tr>
<tr>
<td>20 to 29</td>
<td>7.15</td>
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<tr>
<td>30 to 39</td>
<td>5.44</td>
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<td>40 to 49</td>
<td>4.67</td>
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<tr>
<td>50 to 59</td>
<td>10.68</td>
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<tr>
<td>60 to 69</td>
<td>16.45</td>
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<tr>
<td>70 to 79</td>
<td>17.25</td>
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<tr>
<td>80 to 89</td>
<td>19.22</td>
</tr>
<tr>
<td>90 to 99</td>
<td>10.28</td>
</tr>
<tr>
<td>100 to 120</td>
<td>0.17</td>
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*Represents 52.92 percent of all calls*
Independent South Kingstown Citizen Review:

SK resident David Coté provided an independent EMS data analysis on 1/15/22 and concluded the following:

- “Data indicates that a 3rd South Kingstown ambulance is required.”
- “Data justified additional EMS staff to support 3rd ambulance.”
SK-EMS Cardiac Arrest Data:

- 173 cardiac arrest patients since 2017
  - Average age of a cardiac arrest patient is 68
  - 81% of cardiac arrest calls occur in a residential setting
  - In the South Kingstown census track of 513.02 (East Matunuck, Matunuck, Green Hill) 30 cardiac arrests have occurred with a rate of 8.2 cardiac arrest per 1,000 residents. Largest per 1,000 resident population in South Kingstown
“It doesn’t take a PhD to discern that outcomes are often positively influenced by EMS systems that consistently deliver a predictable response time. In the simplest of terms, when you’re thirsty, you don’t need to know that the scientific composition of water includes organic and inorganic materials, dissolved gases, nutrients, inorganic salts, trace elements, heavy metals and potentially toxic chemicals. You simply turn on the tap and expect a response. The same is true with EMS. Detailed clinical research isn’t needed to know what 911 callers expect. EMS customers universally perceive value in a rapid intervention for loved ones. Long response times often negatively affect scene interactions and perceptions of care. And they are frequently the cause of public complaints. In the absence of a regulatory or defined system standard, court proceedings provide ultimate guidance.”

Jay Fitch, PhD

Founder of Fitch & Associates, a leading resource for EMS/public safety organizations
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Strategic Plan:

- SK-EMS recommends that a third ambulance/personnel be added.
- SK-EMS long range plan (5-year) * includes adding a fourth ambulance in West Kingston near the area of Route 2/Hwy-138.

* Additional financial resources to cover costs associated with a fourth ambulance are required
Town of South Kingstown
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Project Overview

South Kingstown EMS Services:

Jamie Rabbitt, AICP, Director of Planning

SOUTH COUNTY LAND TRUST & SOUTH KINGSTOWN, EMS
March 28, 2022
Town of South Kingstown
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Current EMS stations.

- The yellow and blue circles represent a 3 mile response radius from the current EMS stations (Public Safety Complex / Curtis Corner Rd and Public Service Facility/Route 1).
Town of South Kingstown Emergency Medical Services (EMS)
Current EMS stations.

- The red circle represents a 3 mile response radius from the proposed Ministerial Road/Post Road EMS facility.
During the permitting process associated with the UFD, the Town identifies issues associated with the development of the site and the site's ability to fit the combined needs of UFD and SK-EMS without re-designing the site and/or acquiring easements from abutting property owners (SK-Land Trust and the Schwab’s).

- Final site design site limits SK-EMS’s future expansion possibilities (one bay only).
- Revised Plans are reviewed by the Planning Board and then Zoning Commission and ultimately UFD receives approval to construct their facility and SK-EMS facilities in separate buildings.
  - Approval motion also permits UFD to move forward without SK-EMS to reduce footprint of project.

- In February, the Town of SK advises UFD to move forward without SK-EMS and thanks them for their assistance and support provided during this difficult and challenging permitting process.
Town of South Kingstown

EMS Facility - Proposed Site, Ministerial Road and Post Road

3 mile radius

Google Earth
Town of South Kingstown

EMS Facility - Proposed Site, Ministerial Road and Post Road

AP 80-1/Lot 18
4/- 41,895 SF
(.96 Acre)
Town of South Kingstown

EMS Facility – Proposed Site, Ministerial Road and Post Road
Town of South Kingstown

EMS Facility - Proposed Site, Ministerial Road and Post Road

Onsite Wastewater Treatment System (OWTS) - approximate area

Stormwater Management - approximate area

Parking (9 Spaces)

EMS Facility (2 vehicles + sleeping quarters + administration) - approximate footprint

Onsite Wastewater Treatment System (OWTS) - approximate area
Town of South Kingstown

EMS Facility: Proposed Site - Sample Architecture
Public Comment

- Please limit initial comments/thoughts to 3 minutes to allow everyone to speak.
- We will go back around the room and allow additional comments once everyone has had a chance to speak.
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Thank You for your time and we look forward to your input: