Brunswick County Emergency Services

Protecting the Citizens of Brunswick County

Update on Hurricane Florence

- FEMA Declarations
  - September 14, 2018 Public Assistance Categories A & B
  - September 14, 2018 Individual Assistance
  - October 13, 2018 Public Assistance C through G
- Damage Assessment
  - Unincorporated Brunswick County: $17,600,000
  - Brunswick Cities and Towns: $27,145,000
  - Total: $44,745,000
- Debris Management:
  - Pickup continues in unincorporated areas
  - Most municipalities have activated their debris contract as well
  - BOCC approved pickup in gated communities on 10/15/2018

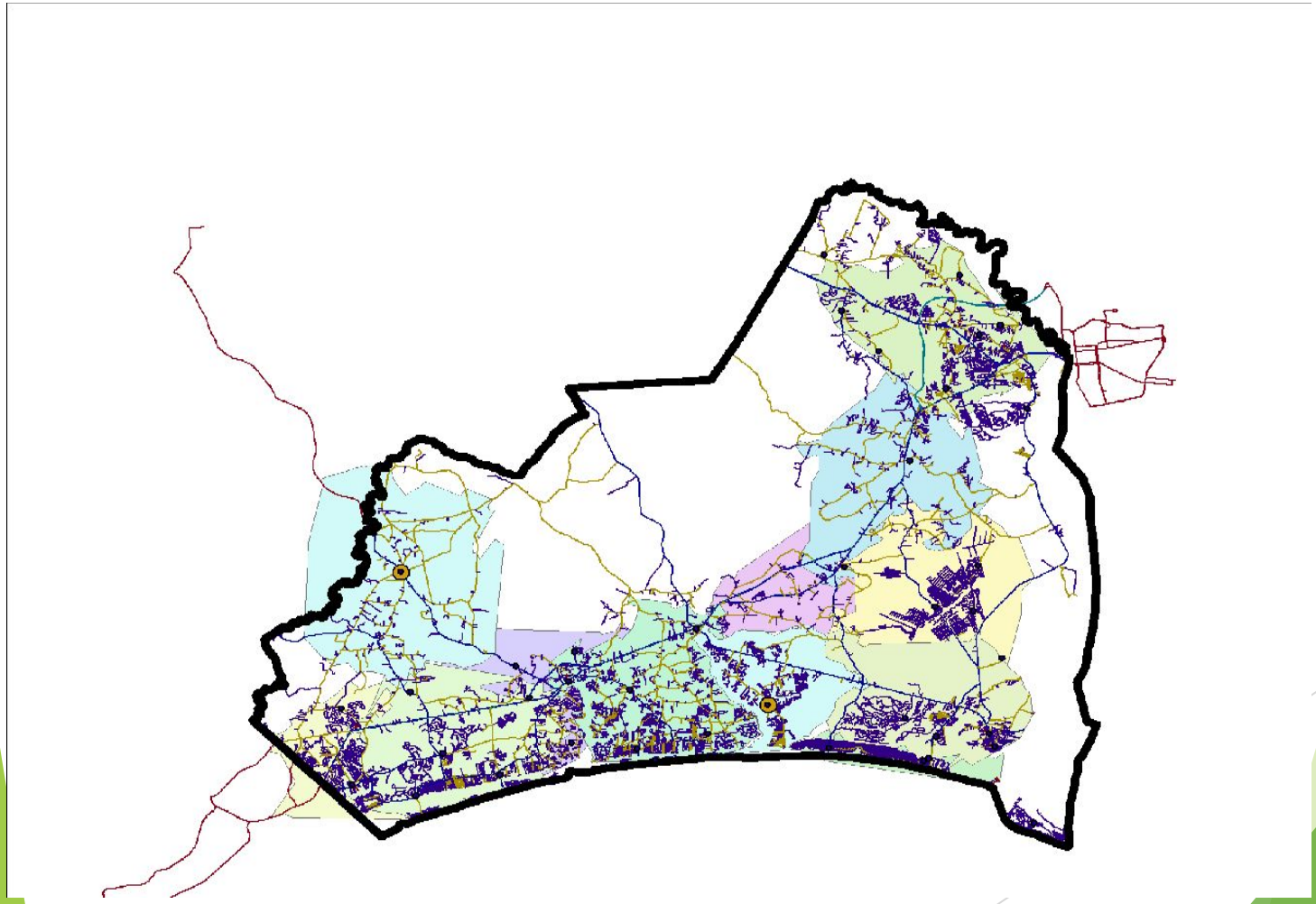
Brunswick County Emergency Services

- Two Divisions
  - Emergency Medical Services
  - Emergency Management
- Special Teams
  - Disaster Medical Specialist
  - Rescue Teams (Swiftwater/ Flood & Confined Space)
- 94 Full time employees
- Total Budget $11.2 million

Emergency Medical Services

- Primary paramedic service for citizens and visitors of Brunswick County
  - 20,000 Responses per year
  - 15,000 Transports per year
- Staffing
  - 7 Ambulances 24 hours per day
  - 2 Quick Response Vehicles 24 hours per day
  - 3 Peak load ambulances
- Employees
  - 92 Employees
    - 9 Administrative Staff
    - 5 Supervisory
    - 78 Paramedics and EMT's
- Funding Sources
  - County Funds: $5,800,000 (60%)
  - User Fees: $4,800,000 (40%)

Emergency Medical Services



Emergency Medical Services

How we determine staffing and ambulance placement

Ambulance Deployment

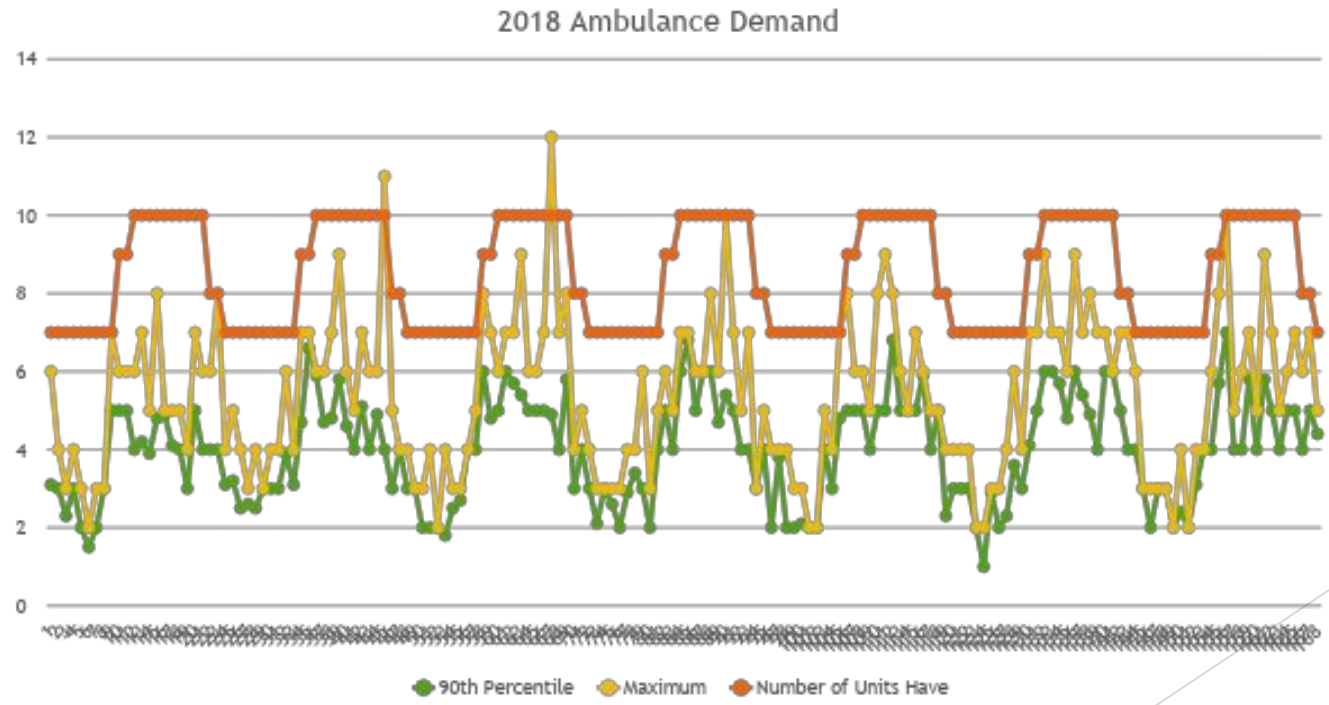
- Two processes together
- Ambulance Demand Analysis
  - How many responses per hour vs. how many ambulances available
  - Answers how many ambulances needed
- Ambulance Deployment Analysis
  - Where are the responses
  - Answers where the ambulances should be placed

Assumptions

- Response time goal is 12 minutes of less 90% of the time
- Deployable Units:
  - 7 24 hours per day
  - 3 12 hour per day peak load
- Response Unit Hour Utilization Goals:
  - Average response Unit Hour Utilization between 0.25 and 0.35
  - 90% of the time Response Unit Hour Utilization should be below 0.60

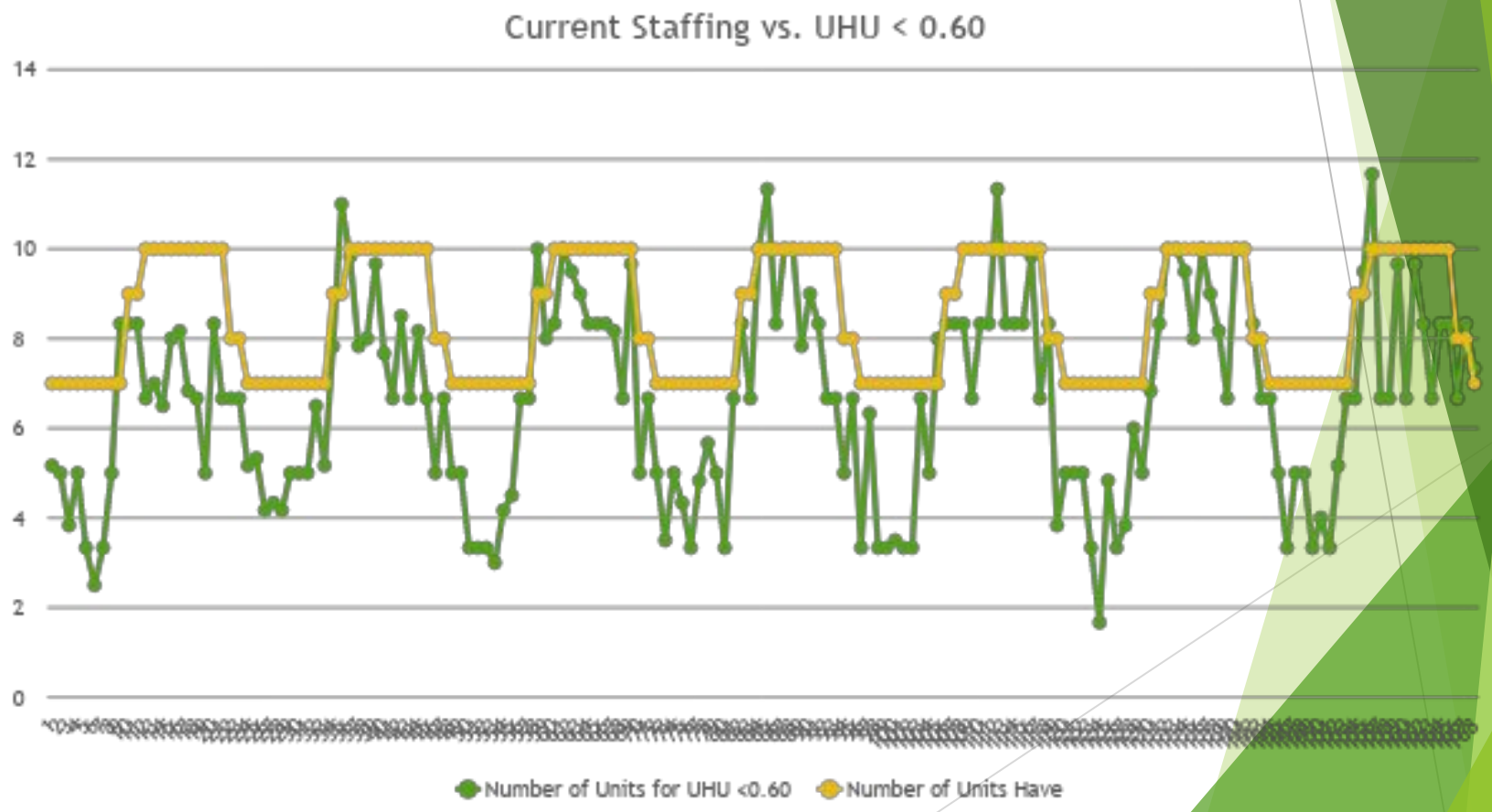
Ambulance Demand Analysis

- For each hour of day of each day of week determine:
  - 90th Percentile of calls for service
  - Maximum number of calls for service
  - Number of scheduled units for each hour



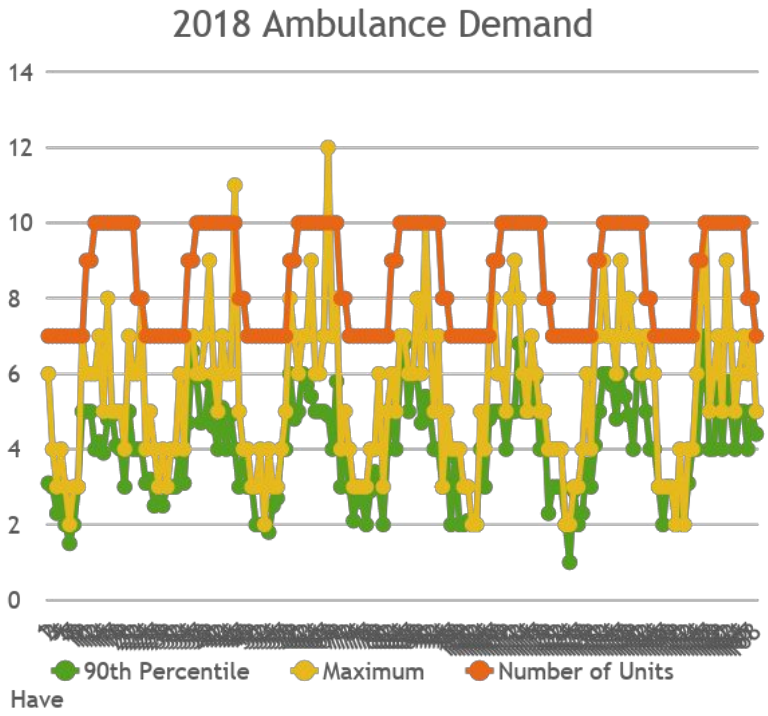
Ambulance Demand Analysis

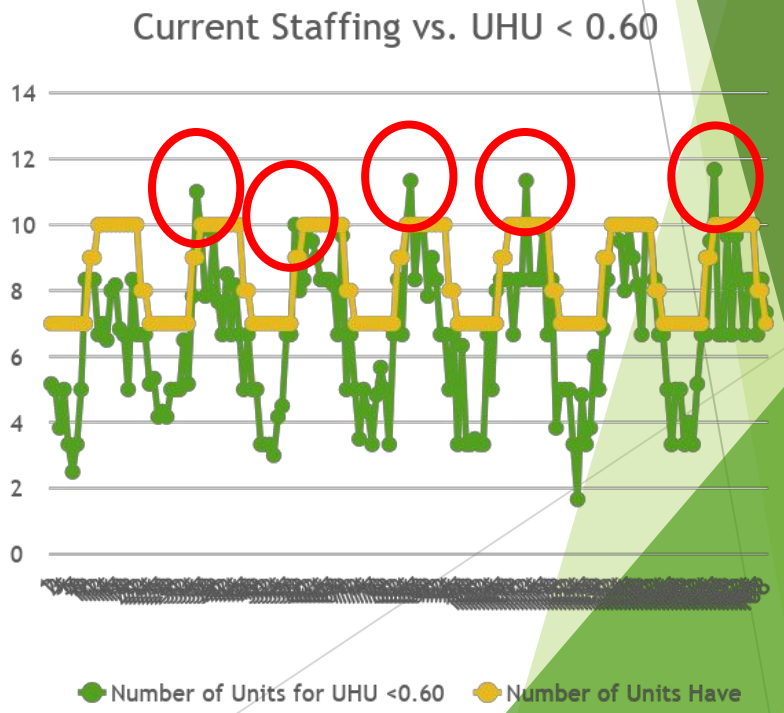
- Based on 90th Percentile response volume determine:
  - Number of units needed for UHU less than 0.60 for each hour
  - Number of scheduled units for each hour



Ambulance Demand Analysis

- From all this we now know:
  - The expected response volume we will see
  - How many response units we need to staff for each hour
  - An idea of the hours we may be low on response resources

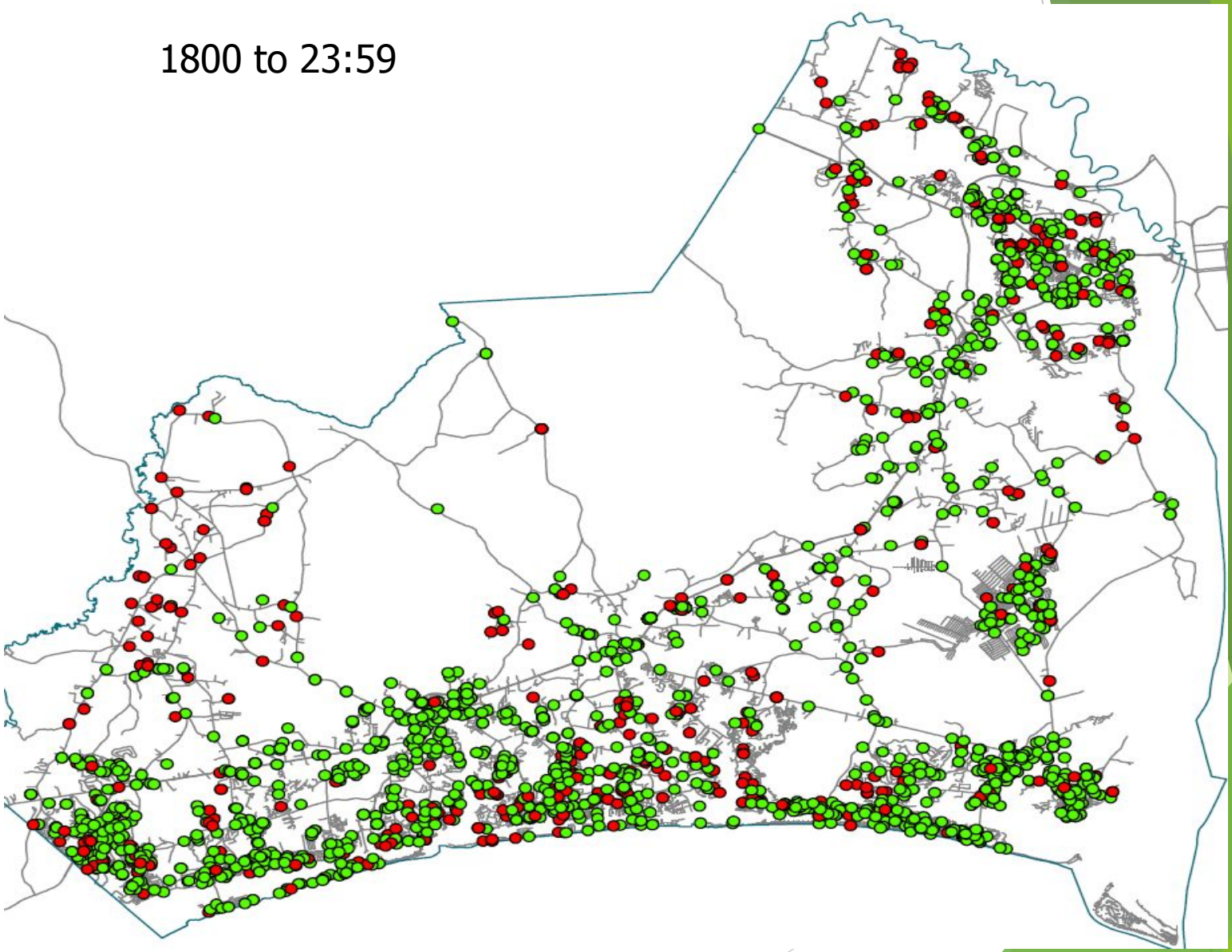




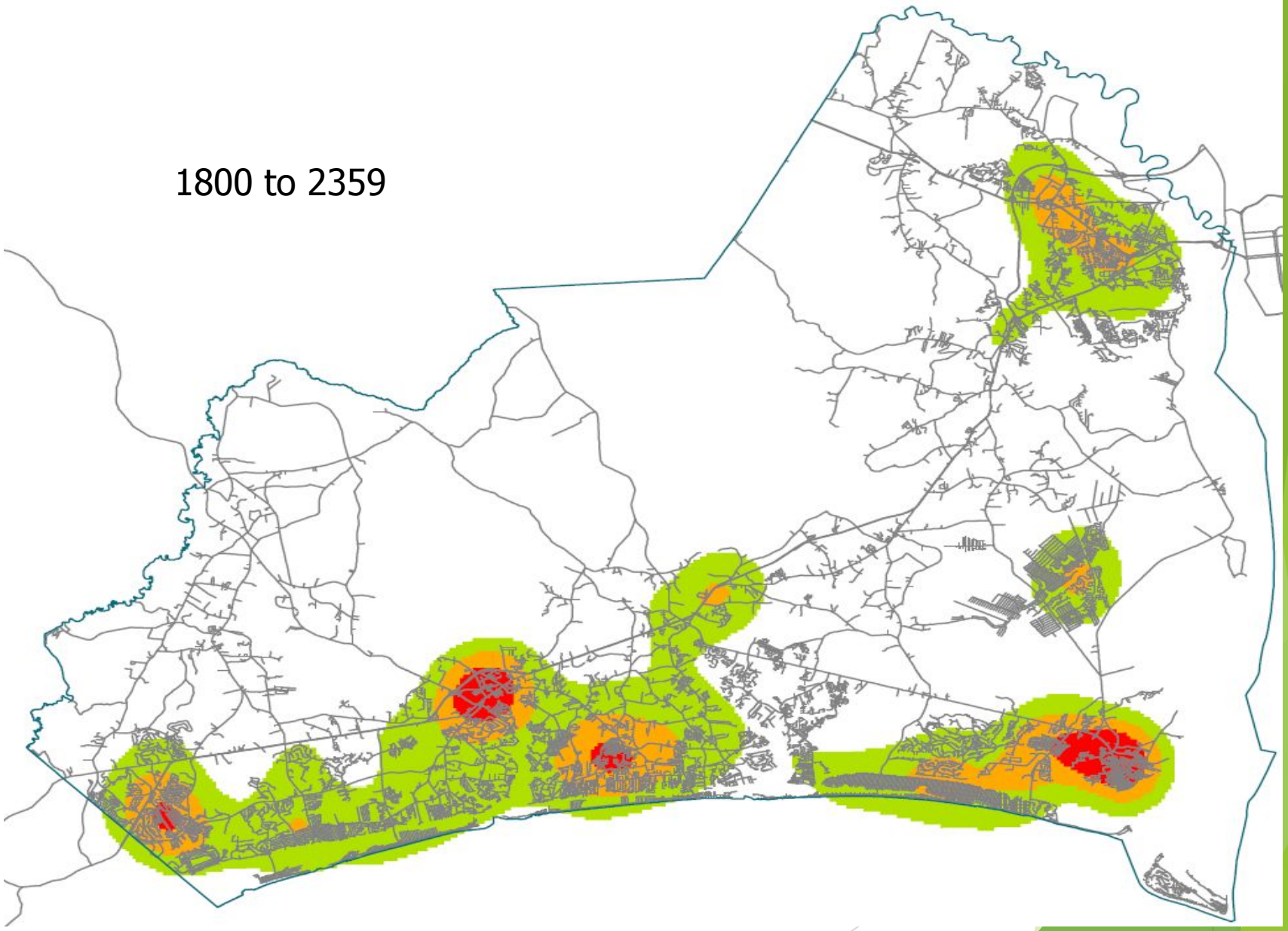
Ambulance Deployment Analysis

- Also designed to answer two questions:
  - Where are the responses located and are certain areas more dense than others
  - Where should we deploy units to get optimal response time
- Process:
  - Plot responses on a map
  - Process a density map to look for hot spots
  - Process a cost-allocation for resource availability from 1 to the number of units available
  - Use the density map to determine where additional units should be deployed
  - Build your system standby plan

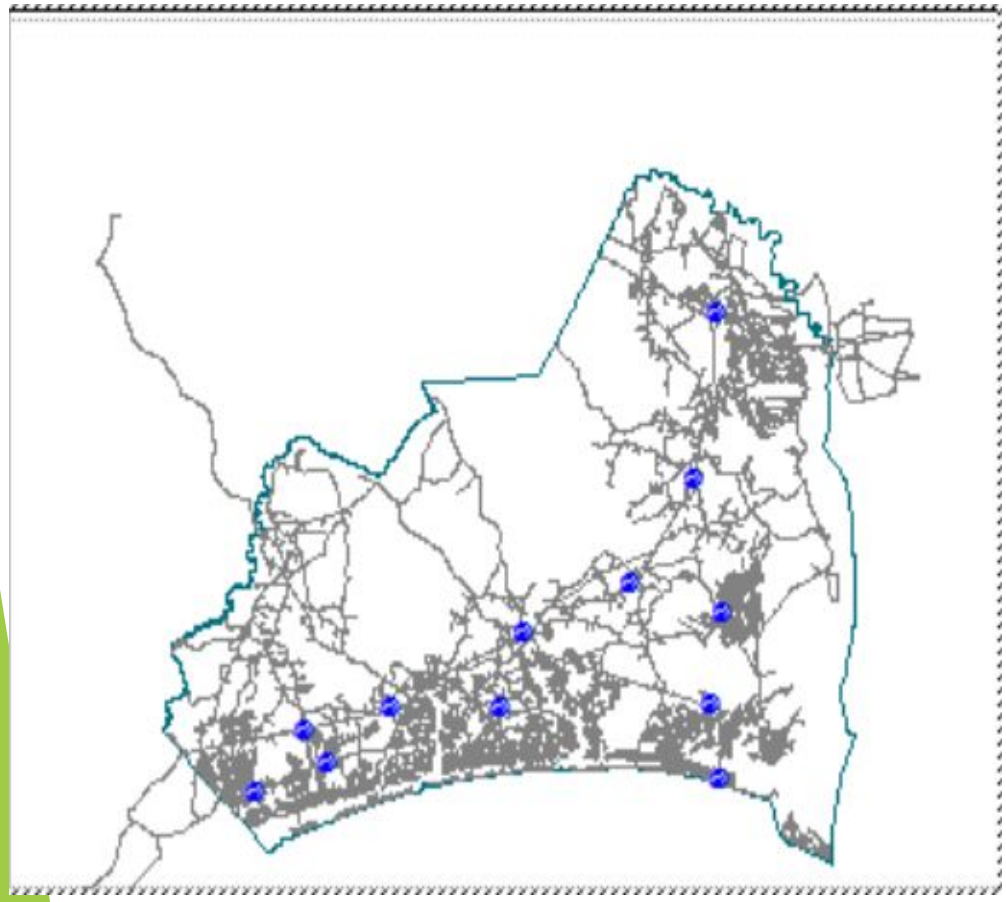
1800 to 23:59



1800 to 2359

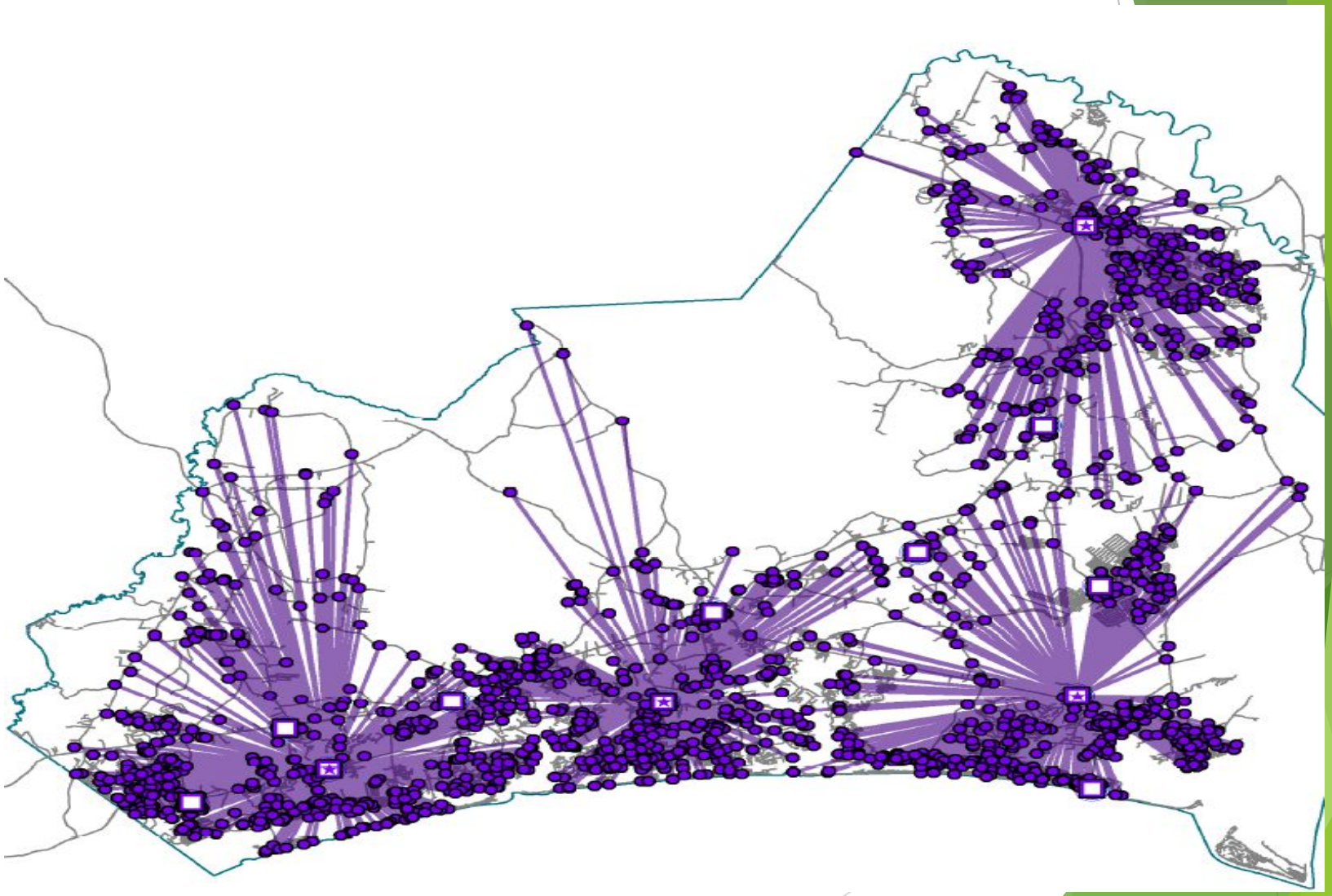


2. Base and Post Locations

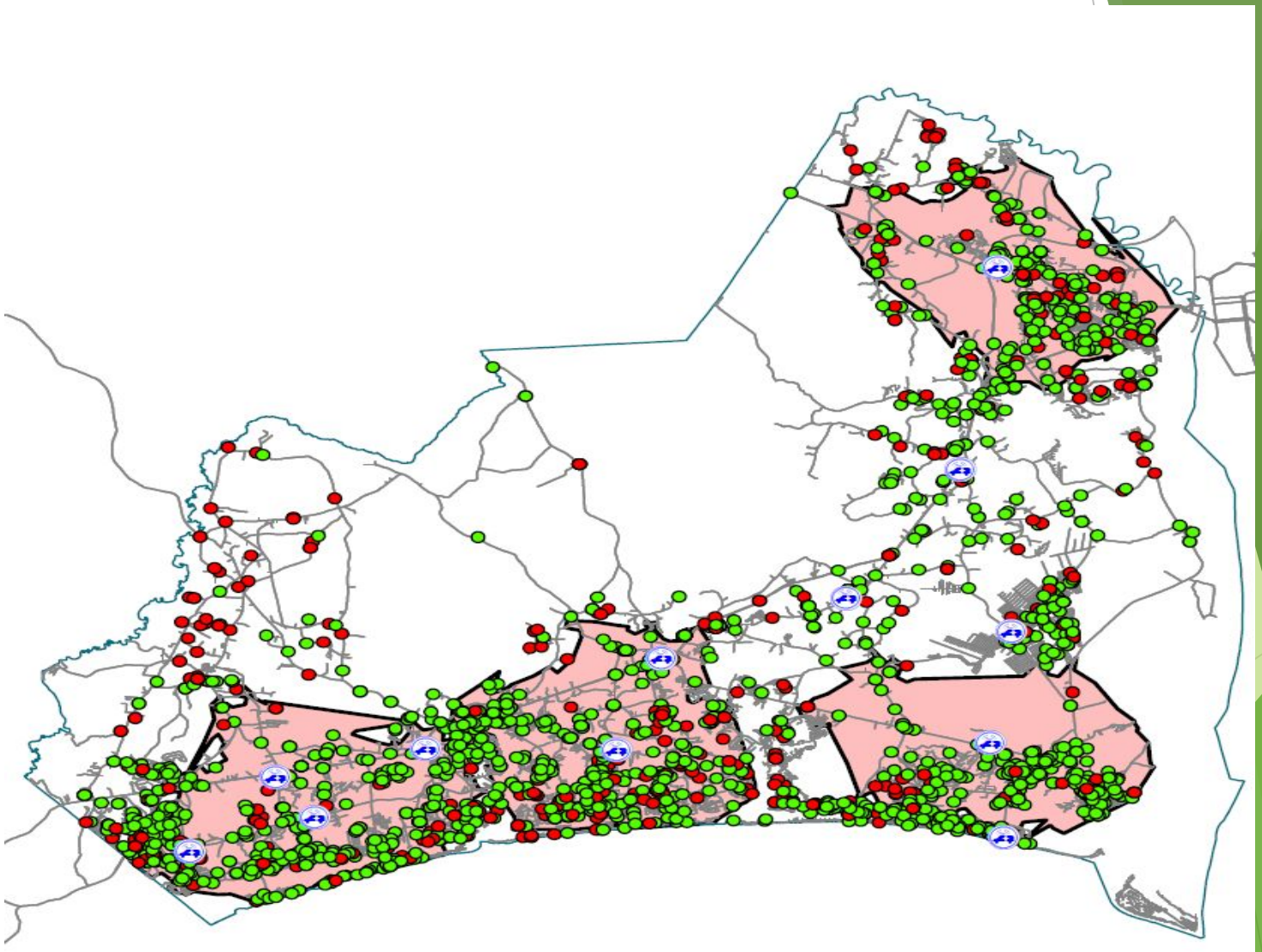


- Have 12 Locations for Post
  - 10 EMS Bases
  - 2 Street Corners
- Deployment during this time:
  - 1800-2100 10 Units
  - 2100-2300 8 Units
  - 2300-0000 7 Units
- Deployment Strategy is:
  - 1-4 available units Geographic
    - Best place to get to all calls
  - 5-10 available units Demand
    - Best place to get best response time

Location Allocation for 4 Units Available



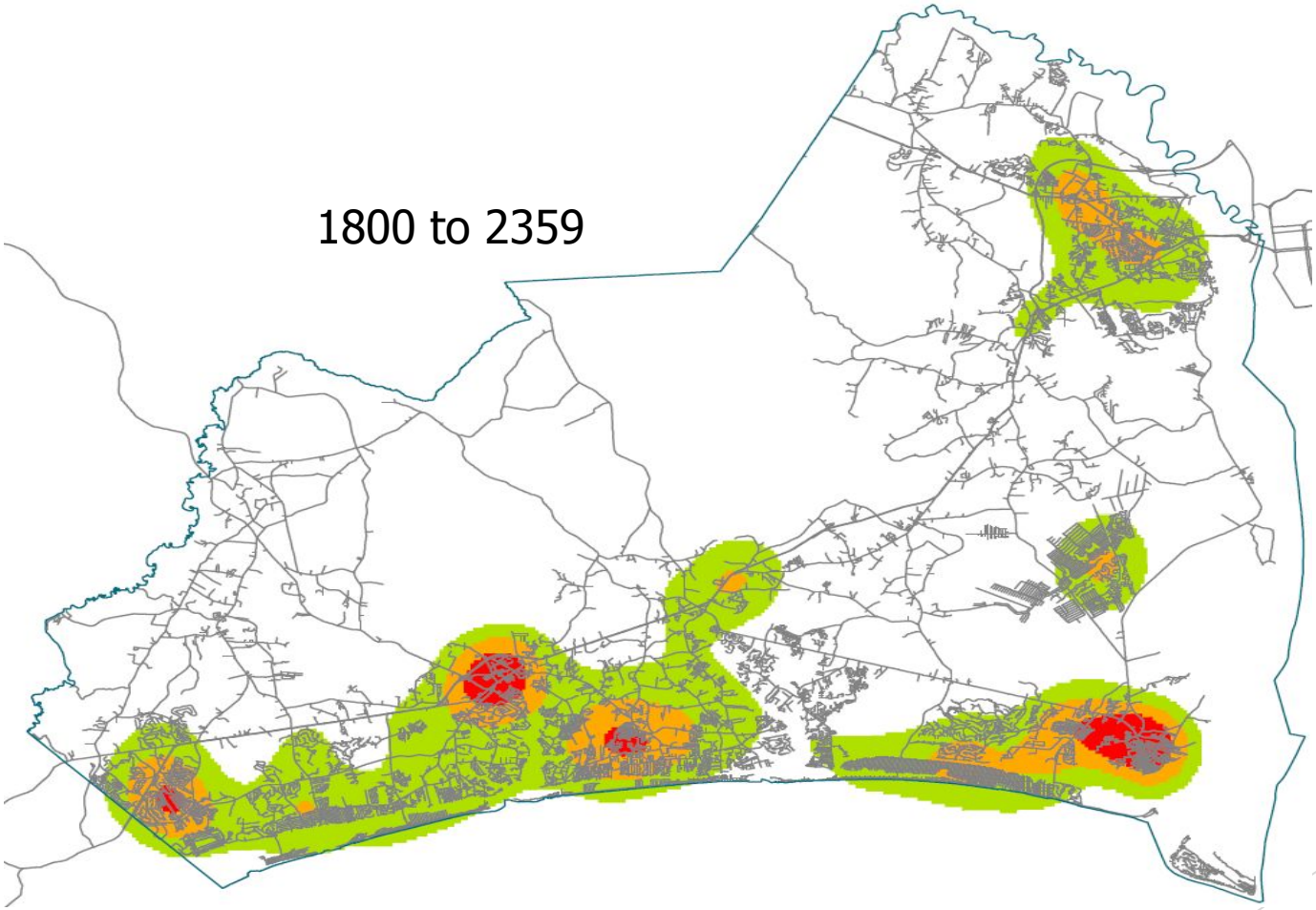
Coverage Potential at 12 Minutes with four units available (68%)

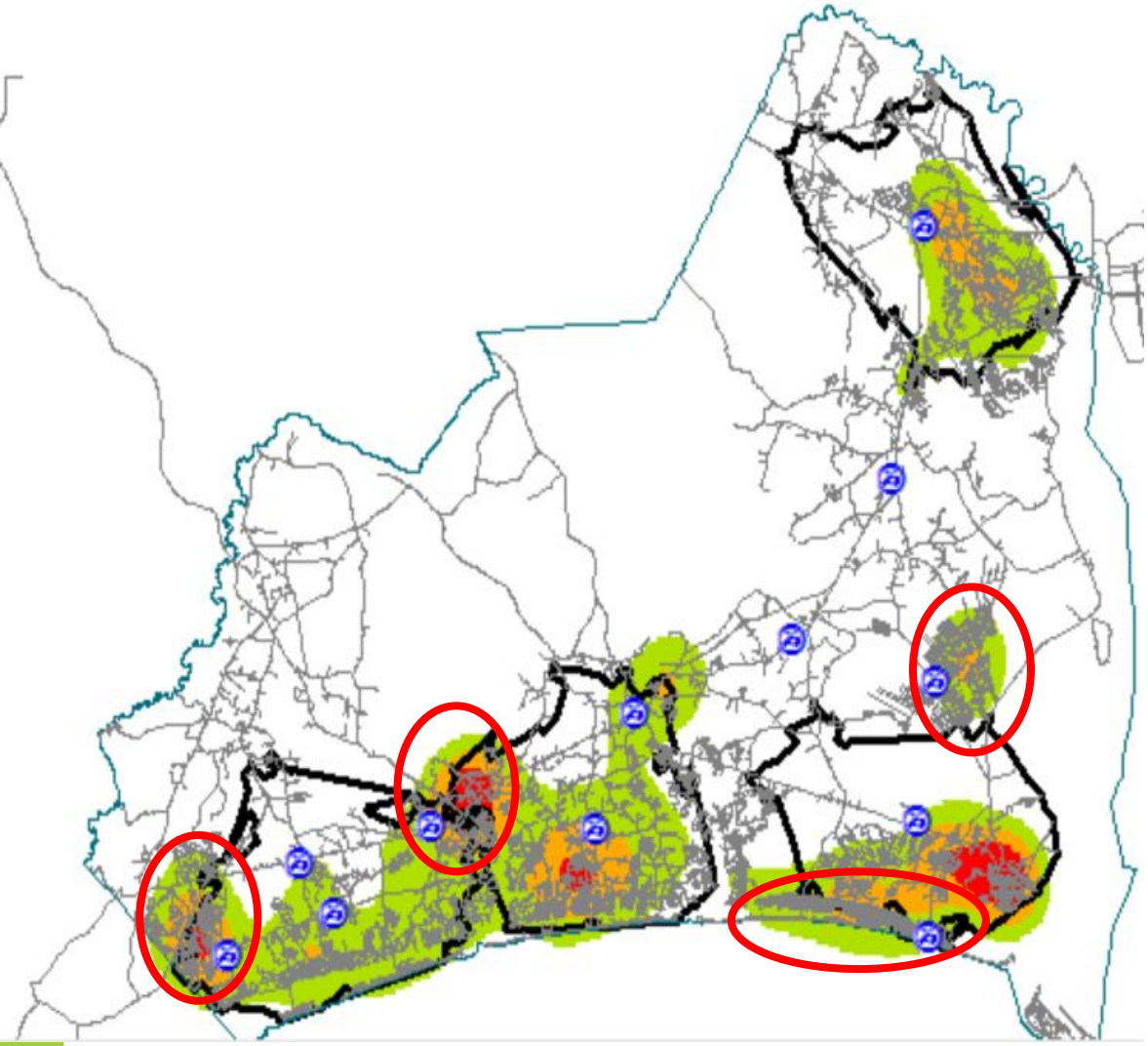


So where are we…

- What we know
  - We know how many responses we will have
  - We know how many resources are needed
  - We know where the responses will be
  - We know where the resources need to be to cover geographically
  - We know the response time compliance potential for up to four units available
- What we don’t know:
  - Where to deploy the other units

1800 to 2359



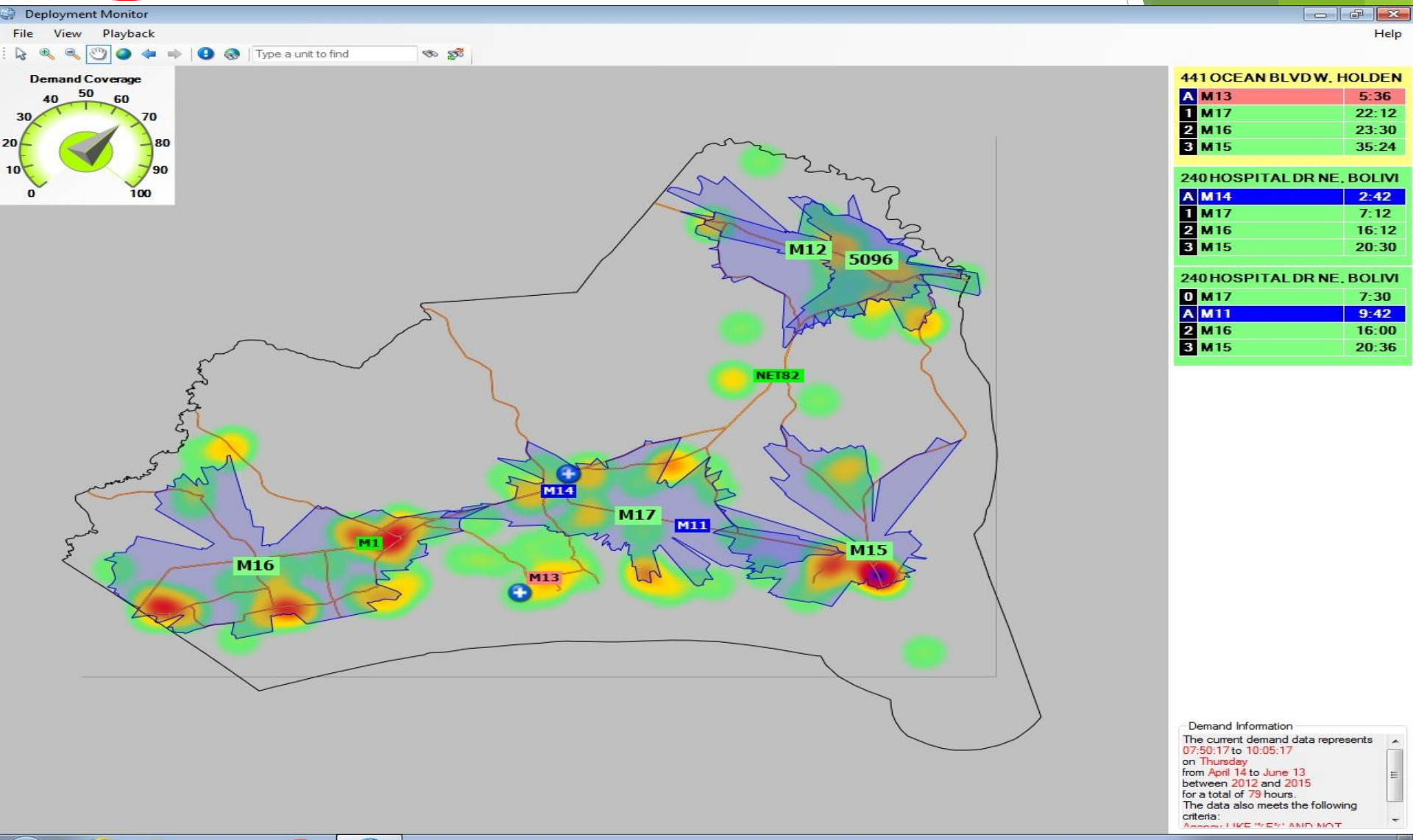


- Have 68% of responses covered
- Still have 6 units to deploy
- What higher density areas still not covered
- What areas may need double or triple covered

EMS System Deployment Plan (1800-0000)

Units Available	Locations									
1	211/17									
2	EMSHQ	Base 5								
3	EMSHQ	Base 2	Base 4							
4	Base 1	Base 2	Base 3	Base 4						
5	Base 1	Base 2	Base 3	Base 4	Base 5					
6	Base 1	Base 2	Base 3	Base 4	Base 5	EMSHQ				
7	Base 1	Base 2	Base 3	Base 4	Base 5	EMSHQ	Base 6			
8	Base 1	Base 2	Base 3	Base 4	Base 5	EMSHQ	Base 6	Base 7		
9	Base 1	Base 2	Base 3	Base 4	Base 5	EMSHQ	Base 6	Base 7	Base 8	
10	Base 1	Base 2	Base 3	Base 4	Base 5	EMSHQ	Base 6	Base 7	Base 8	EOC

Emergency Medical Services



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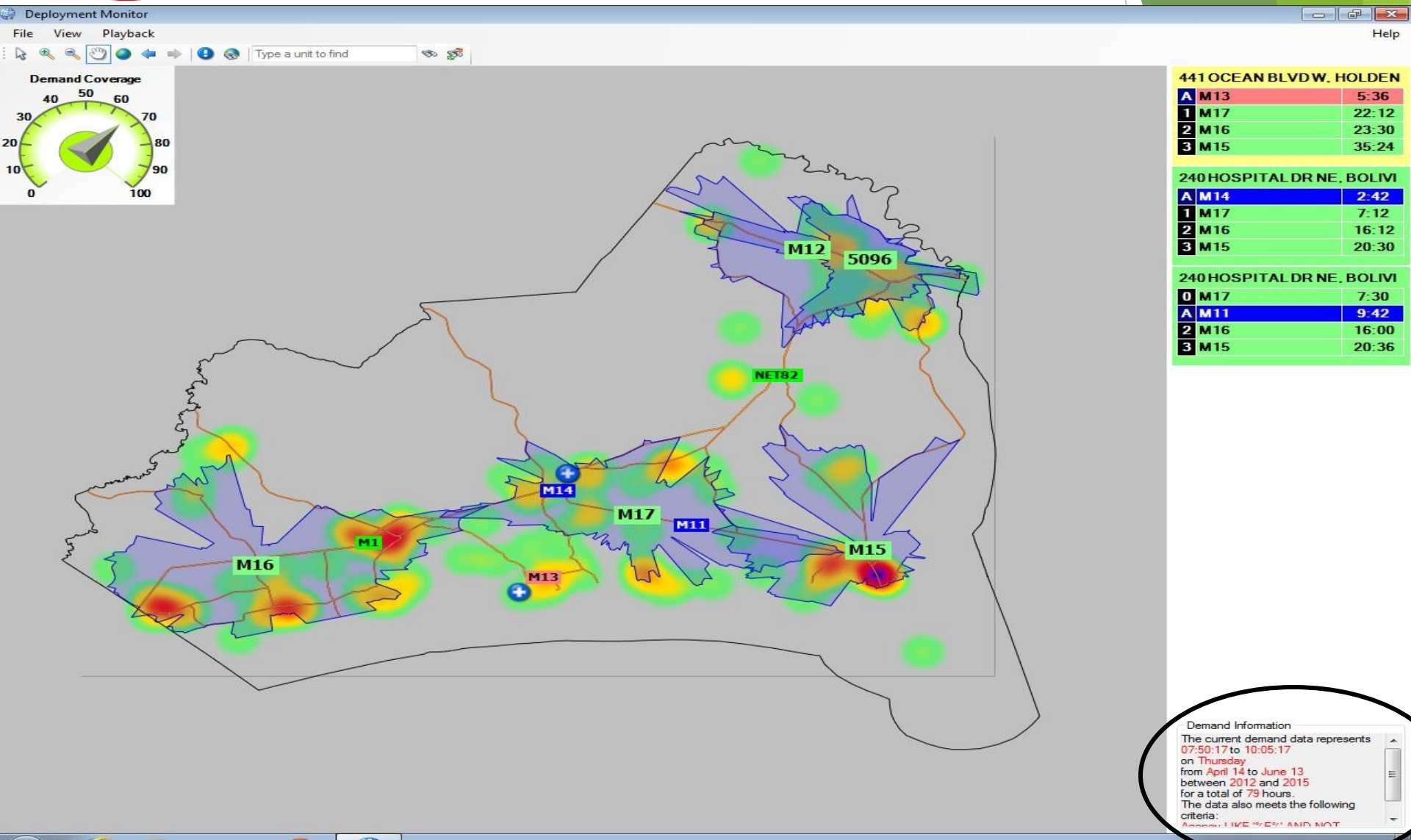

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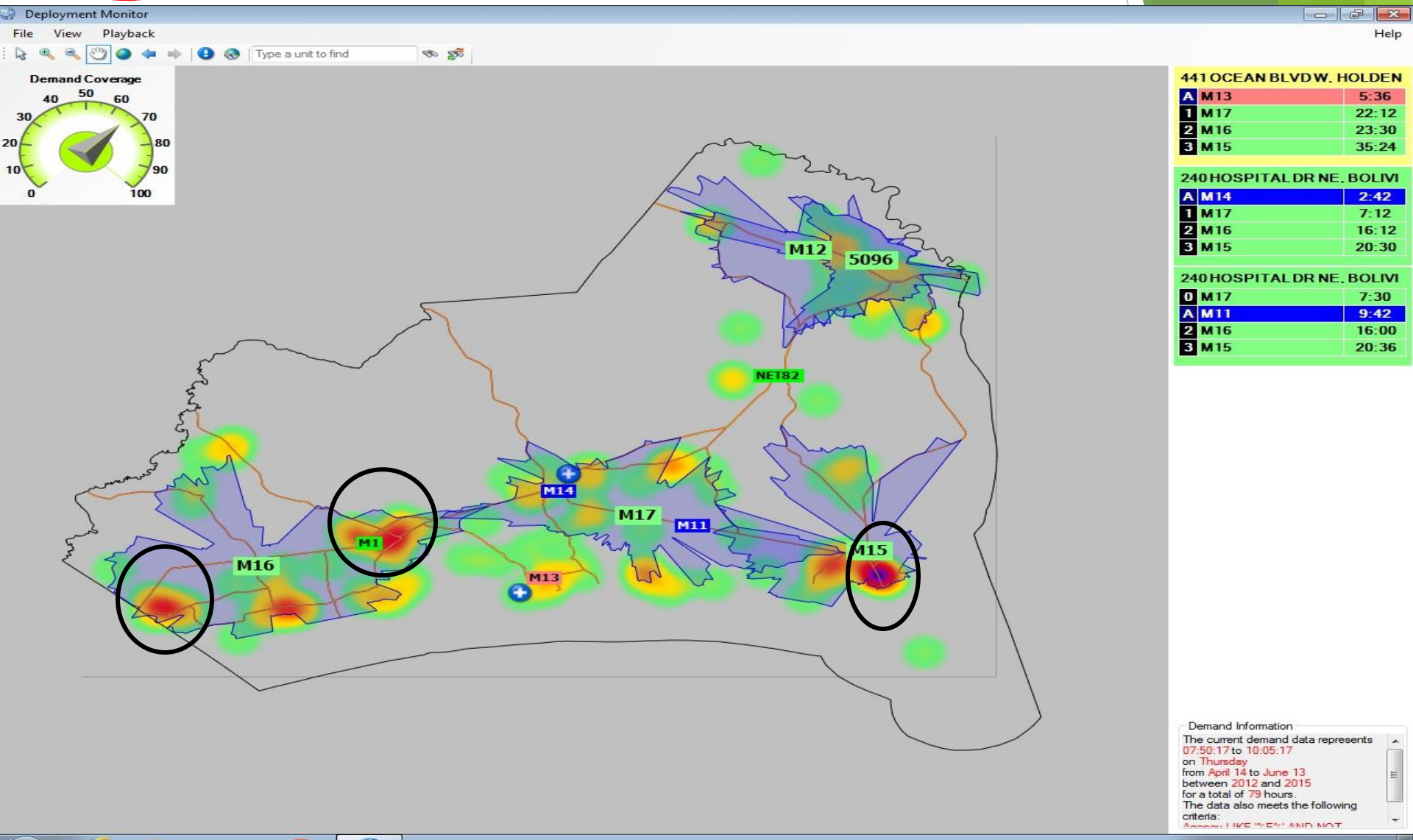

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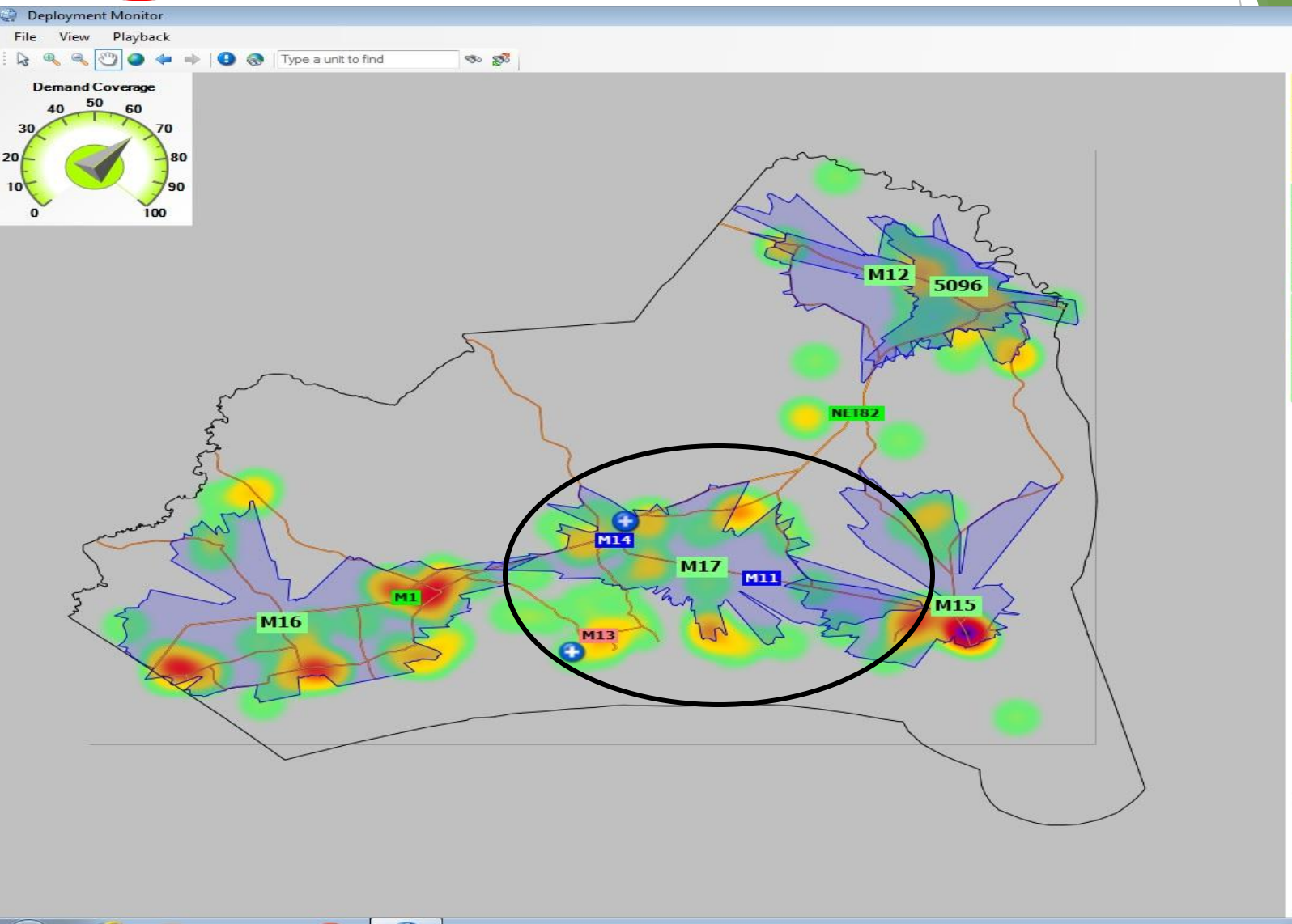
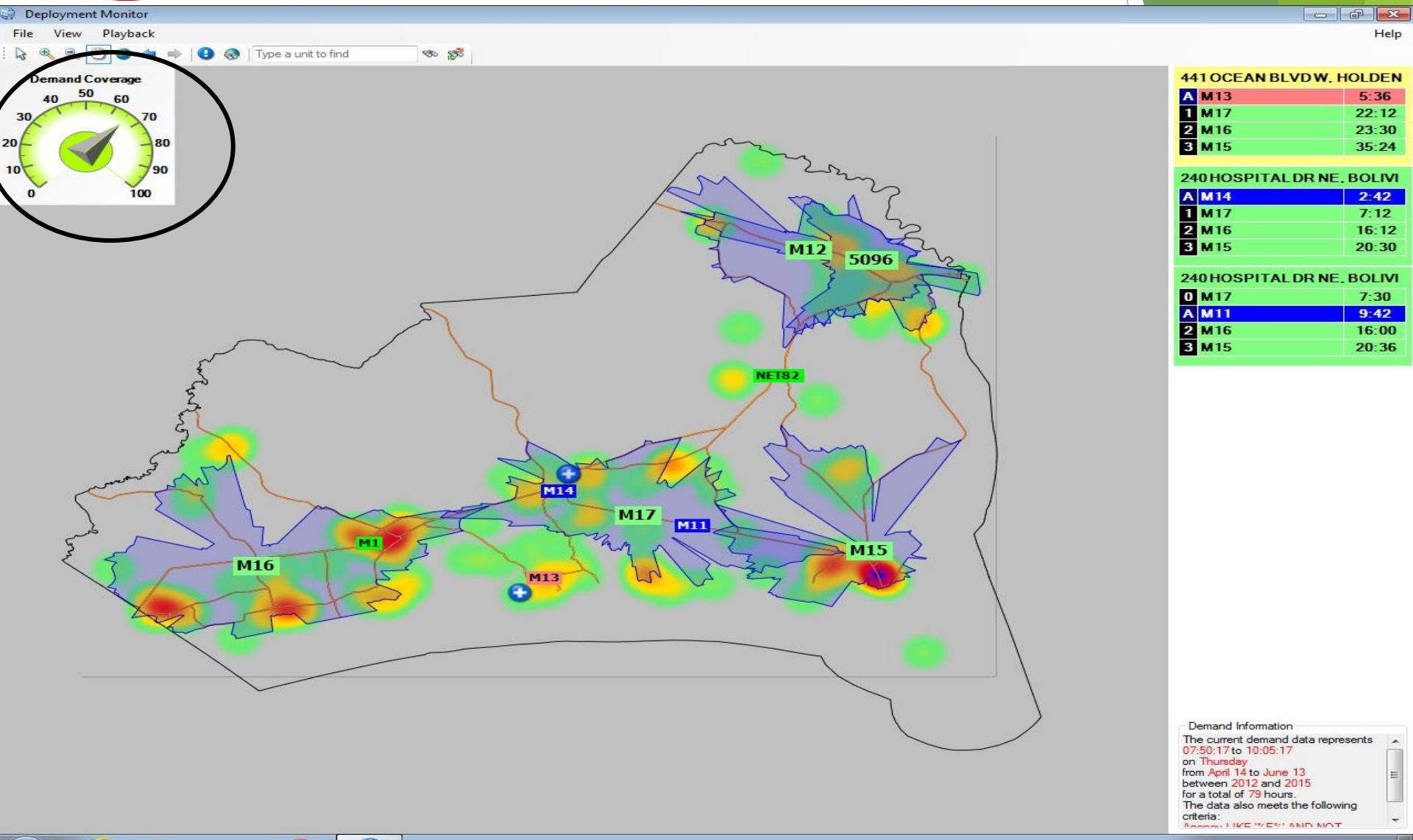
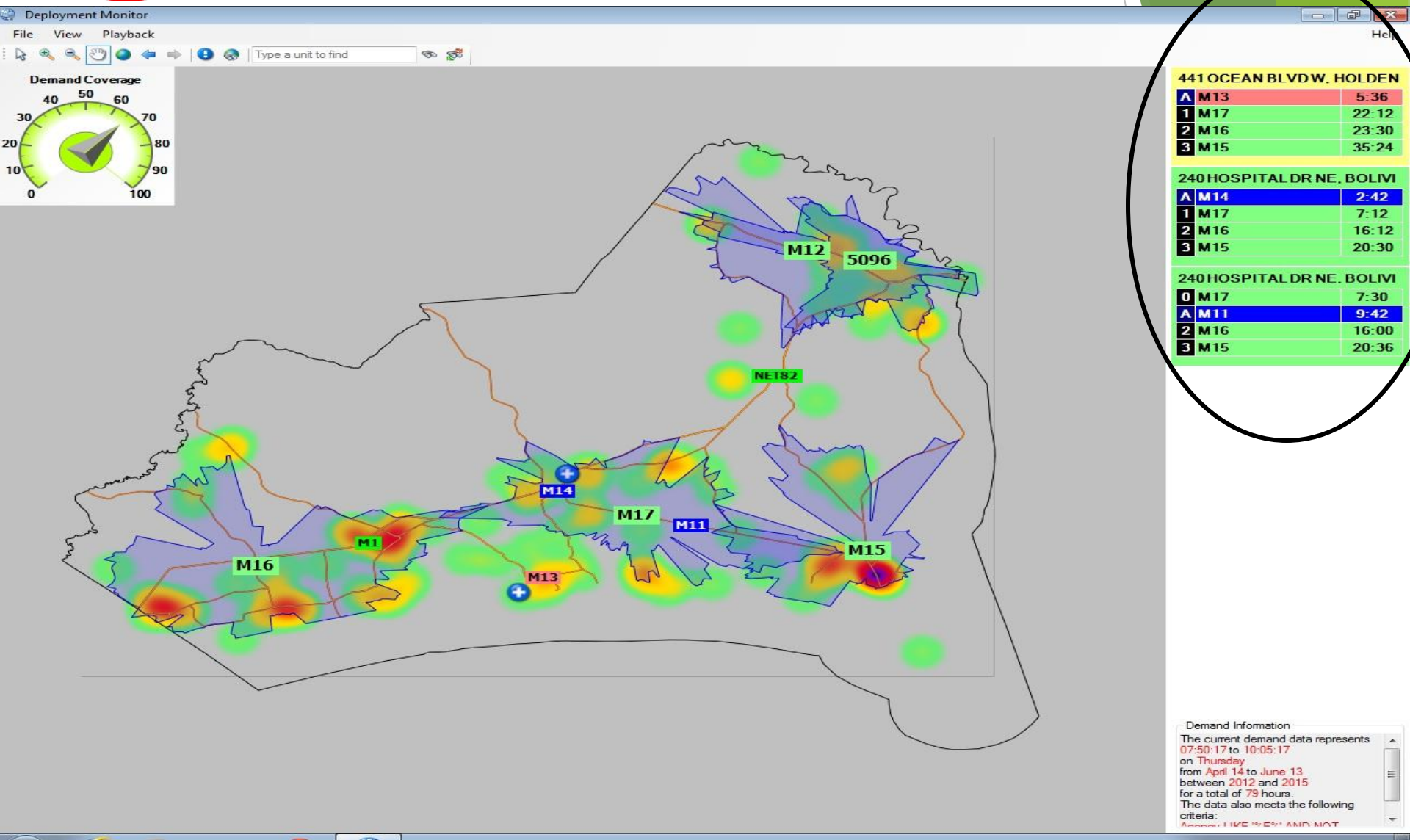


Emergency Medical Services



Emergency Medical Services



Emergency Management

- Coordinate the preparedness, response, recovery and mitigation for any disaster in Brunswick County.
- Task Include:
  - Planning for the Nuclear Power Plant
  - Writing and updating response plans
  - Conducts exercises to test those plans
  - Local Emergency Planning Committee
  - Incident Management

Emergency Management

- Employees
  - Director
  - Deputy Director
- Funding Sources
  - Local Funds
  - Duke/ Progress Energy
  - Emergency Management Performance Grant

Emergency Management

- Major Hazards
  - Hurricane/ Tropical Storm
  - Severe Weather/ Flooding
  - Hazardous Materials
  - Brunswick Nuclear Plant
- Preparedness
- Response
- Recovery
- Mitigation

Brunswick County Hurricane Preparedness

- Brunswick County has been certified "StormReady" and "TsunamiReady" by the National Weather Service
  - This means that Brunswick County has fulfilled all necessary requirements such as 24-hour warning point, created a system to monitor local weather conditions and developed a formal hazardous weather plan

Special Needs

- If you or a loved one has a special need and may need assistance during a storm please call: (910)253-5383
- Brunswick County Special Needs Registry stores information of those with special needs.
- Those on the Special Needs Registry receive phone calls to ensure they are safe during a significant storm and subsequent evacuation if needed.

BRUNSWICK COUNTY
EMERGENCY SERVICES
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Questions