



The Practical Application of the Threat and Hazard Identification & Risk Assessment (THIRA) Model to a Municipality

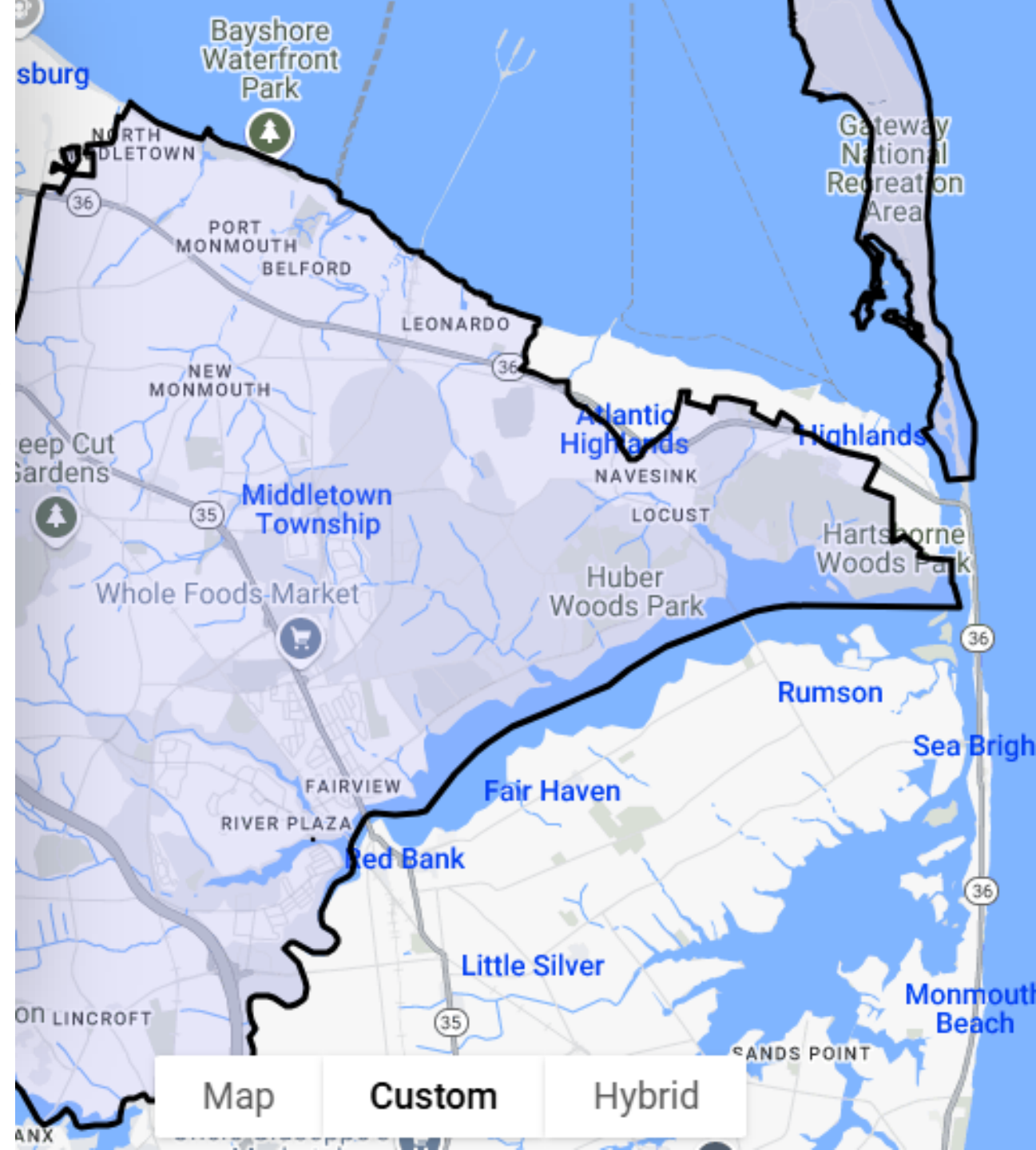
+ the importance of **preparedness** in the field of Emergency Management & Homeland Security

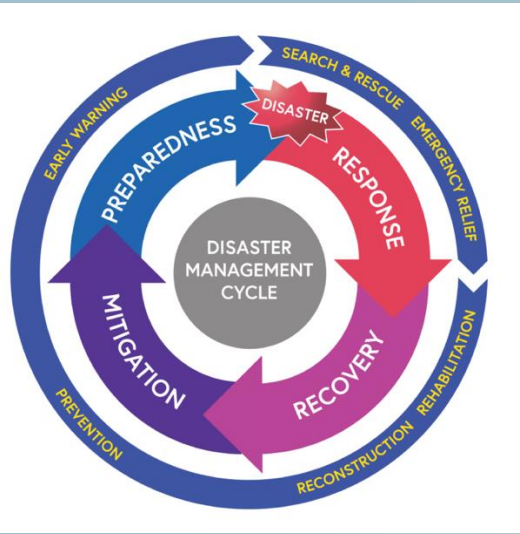
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Community Description and History

- Middletown Township is located in **Monmouth County**. The township has a total area of **59.3** sq mi.
- Township has approximately **66,478** residents.
- Middletown was **discovered** in 1609 by English explorer Henry Hudson.
- Middletown was **founded** in 1664 by Royal Governor Richard Nicholls.
- **Mayor:** Anthony S. Perry Jr (**R-NJ**)
- **Chief of Police:** Craig Weber (2014-Present)
- **EM Operations Chief:** Charles J. Ehret





What is PREPAREDNESS?

Preparedness helps ensure better **RESILIENCE**...



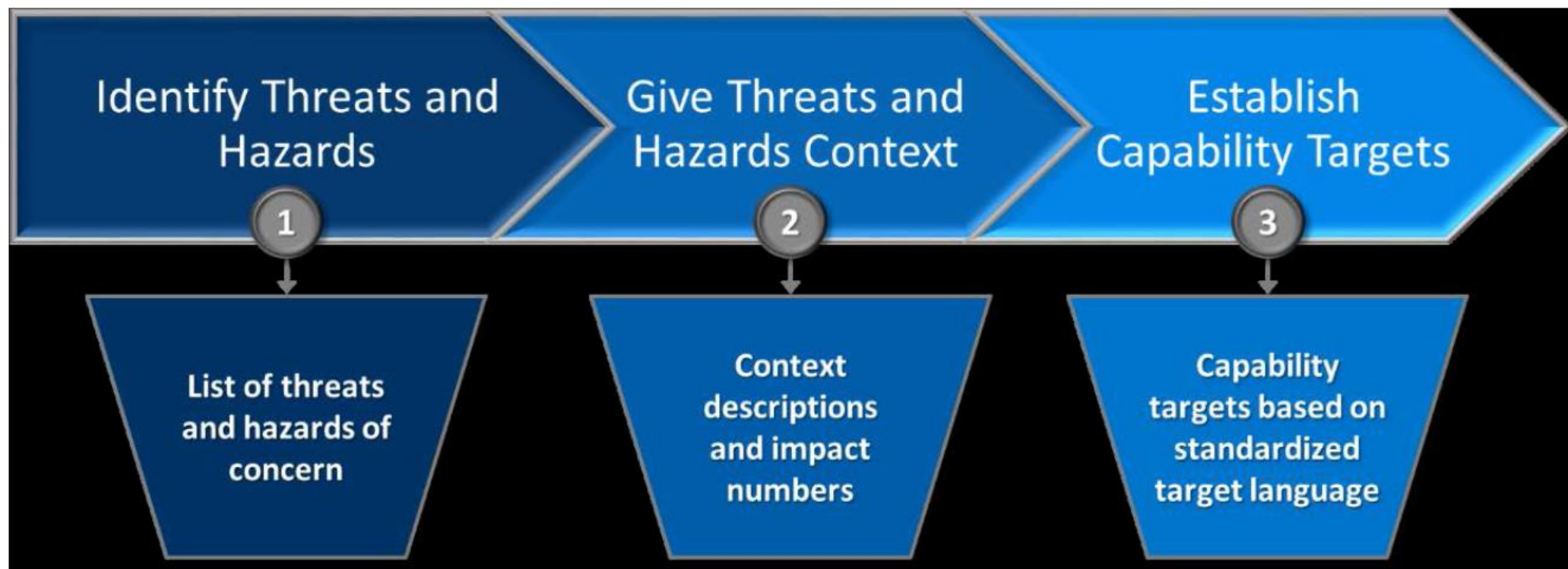
By utilizing the THIRA model for municipalities as I applied it to Middletown, practitioners will...

- Ensure their townships are **better prepared** for any disaster that occurs.
- Understand & identify threats, hazards, and potential **vulnerabilities**.
- While also ensuring their township is well equipped & ready to 'bounce back' swiftly in the event of any disaster.

Preparedness is one of the 4 key phases of Emergency Management,

- Mitigation
- **Preparedness**
- Response
- Recovery

The THIRA Process in 3 Steps



THIRA STEP 1

Identified Threats & Hazards



Car accidents.



(ex: July 7, 2024- Car crashed into electrical pole and caused power outage; affected around 1,200 Middletown residents.)



Hurricanes.



(ex: August 6, 2020- Tropical Storm Isaias; left over 140,000 residents of Middletown and neighboring towns without power.)



Cyberattack.



(ex: June 25, 2024- Ransomware attack left Middletown residents without necessary application's and software's.)



Water main breaks.



(ex: August 26, 2024- Water main ruptured and caused flooding, some lost power, and roads were closed.)



THIRA STEP 2 – Hazards & Threats (Brief Context)

- Installation of generators for local law enforcement response teams, local shelters, and five communication towers.
- Cost estimate: **\$800,000**.
- Funding source for law enforcement: Municipality.
- Possibility of **66,478** residents losing power.
- 66,478 individuals and homes need backup power sources (ex: generators).



THIRA STEP 3 – Established Capability Targets

Impacts and Objectives

- Power outages could cause,
 - Property damage
 - Loss of income for business
 - Disruption to basic needs
 - Disruption to services



Timeframes and metrics

- Storm response and mitigation starts 96 hours out before storm arrives
- If power is out for long periods of time

Middletown utilizes

- Highschool north
- Highschool south
- Croydon Hall
- Several other safe locations (refer to next slide)

Developing Capability Targets

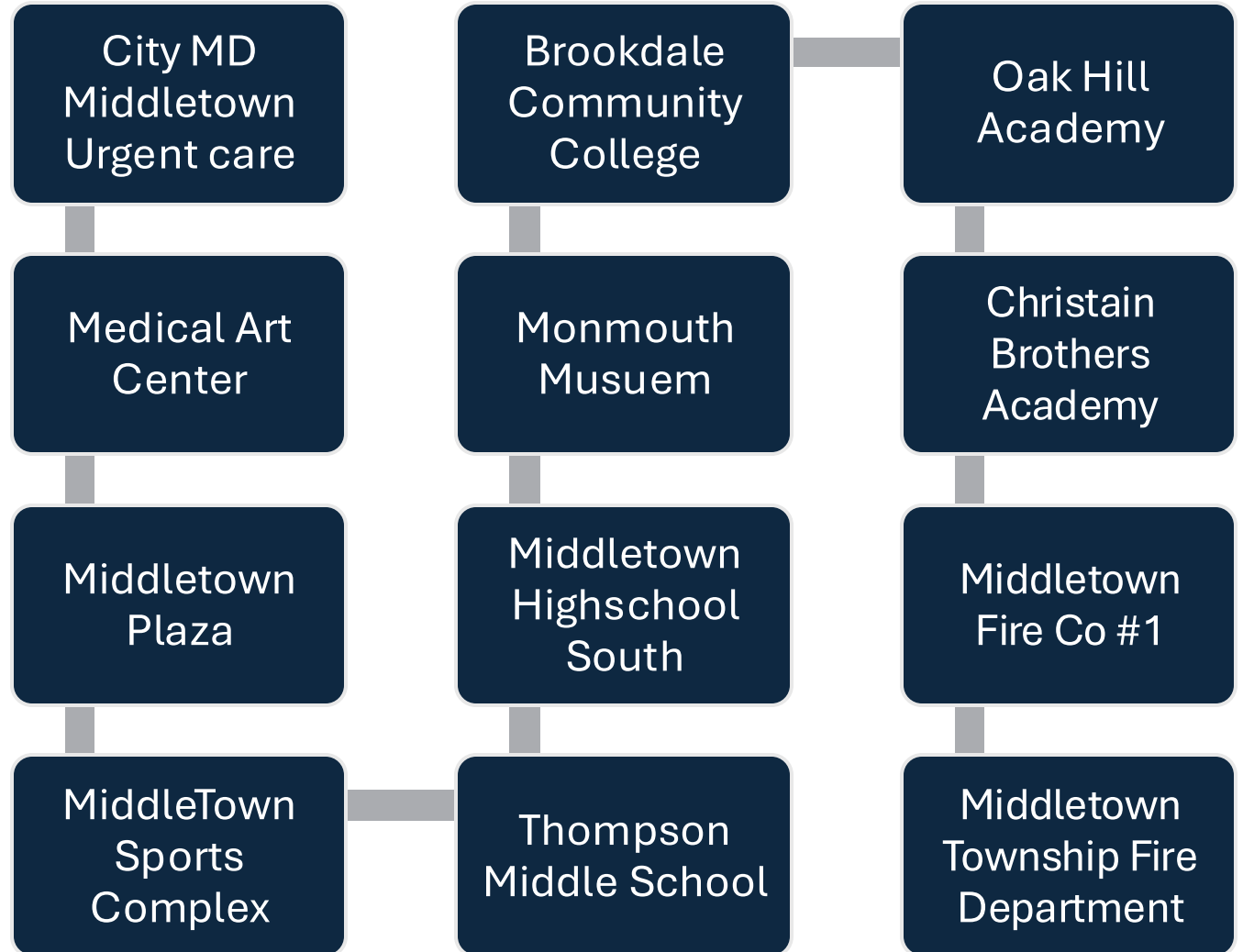
Reduce or eliminate loss of service/power with installation of standby generators at

- Medical facilities
- Buildings utilized by responders
- Fire stations
- Hospitals

Monmouth County Reliability Project put in place

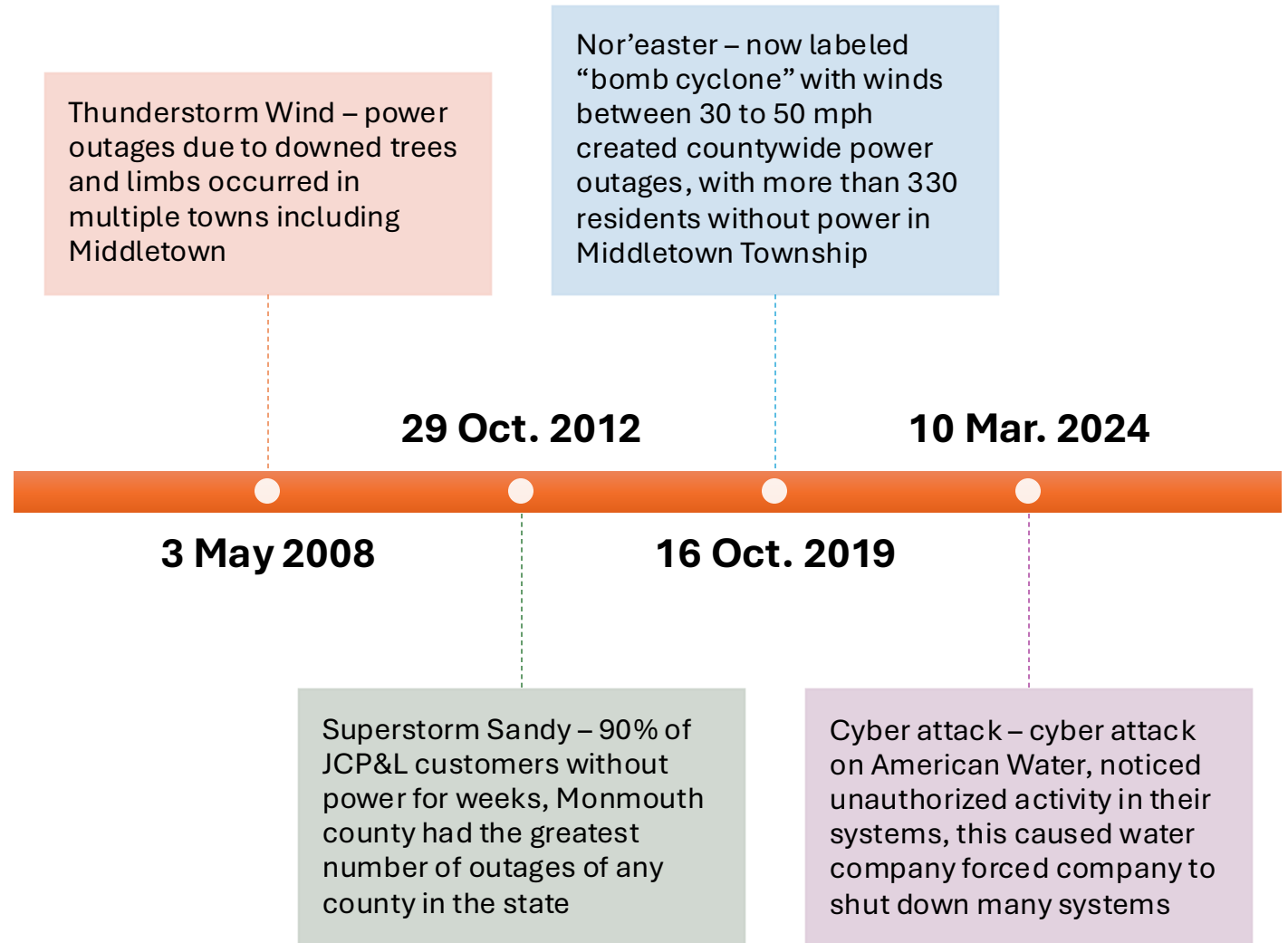
- Strengthen and modernize electrical grid
- Substation enhancements and new transmission lines
- Reduce length and frequency of service disruptions

Points of Interest



Notable Prior Hazards in Middletown

Identifying & learning from past hazards to better prepare for the future is vital!



Middletown, NJ Capabilities & Resources

<u>Fire Department</u>	<u>Emergency Medical Services</u>	<u>Public Waste</u>	<u>Police Department</u>
<ul style="list-style-type: none"> • 26 Pumper, 4 Ladder, 2 Heavy Rescue • 4 Fire Boats • 1 Field Communications Unit (<i>Unique, only one in Monmouth County</i>) <p>Other Units</p> <ul style="list-style-type: none"> • 2 Air, 3 Fire Police, 1 Safety, 4 Brush, 1 Collapse, 2 Spill Response • 8000gal Water Tanker 	<ul style="list-style-type: none"> • Daytime paid EMS backed up by volunteers. • 15 EMS Squadrons with additional rescue squads. • 4 paid daytime ambulances • 12 volunteer ambulances from 5 squads (evening & night). 	<ul style="list-style-type: none"> • Middletown Township Sanitation is <i>private</i>. • Republic & IWS. • 2 recycling areas <p style="text-align: center;"><u>OEM Units</u></p> <ul style="list-style-type: none"> • 2 Utility Vehicles • 1 Rehab Unit Bus • 2 large 18ft equipment trailers • Disaster trailer (for BLS patients) • 12 large generators (100kw to 30kw) • 4 8kw light towers 	<ul style="list-style-type: none"> • Around 125 Officers • K9 Unit • Traffic Unit • Investigations Unit • Community Unit • # of squad cars not disclosed to the public
<ul style="list-style-type: none"> • 5 active FIRE CHIEFS & 6 active FIRE MARSHALLS. 	<ul style="list-style-type: none"> • 4 ambulances + supportive drive/escort teams. 	<ul style="list-style-type: none"> • 2 waste drop off zones (Kanes Lane & Middletown Train Station) 	<ul style="list-style-type: none"> • Craig Weber – Middletown Police Chief



Thank you all!



Stay **safe!**

Stay **prepared!**

Stay **resilient!**

References

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