

Burlington County, NJ GIS Day Map Gallery and Contest Winners - 2018

The Burlington County GIS Day Map Gallery and contest was displayed at Rowan College at Burlington County during the annual GIS Day event, November 28, 2018. Maps were voted on during GIS Day and the gallery was moved to the Burlington County, NJ Administrative building in Mount Holly on November 29th where voting continued until December 17th.

Maps were voted in in 6 categories:

- Most Attractive/Artistic
- Most Informative
- Best Overall
- Best Application/Use of GIS
- Best First-time Presenter
- Best Student

The results are listed in the following pages. To see the maps at a higher resolution, click on the map image.

Congratulations to all the winners!



14

1st Place – Most Attractive /Artistic

Presented by: Joe Stefanoni

Organization: NJDEP

Site Remediation Program

Title:
Jersey Shore Tourist Mary Lee

Map Explanation:

My series of maps illustrates the travels of Mary Lee, a 16.5 ft, 3500 lb female great white shark that was caught and GPS tagged by researchers with Ocearch in 2012. Ocearch provided me with the raw GPS data from which I was able to construct this map. Mary Lee has helped change public perception of great white sharks, especially in New Jersey as she was shown to spend a considerable amount of time along the Jersey shore without harming any humans. She even travelled through Barnegat Bay in November 2015, probably in pursuit of migratory seals that over winter in New Jersey coastal waters. A series of shark attacks in 1916 along the Jersey shore that resulted in four fatalities inspired the movie Jaws. Jaws, released in 1975, terrified people in regards to sharks and villainized the great white shark but Mary Lee and GPS data from other large Great White sharks tagged by Ocearch has helped to dispel that perception.

Although Mary Lee's GPS signal stopped transmitting in June 2017, most likely from worn out batteries, she is believed to be alive and well and still roaming the Atlantic Ocean along the Eastern Seaboard.

Ocearch has a free shark tracking app for anyone interested in following other GPS tagged east coast sharks and other large marine creatures.



29

2nd Place – Most Attractive /Artistic

Presented by: Anthony Bevacqua

Organization: NJDEP

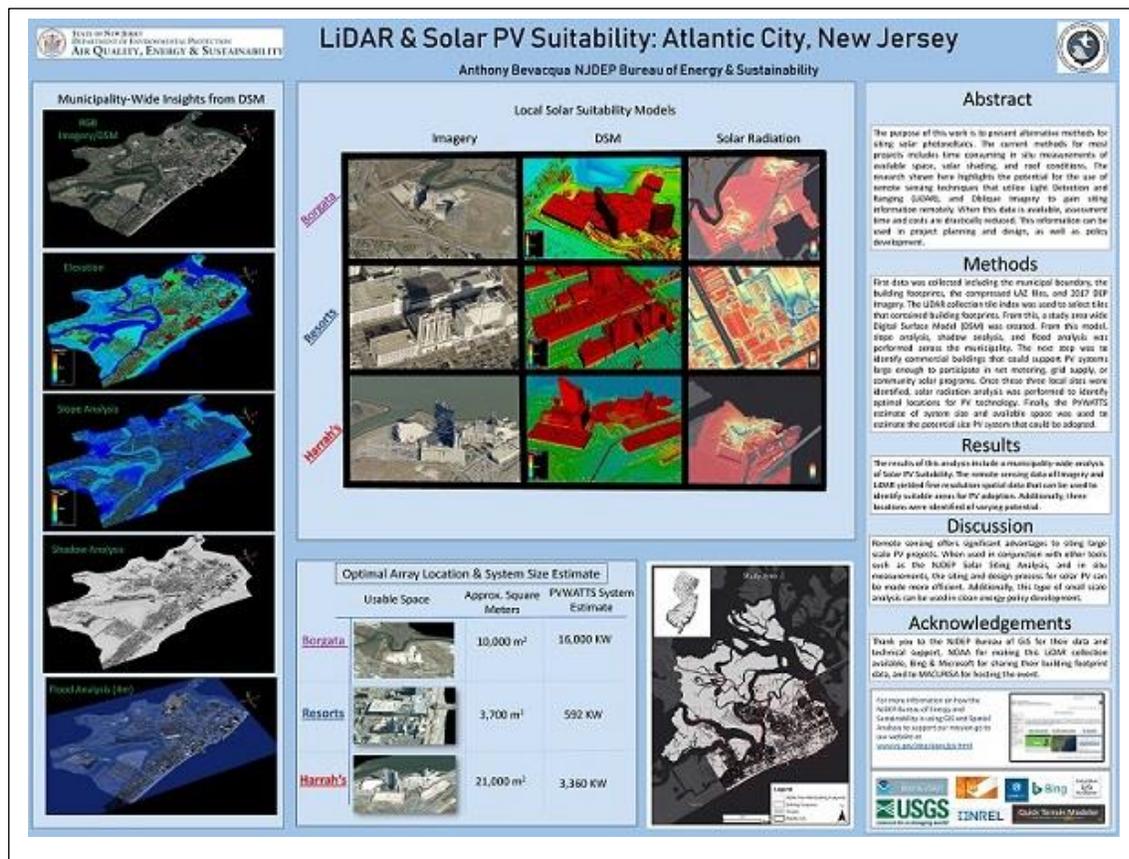
Bureau of Energy & Sustainability

Title:

LiDAR & Solar PV Suitability: Atlantic City, New Jersey

Map Explanation:

The purpose of this work is to present alternative methods for siting solar photovoltaics. The current methods for most projects includes time consuming in situ measurements of available space, solar shading, and roof conditions. The research shown here highlights the potential for the use of remote sensing techniques that utilize Light Detection and Ranging (LiDAR), and Oblique Imagery to gain siting information remotely. When this data is available, assessment time and costs are drastically reduced. This information can be used in project planning and design, as well as policy development.



19

1st Place – Most Informative

Presented by: Liza Davis

Christina Servetnick
Cregg Madrigal
Shikrallah Elizabeth

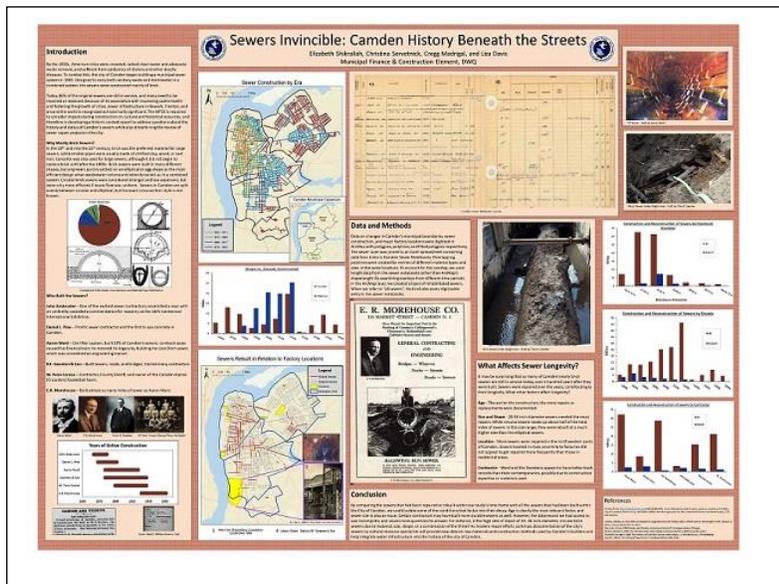
Organization: NJDEP

Municipal Finance & Construction Element

Title:
Sewers Invincible: Camden History Beneath the Streets

Map Explanation:

: We are a team of archaeologists who review publicly funded sewer and water projects for their effects to significant historic properties. The City of Camden submits many projects to our program, and we found ourselves reviewing similar projects frequently. We decided to develop a historic context for the brick sewer system of Camden, to help us understand what information we had and what we needed to obtain when we review projects that involve older sewer systems. Once we began our research, we learned many fascinating facts about a topic that may seem mundane. However, sewers are literally the foundation of modern urban development, and we thought a poster incorporating our research with the analytical GIS work would prove interesting. We used GIS to learn about trends and patterns of sewer construction in the city, and how it related to the development of other industries. We also learned about the factors that affect sewer longevity. We were gratified to win first place in the NJDEP 2018 GIS contest in the Analytical Presentation category, and hope you enjoy our poster.



17

2nd Place – Tied Most Informative

Presented by: Tim London

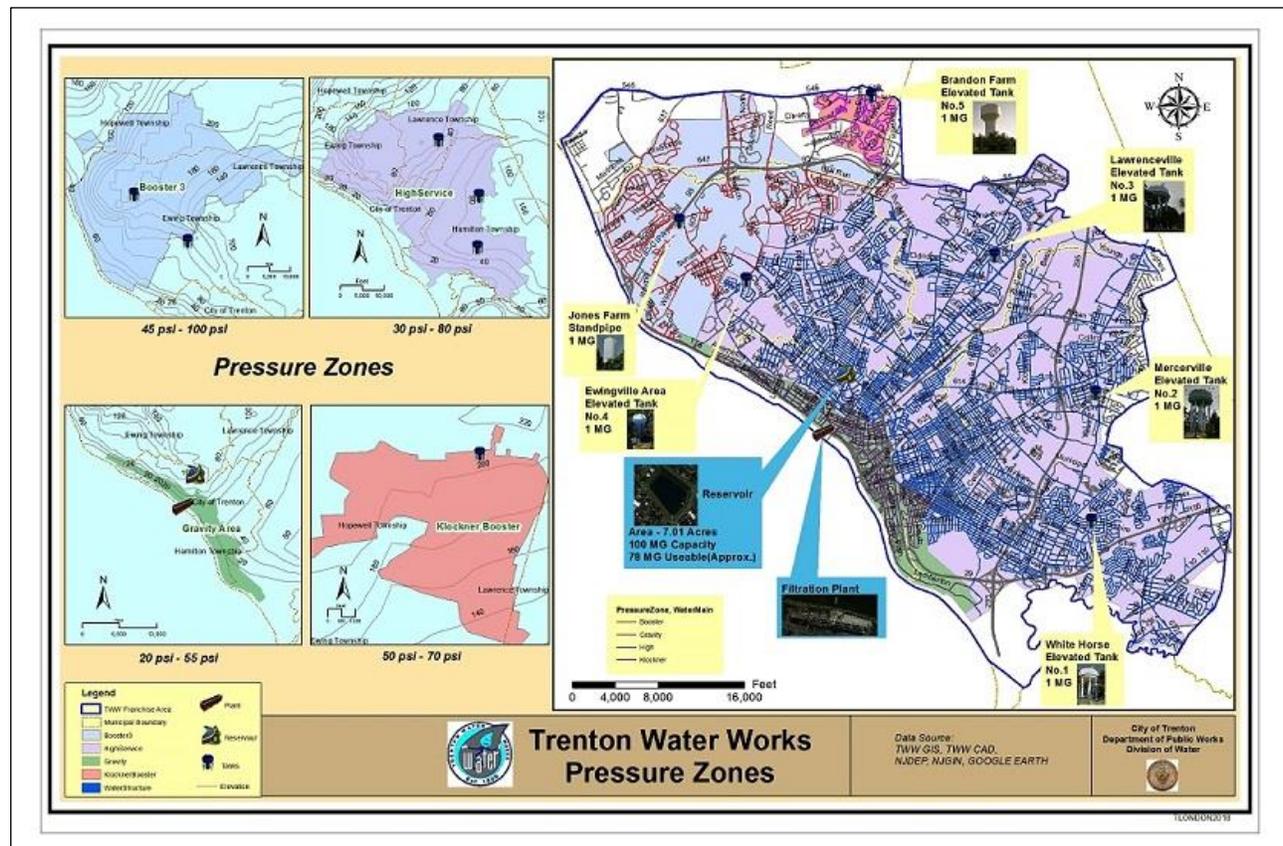
Organization: Rowan College at Burlington County

2018 Advanced GIS Class

Title:
Trenton Water Works Pressure Zones

Map Explanation:

This map series and associated presentation shows the 4 different pressure zones used by Trenton Water Works. Other important features are also shown including locations for tanks, reservoir, stand pipe, and the filtration plant. The Trenton Water Works stores a vast amount of information in their GIS which allows them to quickly answer questions by querying the map or attribute data.



24

2nd Place – Tied Most Informative

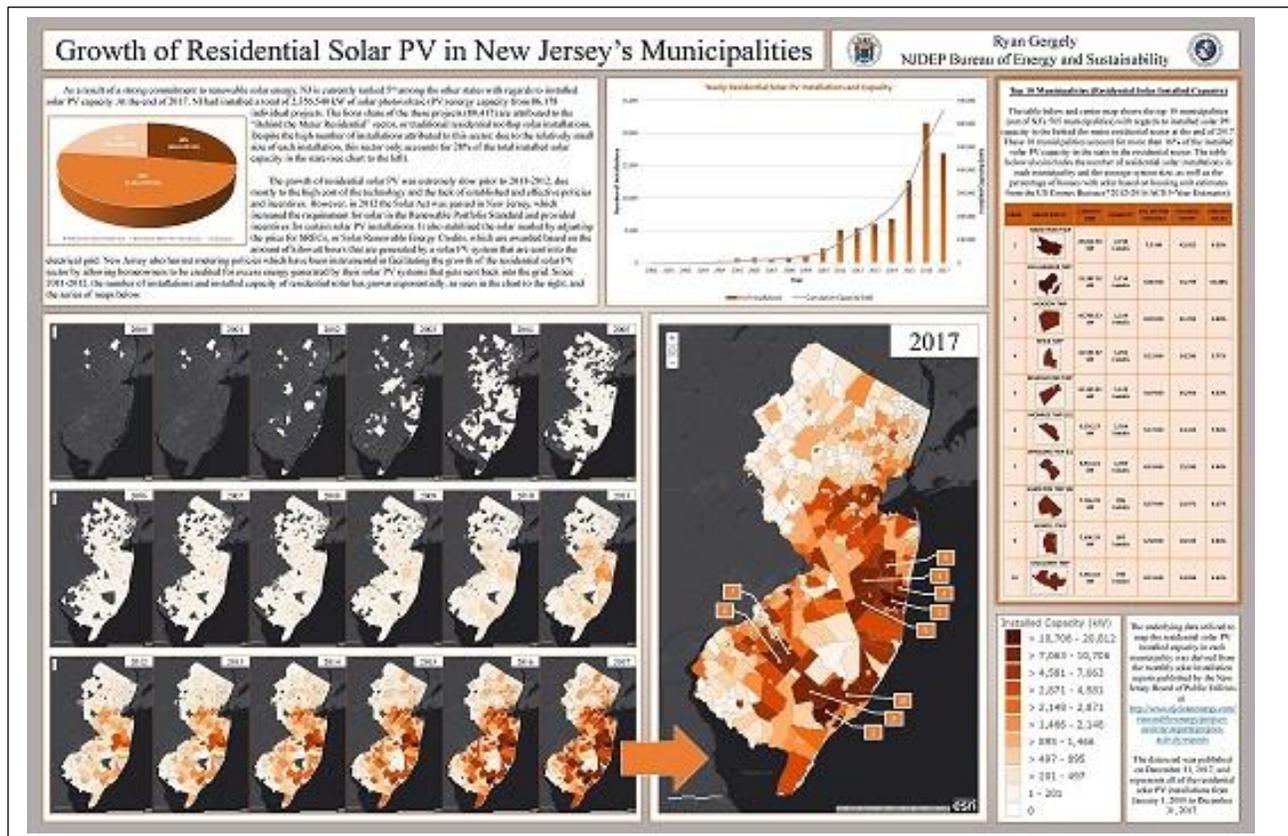
Presented by: Ryan Gergely

Organization: NJDEP

Bureau of Energy & Sustainability

Title:
Growth of Residential Solar PV in New Jersey's Municipalities

Map Explanation:



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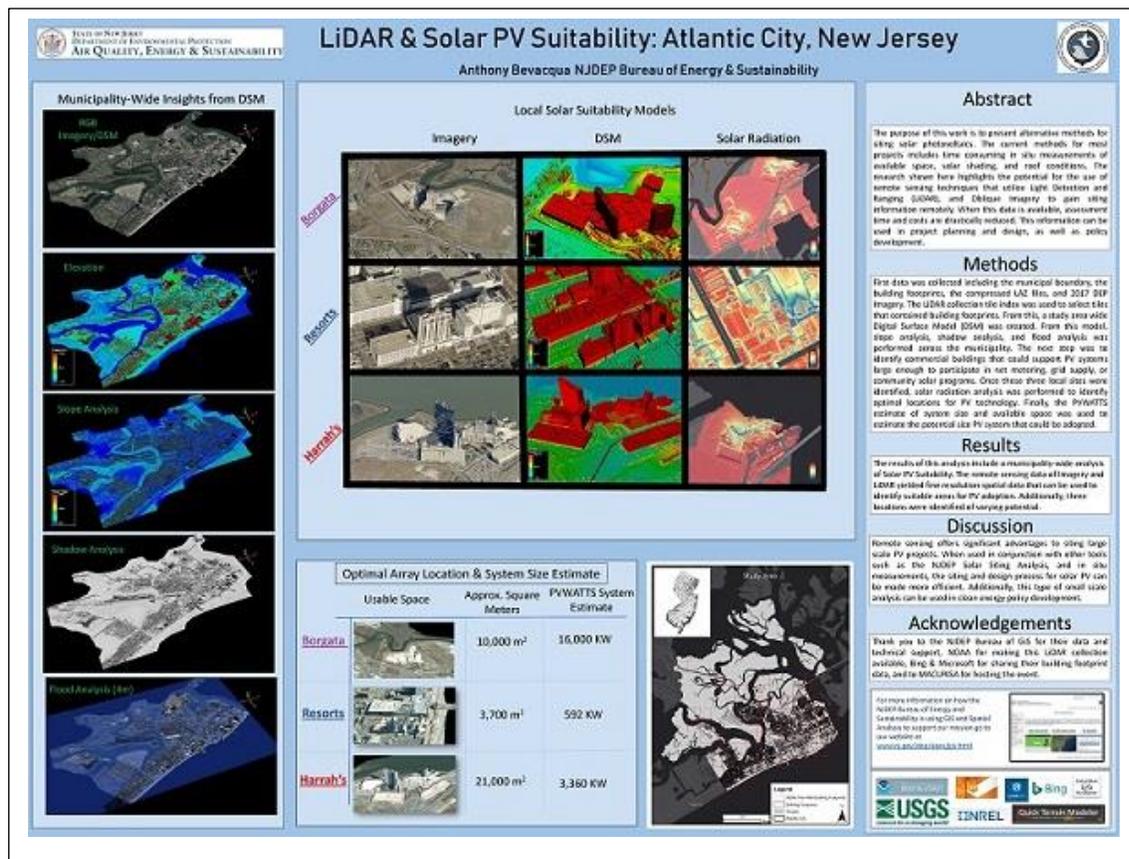
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34

2nd Place - Tied
Best Overall

Presented by: Kiersten Gauntt

Organization: Burlington County

Departments of Information Technology & Engineering

Title:
Delanco Motor Vehicle Commission Civil Plans

Map Explanation:

This map was created to show a parcel of land that was being developed for Motor Vehicle. There is a site plan that was geofenced (paper map with no spatial coordinates that was given coordinates for use in GIS) overlaid onto aerial imagery. The county's parcel layer was also overlaid. The GIS analysis was performed to find the usable land that remained after the developmental set backs that are required.



29

1st Place – Best Application/Use of GIS

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Organization: NJDEP

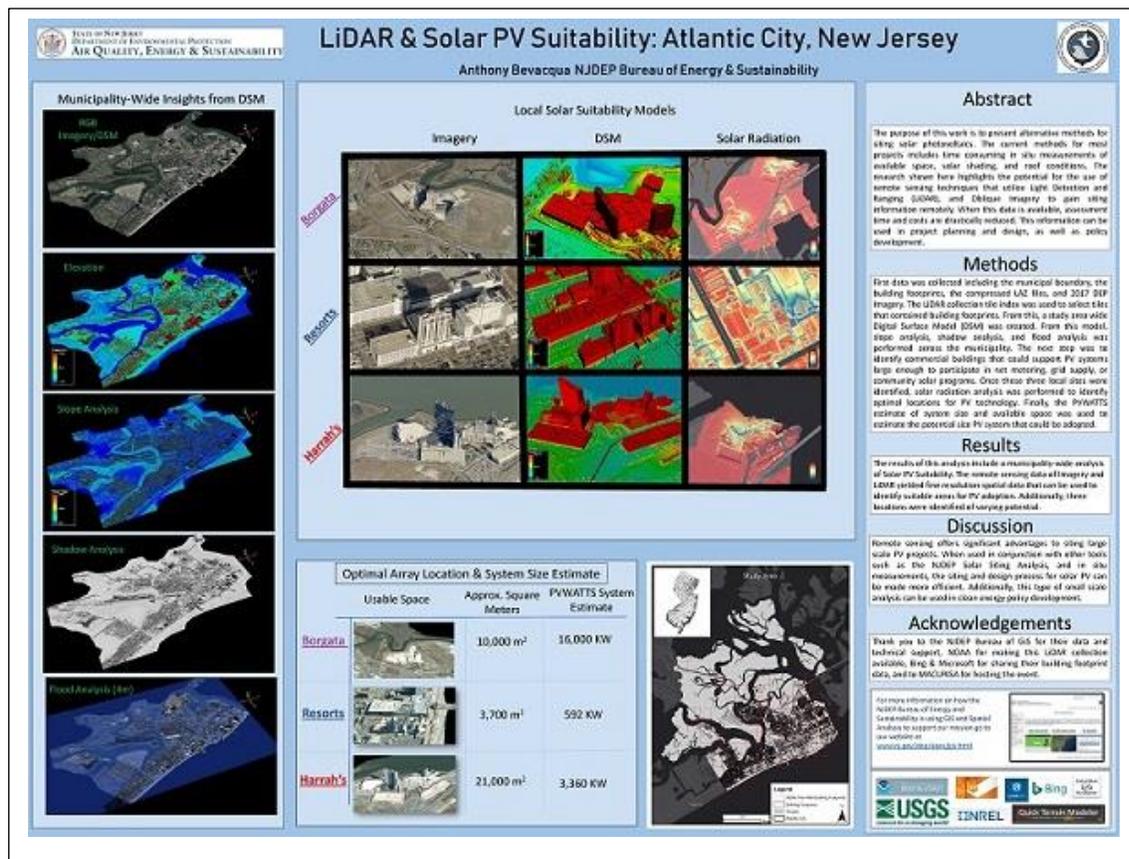
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9

2nd Place – Best Application/Use of GIS

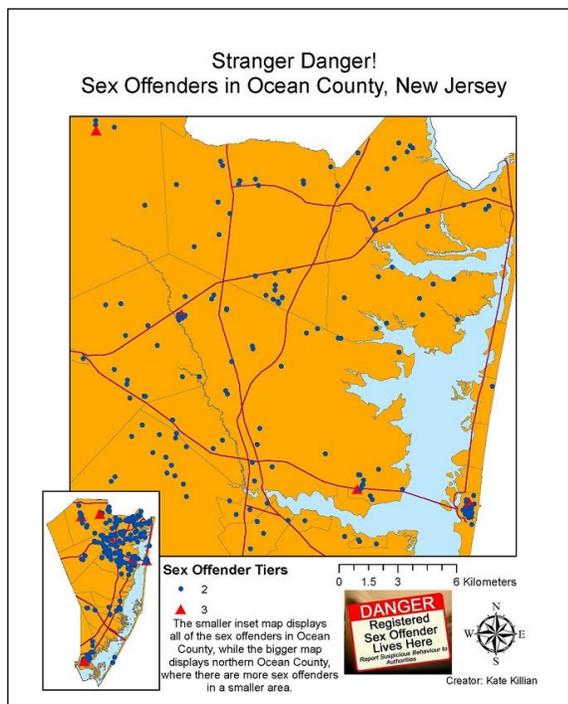
Presented by: Kate Killian

Organization: Marine Academy of Technology and Environmental Science

Title:
Stranger Danger! Sex Offenders in Ocean County, New Jersey

Map Explanation:

This map displays all of the sex offenders in Ocean County, New Jersey. The smaller, inset map displays all of Ocean County, while the larger map displays northern Ocean County where there are more sex offenders in a smaller area. The smaller blue circles represent tier two offenders. The larger red triangles represent tier three offenders. Tier one represents the smallest offenses, and tier three represents larger, more serious offenses. The data displayed on this map was collected from the New Jersey State Police's Sex Offender Internet Registry. In order to incorporate this data, I collected the address and tier information from the sex offender registry, and then used Google Earth to collect the GPS coordinate points for each sex offender's location. The coordinate points were then used to display each point. This map was originally created for a Halloween Map assignment for a Geographic Information Systems (GIS) class at the Marine Academy of Technology and Environmental Science (MATES), located in Manahawkin, New Jersey.



6

1st Place – First-time Presenter

Presented by: Doug Wizzins

Organization: Rowan College at Burlington County

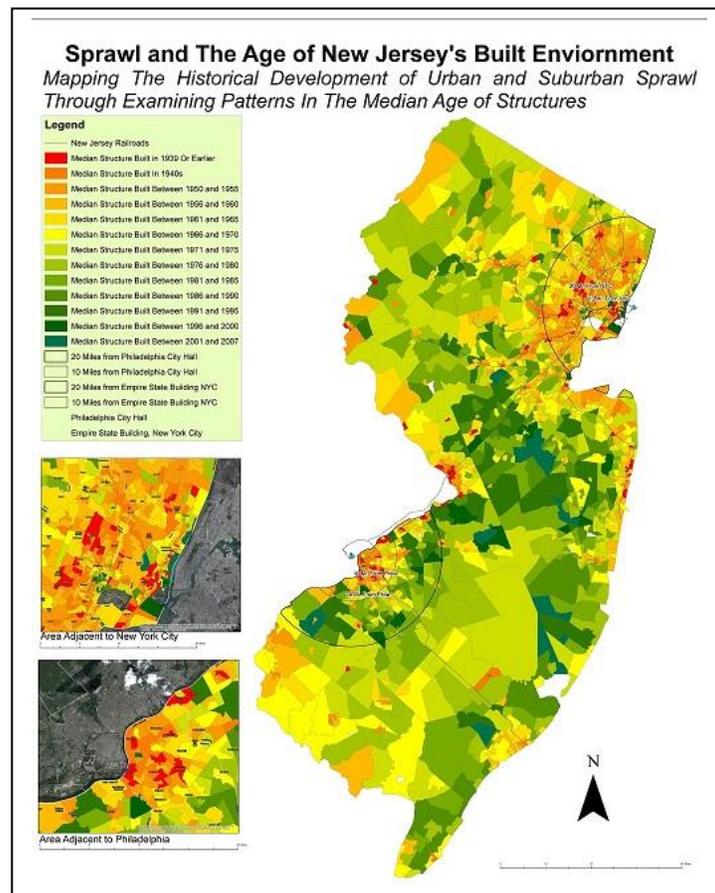
2018 Advanced GIS Class

Title:

Sprawl and the Age of New Jersey's Built Environment

Map Explanation:

This map and associated presentation look at mapping the historical development of urban and suburban sprawl through examining patterns in the median age of structures over the course of the 20th Century. It examines trends, relationships with specific transportation systems and the proximity to major urban centers and age of housing stock.



29

2nd Place – First-time Presenter

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Organization: NJDEP

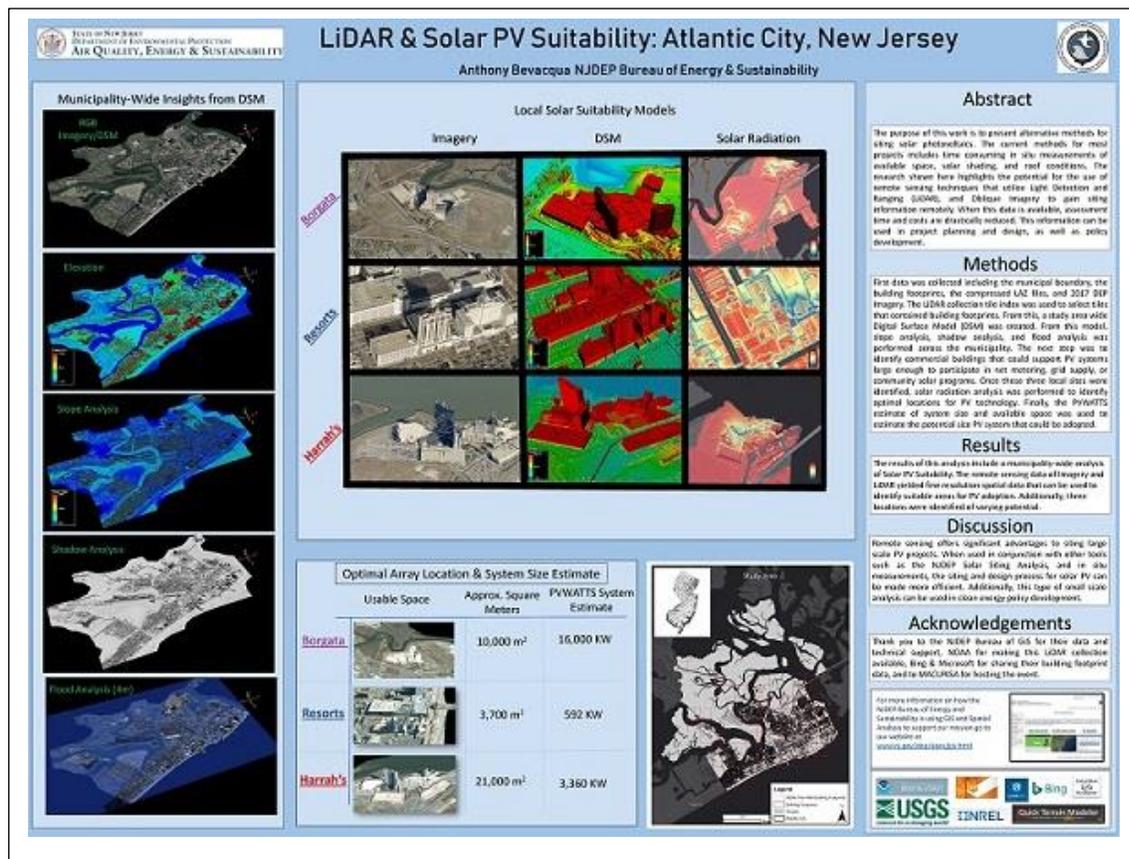
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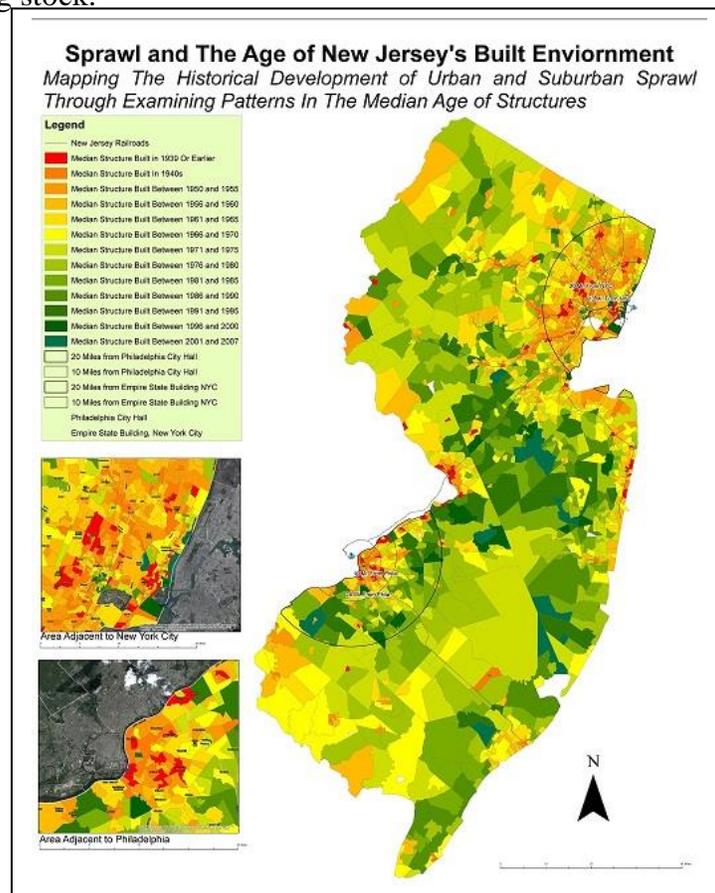
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12

2nd Place – Best Student

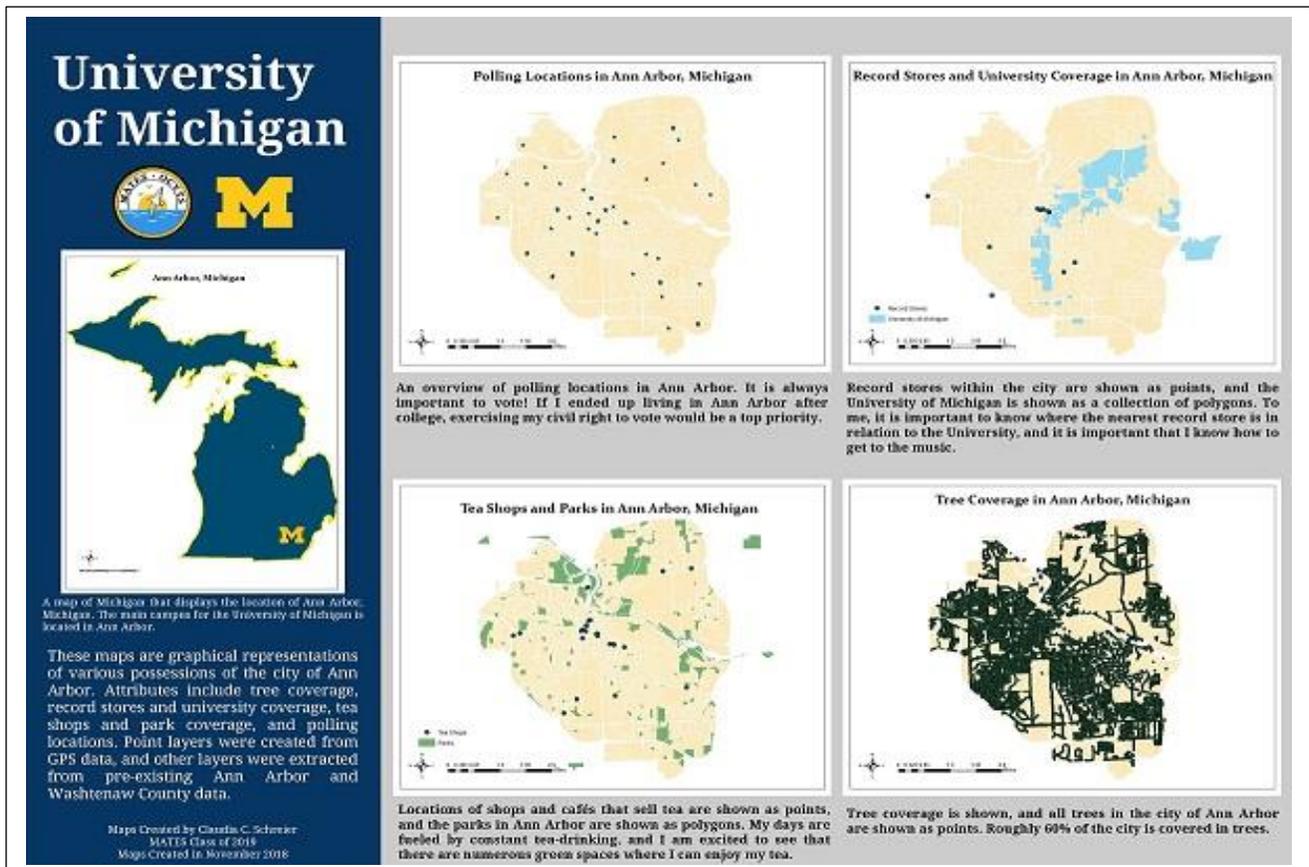
Presented by: Claudia Schreier

Organization: Marine Academy of Technology and Environmental Science

Title:
University of Michigan- Ann Arbor, Michigan

Map Explanation:

This collection of maps depicts various possessions of the city of Ann Arbor, Michigan. Using ArcGIS, data layers such as polling locations, record stores and university coverage, tea shops and park coverage, and tree coverage were created. All data was retrieved from the City of Ann Arbor's Spatial Database. The series of maps could be utilized by students at the University of Michigan who are looking for various places to spend their free time. This map was created by a prospective student applying to become a part of University of Michigan's Class of 2023.



29

1st Place – Most Votes Overall

Presented by: Anthony Bevacqua

Organization: NJDEP

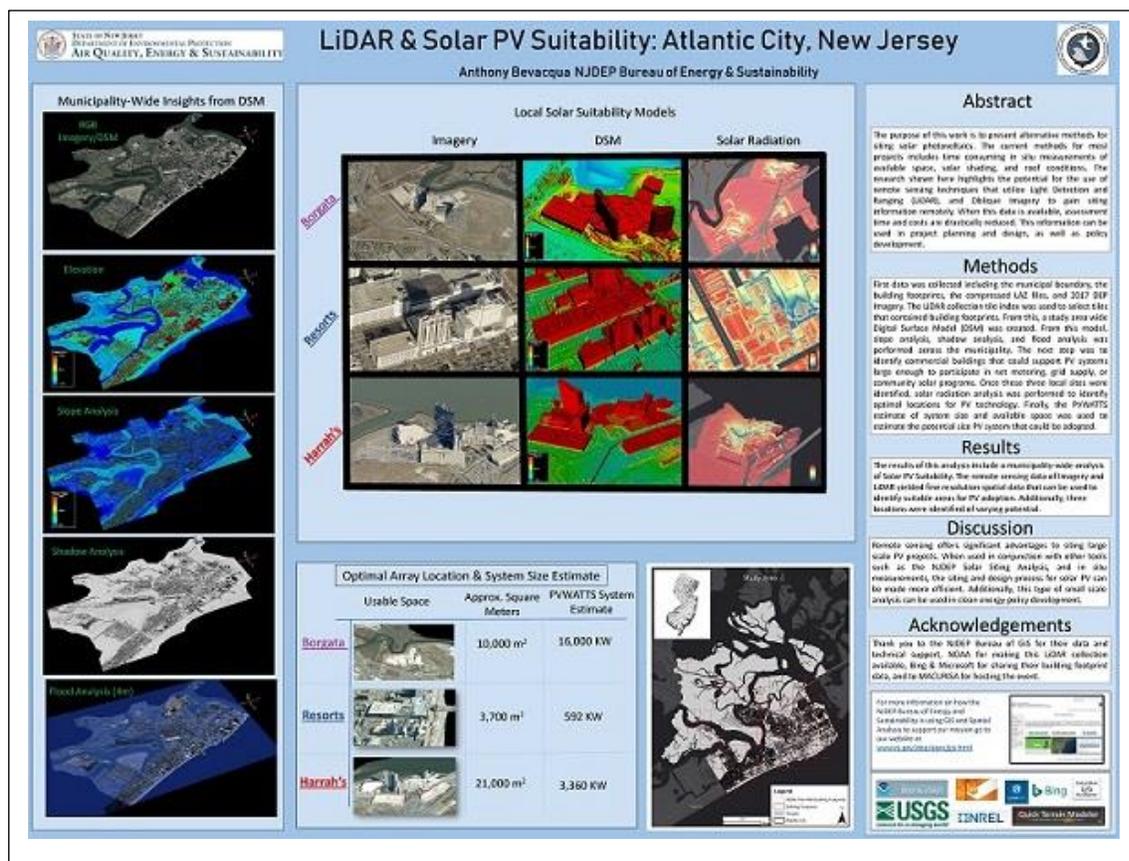
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