Elizabeth, NJ Geohealth Workshop:
Food and Physical Activity Environment Assessments

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Project Summary

This project developed a community assessment of both the food environment and the physical activity environment for Elizabeth, New Jersey through a series of Geohealth Workshops. The primary method for conducting this assessment was an innovative Geohealth Workshop format that allows local students to learn to use geospatial technology, empowering them to make a spatial assessment of healthy eating and physical activity components in their own community.

The participating students (both high school and college) were organized through a partner non-profit group in Elizabeth, Future City Inc. The workshop gave students the opportunity to experience a college environment, learning how to use geospatial technologies in the computer lab at Rutgers' Center for Remote Sensing and Spatial Analysis (CRSSA). Their training also included a series of pre-workshop meetings at the Historical Society of Elizabeth's Bonnell House (1684), just a short walk from the Elizabeth train station as well as Elizabeth High School.

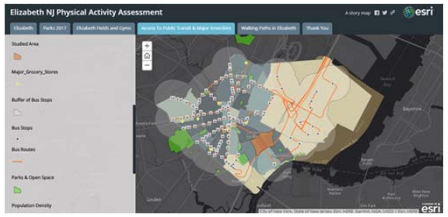
The final products have included a map-rich report for each year's workshop and 2 interactive story maps online for public access to the student products.

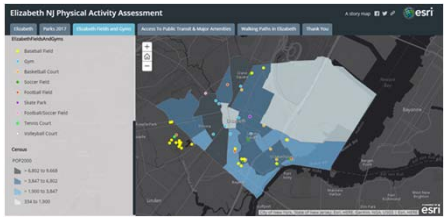
Geohealth Workshop

One important dimension of this project was the participation of students throughout the process. The highlight was a week-long Geohealth Workshop held on the campus of Rutgers-New Brunswick at the Center for Remote Sensing and Spatial Analysis (CRSSA).

The week-long workshop followed a daily pattern that offered a hands-on GIS technical lesson in the mornings followed by lunch and a guest speaker whose specialty was either in the health field or were involved in mapping. The workshops introduced students to research and science in related fields.

The following experts shared their work with the students:
Kathe Newman, Rutgers Bloustein School (New Brunswick Food Community)
Meredith Taylor, Rutgers SEBS (Urban Agriculture)
Todd Mittleman, Rutgers Institute for Food, Health, and Nutrition (IFNH building tour)
Wansoo Im, Meharry Medical College (community mapping)
Daniel Hoffman, Rutgers' Nutritional Sciences (favelas of Brazil)
Mike Johnson, Elizabeth YMCA (Elizabeth community resources)
Alane McCahey, Senior Director of Community Initiatives, Elizabeth YMCA
Arianna Lindberg, Department of Landscape Architecture, Rutgers University
Michelle Kennedy, Center for State Health Policy, Rutgers University
Dr. Richard Lathrop, Center for Remote Sensing and Spatial Analysis, Rutgers University



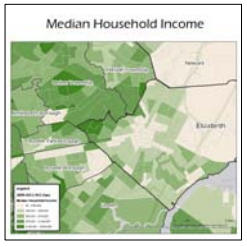


Elizabeth, NJ

The City of Elizabeth is located in Union County, Northern New Jersey, United States. With a population of 124,969, the City of Elizabeth is New Jersey's fourth largest City. The City of Elizabeth was founded in 1665 and became the first capital of the State of New Jersey.

With a population of 124,969, the City of Elizabeth is New Jersey's fourth largest City. Elizabeth's diverse population represents more than 50 countries and 37 language groups. The 2010 US Census found that 59.5% of Elizabeth residents reported that they were Hispanic or Latino. The population of Elizabeth is also young, with over 25% of the residents under the age of 18.

With its close proximity to Newark Liberty International Airport, the New Jersey Turnpike, the Garden State Parkway, Routes 1 & 9, and Manhattan, the City has become a regional hub for the East Coast. Elizabeth has two NJ Transit train stations that connect to New York City and the rest of the State. The Port of Newark and Elizabeth's 2,000-acre marine terminal hosts over 150,000 jobs and is the World's largest containership port and the largest Foreign Trade Zone in the United States.



Supplemental Materials Online

2016 Story Map of Food Environment:
http://arcg.is/29Te62f

2017 Story Map of Physical Activity Environment:
https://arcg.is/01i4i4

Newsroom story on Geohealth Workshops:
http://goo.gl/uV98i9

Recommendations

Some recommended actions that came out of the Physical Activity Assessment:

1. Complete a full SWOT based assessment of the physical activity in Elizabeth.
2. Creation of an information dataset that can be shared and be publically accessible.
3. Expanded access to gyms to avoid "gym deserts".
4. Creation of complete streets policies allowing more walkable streets and better access for different modes of transportation.
5. Increased connectivity between public transit systems and parks.
6. City events that can promote using city space for physical activity i.e. Ciclovia.
7. Enhanced public data (including geospatial) describing parks and public activity spaces.

Recommended actions developed based on the Food Environment Assessment of Elizabeth, NJ:

1. Recruiting participants interesting in learning about both GIS and health.
2. Identifying food environment issues specific to community being studied.
3. Training participants in basic geospatial technology applications.
4. Collect data on permanent food environment features - e.g., supermarkets.
5. Collect data on temporary food environment features - e.g., farmer's markets.
6. Conduct spatial analyses of food environment data.
7. Represent food issues with multi-feature maps that tell the story of the issue, not just locations.
8. Develop text explanations for report and Story Maps for decision makers and the general public.

Lessons Learned

1. Students (both high school and college) are much more **aware of their community** than they are sometimes given credit. Tapping into their **energy and creative perspectives** demonstrates an important alternative to a simple expert approach to mapping or assessing a community.

2. **Community groups** (like our partners at Future City, Inc.) are essential in **assessing a diverse urban landscape**. Their local knowledge was invaluable in ensuring that the completed assessment was relevant for the community and its leaders.

3. **Maps** (particularly the story maps made by students) can **engage an audience** much more than technical reporting. The maps sparked discussion that might not have happened otherwise, including one with the mayor.

4. **Sharing the results** as publicly as possible can have **unanticipated impacts**. The students posted their food environment maps online without a clear audience. The staff at the YMCA found the materials to be useful and integrated them into their ongoing efforts to address food access disparities in Elizabeth.

Partners

NJ Healthy Communities Network:
http://www.njhcn.org/

Future City Inc.:
http://futurecityinc.org/

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