



# Considering the Ethical Implications of Using VGI for Community-based Planning

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Presented at the 2013 Annual Meeting of the Association of American Geographers, Los Angeles, California,

# Urban Activity Spaces

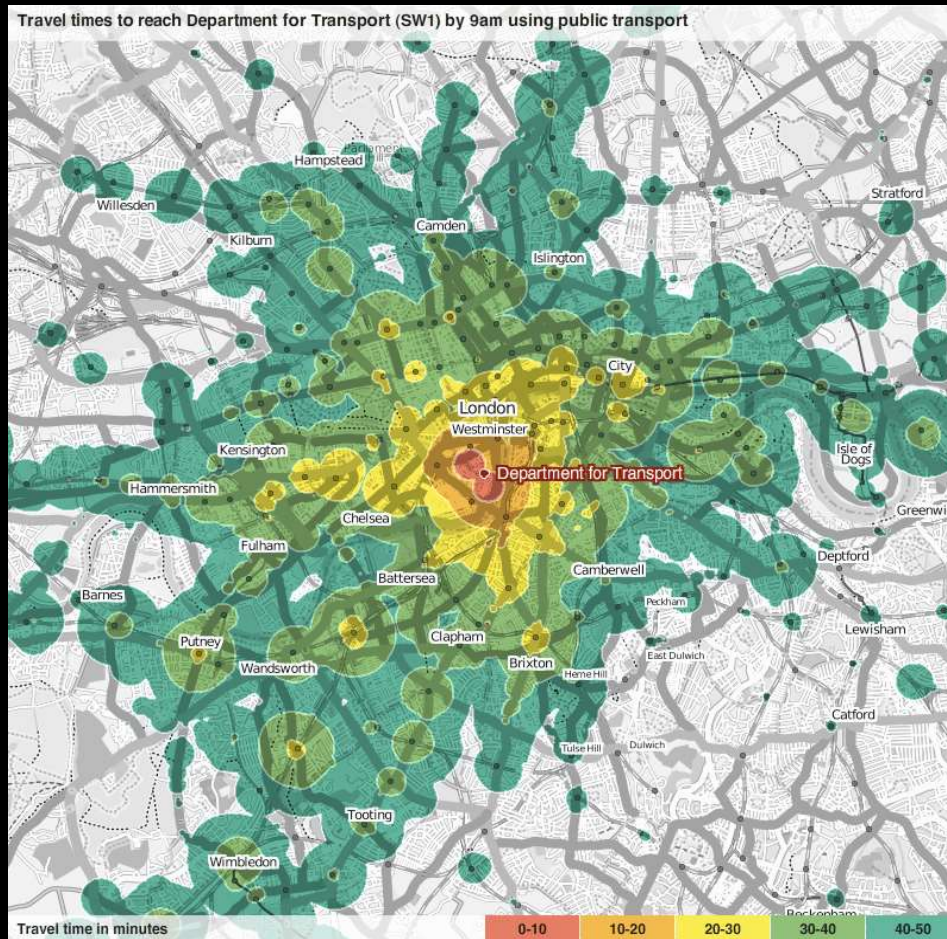
- Defined as “graphical representation of the space within which a group of activities are carried out for an individual or a household (Newsome, Walcott, & Smith, 1998; 361)
- Time constraints are imposed by or on the traveler
- Observed activity space may or may not represent the maximal area over which a traveler could engage in activities but rather the area over which they are likely to engage in those activities (based on observed behavior)
  - Perceptual factors (e.g., mental maps, perceived sense of safety)
  - Personal factors (e.g., health)
  - Physical environment factors (e.g., presence or absence of sidewalks)
  - Institutional factors ( e.g., administrative/law enforcement rules)

# Activity Spaces are constrained by perceptions..



Source: New Yorker/ Saul Steinberg

and practical limitations like travel time...



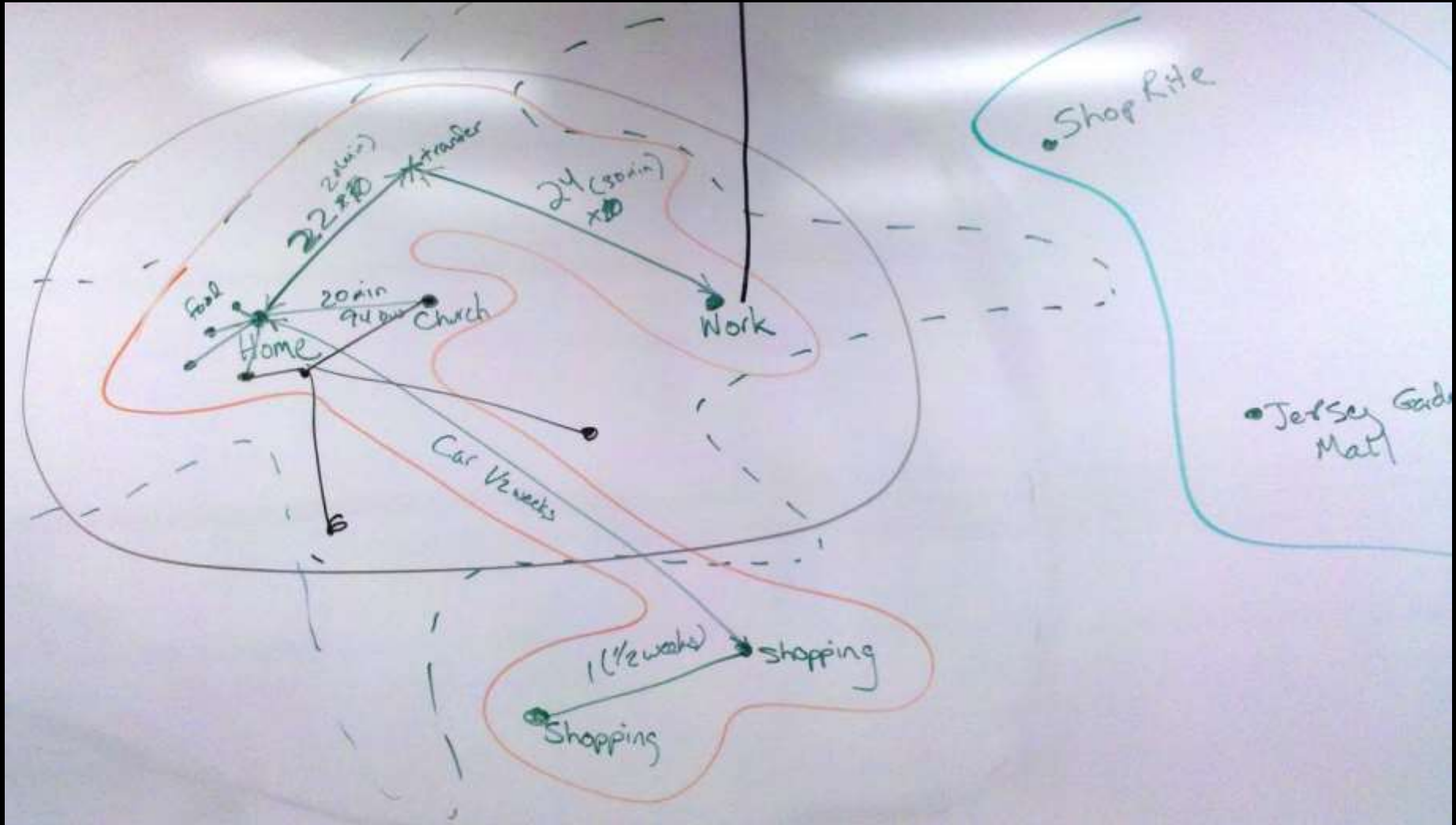
Time Travel Contours

Source: [www.mysociety.org](http://www.mysociety.org)

# Expanding Activity Space

- Project funded by the Federal Transit Administration
- Goals
  - Develop a replicable approach and method for engaging low-income communities in identifying, analyzing, and visualizing their own travel behavior and mobility barriers
    - Qualitative Methods
    - Small Samples
    - Participatory/Interactive
  - Use the experience to design a web-based tool that can be used by community organizations and planning agencies
  - Original project design did not consider ethics or VGI specifically
- Status
  - Project completed, under final review
- Emerging questions and concerns

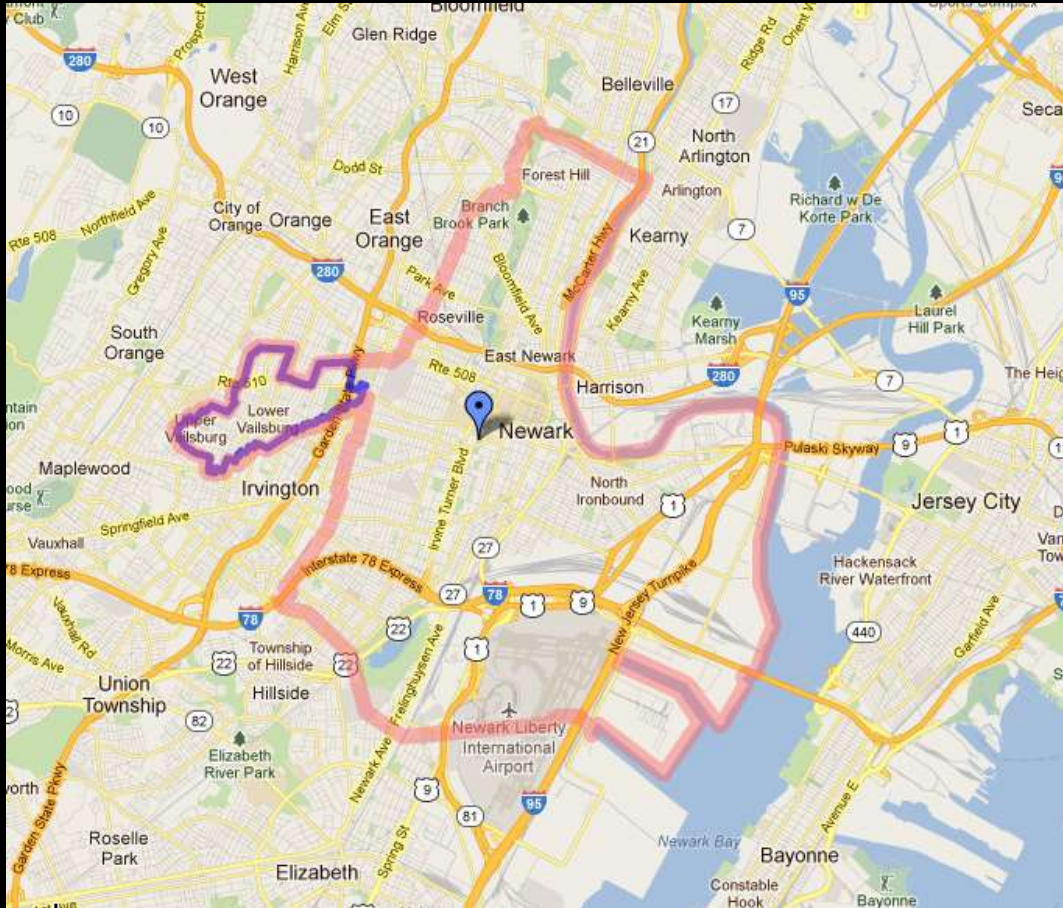
# Conceptualizing Activity Spaces



Individual Activity Spaces Showing Missed Opportunities,

Source: Author

# Study Area and Community Partners



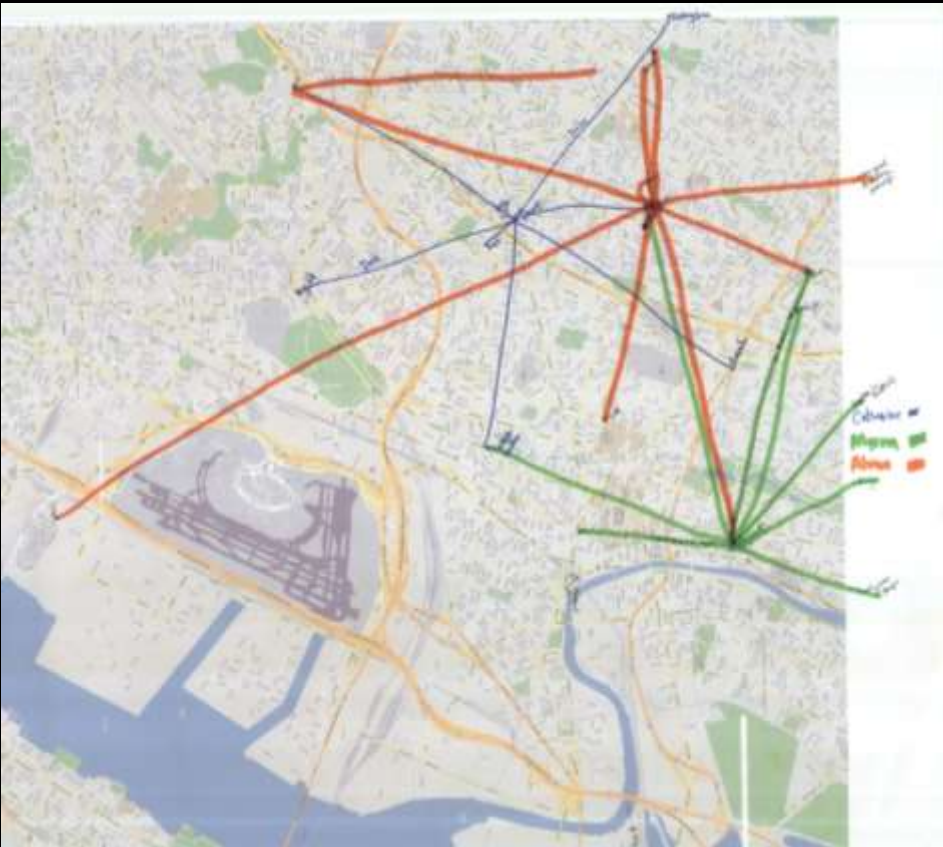
- Unified Vailsburg Services Organization
- Greater Newark Conservancy

# Data Collection Strategy Discussion

- April 15<sup>th</sup> to November 15<sup>th</sup>, 2012
  - 10 focus groups with a diversity of participants
    - 50 intercept surveys
    - 70 individual spatio-temporal narratives
    - 10 travel diaries, describing a week's worth of trips
    - 5 individuals agreed to be shadowed
  - The complexity of the Institutional Review Board process
  - Incentives were provided for participation
  - Challenges in engaging vulnerable populations
- 



# Focus Groups supported by participatory mapping



Individuals discussed their typical day...

# Data Analysis/ Outcomes

- Data was used to create
- 15 composite fictional narratives, masking in particular home address locations and other personal information
- Limits of design of systems / services in transportation-poor areas
- Amazing complexities that govern poor people's lives
  - Work schedules
  - Caregiving obligations
  - Safety / Security
  - Service (of providers)
  - Physical Environment Barriers
- New short survey instrument designed
  - Describe your typical day...
  - Survey and mapping activity embedded in website
  - Unique login/password for individuals
  - Unique login/password for community organizations/agencies

# Findings and Results:

<http://ExpandingActivitySpace.org>



[FAQs](#) [Contact](#) [Register](#)

[home](#)

[about](#)

[blog](#)



## User Login

Username:

Password:

Remember me

[log in](#)

[Create new account](#)

[Request new password](#)

## Activity Spaces

Working under a Federal Transit Administration (FTA) grant, Hunter College developed a new, easily replicable approach and method for engaging low-income communities in identifying, analyzing, and visualizing their travel behavior and mobility barriers.

[REGISTER >>](#)

## Take A Tour Of The Site

Use this web-tutorial to find out how you can use this site to create your own activity space map!

<add video when we have finalized site to walk through>

# Outcomes – 1

## Web-based Data Collection Tool

Activity Spaces

home about blog **map my activity**

Welcome, Walter [Log out](#)

### A Day In My Life

Tell us about a typical day in your life. Let us know where you go. Think about all the places you stop in a typical day. Click on Add a Destination, and enter all the places you go in a typical day in your life. Don't forget to enter all the places you go, even a quick stop to the corner store to pick up a lotto trip is important. All of these places create the activity space that you operate in. Once you enter a destination and press save you will see your activity space forming on the map to the right. Continue to add destinations and watch your activity space grow!

**ADD DESTINATION**

Here's what your typical day looks like so far:

- Start
- Travel Duration: 1.5hr(s)
- 7:00AM [Work edit](#)
- Travel Duration: 1.5hr(s)
- 5:00PM [Home edit](#)
- Travel Duration: 0.25hr(s)
- 6:15PM [Bank/Post Office/other gov't office edit](#)
- Travel Duration: 2hr(s)
- 8:30PM [Friend's/Relative's House edit](#)
- Travel Duration: 3.25hr(s)
- 11:45PM [Home edit](#)
- Finish

### About Me

Help us make sense of the collective data by providing some information about yourself, your household, and your transportation patterns. This information will help community organizers to see where there are shared needs among the people of the community. \*If you are logging in as an organization, we only need the name of the organization and the zip code that you want to analyze. All other fields are optional.

### My Activity Space Map

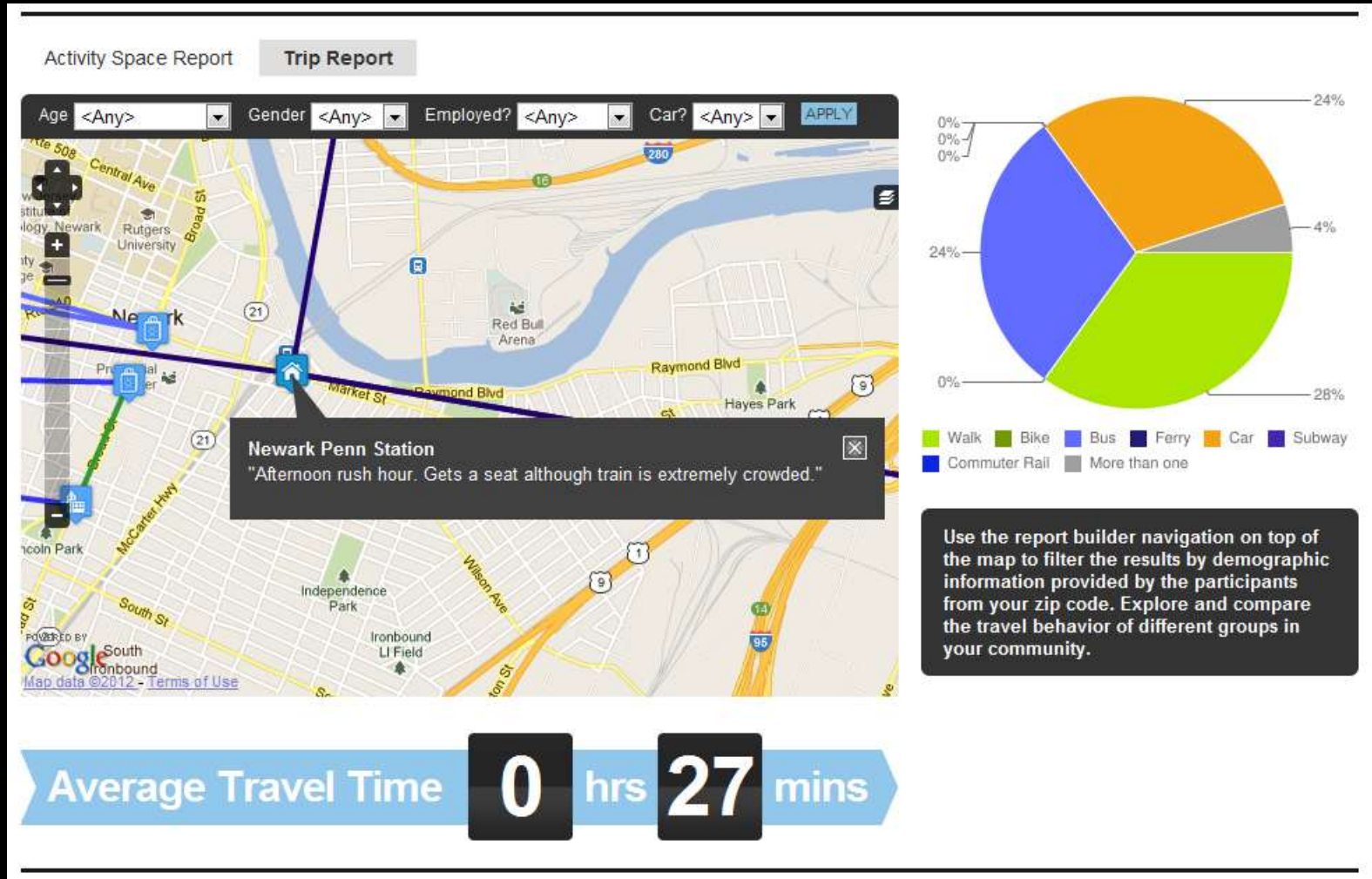
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### My Trip Map

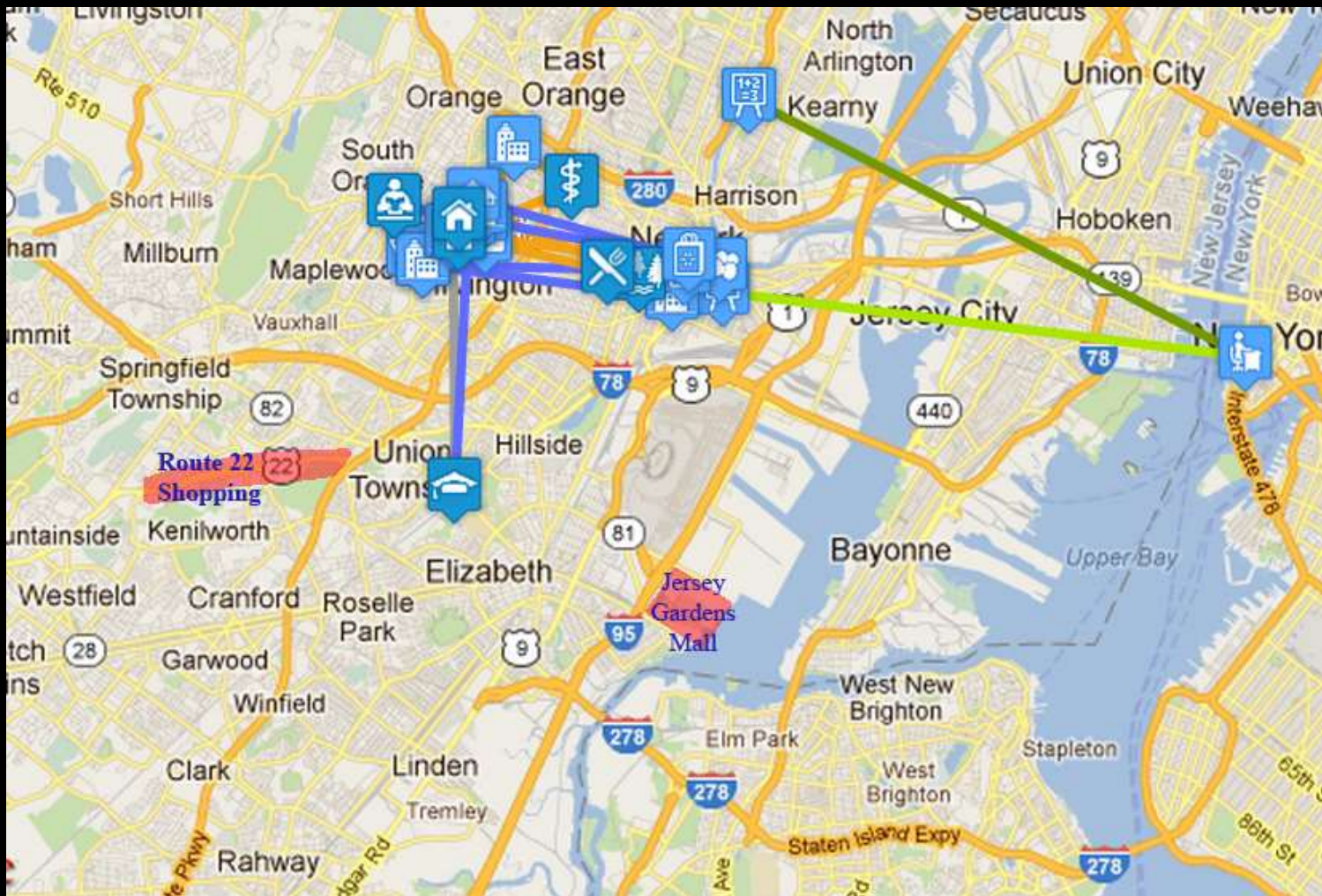
powered by Google  
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# Outcomes – 2

## Community Advocacy Opportunities

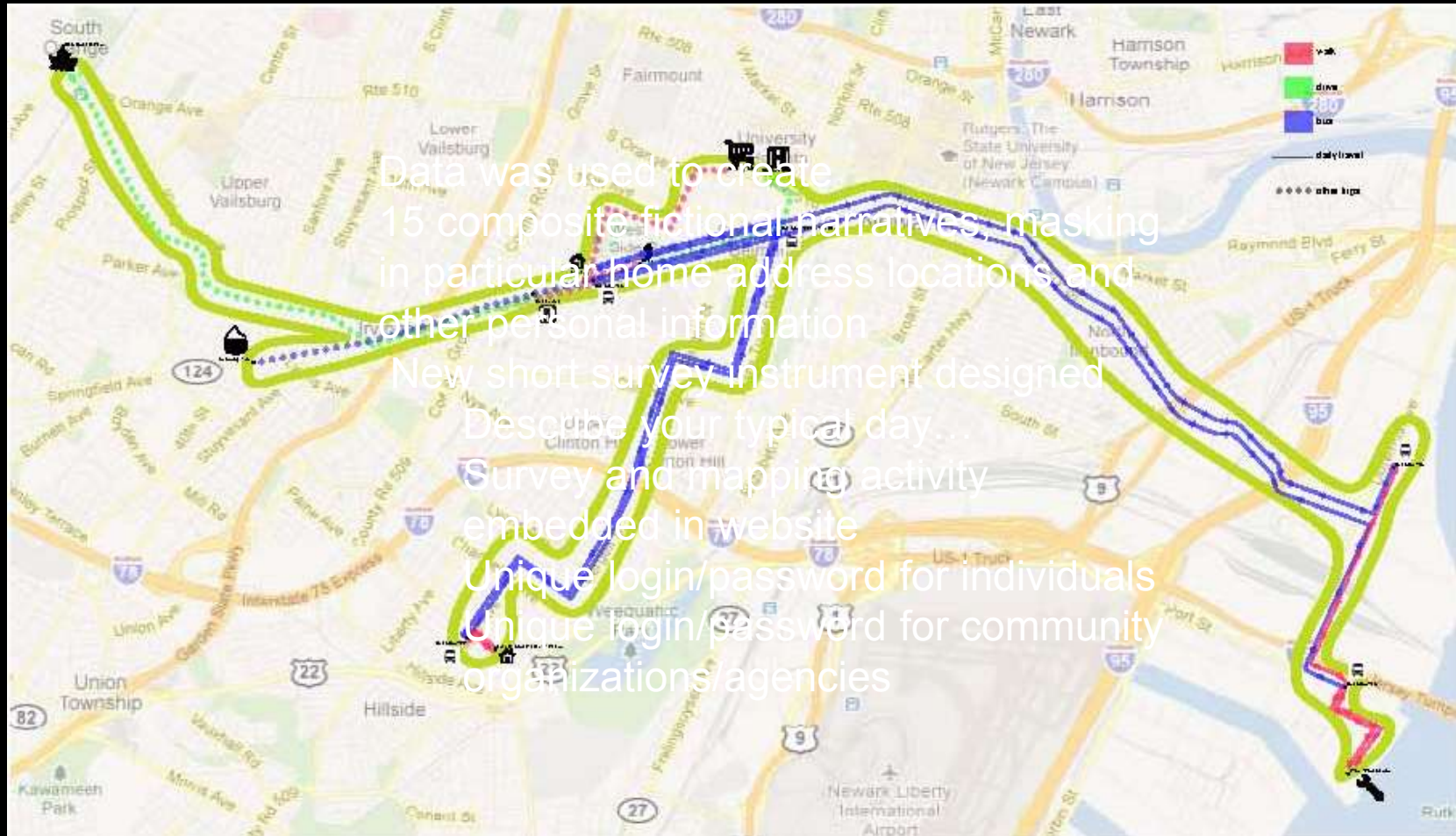


# Missed Opportunities



Source: Author

# Next Steps

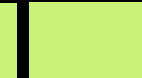


Individual Activity Space following actual routes

Source: Author

# Ethical Dilemmas

- Institutional Review Board process
- Raising Expectations of vulnerable populations
- The shock of learning about relatively intimate private information
- Managing access to information
- Individual empowerment versus/and community advocacy
- Critical Education of participants' rights and responsibilities







# For further information:

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