



**NORTH CAROLINA**  
Department of Transportation

***Research & Innovation Summit – 2020***



# Effective Identification and Engagement of Transportation Stakeholders Using Geospatial Analytics and Online Advertising

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# Transportation Planning Process



## Problem Statement

1. Local stakeholders are more likely to get involved in the planning process of it compared to commuting stakeholders
  2. Some stakeholders participate in the planning of the project because they are skeptical about long term construction nearby.
  3. Some stakeholders do not live in the vicinity of the project location and therefore they are
    - Not aware of the existence of the project
    - Not aware of the improvement that the project implementation would provide to them
- **Local:** stakeholders that live or work in close proximity to the project's location
- **Commuting:** stakeholders that regularly commute near the project's location

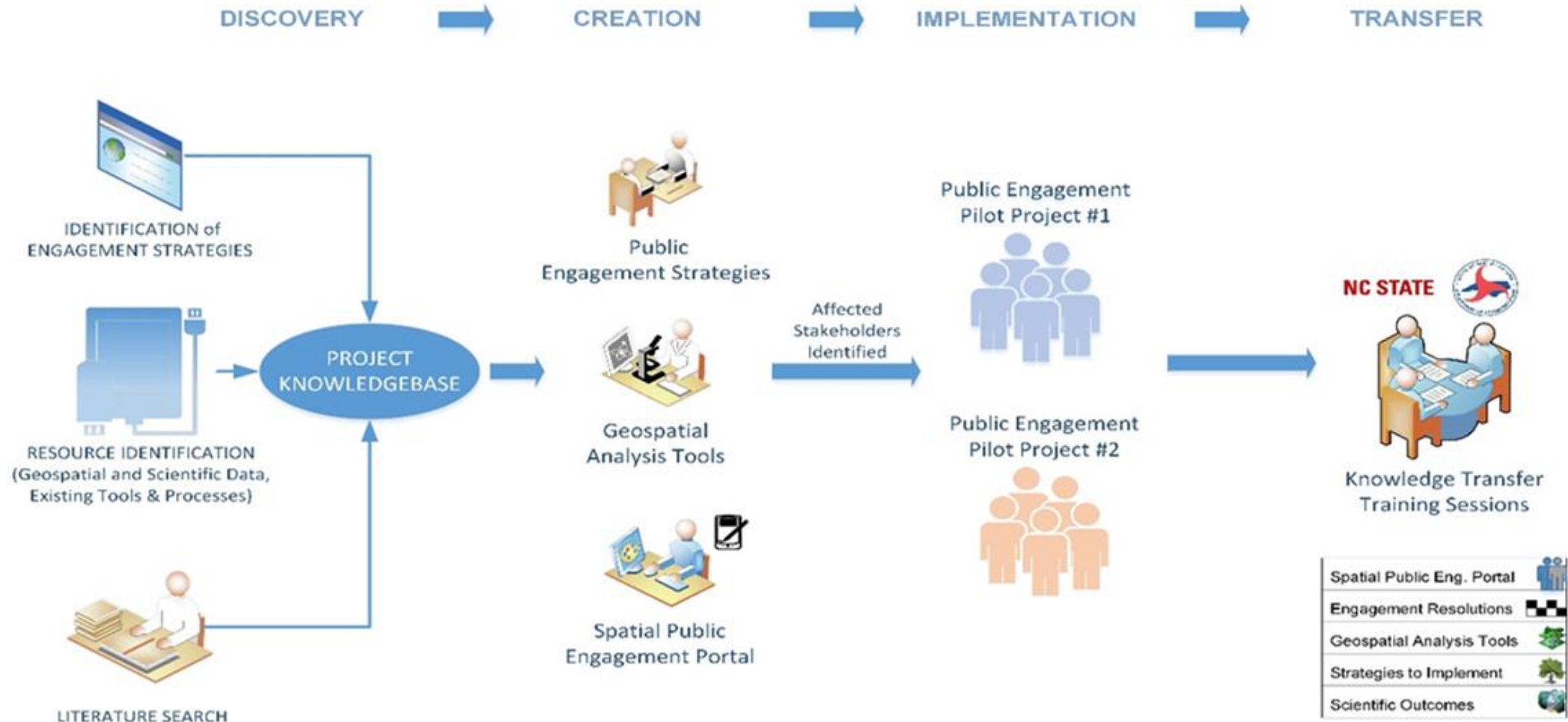
# Overarching Goal

NCDOT aims to gain the input from full spectrum of citizens

1. Involving the public early
2. Continued involvement



# Overview of the project





Public  
Engagement Strategies



Geospatial  
Analysis Tools

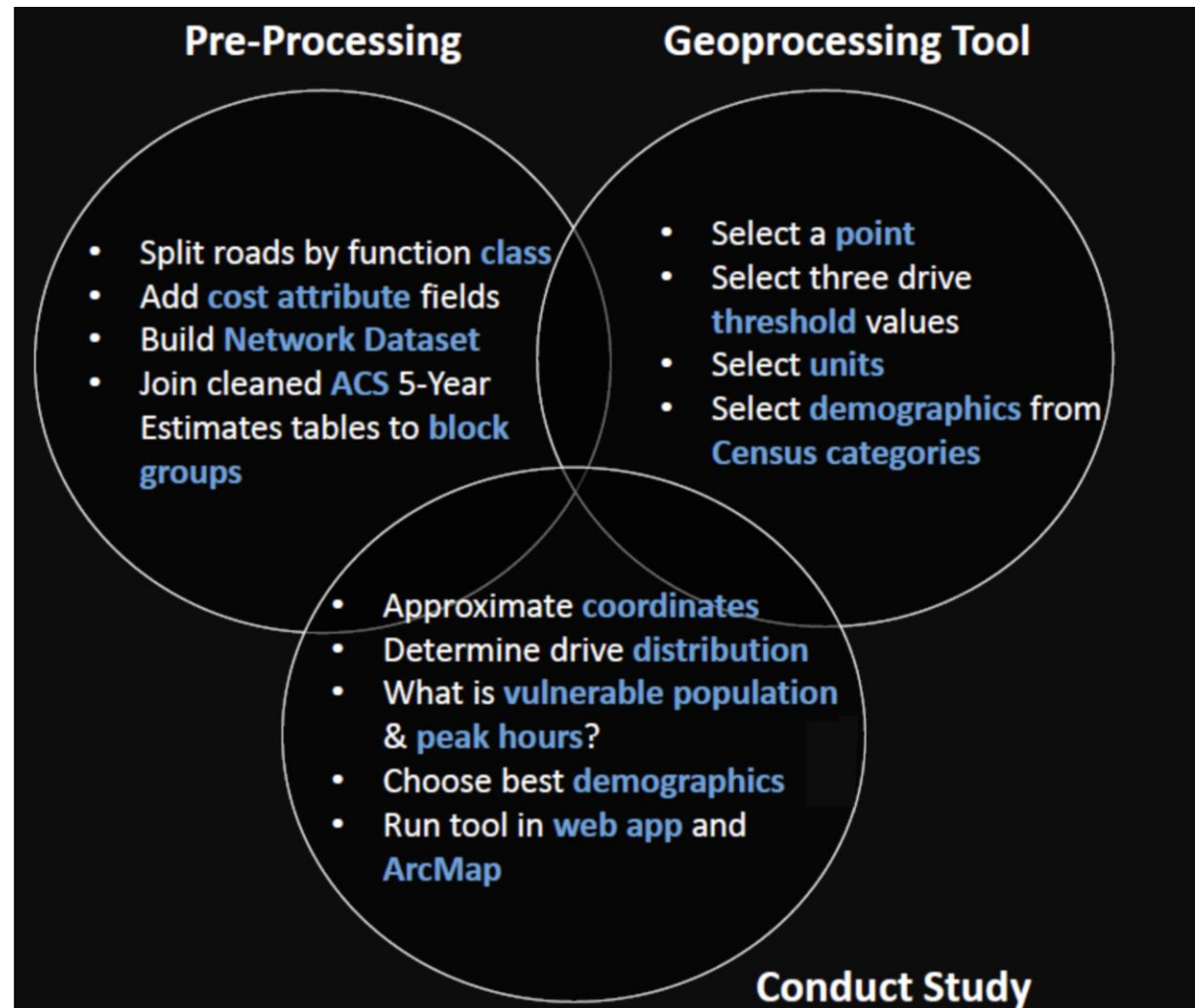


Spatial Public  
Engagement Portal



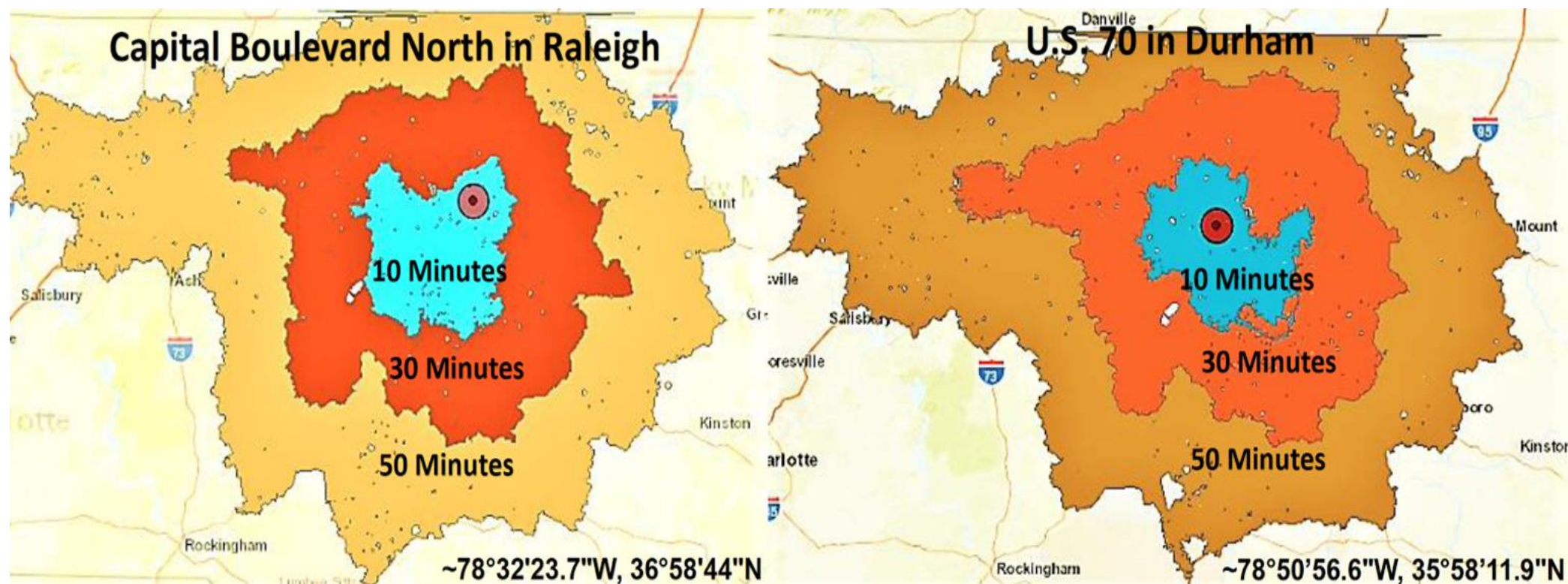
# Geospatial Analysis Tools

Network Analysis | Affected Areas | Areas with Demographic Interest



# Geospatial Analysis Tools

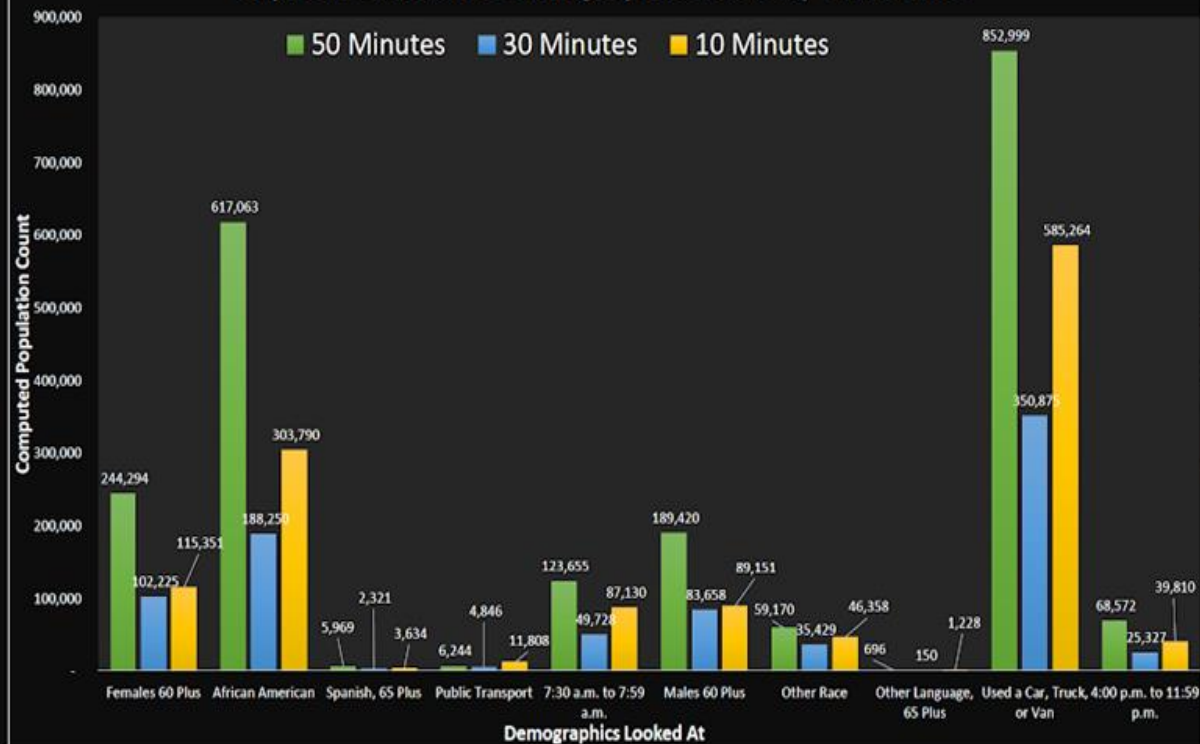
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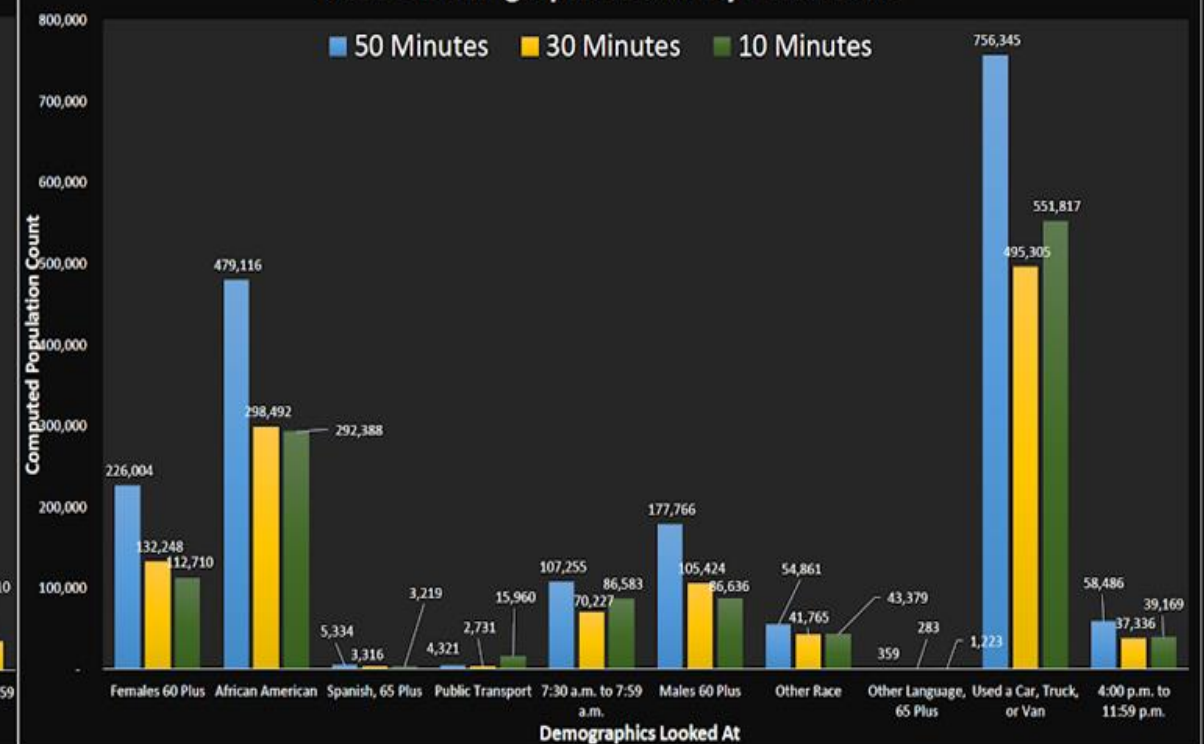
# Geospatial Analysis Tools

Network Analysis | Affected Areas | Areas with Demographic Interest

### Capital Boulevard Demographic Totals by Drive Time



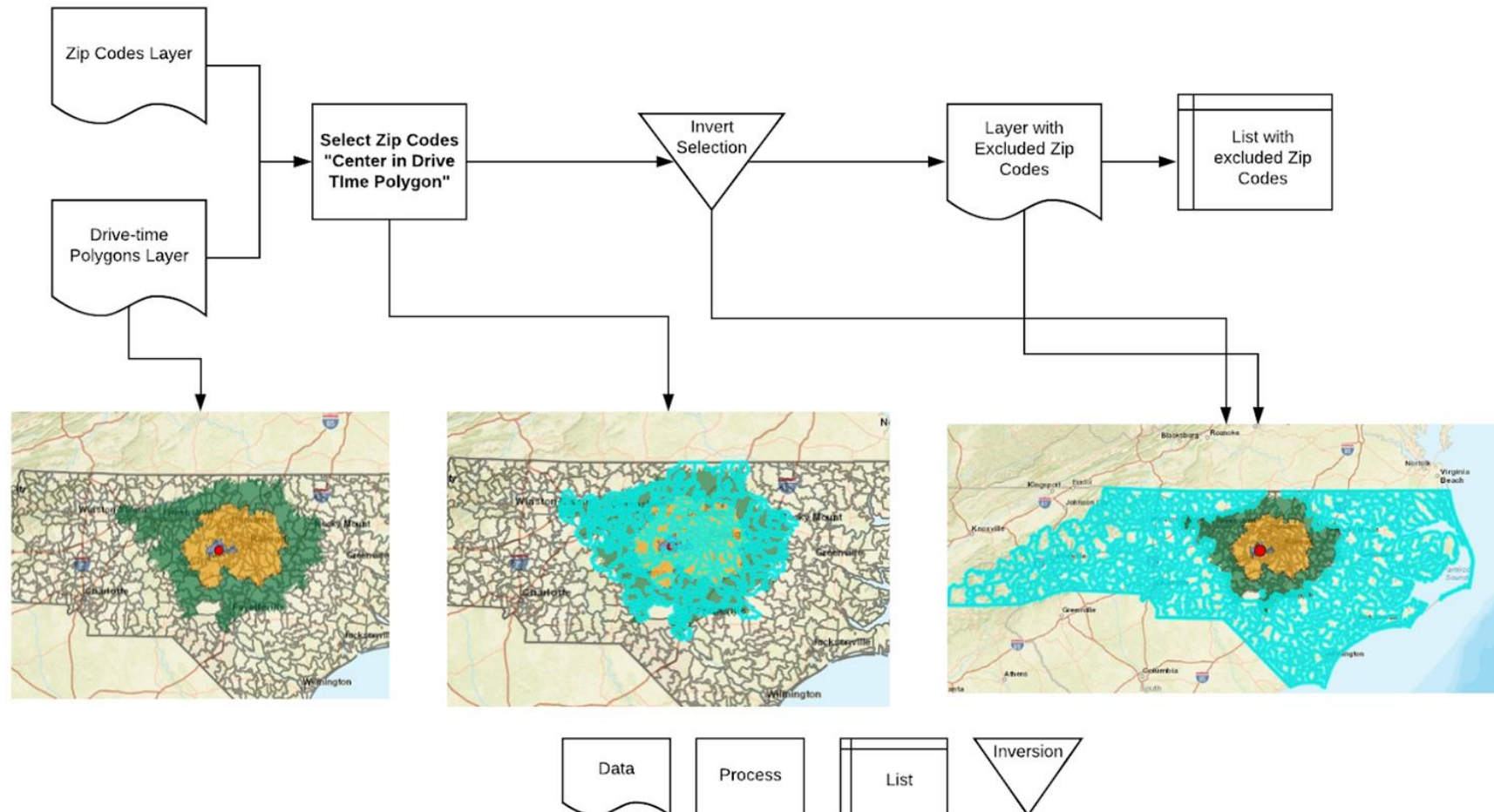
### U.S. 70 Demographic Totals by Drive Time





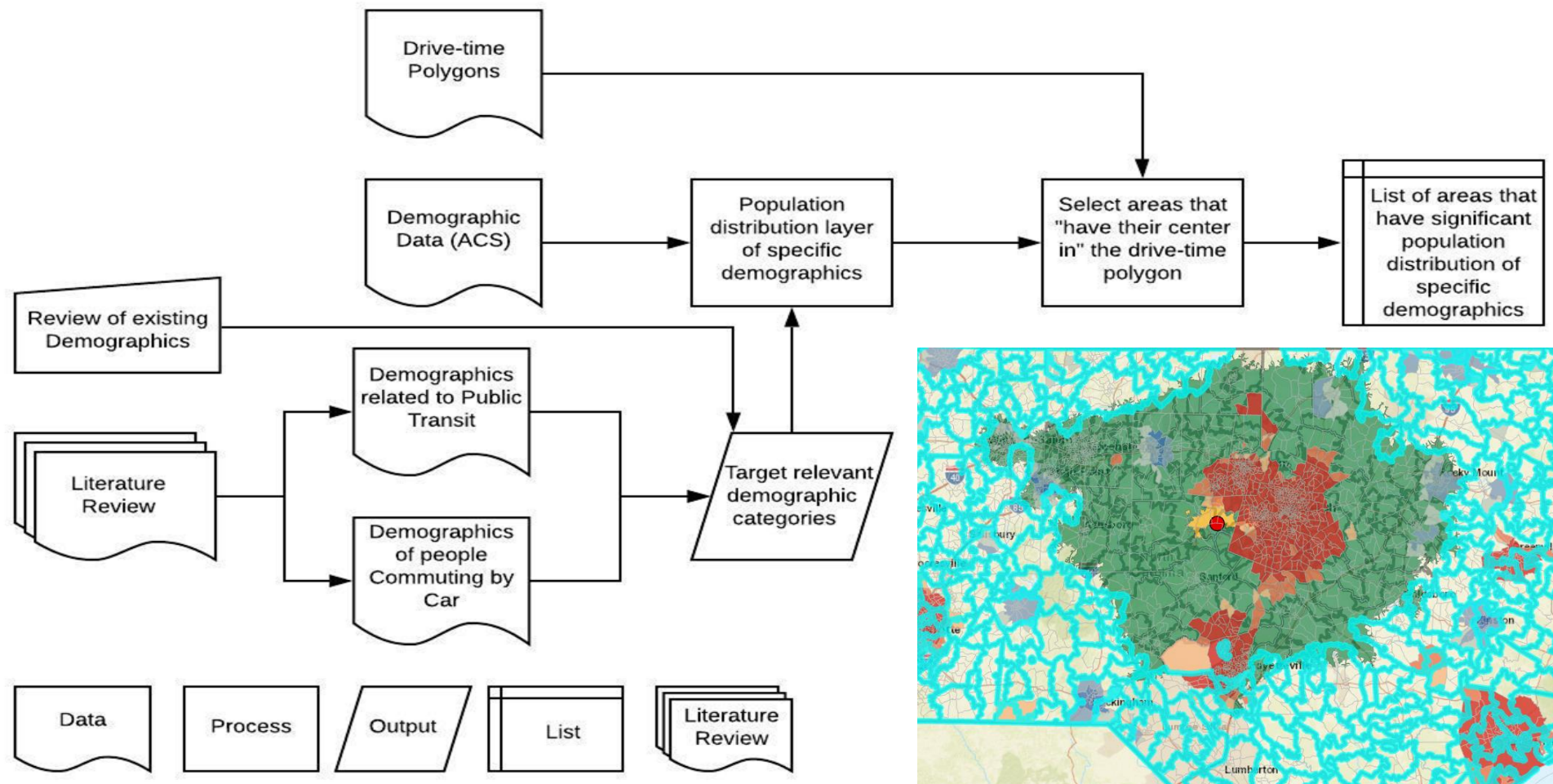
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# Geospatial Analysis Tools

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Facebook ads



Public  
Engagement Strategies



Google Ads



Geospatial  
Analysis Tools

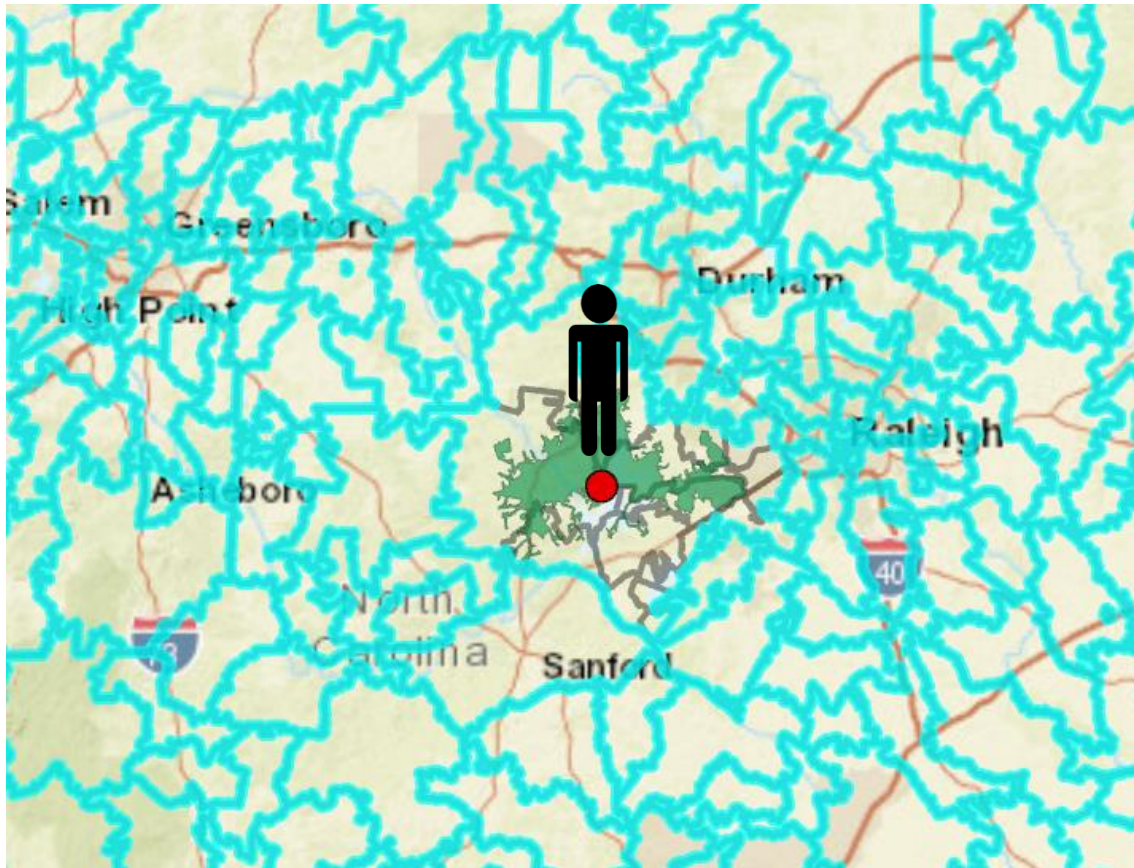


Spatial Public  
Engagement Portal



# Public Engagement Using Online Advertising

Target Local Stakeholders | Target Relevant but Nonlocal Stakeholders | Target Stakeholders with Relevant Demographic Profile

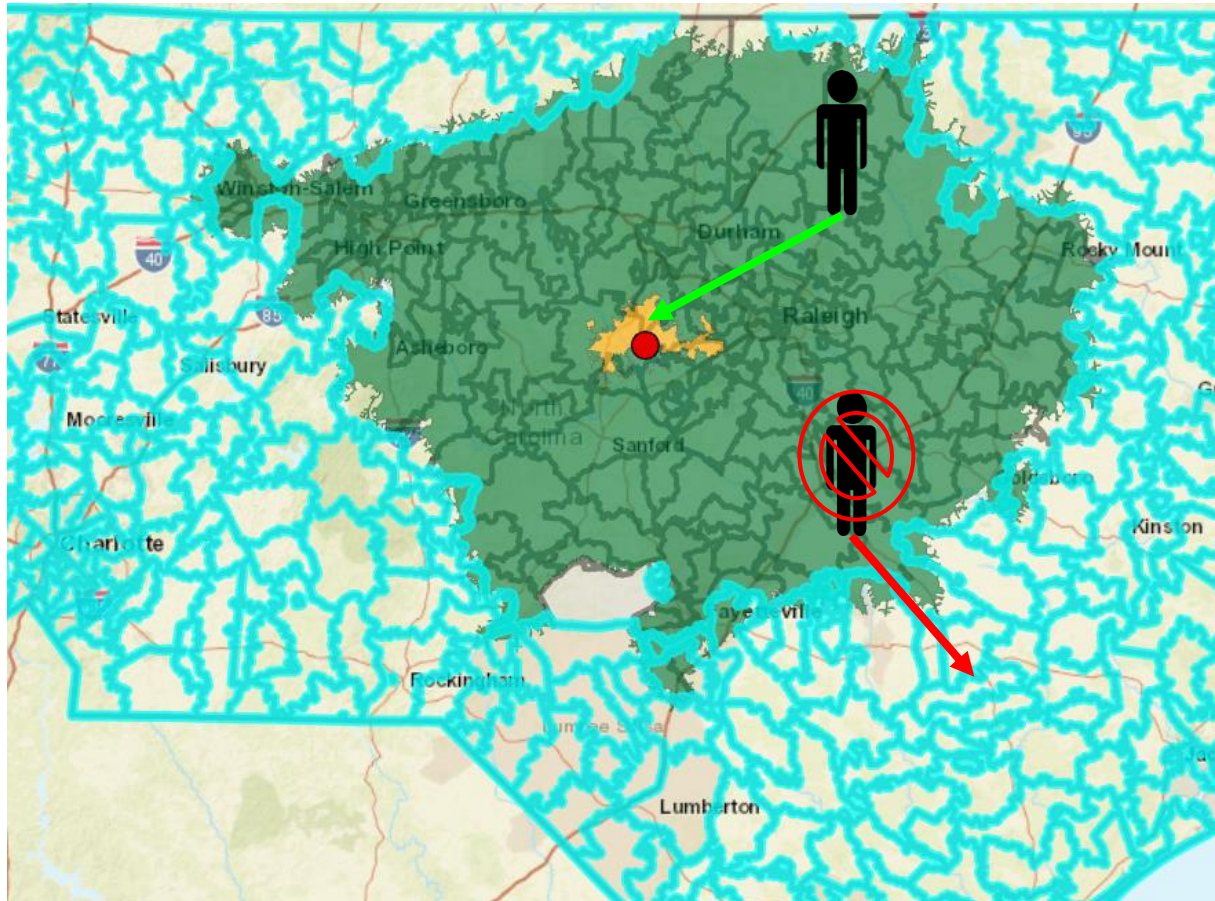


We aim to target stakeholders whose house/business is located in close proximity to the project's site and as a result, they will be centrally affected by the implementation of the proposed project.



# Public Engagement Using Online Advertising

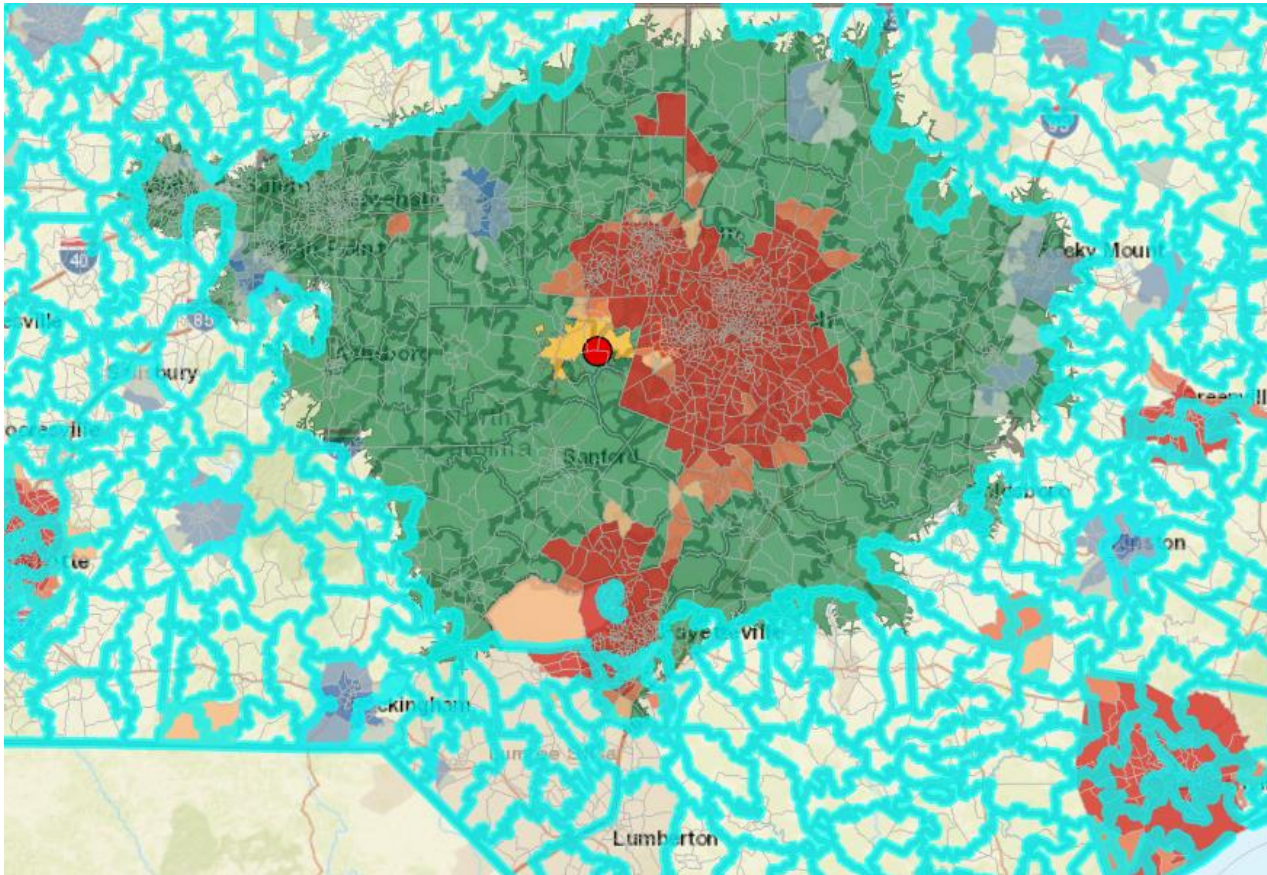
Target Local Stakeholders | Target Relevant but Nonlocal Stakeholders | Target Stakeholders with Relevant Demographic Profile



We aim to target migratorily affected stakeholders that regularly commute to the projects' site.

# Public Engagement Using Online Advertising

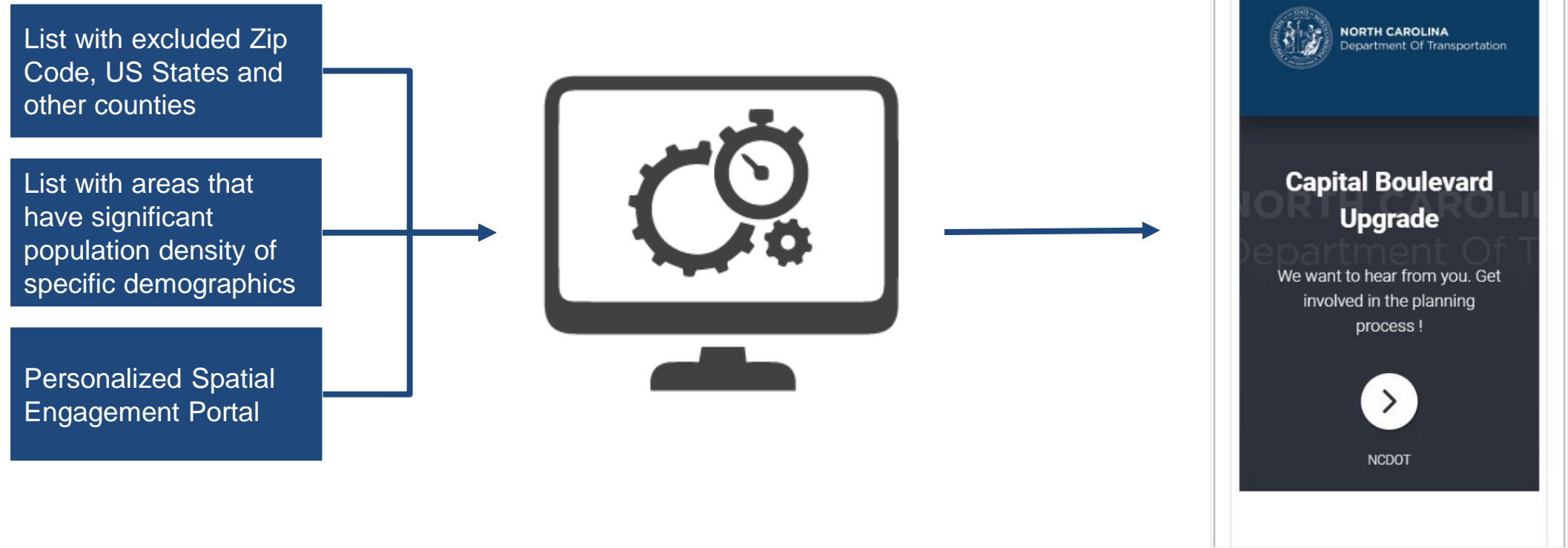
Target Local Stakeholders | Target Relevant but Nonlocal Stakeholders | Target Stakeholders with Relevant Demographic Profile



We aim to target stakeholders that have a greater interest in the proposed transportation project.



# Semi-Automated Creation of Advertising Campaigns





Public  
Engagement Strategies



Geospatial  
Analysis Tools



Spatial Public  
Engagement Portal



# Spatial Public Engagement Portal

## Example Story Map:

<https://storymaps.arcgis.com/stories/fb44c65bc2c84308a110c818f3e10c65>



George's summer research presentation video:  
<https://www.youtube.com/watch?v=34KNasYnAio>

# Thank you !

## Any Questions?

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