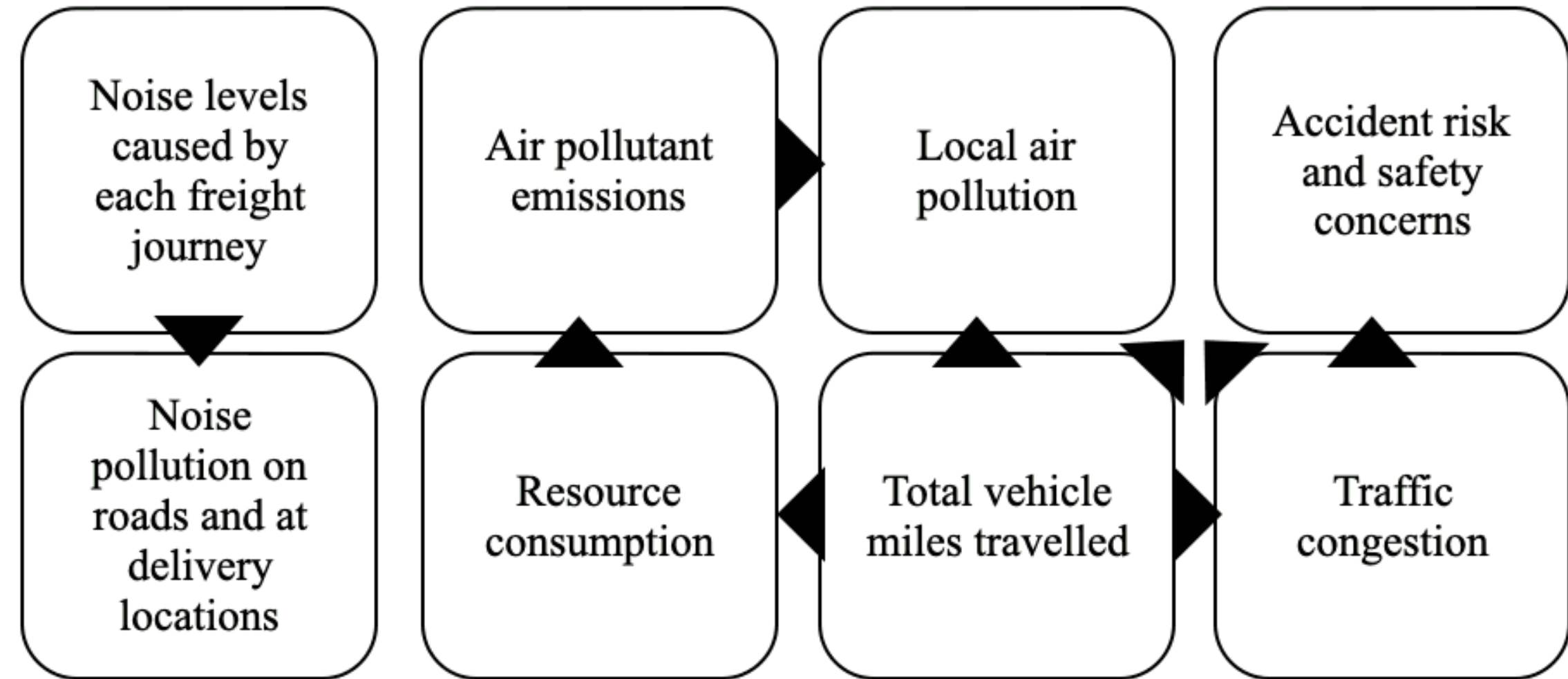




Integrating Social Media, Big Data, and other Innovations to Assess Community Livability





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Livability is...

- Defined differently according to context
- Complex and includes diverse stakeholders
- Difficult to quantify – requires both qualitative and quantitative assessments
- An important measure of quality of life in communities





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A CFIRE freight story ...

The Living with Freight Project: **Memphis**

- How has your neighborhood changed?
- What are the greatest barriers to livability in your neighborhood?
- What are the most important factors to livability?

Surveys reveal an additional challenge with understanding livability in diverse communities. People are very adaptable to their environments and have flexible expectations for their communities in terms of what levels are needed to be "livable." While different communities consider similar things to contribute to livability, and possess those features in different amounts, this information was insufficient to predict how they would rate the livability of their community. However,

In 2014, the University of Memphis conducted a number of surveys to learn more about residents' perception of livability. Survey locations and responses can be reviewed in the interactive map.

Freight and Environmental Justice

A considerable concern when examining

Voices from Memphis: Excerpts from a 2014 Livability Perception Study

Survey Responses

- How has your neighborhood changed?
- What are the greatest barriers to livability in your neighborhood?
- What are the most important factors in neighborhood livability?
- What are the most important factors in community livability?

Source: University of Memphis, 2014

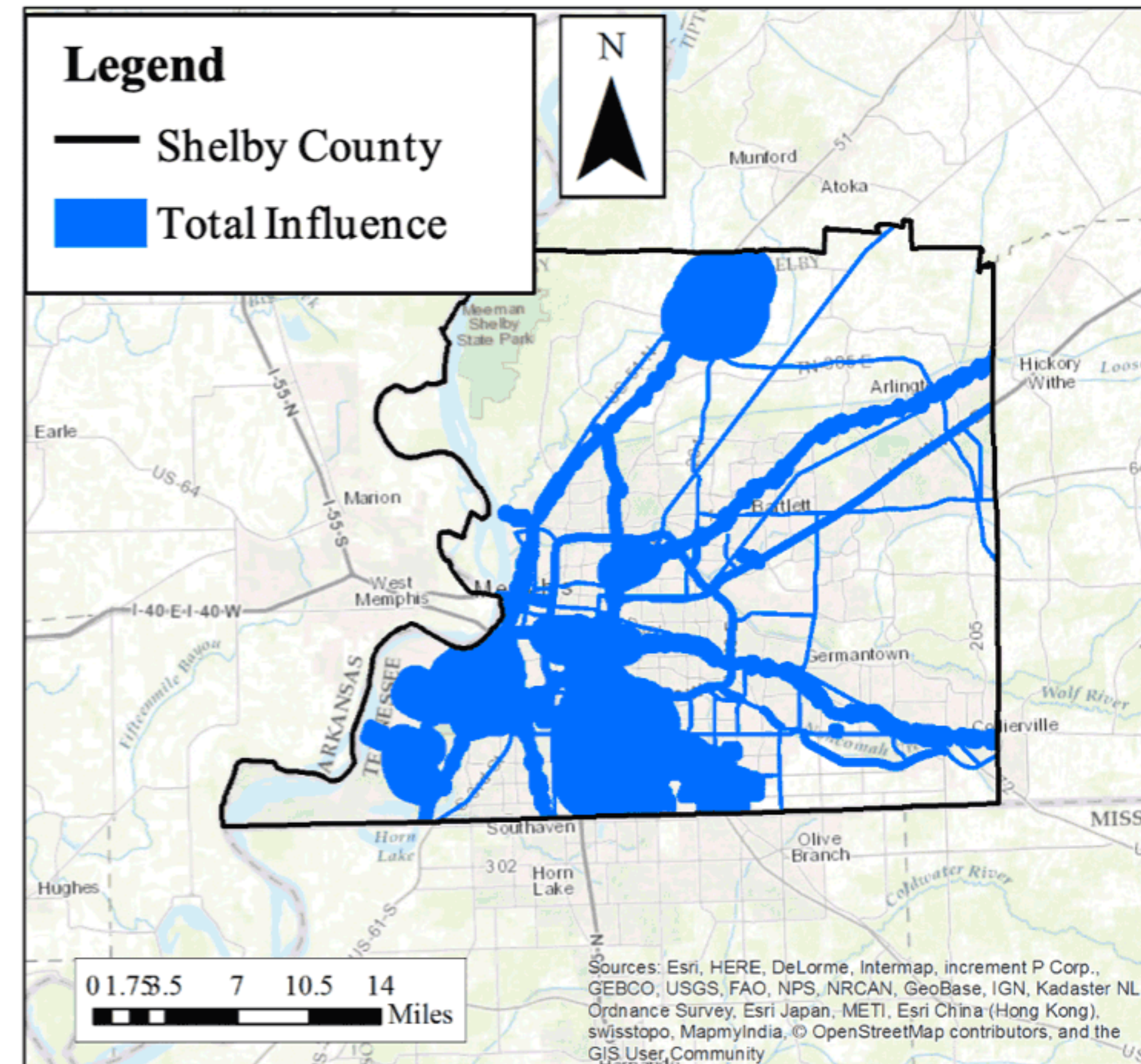
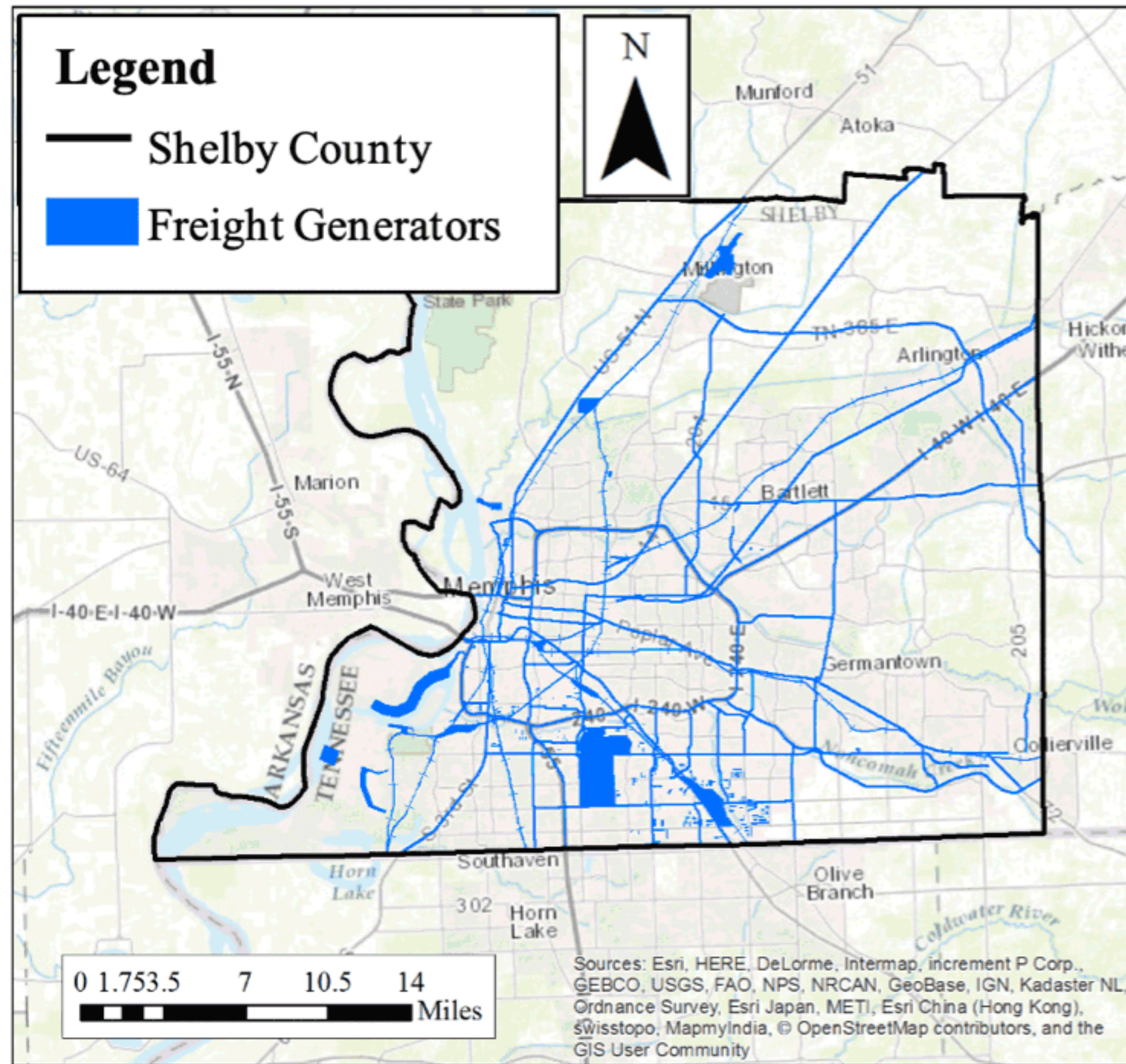
Demographic Overlays

- Population Density
- Income
- Percentage African American
- Percentage Hispanic
- Percentage Native American
- Percentage Asian American

The map displays survey locations as green squares across Memphis. It includes two legends: 'Percent African American' with categories 92-100 (dark blue), 71-91 (medium blue), 23-70 (light blue), and 0-22 (white); and 'Population per Km²' with categories 1843-11490 (dark red), 1283-1842 (medium red), and 741-1282 (light red). A callout box for Census Tract 107.10 shows 68% African American and a population density of 107.10. The map also features zoom in (+) and zoom out (-) controls.

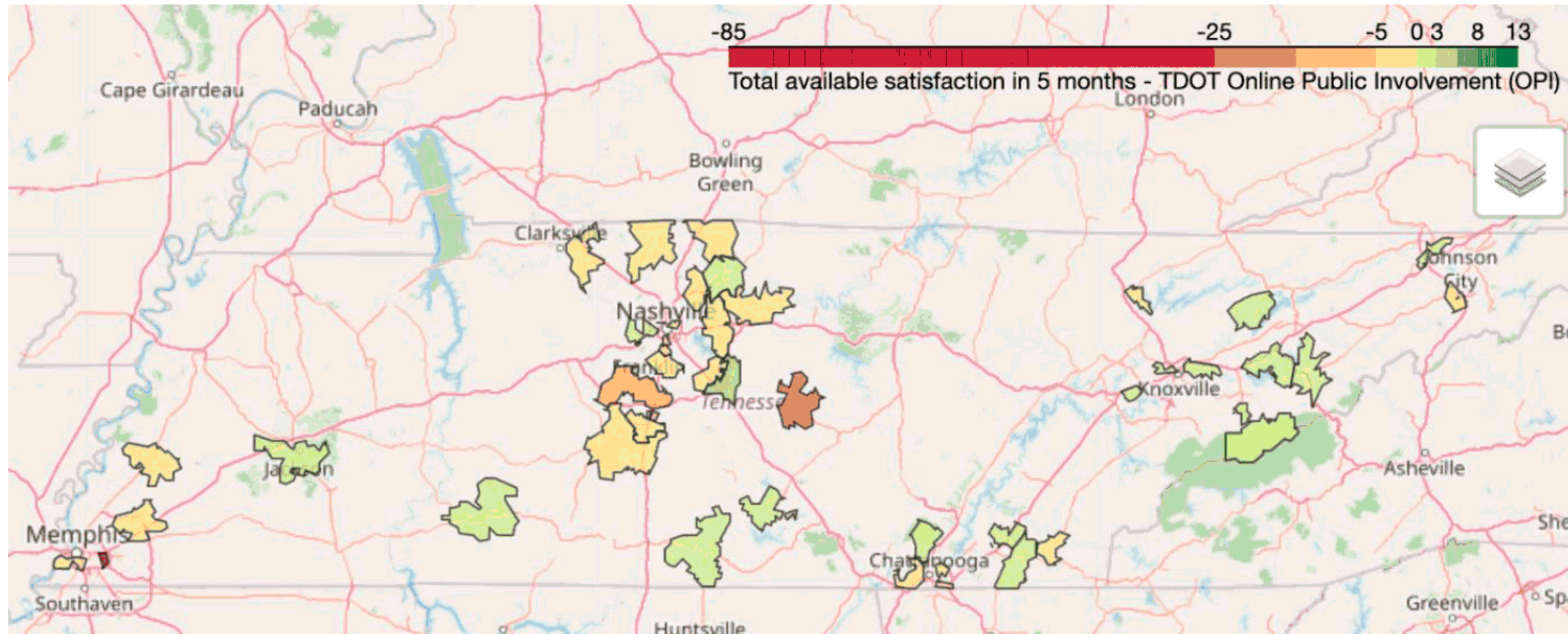


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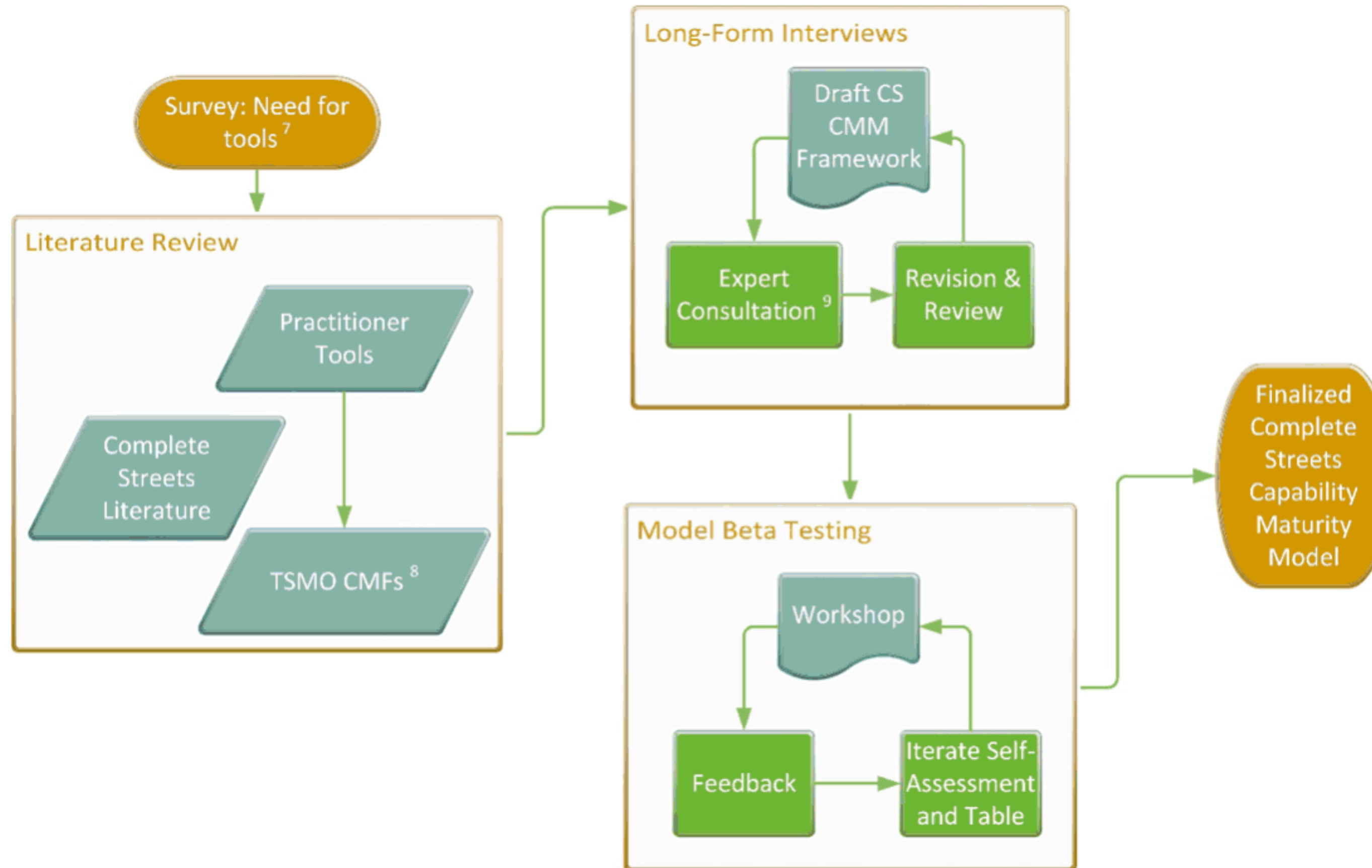
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Sentiment-Derived Satisfaction of Zip Codes in Tennessee (Golnaz Sarram, doctoral dissertation)



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Capability Maturity Model for Complete Streets (Sam Jordan, doctoral dissertation)