# Appendix F: Transportation Equity Benefit Analysis

## F-1 Objective

The District of Columbia is committed to environmental justice and the equitable distribution of transportation projects and investments. Potentially vulnerable populations, from a demographic perspective, often could benefit most from improved access, more transportation choice, and community investment. To document the distribution of programmed project investments to potentially vulnerable populations, DDOT has developed a geographic assessment. The methodology for this assessment of STIP projects is consistent with the assessment conducted in moveDC.

## F-2 Methodology

Using demographic data from the 2011-2015 American Community Survey (ACS) data at the census tract level, areas with high concentrations (relative to Districtwide averages) of potentially vulnerable populations were identified and are shown in **Figure F-1.** Each census tract was classified into one of five percentiles ranges relative to the Districtwide average. The census tracts with the highest percentiles of potentially vulnerable populations are shown in red.

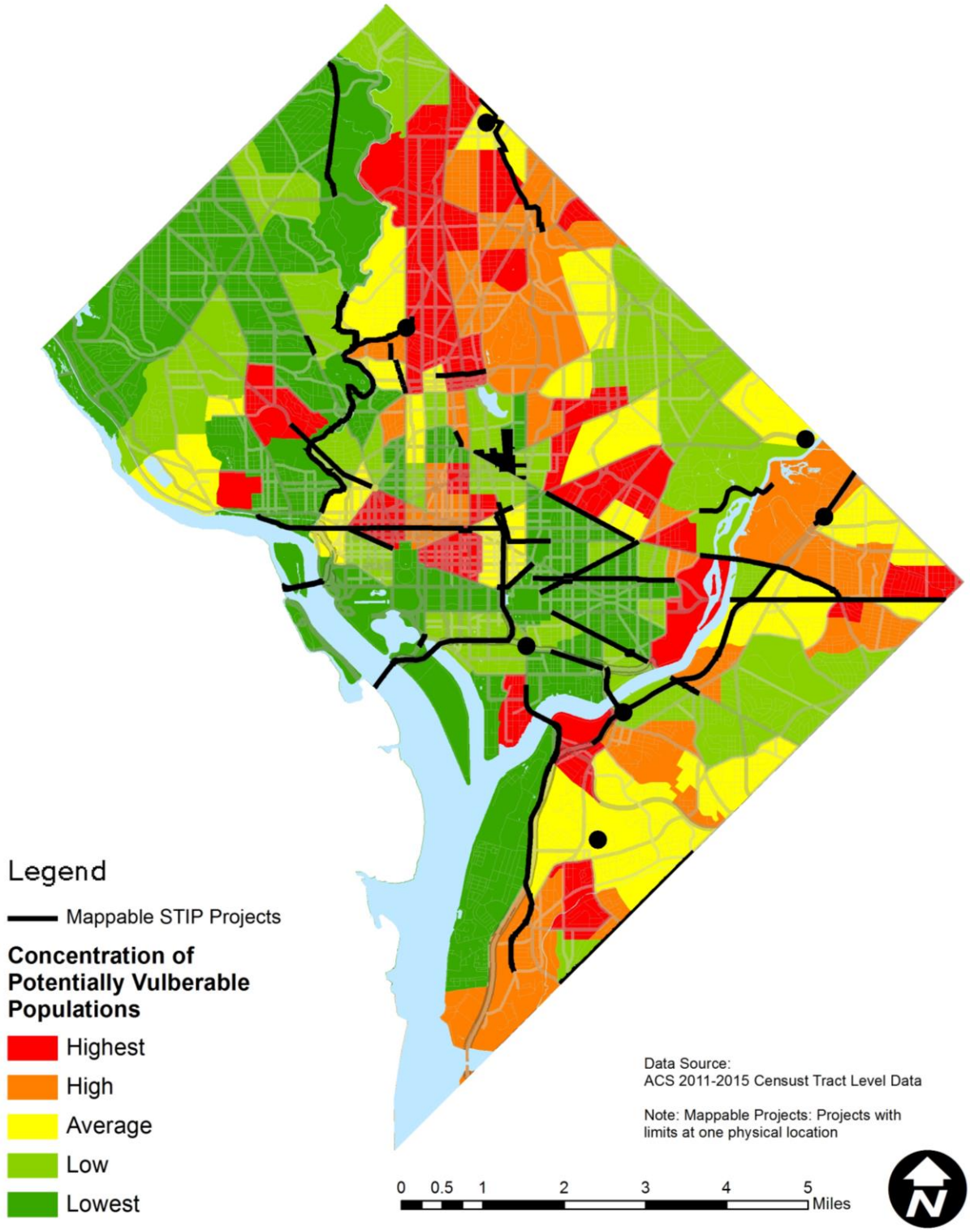
The identification of these areas was based on census tract data on minorities, low-income households, LEP, and country of origin. The select population groups are either directly protected under Title VI of the Civil Rights Act of 1964 or may be linked to protected populations under Title VI. There may be other areas with potentially vulnerable populations that are not highlighted.

Each project with a defined geographic location (excludes districtwide projects) was mapped using a quarter-mile buffer. The following two high-level metrics were used to assess the distribution of STIP projects through the District and assess the level to which potentially vulnerable populations are served:

- The number of projects intersecting each percentile range
- The average number of projects per census tract

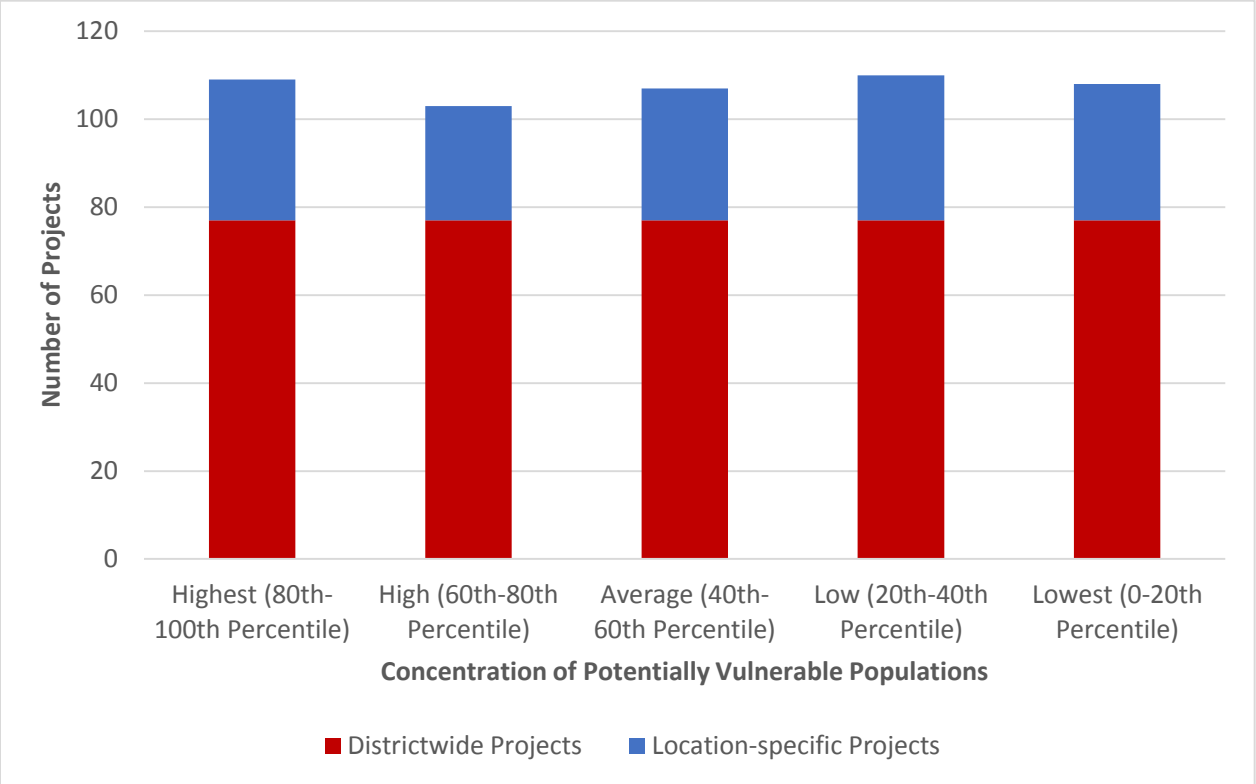
It should be noted that projects may intersect more than one census tract or one percentile range.

## Figure F-1 | Potentially Vulnerable Populations



## F-3 Findings

The geographic analysis shows that the projects with defined geographic locations are spread very evenly over the District. **Figure F-2** shows the number of projects in each of the 5-percentile ranges. The graph combines districtwide projects and projects with a defined location based on their geographic intersection with census tracts. Each census tract is associated with one of the percentile tiers. Projects may fall in more than one percentile range as many project cross census tracts and therefore different percentile ranges.




*Notes:* *Projects may fall in more than one percentile range.*
Districtwide Projects: Projects that are not restricted to one physical area
Location-specific Projects: Projects with defined geographic limits

**Figure F-2 | Distribution of Projects Amongst Quintiles of Potentially Vulnerable Populations**

Based on this high-level analysis, the District's investment does effectively serve potentially vulnerable populations[1]. **Table F-1** summarizes the number of projects with a specific location in each census tract. Although census tracts with lower concentrations of transportation disadvantaged populations have

[1] This high-level assessment does not consider factors such as project scale, project impacts which may be viewed as disruptive, and the benefits/impacts of regional projects which are likely to extend beyond the ¼ mile area considered in the analysis.

more projects per tract by a small margin, projects are distributed relatively evenly. As projects moved toward implementation, DDOT will continue to monitor this distribution of investment and conduct ongoing engagement with these populations.

### Table F-1 | Number of Projects Amongst Quintiles of Potentially Vulnerable Populations

| Concentration of Potentially Vulnerable Populations | Highest (80 -100th Percentile) | High (60 - 80th Percentile) | Average (40 - 60th Percentile) | Low (20 - 40th Percentile) | Lowest (0 -20th Percentile) |
|---|---|---|---|---|---|
| **Average Number of Projects Per Tract** | 2.3 | 2.3 | 2.7 | 2.6 | 2.7 |

*Note: Projects may fall in more than one census tract.*