



Siting Bike Rental Stations to Address Environmental Justice Concerns

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Project Goal:

Groundwork Somerville hopes to address environmental justice concerns in Somerville, Massachusetts by expanding Boston's bike share program to the community. GIS analysis will be used to site four rental stations based on income level, minority population and commute times. An optimal location will serve the transportation needs of the target population - those most vulnerable to environmental justice risks.



Methodology:

1. Use 2000 Census data at the block group level to create three criteria maps that depict income, minority population, and commute time.

2. Create **environmental justice rankings** based on how each block group scores in each criteria. Highest scores will be assigned to block groups with the lowest income, the highest minority population, and the

longest commute time.
3. Use 2010 Census data at the block level to create a residential **population density map** of Somerville.
4. Select four sites where block groups with high environmental

justice rankings overlap with blocks with high population density. Bike rental locations should be on major roads whenever possible.
5. Compare possible sites based on 1/4 mile walkable network.

