

Environmental Racism In Montgomery County

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Objective and Hypotheses

The objective of this study was to examine the environmental implications from interstates in Montgomery County on minority populations.

- **H₁**: I hypothesizes populations within proximity of interstates experience disproportionate environmental implications.
- **H₂**: I hypothesizes that minorities will be disproportionately impacted by environmental pollution in Montgomery County

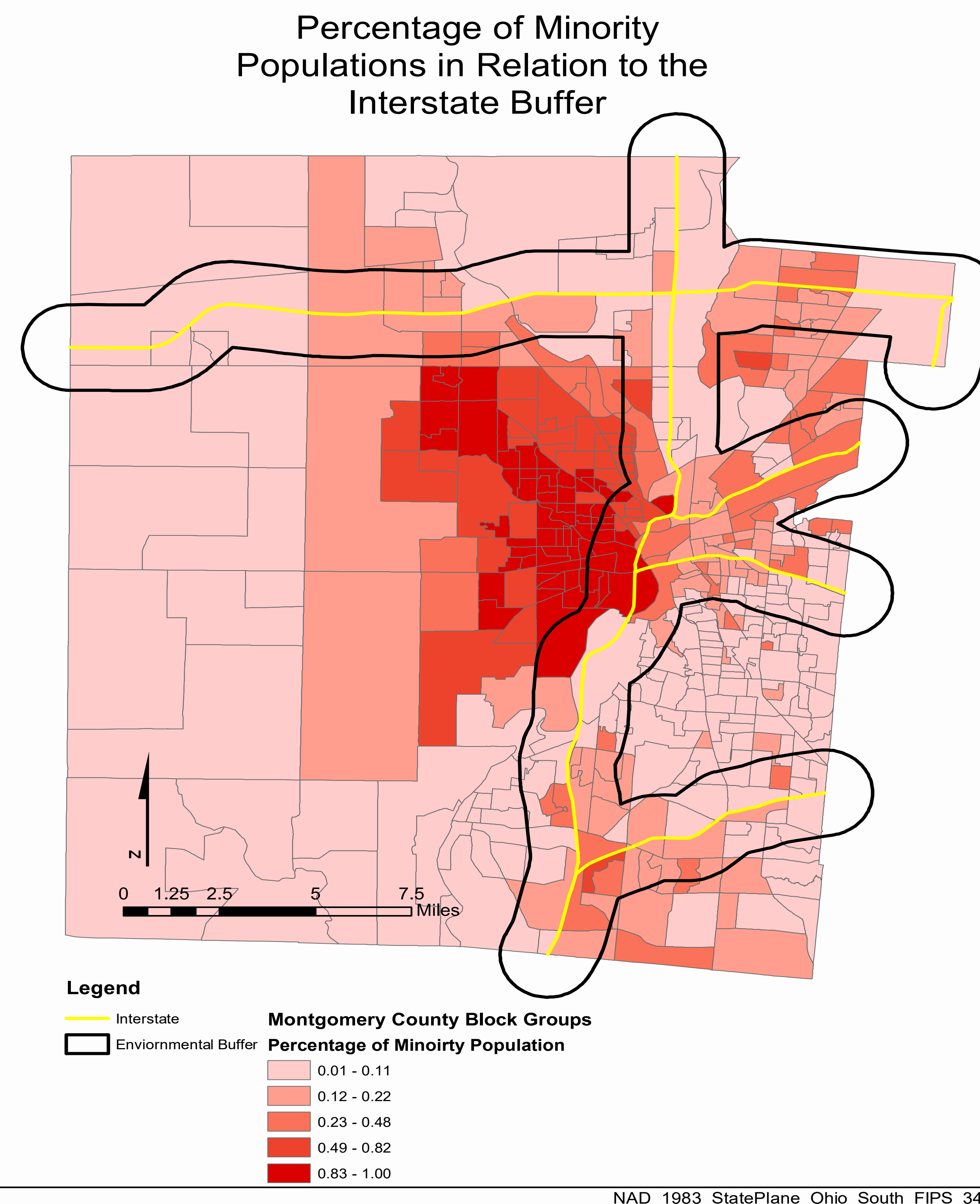
Methods

- Montgomery County Ohio served as the study site for investigation. It is the fifth most populated county in Ohio with a population 535,162.
- The United States Census provided census block group boundary data for populations in Montgomery County. Next, the Fact Finder site was utilized to obtain race data for each census block group. Finally, the transportation data came within the Geographic Information system (GIS) database, the National Interstate Highway. The data was compiled in the GIS software (figure 1).
- A buffer of 2000 meters was created around the interstates to identify areas that are disproportionately impacted by environmental pollution from the highways. Using the GIS software table 1 was constructed to identify the percentage of minority population living within and outside the environmental buffer.

Conclusions

- The percentage of minorities within the environmental buffer compared to outside was not significant.
- The thematic map reveals a dense population of minorities to the west of Dayton.
- Redlining is responsible for the dispersion of minorities in Montgomery County.

Results



• Figure1

Data

	Inside Buffer	Outside Buffer
Total White Population	230,954	164,318
Total Minority Population	75,065	64,825
Minority Percentages	25%	28%

• Table 1

Environmental Racism

- Environmental Racism targets underrepresented minority community for locations to place sources of pollution. (Hamilton 1995)
- The U.S General Accounting Office study in 1983 found minorities were twice as likely to live in communities with hazardous conditions (Mohai et al. 1992).

Pollution Implications

- An apparent source of pollution comes from transportation systems, emissions, and dispersion models of vehicle
- Generated pollutions, and noise models are consequences of living near a transportation system (Forckenbrock & amp; Schweitzer).
- Noise and air pollution are associated with myocardial infarction (Huss et al 2010).
- Pollution causes both physical and soico-economic impacts related to adverse health impacts (Seong eta al 2011).

Law and Policy

- In the 1930's Surveyors with the federal Home Owner' Loan Corporation limited where minorities could purchase homes in Montgomery County.
- Redlining has been outlawed since 1968. And for the last 40 years, banks have had a legal obligation under the Community Reinvestment Act to solicit clients — borrowers and depositors — from all segments of their communities.
- Lending industry demonstrates racism and is unchecked by current policy.
- As of 2016, in Montgomery County, specifically in western Dayton, African Americans are 2.1 times as likely to be denied a conventional home mortgage as white applicants.

Acknowledgments

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