

Spring 4-24-2013

A GIS Analysis of Environmental Justice in Lake and Porter Counties

Halina Hopkins

Valparaiso University, halina.hopkins@valpo.edu

Follow this and additional works at: <http://scholar.valpo.edu/cus>



Part of the [Geography Commons](#)

Recommended Citation

Hopkins, Halina, "A GIS Analysis of Environmental Justice in Lake and Porter Counties" (2013). *Celebration of Undergraduate Scholarship*. Paper 254.

<http://scholar.valpo.edu/cus/254>

This Poster Presentation is brought to you for free and open access by the Office of Sponsored and Undergraduate Research at ValpoScholar. It has been accepted for inclusion in Celebration of Undergraduate Scholarship by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.

A GIS Analysis of Environmental Justice in Lake and Porter Counties

Halina Hopkins

Departmental Affiliation: Geography and Meteorology
College of Arts and Sciences

Starting with the publication in 1987 of the United Church of Christ Racial Justice Commission Report "Toxic Wastes and Race in the United States," environmental justice research addresses the geospatial relation between environmental hazards and the social characteristics of the communities hosting toxic sites. Geographic Information Systems (GIS) allows environmental justice researchers to consider questions involving public policy, health effects, risk analysis, and more nuanced considerations of race, income, and injustice. This project is an analysis of environmental justice in two counties in northwest Indiana: Lake County, which contains the city of Gary; and Porter County, an adjacent county with no major cities. I investigated the relationship between environmental hazards and wealth in these two counties. I addressed this question by using GIS to map population block data from the 2010 U.S. Census (using housing values, median income, and county revenue as indicators of wealth) against the locations of toxic release facilities from the U.S. Environmental Protection Agency's Toxic Release Inventory (TRI). I developed a set of maps showing the spatial relationship between TRI density and economic status.

Information about the Author:

Halina Hopkins is a senior majoring in biology, environmental science, and humanities. This project was the culmination of her advanced GIS class. She became interested in environmental justice through a course on African-American literature, when she learned of a material-historicist precedent for negative relations between minorities and the physical environment. What she learned from this project has made her more attuned, as a teacher of science and English, to social relations with the environment.

Faculty Sponsor: Dr. Bharath Ganesh Babu

Student Contact: halina.hopkins@valpo.edu