

THE ENVIRONMENTAL CONDITION OF
PROVIDENCE, RHODE ISLAND: AN INDEX
FOR DECISION MAKING

by

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ABSTRACT

An area of environmental study and public policy which has only recently been examined is Environmental Equity. In just the past fifteen years some scholars and governmental agencies have begun exploring the relationship between race and economic condition to the quality of the environment.

Their work has focused on single issues, issues such as, "Are hazardous waste disposal facilities located in white neighborhoods or black neighborhoods?" My work looks at the environment in a broader context. This piece of work examines multiple issues or indicators and creates a complete landscape about the quality of the environment. Moreover, this study is not be limited to White versus Black, but also examine the condition of the environment for different racial and economic groups.

My investigation examines environmental condition in specific neighborhoods in the City of Providence, Rhode Island. To evaluate these conditions, I have developed the Environmental Condition Index, which is used to compare the state of the environment in the 25 neighborhoods of Providence. Previously, no measurement tool was available for utilizing multiple indicators which could apply to different sections of the same city or state. This index compares each of the 25 neighborhoods to one another. Moreover, it examines the relationship between the Index with race and economic condition.

The ten indicators used in the Environmental Condition Index break down into two groupings: health related indicators and aesthetic indicators. The five health related indicators are CERCLIS hazardous waste sites, lead poisoning in children, and air

toxics from three sources (dry cleaners, gas stations and industrial facilities). The five aesthetic indicators are parks and open space, litter, illegal dumping violations, vacant buildings and street trees. The Environmental Condition Index utilized more than 34,000 pieces of data.

I have found that there is a vast difference in the quality of the environment in the 25 neighborhoods. The range is dramatic and it is generally consistent across the whole spectrum of indicators, the results raise serious concerns about the quality of life that can be hoped for in individual neighborhoods. Some neighborhoods lack both aesthetic beauty and suffer from potentially serious health threats.

After this review, it is clear that there is a relationship between the Environmental Condition Index, and racial populations and wealth. Generally, the areas that were the poorest in terms of median income showed the worst results on the Environmental Condition Index. Similarly, areas with the highest percentage of minorities suffered from blight and health threats. The relationship between race and the Environment Condition Index was found to be strongest for Hispanics and Whites, but also significant for Blacks and Asians. When controlling for income, it was determined that there was a difference for racial groups.

Finally, this research led me to proposing specific proposals to remedy the disturbing findings. The recommendations proposed create a series of policies including the development of an Environmental Trust Fund for the purposes of equalizing inequities found through the Index. The Trust Fund is funded by a nonutilization tax on vacant buildings and property and would pay for the rehabilitation of vacant housing, park maintenance and street beautification. The policy proposals are equitable and achievable and should be driven by the use of the Index to achieve equity.