

The New Jersey Childhood Obesity Study

New Brunswick

Physical Activity Environment

August 2010

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Funding provided by the Robert Wood Johnson Foundation

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About the Study

The New Jersey Childhood Obesity Study, funded by the Robert Wood Johnson Foundation, aims to provide vital information for planning, implementing and evaluating interventions aimed at preventing childhood obesity in five New Jersey municipalities: Camden, Newark, New Brunswick, Trenton, and Vineland. These five communities are being supported by RWJF's New Jersey Partnership for Healthy Kids program to plan and implement policy and environmental change strategies to prevent childhood obesity.

Effective interventions for addressing childhood obesity require community specific information on who is most at risk and on contributing factors that can be addressed through tailored interventions that meet the needs of the community.

Using a comprehensive research study, the Center for State Health Policy at Rutgers University is working collaboratively with the State Program Office for New Jersey Partnership for Healthy Kids and the five communities to address these information needs. The main components of the study include:

- A household survey of 1700 families with 3 -18 year old children
- De-identified heights and weights data from public school districts
- Assessment of the food and physical activity environments using objective data

Data books and maps based on the results of the study are being shared with the community coalitions in the five communities to help them plan their interventions.



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In This Chartbook...

The maps in this chartbook describe the physical activity environment in New Brunswick in terms of geographic distribution of parks and physical activity facilities. Research shows that people who have access to these facilities are more likely to be physically active.

- The maps in this chartbook were created using physical activity facilities data from a commercial database (InfoUSA, 2008), data from city departments, as well as information obtained from systematic web searches. The maps present data for the city of New Brunswick and for a 1 mile buffer area around New Brunswick.
- Physical activity centers include private and public facilities which offer physical activity opportunities for children 3-18 years of age.
- Physical activity environment maps are compared with Census 2000 data to visualize accessibility of physical activity opportunities in neighborhoods with different characteristics.
- Poverty level presented in this chartbook are based on the 2000 Federal Poverty Guidelines.
- Crime rates in New Brunswick are presented at the census block group level as relative crime risk (CrimeRisk) obtained from a commercial data source (Applied Geographic Solutions, 2008). CrimeRisk – an index value derived from modeling the relationship between crime rates and demographics data – is expressed as the risk of crime occurring in a specific block group relative to the national average. For this chartbook, data on *total* CrimeRisk, which includes personal and property crimes, are reported.

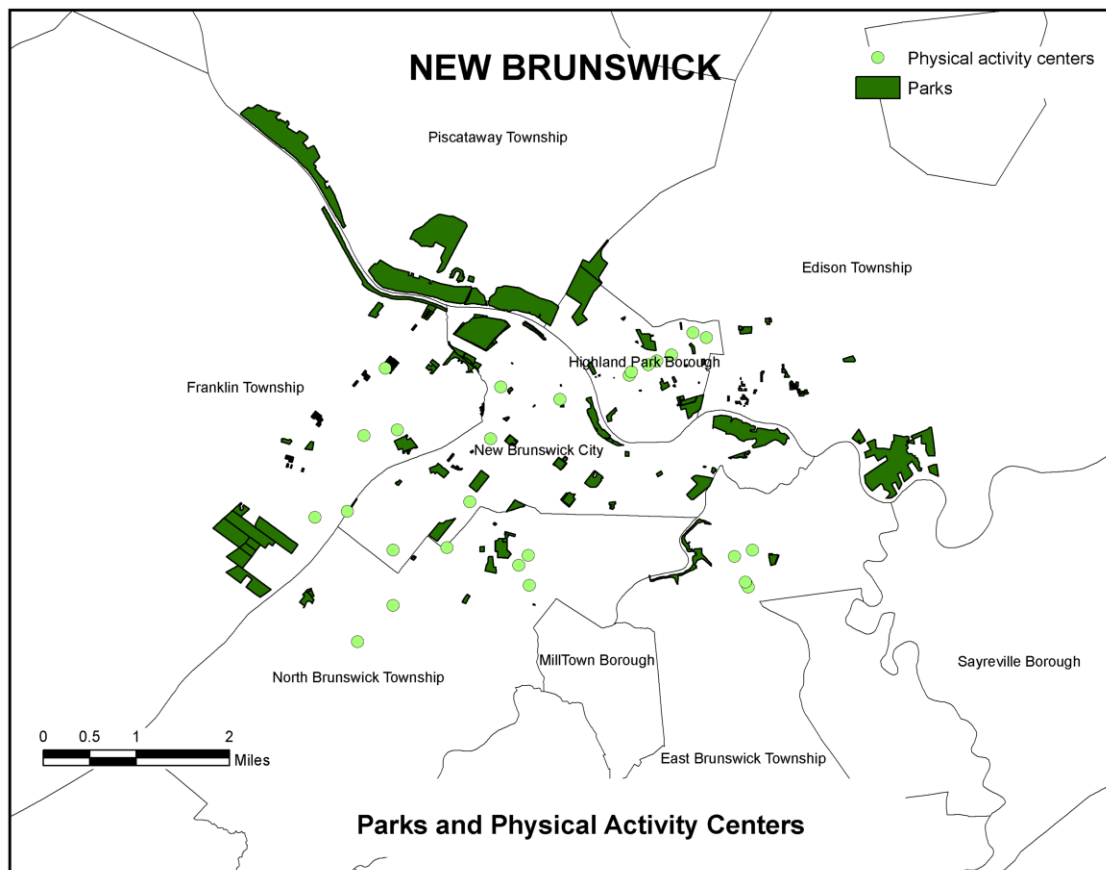


CSHP 2010, New Brunswick physical activity environment 2008 data

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City of New Brunswick and major landmarks.

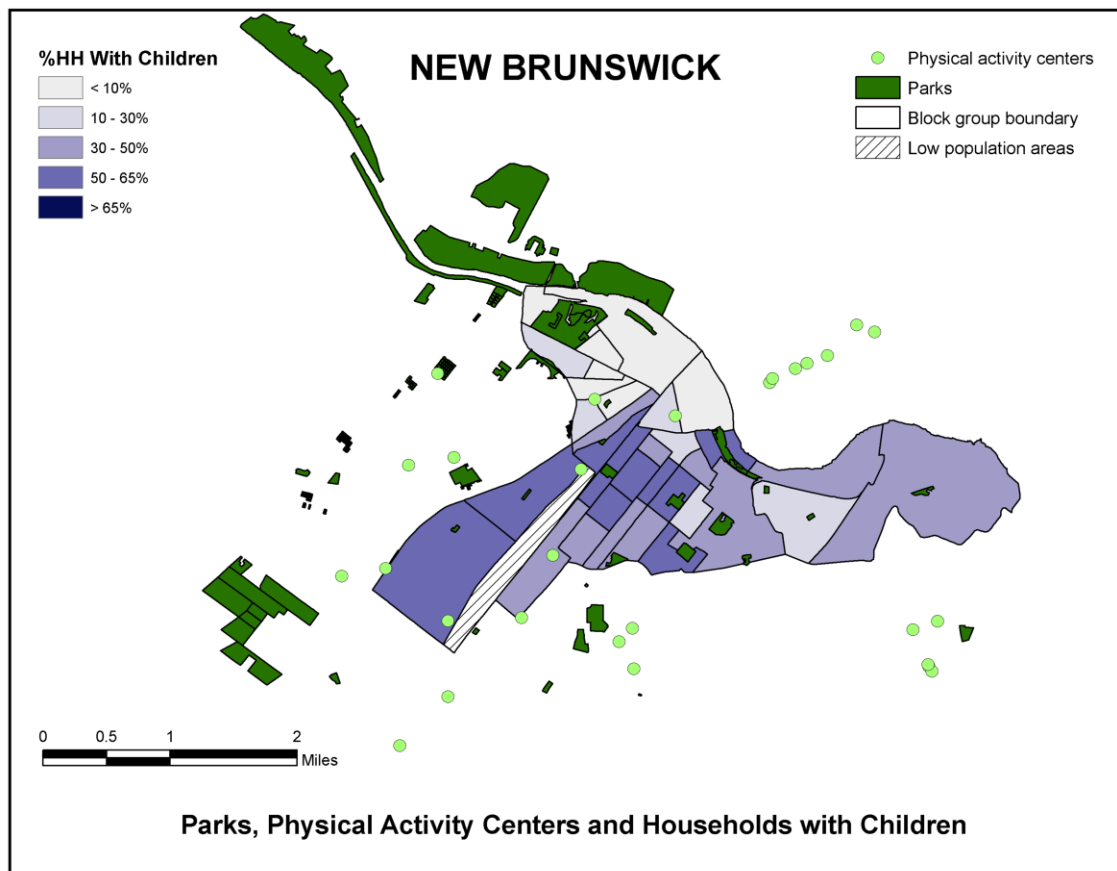


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Locations of parks and physical activity centers in New Brunswick and surrounding areas within a 1-mile buffer of city boundaries.

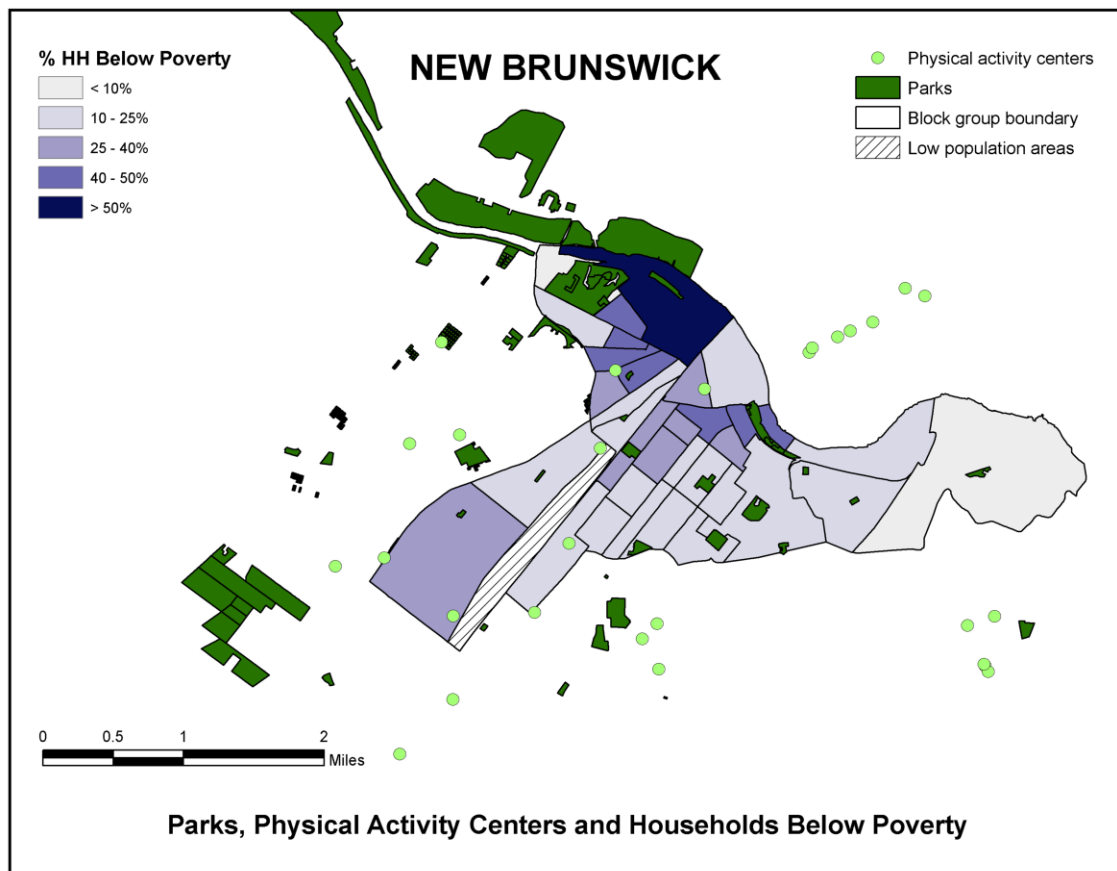


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This map overlays physical activity environment and the density of households with children. As the legend on the upper left shows, census block groups in darker blue have greater proportions of households with children. Also mapped are parks (dark green areas) and physical activity centers (light green dots) in New Brunswick and within a 1-mile buffer of city boundaries.

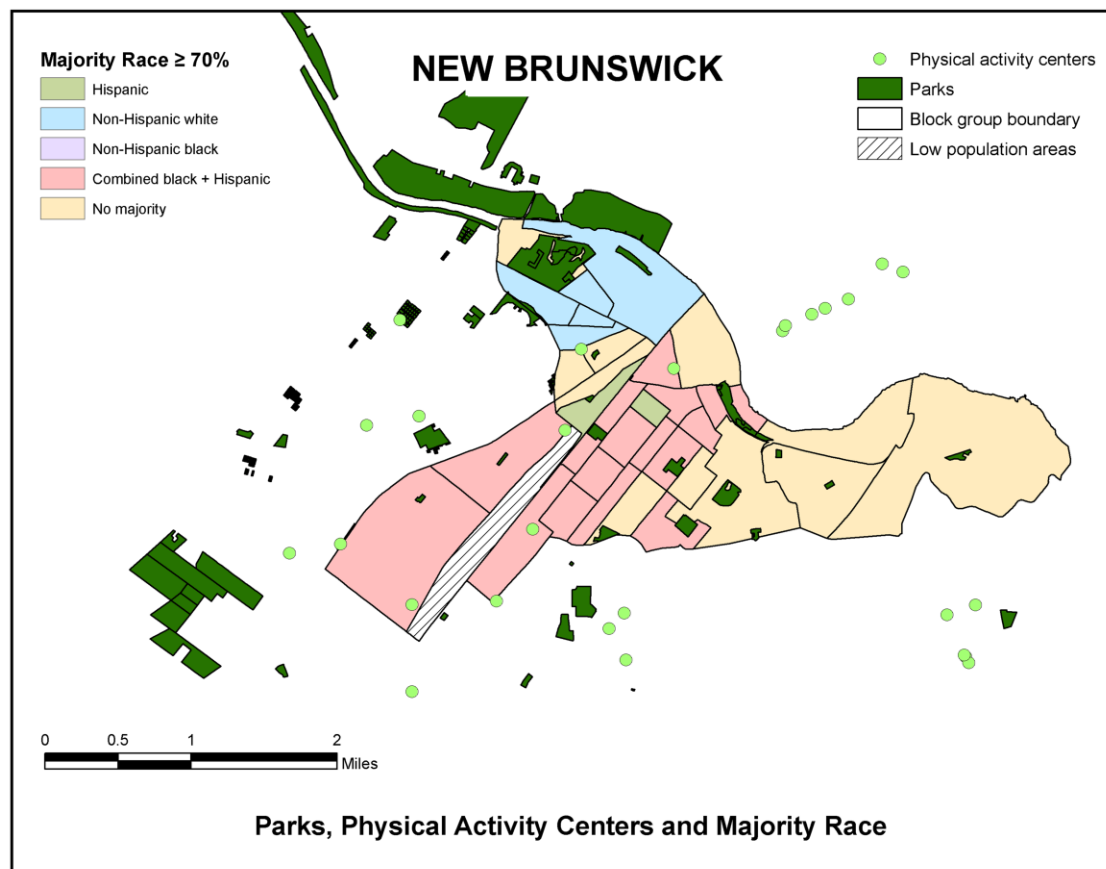


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This map overlays physical activity environment and poverty level. As the legend on the upper left shows, census block groups in darker blue have higher percentages of households below poverty level. Also mapped are parks (dark green areas) and physical activity centers (light green dots) in New Brunswick and within a 1-mile buffer of city boundaries.

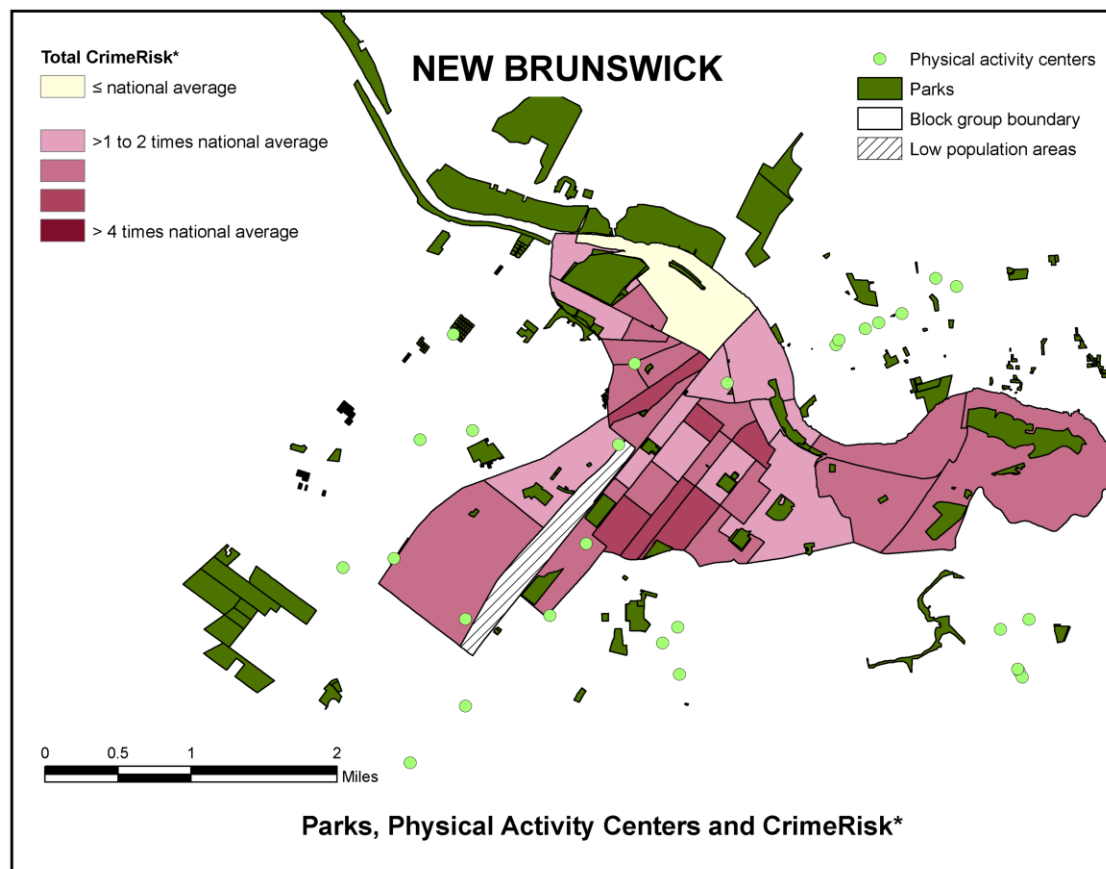


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This map shows the majority racial composition (see legend on upper left) at the census block group level. Overlaying the racial compositions are the locations of parks (dark green areas) and physical activity centers (light green dots) in New Brunswick and within a 1-mile buffer of city boundaries.



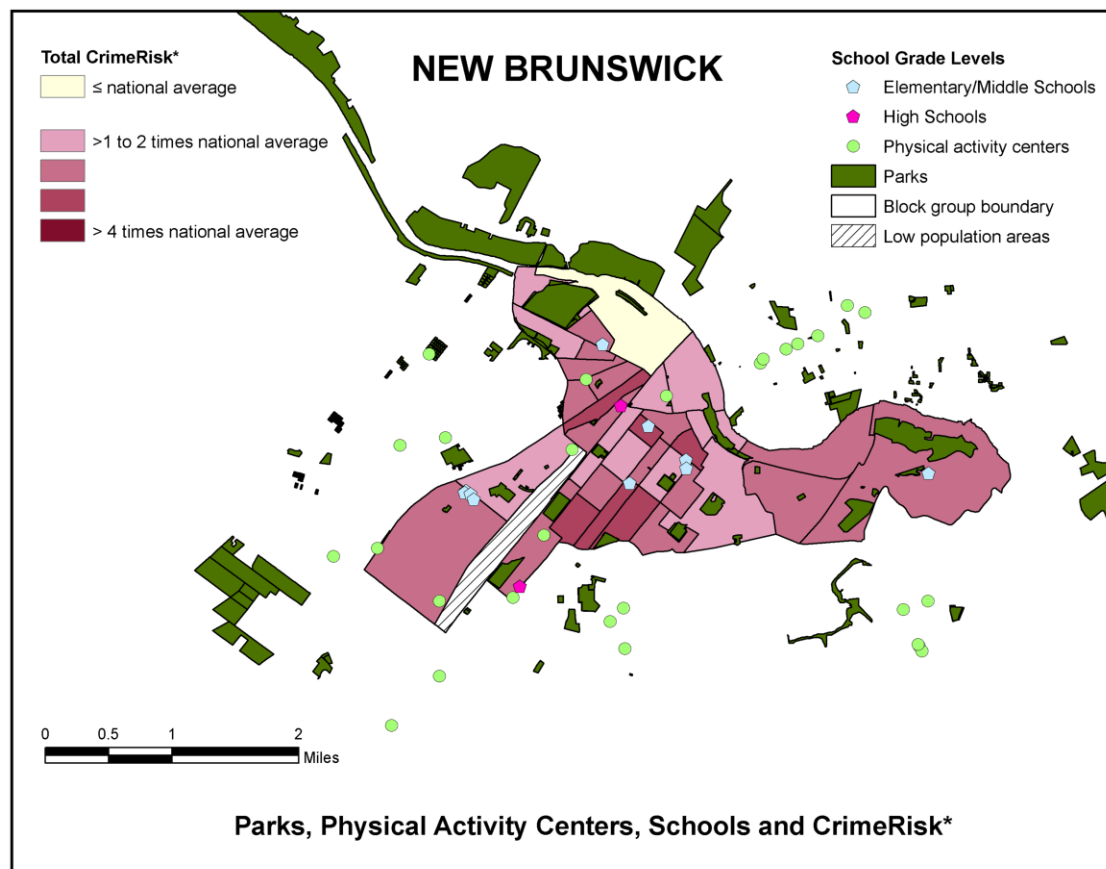
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* *CrimeRisk* (AGS, 2008) is an index of the relative crime risk compared to the national average.

This map shows total *CrimeRisk* (property crime and personal crime) at the census block group level. As the legend on the upper left indicates, the darker the color, the higher the total crime risk relative to national average. Overlaying total crime risk are the locations of parks (dark green areas) and physical activity centers (light green dots) in New Brunswick and surrounding areas within a 1-mile buffer of city boundaries.



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* *CrimeRisk* (AGS, 2008) is an index of the relative crime risk compared to the national average.

This map shows total *CrimeRisk* (property crime and personal crime) at the census block group level. As the legend on the upper left indicates, the darker the color, the higher the total crime risk relative to national average. Overlaying total crime risk are the locations of public schools (see legends on the upper right), parks (dark green areas) and physical activity centers (light green dots) in New Brunswick and surrounding areas within a 1-mile buffer of city boundaries.

Next Steps

- As part of the New Jersey Childhood Obesity Study, we also conducted a household phone survey, as well as a geo-spatial analysis of food environment using methodologies similar to the physical activity environment assessment.
- The results from the survey related to children's BMI, health behaviors, and parental perceptions of environments will be linked to the physical activity environment data presented in this chartbook.
- Using the survey, food environment, and physical environment data, we will be able to address questions such as:
 - ✓ What aspects of the physical activity environment are associated with childhood obesity?
 - ✓ How are environmental characteristics associated with being physically active?
 - ✓ How important are perceptions of the environment compared to actual neighborhood characteristics in contributing to childhood obesity, active practices, and sedentary behaviors?
 - ✓ How do these relationships differ among various socio-demographic groups (e.g., gender, race-ethnicity, social class)?