



Health Impact Assessment of the Boone Boulevard Green Street Project in the Proctor Creek Watershed of Atlanta

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US EPA Office of Research and Development

Addressing Public Health Challenges
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What's The Connection?

Community Decisions And Public Health

Communities make decisions that often do not consider the trade-offs among human health, ecosystem services, economic vitality, and social equity

- Growing awareness that factors outside the traditional health field affect public health
- Substantial Improvements will occur *only if health considerations* are factored into community decisions



What is Health?

Health

“A state of complete physical, mental, and social well-being; not merely the absence of disease and infirmity”

- Preamble to the Constitution of the World Health Organization



Health is an indicator of **quality of life**

Health Impact Assessment (HIA)

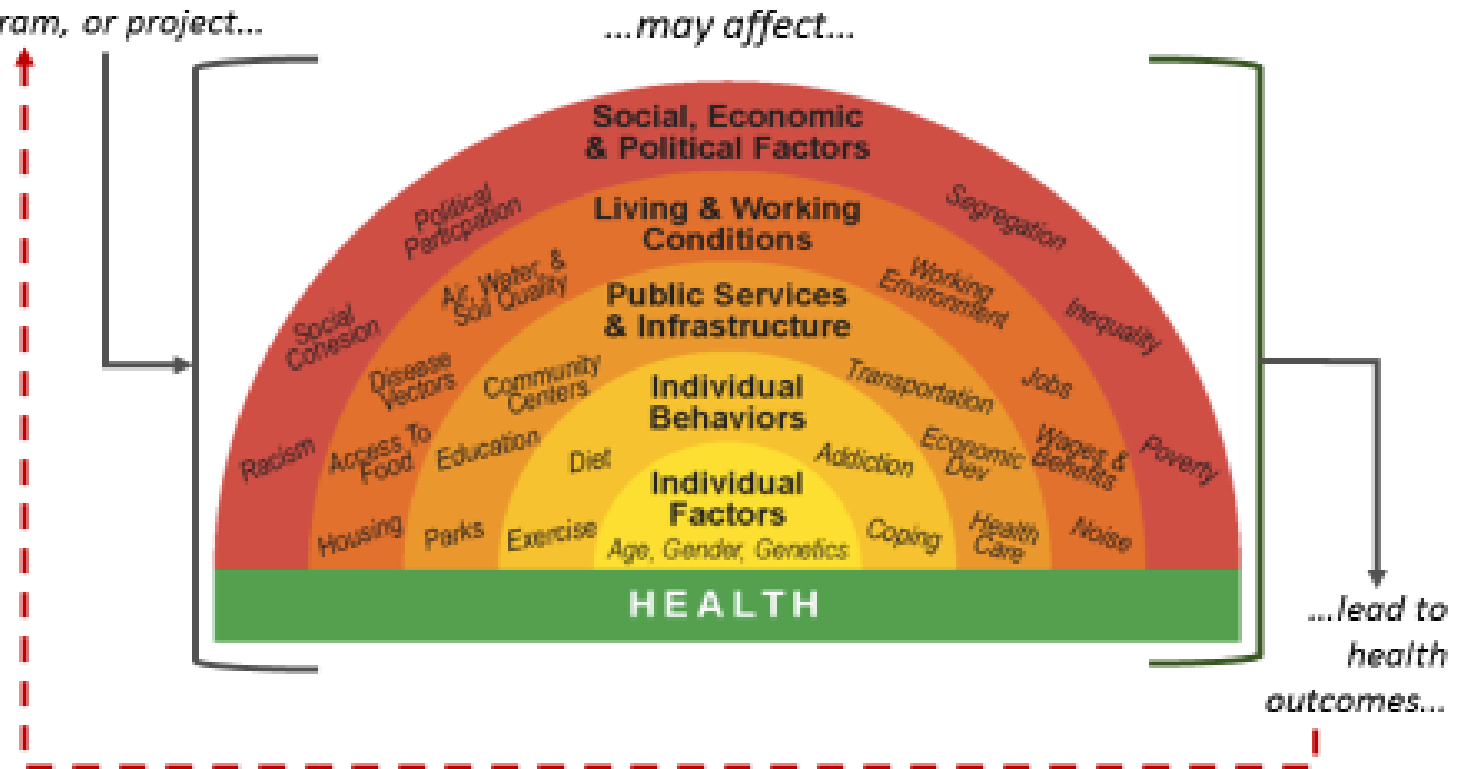
HIA is a process that uses
scientific data, health expertise and public input
to factor public health considerations into the decision-making process

- Conducted and communicated in advance of a decision
- Recommendations intended to shape the final proposal based on health protection and health promotion
 - Health Hazards
 - Exposures to pollutants
 - Air, water, soil
 - Health Benefits
 - Access to green space; walkability
 - Local job market

What is HIA?

In a nutshell, HIAs:

*Evaluate how a
proposed policy, plan,
program, or project...*



Steps in the HIA Process

Stakeholder and Community Involvement

Screening	Determines the need and value of a HIA
Scoping	Determines which health impacts to evaluate, methods for analysis, and a work plan
Assessment	Provides <ul style="list-style-type: none"> 1) A profile of existing health conditions 2) Evaluation of potential health impacts
Recommendations	Provide strategies to manage identified adverse health impacts
Reporting	Includes <ul style="list-style-type: none"> 1) Development of the HIA report 2) Communication of findings & recommendations
Monitoring	Tracks <ul style="list-style-type: none"> 1) Impacts on decision-making processes and the decision 2) Impacts of the decision on health determinants

Proctor Creek's Boone Boulevard Green Street HIA

Decision: Implementation of a green infrastructure project along Joseph E. Boone Boulevard, NW (in concert with road diet project)

Decision-Makers: City of Atlanta, Georgia

Role of HIA: Evaluate potential positive and negative health impacts of the green street project design and inform stakeholder decisions

HIA Lead:



Region 4 – Office of Environmental Justice
Office of Research and Development

HIA Partners:



Proctor Creek Communities: Challenges and Solutions

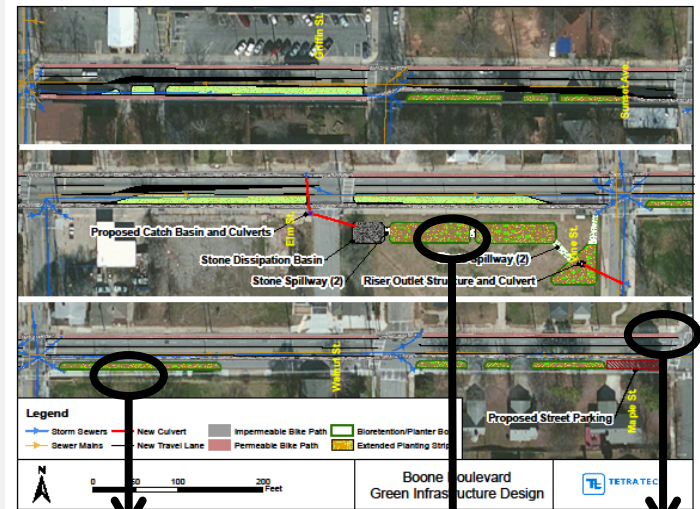
Issues Facing the Community:

- Pervasive flooding
- Impaired water quality
- Poverty
- Derelict properties
- Aging infrastructure



Potential Solution:

Boone Boulevard Green Street Project



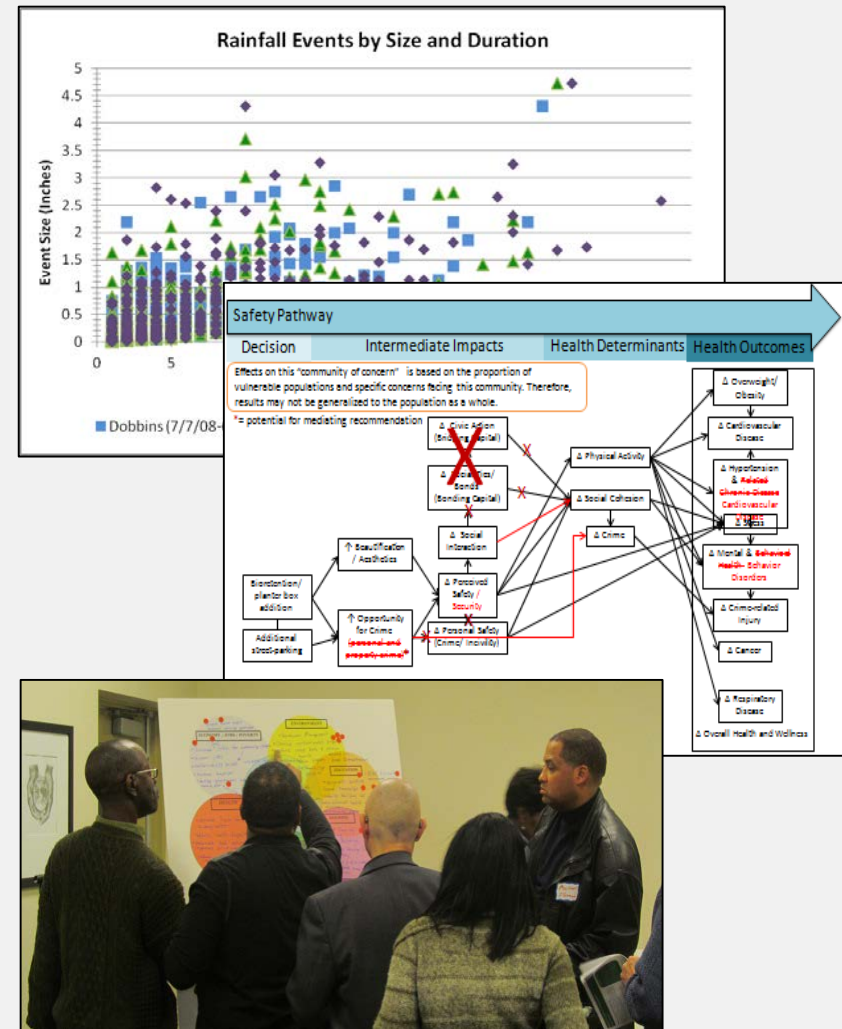
Planter box

Bioretention cell

Permeable
pavement

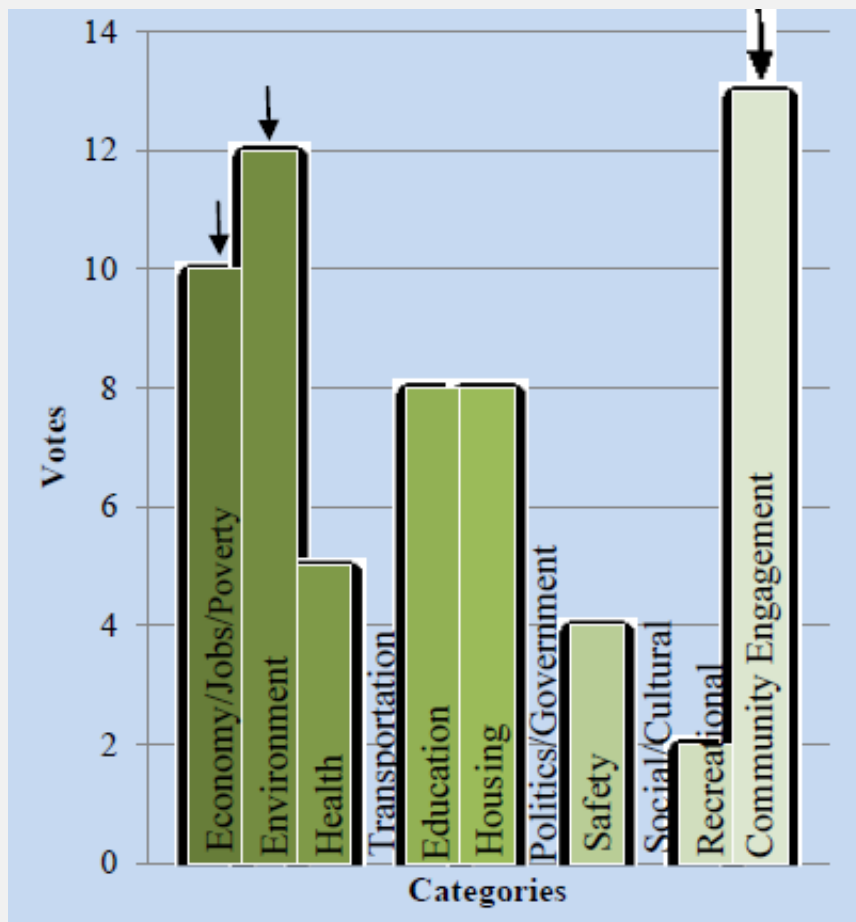
Setting the Scope of the HIA

- Used community/stakeholder input to:
 - Identify issues of interest and areas of concern in the community; and
 - Prioritize issues where the HIA should focus
 - Provided local knowledge, conducted data mining and literature review
- Developed causal pathways and work plan to study impacts

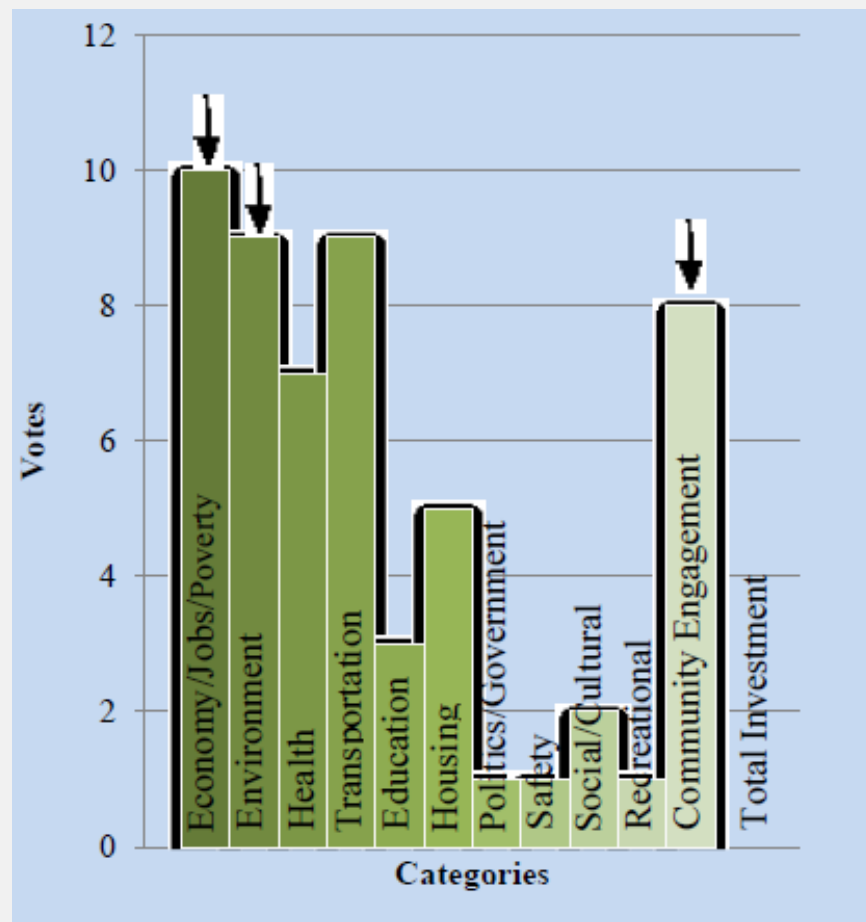


Setting the Scope of the HIA

Community Priorities



Advisory Group Priorities



Health Determinants and Health Outcomes

Sustainability	Health Determinant	Health Outcomes
Environment	<ul style="list-style-type: none"> • Water Quality • Flood Management (Exposure to Injury, Housing Quality, and Vector Control) • Climate and Temperature (Exposure to Extreme Heat Events) • Air Quality • Traffic Safety • Exposure to Urban Noise • Exposure to Greenness 	<ul style="list-style-type: none"> • Respiratory Disease (e.g., asthma, allergies, lung cancer) • Heat-related Illness • High-Blood Pressure (i.e., hypertension) • Cardiovascular Disease • Cancer • Water-borne Disease • Vector-borne Disease (e.g., West Nile Virus) • Overweight/Obesity
Society	<ul style="list-style-type: none"> • Access to Goods, Services, Greenspace, and Healthcare (Active Transport) • Crime • Social Capital 	<ul style="list-style-type: none"> • Hearing (noise-induced hearing threshold shifts) • Motor-Vehicle-related Injury • Crime-related Injury • Mental and/or Behavioral Disorders (e.g., anxiety, depression)
Economy	<ul style="list-style-type: none"> • Cost of Living • Employment • Business Performance 	<ul style="list-style-type: none"> • Stress (acute and chronic) • Perceived Overall Health and Wellness • Morbidity/Mortality Risk

HIA: Benefits and Outcomes for Proctor Creek

- Demonstration project to address flooding and stormwater issues in the Proctor Creek Watershed
- Extensive stakeholder and community engagement
- Assessed health determinants in environmental, social and economic sectors
- Recommendations were prioritized by pre-construction, during construction, post-construction and long term phases
- New Local State, Federal, and Community partnerships were developed
- Met with City of Atlanta to deliver final peer-reviewed HIA
- *City decided to double the length of the green street*



Co-Leads for BBGS HIA

- Tami Thomas-Burton – US EPA Region 4
- David Egetter – US EPA Region 4
- Lauren Adkins – Pegasus

