

**STRIDE**

Southeastern Transportation Research,  
Innovation, Development and Education Center

**T+H**

Transportation + Health

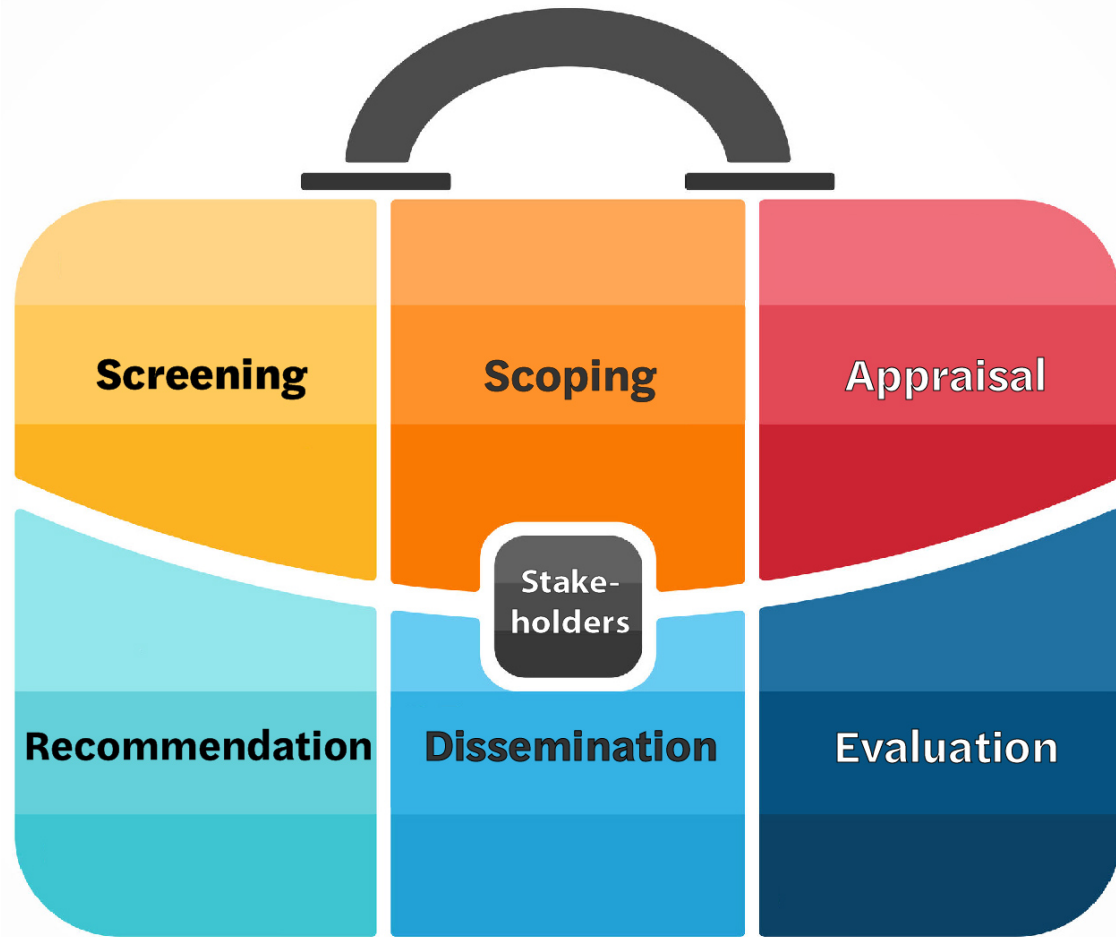
# Health Impact Assessment (HIA) Part II

THE  
CITADEL



*CIVL 642 Public Health, Physical Activity, and Design of the Built Environment*

# Health Impact Assessment Toolkit



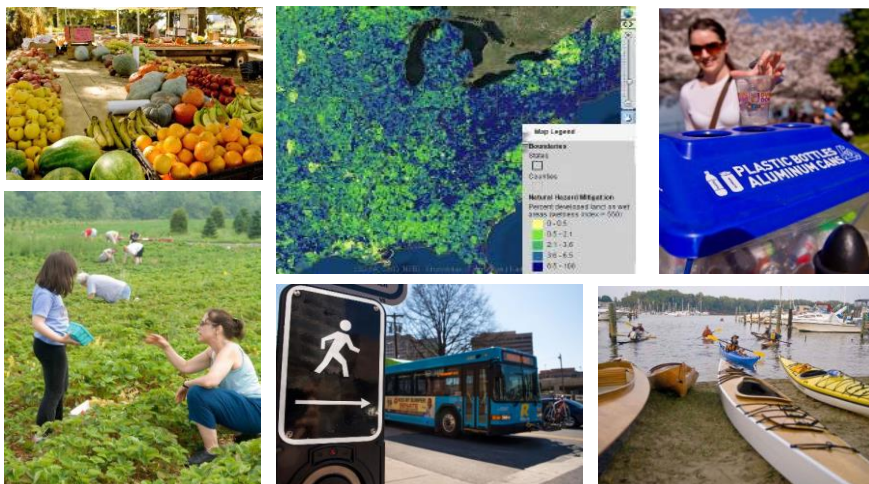
Procedures + methods + tools  
to identify:

- potential and/or sometimes unintended effects of a proposed project on the health of a population.
- distribution of effects within the population and appropriate actions to influence effects.

<https://nmtracking.org>



# The Health Impact Assessment (HIA) Resource and Tool Compilation: A Comprehensive Toolkit for New and Experienced HIA Practitioners in the U.S.

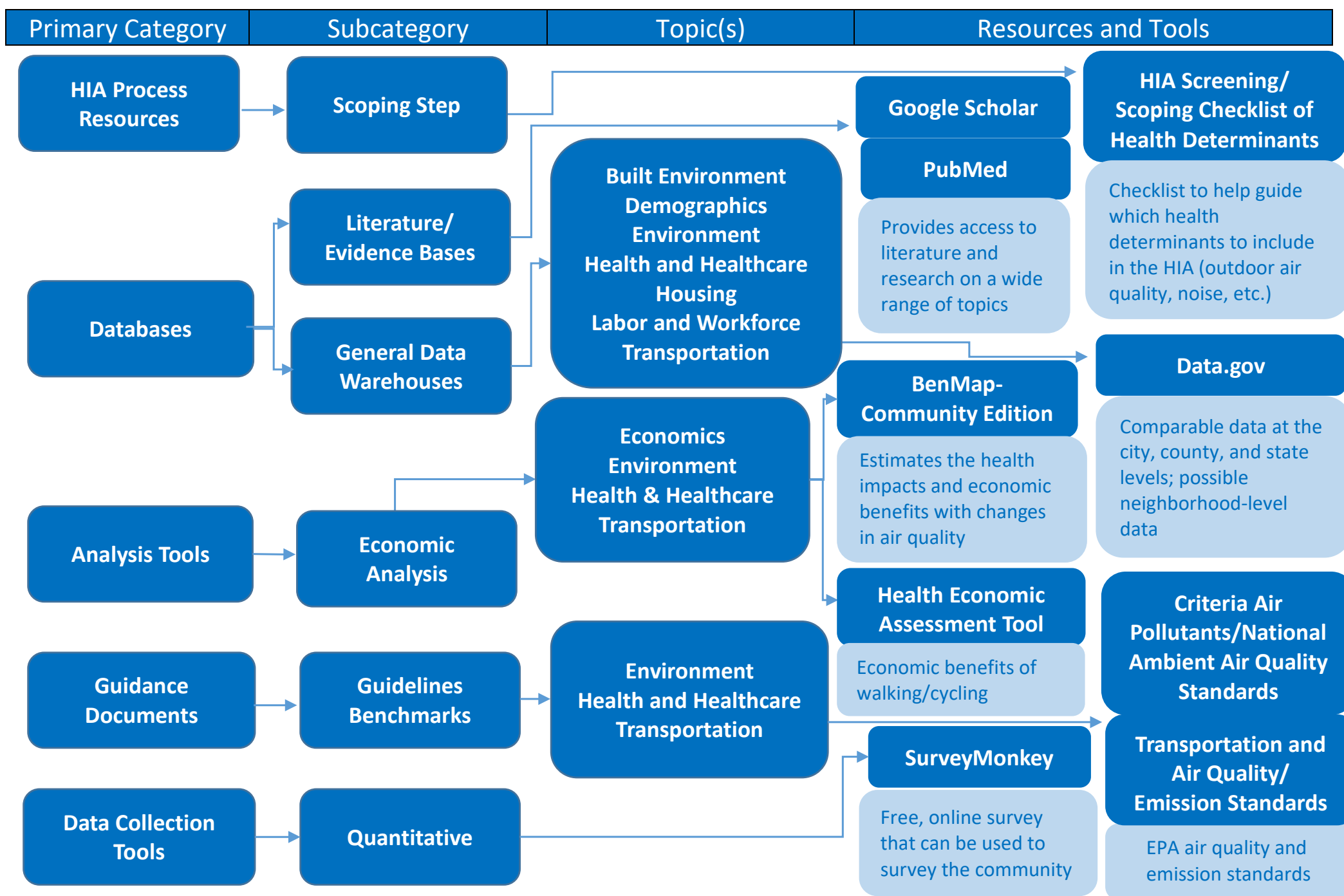


Primary Category	Subcategory
HIA Process Resources	<ul style="list-style-type: none"> <li>– General HIA Information</li> <li>– HIA Trainings and Webinars</li> <li>– Screening Step</li> <li>– Scoping Step</li> <li>– Assessment Step</li> <li>– Recommendations</li> <li>– Reporting Step</li> <li>– Monitoring &amp; Evaluation Step</li> <li>– HIA Communication</li> <li>– Community Participation, Partnerships, and Equity</li> </ul>
Databases	<ul style="list-style-type: none"> <li>– Literature/Evidence Bases</li> <li>– General Data Warehouses</li> <li>– Multi-Topic Databases</li> <li>– Agriculture</li> <li>– Built Environment</li> <li>– Business and Industry</li> <li>– Crime</li> <li>– Economics</li> <li>– Education</li> <li>– Environment</li> <li>– Health and Healthcare</li> <li>– Housing</li> <li>– Labor and Workplace</li> <li>– Population</li> <li>– Transportation</li> </ul>
Guidance Documents	<ul style="list-style-type: none"> <li>– Guidelines</li> <li>– Benchmarks</li> </ul>
Analysis Tools	<ul style="list-style-type: none"> <li>– Decision Analysis</li> <li>– Economic Analysis</li> </ul>
Models	<ul style="list-style-type: none"> <li>– Scientific Models</li> <li>– Methods</li> <li>– Frameworks</li> <li>– Indices</li> </ul>
Mapping Tools	<ul style="list-style-type: none"> <li>– GIS-Based Mapping</li> <li>– Map Data Viewers</li> </ul>
Data Collection Tools	<ul style="list-style-type: none"> <li>– Qualitative</li> <li>– Quantitative</li> <li>– Mixed Methods</li> </ul>

Roles	Skills Needed
Community Liaison	Team member with knowledge of the community and has access to the community social and formal networks (e.g., community leader, historian, member of a community representative organization, long-time resident).
Public Health Researcher	Team member with knowledge of basic public health principles and mediating factors that influence health (e.g., public health professional, physician, health educator).
Project Leader	Team member who is well versed and has experience managing teams with multiple skills/fields of expertise, leading meetings and discussions, organizing action items and establishing project goals, framework, timeline and a communication plan.
HIA Technical Advisor	Team member of advisor who has extensive knowledge and experience conducting and evaluating HIAs, including best practices and lessons learned (e.g., representative from Human Impact Partners, Georgia Health Policy Center, Oregon Public Health Institute, and UCLA HIA program, CDC National Center for Environmental Health).
Researcher(s)	Team member(s) with experience planning and conducting research who can perform literature reviews, risk assessments, and develop test research questions/hypotheses (e.g., epidemiologist, community health researcher, etc.).
Writer/Editor	Team member with experience writing and evaluating scientific papers and producing reports and materials for different audiences.
Subject Matter Expert(s) (usually members of steering or advisory committee)	Member(s) with experience and knowledge about the specific fields of expertise that will be evaluated in the assessment (e.g., housing, transportation, watershed management, ecology, engineering or architecture, public and community health, etc.).



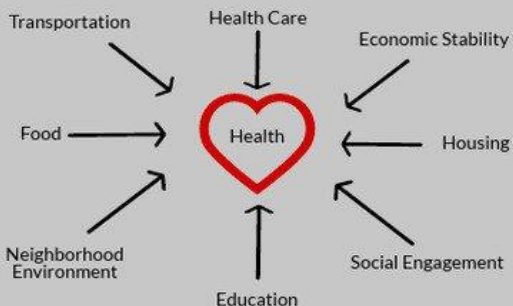




# Health Impact Assessment

A Tool to Make Your Community Healthier

Health is affected by the conditions where we live, learn, work, and play



These social determinants can be impacted by government policies and physical changes in our communities, such as a new development



## Health Impact Assessments (HIAs)

### What is an HIA?

An HIA is a tool that assess and reports how a policy or project will impact the health of people living in the surrounding area, and makes recommendations on how to make the policy or project more health friendly



### HIA Goal:

To give a voice to community concerns, provide decision-makers with recommendations, and help ensure that health is protected and inequities are reduced

### When to perform HIA?

Before a project starts or a policy is finalized



### Who performs HIA?

Trained public health professionals from universities or health departments

## What is the HIA Process?

1. When a policy or development project is under consideration...



2. an HIA is automatically required or a community can request one be completed.



3. Public Health Professionals measure the project's impact.



4. They review the project or policy, discuss with stakeholders and residents, and determine what action is needed to ensure the health of the affected community.



5. They report these findings to decision-makers.



## Outcomes

**Transparency:** the plans, dealings, and expected results of the project are clear to the community



**Accountability:** politicians and developers are held to certain agreed upon project standards



**Equity:** the health of marginalized, under-represented groups is prioritized



# SOPHIA

Society of Practitioners of Health Impact Assessment

## Society of Practitioners of Health Impact Assessment - Model HIA Reports

<https://hiasociety.org/Model-HIA-Reports>

- Baltimore-Washington Rail Intermodal Facility HIA, Baltimore, MD
- Page Avenue Health Impact Assessment, St. Louis, MO
- Health Effects of Road Pricing in San Francisco, CA

# West Lakes Community Health Impact Assessment: Orlando, FL

<http://www.flregionalcouncils.org/2017/09/06/west-lakes-community-health-impact-assessment/>

<http://ftp.ecfrpc.org/Projects/LIFT%20Orlando%20-%20West%20Lakes%20Health%20Impact%20Assessment.pdf>

## ENVIRONMENTAL FACTORS



**Bike/Ped Access & Mobility**



**The Built Environment**
























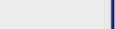


























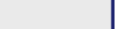










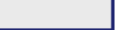


**Access to Goods & Services**



**Crime**

## INFLUENCING FACTORS

Safety of the Bike/Ped Network	→ Improve →	  
Effectiveness of the Bike/Ped Network	→ Improve →	    
Comfort of the Bike/Ped Network	→ Improve →	    
Cohesion of Land Uses	→ Improve →	   
Effectiveness of Bike/Ped Generators	→ Improve →	   
Access to Parks & Fitness Programs	→ Increase →	  
Incorporation of Civic Activities & Uses	→ Increase →	    
Access to Health Care	→ Increase →	  
Access to Healthy Food	→ Increase →	  
Access to Transit & Jobs	→ Increase →	    
Safe Access to Schools	→ Ensure →	    
Access to Education	→ Increase →	  
Frequency of Crime	→ Reduce →	  
Effectiveness of Lighting	→ Improve →	   
Use of Natural Surveillance	→ Increase →	   
Use of Territorial Reinforcement	→ Increase →	  

## GOAL FOR FACTOR

## INDICATORS

## WELLNESS INDICATORS COLORED LISTING

-  Crime Rates
-  Physical Activity & Obesity
-  Respiratory & Cardiovascular Health
-  Social Capital
-  Bicycle & Pedestrian Safety

\*Each color represents one of the indicators. These colors correspond to each influencing factor (gray boxes)





September 2016



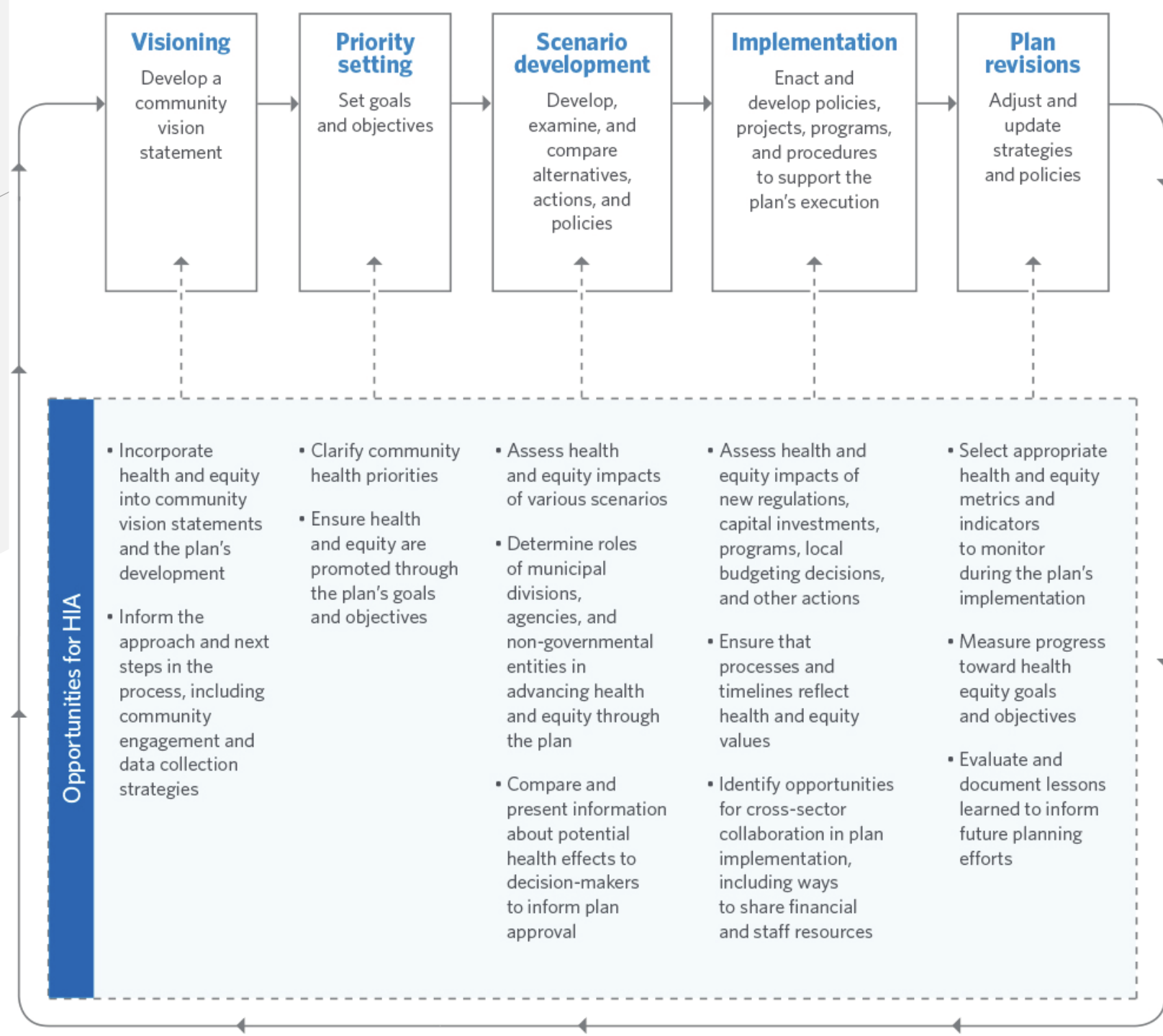
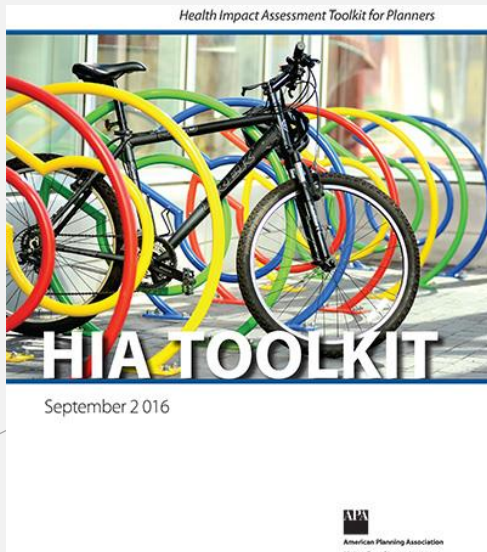
## Health Impact Assessment for Planners, 2016

### American Planning Association

<https://www.planning.org/publications/document/9148443/>

HIA is a rapidly growing field that positions decision makers to make better choices by bringing together **scientific data**, **health expertise**, and **public input** to identify the potential and often overlooked effects, both positive and negative, of proposed laws, regulations, **projects**, policies, and programs on public health (Health Impact Project)







<http://imph.org/first-health-impact-assessment-in-south-carolina/>

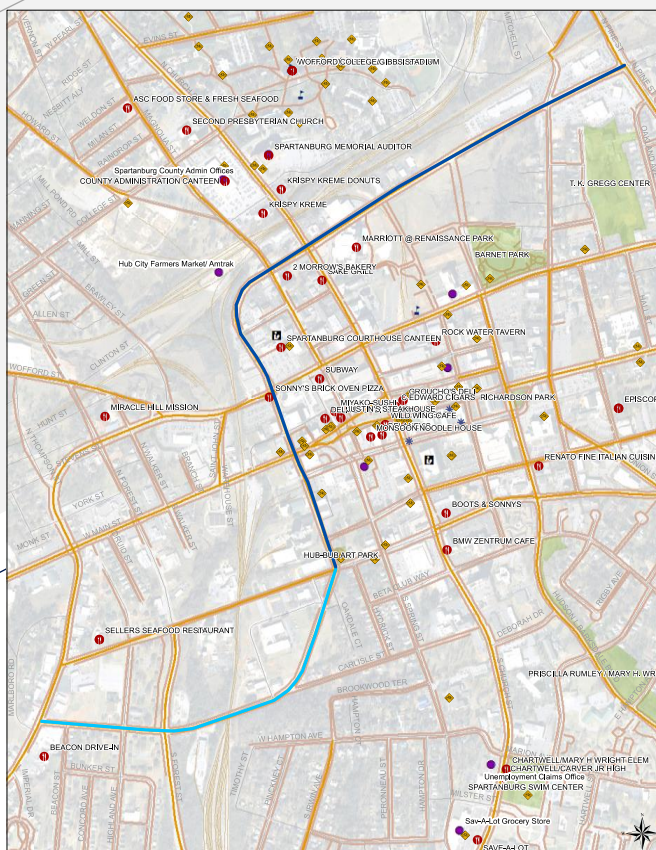


Table 1: HIA Analysis Summary of Findings

Health Determinant	Direction	Magnitude	Impact	Significance Likelihood	Distribution
Traffic Safety	↑	High	High	Very Likely	Affects whole community relatively equally
Physical Activity	↑	Medium	Medium/High	Very Likely	Impacts neighboring vulnerable community and whole community via expanded access
Access to Goods and Services	↑	Medium	Medium/High	Very Likely	Disproportional effect on low income, transit-dependent communities around DMA
Air Quality	↑	Low	Low	Possible	Affects whole community relatively equally

#### Legend:

##### Direction of Impact:

- Positive = Changes that may improve health
- Negative = Changes that may detract from health
- Uncertain = Unknown how health will be impacted
- No effect = No effect on health

**Magnitude of Impact:** (realizing the proposed project is a 2.1 mile stretch of road, so the comparison or point of perspective is those who currently use DMA)

- Low = Causes impacts to no or very few people
- Medium = Causes impacts to wider number of people
- High = Causes impacts to many people
- Note that this is relative to population size

##### Significance of Impact:

- Low = Causes negative impacts that can be quickly and easily managed or do not require treatment or causes positive impacts that are not serious/significant
- Medium = Causes negative impacts that necessitate treatment or medical management and are reversible or positive impacts that provide opportunity for improved health
- High = Causes or prevents death or serious illness

##### Likelihood of Impact:

- Very Likely = it is very likely that impacts will occur as a result of the proposal
- Likely = it is likely that impacts will occur as a result of the proposal
- Possible = it is possible that impacts will occur as a result of the proposal
- Unlikely = it is unlikely that impacts will occur as a result of the proposal
- Uncertain = it is unclear if impacts will occur as a result of the proposal

##### Distribution of Impact:

The community surrounding DMA has a large minority population (37.4% in the 29303 zip code and 70.8% of the population in the 29306 zip code). When it comes to economic characteristics, in the 29303 zip code 18.1% of individuals live below the poverty line and in 29306 28.8% of individuals live below the poverty line.





# Health Impact Assessment (HIA) Part II

## Thank You.

William J. Davis, Ph.D., P.E.

843 953 7687

[jeff.davis@citadel.edu](mailto:jeff.davis@citadel.edu)

[www.citadel.edu/root/cee](http://www.citadel.edu/root/cee)

THE  
CITADEL

