

# E. Health and Environmental Impacts



## Health and Environmental Impacts

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Health Impact Assessment



## What is Health?

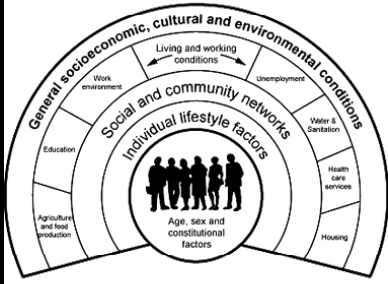
### World Health Organization (WHO) Constitution- 1948

Health is "... a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity."

### Ottawa Charter for Health Promotion- 1986

Expanded the definition to include the ability of an individual or group "to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment."

### Influences on Health



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Health Impact Assessment

### What is a Health Impact Assessment?

A **Health Impact Assessment (HIA)** is:  
“a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population.”

3 types of HIAs:

- Proactive HIAs- before project or policy
- Retrospective HIAs- after project or policy
- Concurrent HIAs- occurring simultaneously with projects

HIAs consider:

- social and environmental justice issues,
- adopt a multidisciplinary and participatory process, and
- use both qualitative and quantitative evidence in the process.

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Health Impact Assessment

### What is a Health Impact Assessment?

**Steps of an HIA Process:**

1. Screening- should we conduct an HIA?
2. Scoping- planning for the HIA
3. Risk assessment- implementation of the HIA
4. Dissemination- circulates the results
5. Monitoring and evaluation- review of the HIA process

Steps in an HIA Process

```
graph TD; A[SCREENING] --> B[SCOPING]; B --> C[RISK ASSESSMENT]; C --> D[DISSEMINATION]; D --> E[MONITORING and EVALUATION];
```

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BeltLine HIA

## Air Quality

The BeltLine represents a massive 25-year construction project, including the creation of parks, trails, transit, 50,000 housing units, and 13 million square feet of other new construction.

Because of this construction, the BeltLine may create several areas where people are living within 200 meters of high-volume corridors.

**Potential Health Implications:**

- Increased mortality and morbidity rates from cardiovascular and respiratory illnesses
- Increased risk for lung cancer
- Short- and long-term non-cancer health effects such as bronchitis and asthma

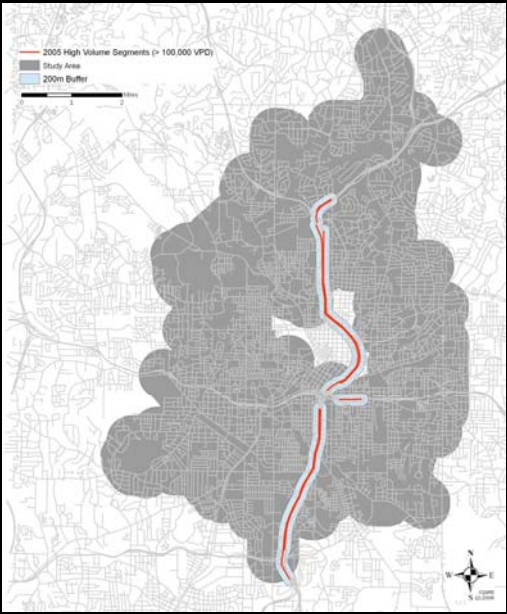
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BeltLine HIA

## Air Quality

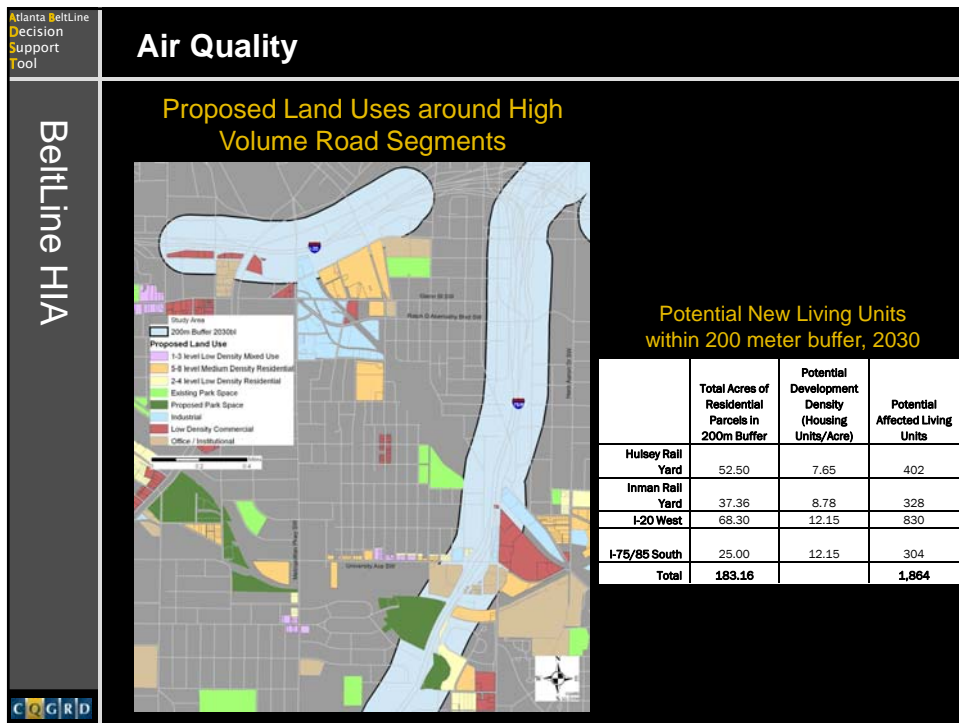
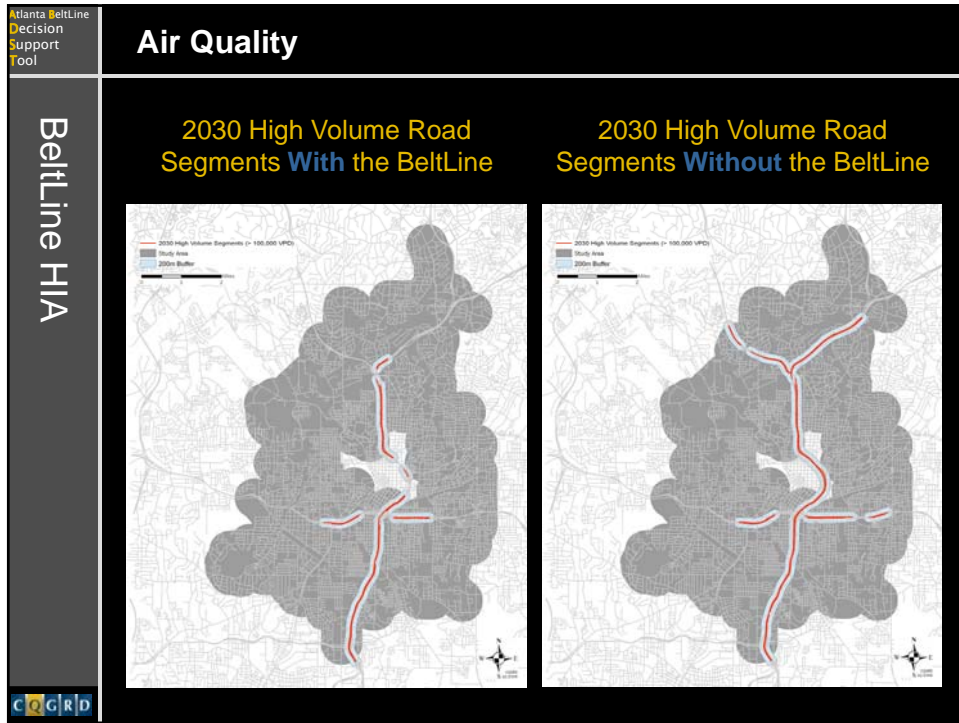
2005 High Volume Road Segments



2005 High Volume Segments (> 100,000 VPD)  
Study Area  
200m Buffer

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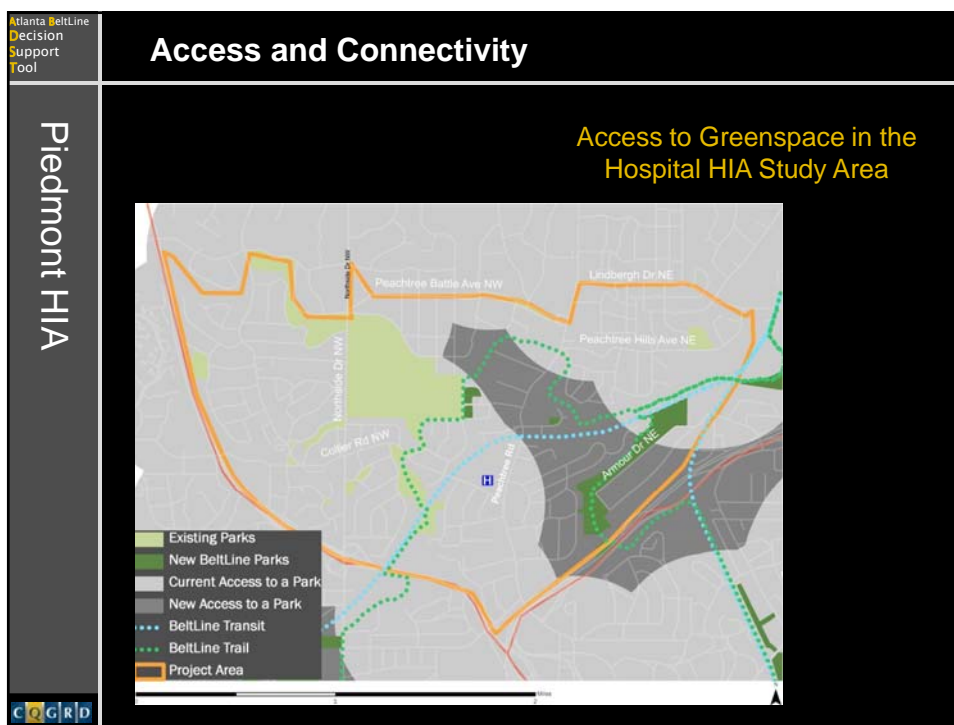
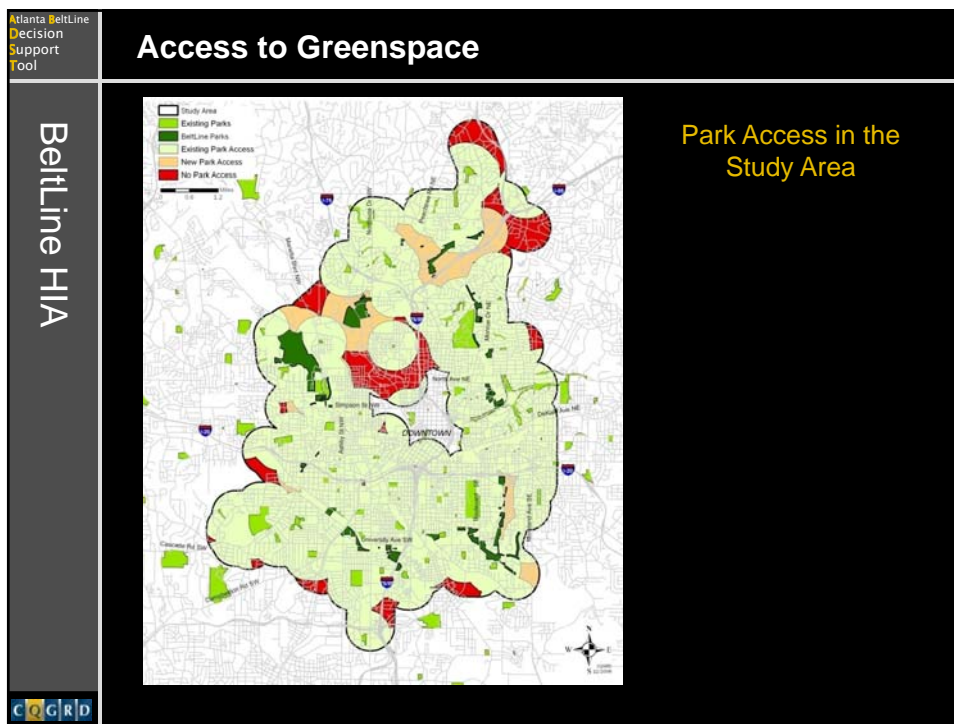


## E. Health and Environmental Impacts

Atlanta BeltLine Decision Support Tool	<h3>Access to Greenspace</h3>
BeltLine HIA	<h4>Equity</h4> <p>The BeltLine creates parks, trails, and transit equally distributed by race and income; 11,000 people will have access to a park for the first time.</p> <p><b>Potential Health Implications:</b></p> <ul style="list-style-type: none"><li>▪ Better access to employment opportunities, services, healthy foods, and recreational facilities</li></ul>
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Atlanta BeltLine Decision Support Tool	<h3>Access to Greenspace</h3>
BeltLine HIA	<h4>Physical Activity</h4> <p>The BeltLine will create 1,300 acres of parks, 33 miles of trails, \$4 million in streetscape and intersection improvements, and an extension of the transit system.</p> <p><b>Potential Health Implications:</b></p> <ul style="list-style-type: none"><li>▪ Reduced premature death and risk of developing diabetes, high blood pressure, and colon cancer</li><li>▪ Reduced feelings of depression/anxiety</li><li>▪ Helps control weight</li></ul>
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# E. Health and Environmental Impacts



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Piedmont HIA – Access and  
Connectivity

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## Example of Walkability Audit Questions

**A. ENVIRONMENT**

**1. Uses in segment (all that apply)**

Housing- Single Family Detached

Housing- Multi-Family

Housing- Mobile Homes

Office/Institutional

Restaurant/Café/Commercial

Industrial

Vacant/Undeveloped

Recreation

**2. Slope**

Flat

Slight hill

Steep hill

**3. Segment intersections**

Segment has 3-way intersection.

Segment has 4-way intersection.

Segment has other intersection.

Segment dead ends but path continues.

Segment dead ends.

Segment has no intersections.

**B. PEDESTRIAN FACILITY (all if none present)**

**4. Type facility (all that apply)**

Footpath (worn dirt path)

Paved trail

Sidewalk

Pedestrian Street (closed to cars)

*The remaining questions in Section B refer to the best pedestrian facility selected above.*

**5. Path material (all that apply)**

Asphalt

Concrete

Paving Bricks or Flag Stone

Gravel

Dirt or Sand

**6. Path condition/maintenance**

Poor (many bumps/potholes)

Fair (some bumps/potholes)

Good (very few bumps/potholes)

Under Repair

**7. Path obstructions (all that apply)**

Poles or Signs

Parked Cars

Overgrown

Garbage Cans

Other

None

**8. Buffer between road and path (all that apply)**

Fence

Trees

Hedges

Landscaping

Grass

None

**9. Path distance from curb**

At edge

< 5 feet

> 5 feet

**10. Sidewalk width**

< 4 feet

Between 4 and 8 feet


> 8 feet


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Piedmont HIA


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## Access and Connectivity





*The roadway, although in good condition, was extremely wide and somewhat curvy throughout this segment. Although sidewalks mimicked the street orientation with no buffer in between the two, sidewalks were often scattered with debris and dust and were essentially the same height as the roadway.*





*Examples of poor pedestrian conditions: although shady and separated from the street, these sidewalks are raised and broken and are narrow.*



*Along parts of the segment, there are times that the sidewalk height is even with the roadway height, creating essentially a continuous curb cut, with no separation between pedestrians and automobiles.*

# E. Health and Environmental Impacts

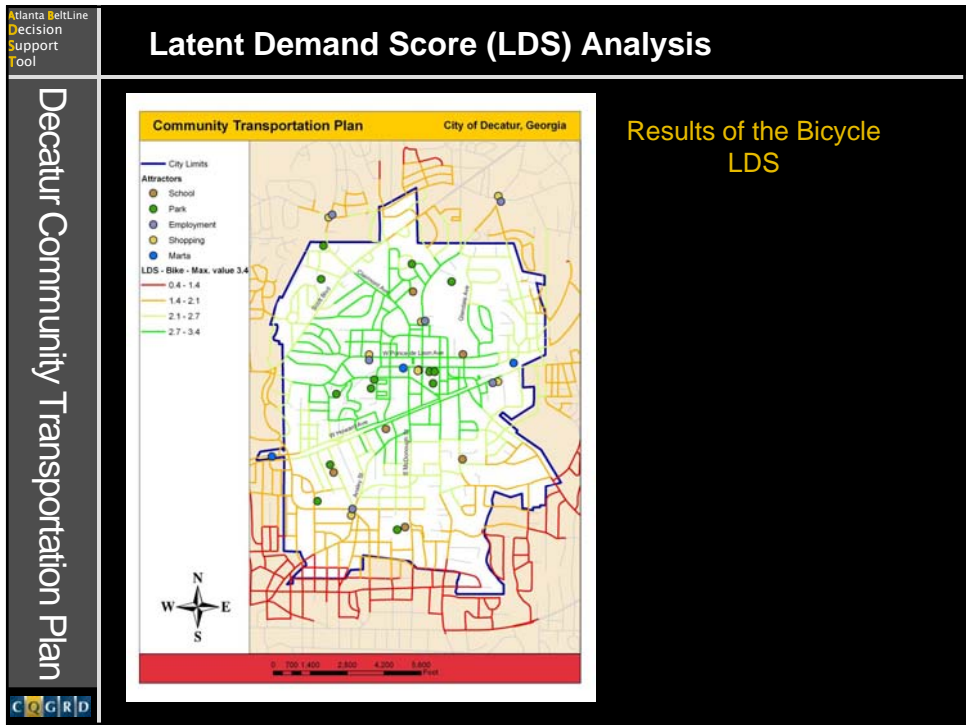
Atlanta BeltLine Decision Support Tool

Piedmont HIA

## Walkability Audit Recommendations

KEY FINDINGS	RECOMMENDATIONS	RELATIONSHIPS		
		Traffic	Access	Connectivity
<b>Walkability and Bikeability</b>				
<p>The Walkability Audit (see Section 4.2 and Appendix A.4) found significant barriers to walking and bicycling in the study area, including poorly maintained sidewalks, insufficient buffers between pedestrians and traffic, insufficient signage, a lack of shade, and a lack of accommodation for bicycles.</p>	<ul style="list-style-type: none"> <li>Improve and increase barriers between pedestrian and automotive traffic along high-volume corridors, such as Collier Road.</li> </ul>		X	X
	<ul style="list-style-type: none"> <li>Make improvements to the pedestrian environment, which could include:                             <ul style="list-style-type: none"> <li>Improve the quality of the sidewalks;</li> <li>Ensure sidewalk width is adequate for two adults walking abreast;</li> <li>Increase the number of crosswalks;</li> <li>Increase and maintain lighting for pedestrians;</li> <li>Add pedestrian signals to existing intersections;</li> <li>Narrow roadways or lanes;</li> <li>Reduce number of lanes;</li> <li>Add medians;</li> <li>Add textured pavement;</li> <li>Add speed tables; and</li> <li>Add or upgrade landscaping.</li> </ul> </li> </ul>	X	X	X
	<ul style="list-style-type: none"> <li>Identify those destinations easiest to reach by bicycle and install bicycle-friendly facilities (such as bicycle racks, water fountains, etc.).</li> </ul>		X	X
	<ul style="list-style-type: none"> <li>Increase pedestrian education to include:                             <ul style="list-style-type: none"> <li>Wayfinding signage to make pedestrian routes easier to follow; and</li> <li>Conduct outreach within the community to make residents familiar with new walking and bicycle options in the community.</li> </ul> </li> </ul>		X	X

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## Decatur Bicycle Network

Decatur Community Transportation Plan

The final Decatur Bicycle Network

Community Transportation Plan  
City of Decatur, Georgia  
Decatur Bicycle Network

Proposed on street  
Proposed trail  
Current street route  
Current trail  
Proposed sharing  
Current Connection

Metra Stations  
Streets  
Activity Centers  
City Parks  
City Schools  
City Limits

To Emory University  
To Acropolis Center, Stone Mountain

0 0.25 0.5 1 Miles

City of Decatur

## THANK YOU!

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