

# I-45 N EXPANSION

## HEALTH IMPACT ASSESSMENT



### BACKGROUND

Air Alliance Houston has been funded by the Urban Institute and the Robert Wood Johnson Foundation under the [500 Cities Data Challenge](#) to conduct a Health Impact Assessment (HIA) of the proposed I-45 highway expansion project known as the North Houston Highway Improvement Project (NHHIP). The expansion will run from the I-45N/Beltway 8 intersection on the north side of Houston to the I-45/I-69/288 intersection just south of Midtown.

Air Alliance Houston is concerned about the health effects of the freeway on the roughly [80,000 Houston-area children](#) attending schools within traffic-related air pollution (TRAP) zones. Children living or attending school near highly trafficked freeways like I-45 are at greater risk of damage to their developing brain, lungs, heart, and circulatory systems. Furthermore, a number of traffic-related air pollutants – such as diesel particulate matter, benzene, 1,3 butadiene, and formaldehyde – are known to cause cancer.

The NHHIP project offers an opportunity to integrate protective and health-promoting design features that will reduce school children's exposure to the freeway and help protect community health.

### GOALS

The HIA has identified three main goals:

1. Quantify the project's potential co-benefits and co-harms to health for inclusion in the final environmental impact statement.
2. Serve as a model project to integrate HIAs into future mobility projects in the metro-Houston area.
3. Raise public awareness of the public health implications of freeways.

### HEALTH EFFECTS

Focusing on schools located within 150 m (500 ft) of the NHHIP project, the HIA is using a combination of existing data sets, data gathering, literature review, and stakeholder input to assess the potential positive and negative health effects associated with:

1. the proposed freeway expansion; and,
2. proposed mitigation strategies.

### IMPACT CATEGORIES

While the HIA will reflect Air Alliance Houston's emphasis on promoting access to clean air for all Houstonians, the assessment will reflect the range of priorities represented by the Make I-45 Better Coalition: air quality, mobility, low income communities, economic development, parks and green space, noise, visual impacts, urban heat island, and flooding.