

COMMUNITY BTM NOISE LAB

unite. evaluate. take actions.



My FORMER Life

About 1,250,000 results (0.45 seconds)

Everyone's Upstairs Neighbors - YouTube



Google

upstairs neighbors loud footsteps



Settings

Tools

All

Videos

Images

News

Shopping

More

About 29,000 results (0.58 seconds)

Loud walking upstairs neighbor, what to do? (renter, noisy ...

www.city-data.com › [City-Data Forum](#) › [General Forums](#) › [Real Estate](#) › [Renting](#) ▼

Jan 10, 2009 - 10 posts - 9 authors

The girl **upstairs** and her boyfriend stayed "busy" ... Go away for a weekend and leave your MP3 playing constant loop **loud footsteps** noises.

Loud walking upstairs neighbor, what to do? (cleaning ...

10 posts Feb 24, 2016

Loud walking upstairs neighbor, what to do? (evictions ...

10 posts Jan 31, 2016

Loud walking upstairs neighbor, what to do? (broken ...

10 posts Aug 20, 2014

Loud walking upstairs neighbor, what to do? (leasing ...

10 posts Mar 16, 2011

More results from www.city-data.com

How to deal with noise from upstairs neighbors? | Ask MetaFilter

ask.metafilter.com/275829/How-to-deal-with-noise-from-upstairs-neighbors ▼

Feb 12, 2015 - Last week I had new **neighbors** move into the apartment above me. Their **footsteps** are very **loud**. occasionally there is other noise. and they are ...

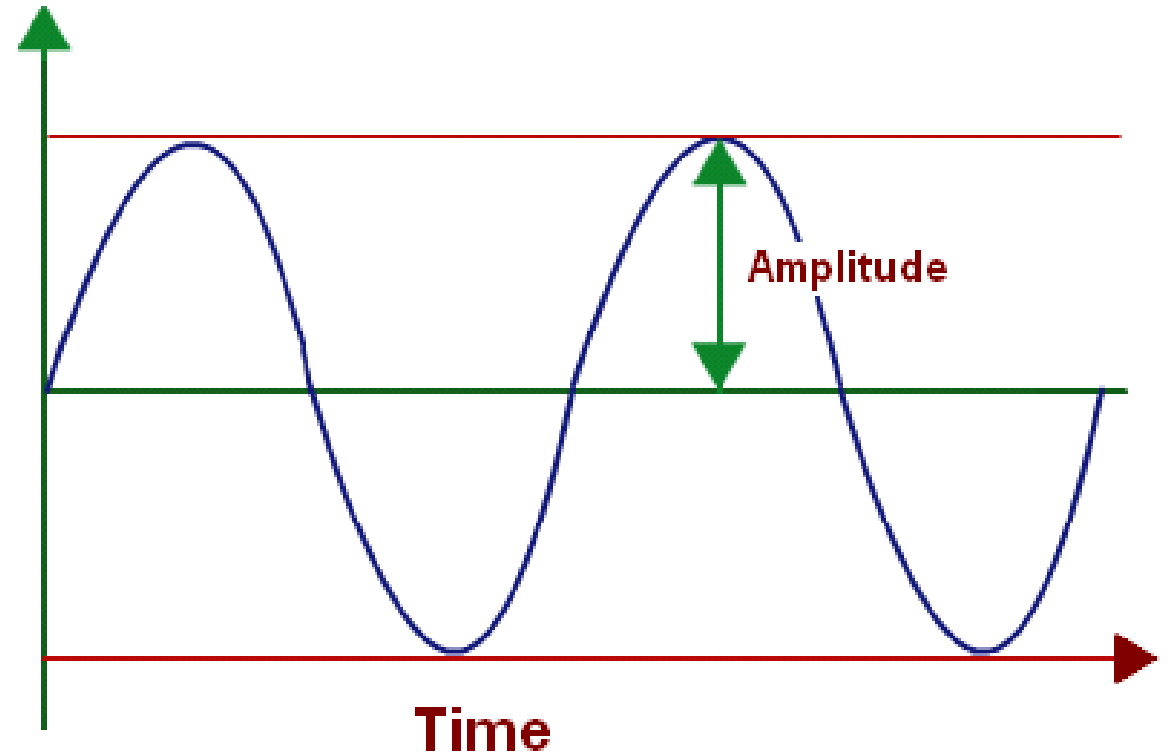
What is **quiet enjoyment**? How is it **enforced**? How effective is dealing with noise issues in a **court of law**? What is **sound**? What is **noise**? What is a **decibel**? What is an **A-weighted decibel**? Who ***e/se*** is dealing with this crap? Who **cares**, besides me? How is this impacting my **health**?

I think you would like this thing called
Public Health.

Take 1. An **Academic** Approach

What is Sound?

- Audible wave
- Characterized by both its
 - Intensity Level (decibel)
 - Frequency (Hz)



INTENSITY In Context

Sound	Decibel Level dB(A)	Sound Level
No Sound	0	Very Quiet
Quiet Library	30	
Private Office	50	Quiet
Normal Conversation	60	
Vacuum Cleaner	70	Annoying
Telephone Dial Tone	80	Loud
Food Blender	90	
Garbage Truck	100	Very Loud
Chainsaw	110	
Live Rock Concert	120	

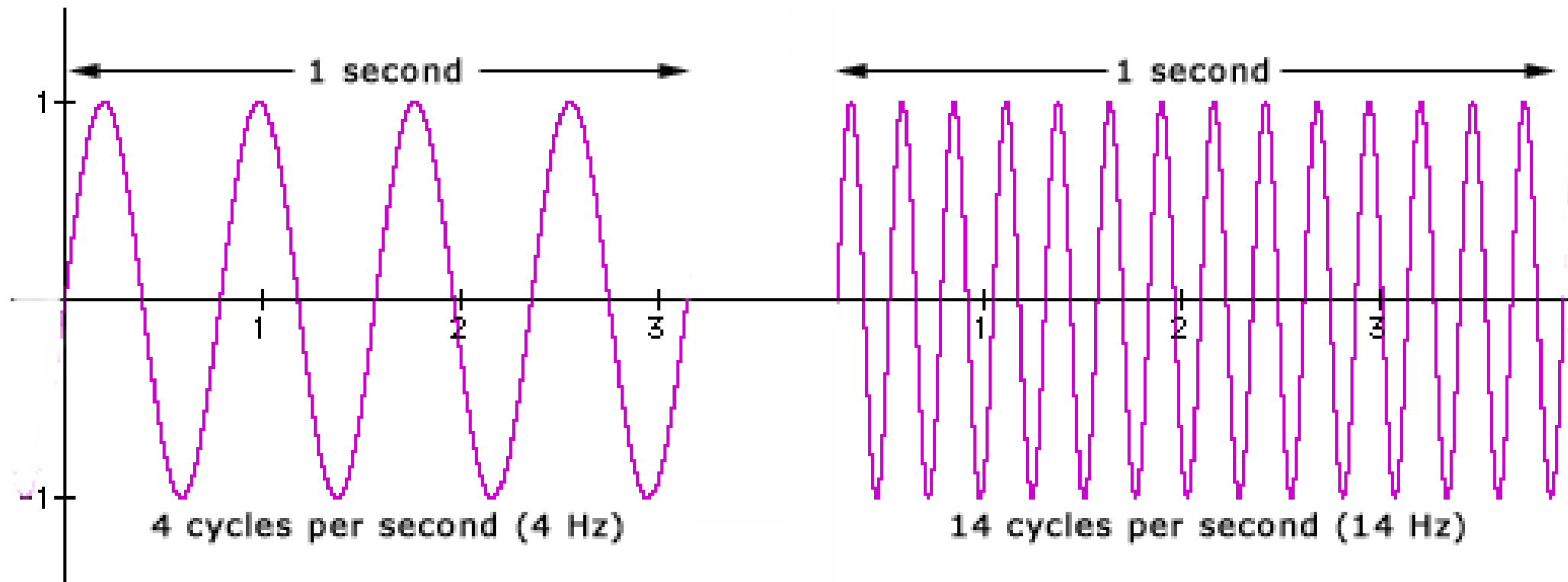
There is some noise that I
hear and some that I *feel*.

- East Boston Residents Dr.'s Marcos Luna and
Neenah Estrella- Luna



Frequency

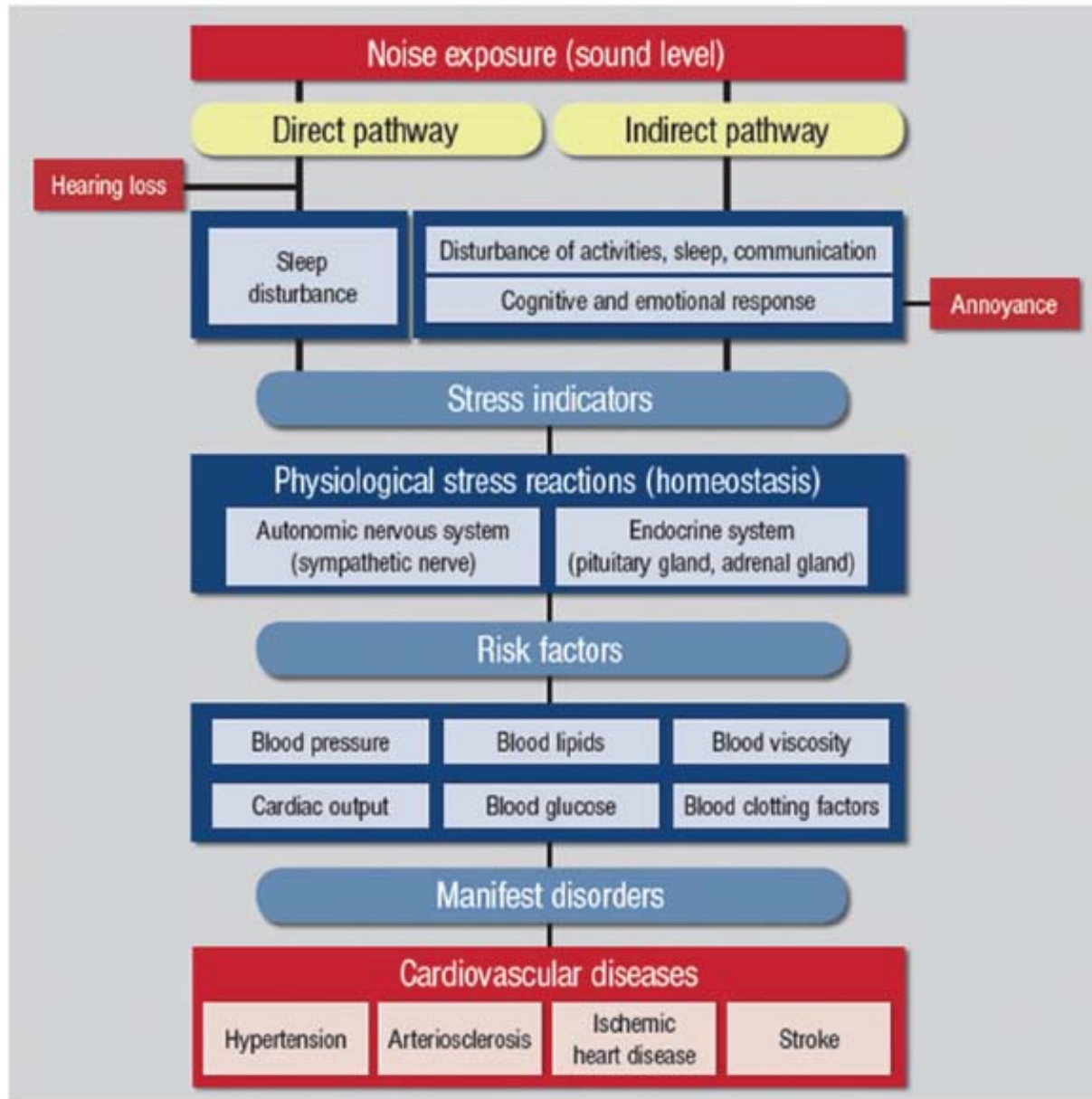
- Unit = Hertz (Hz)
- 0 Hz – 20,000 Hz



FREQUENCY In Context

Range	Effect
< 20 Hz	Tornado
31 Hz	Air conditioner
500 Hz	Fire Alarm
2000 Hz	Crickets
16,000 Hz	Air
20, 0000 Hz	Upper Limit of Human Hearing

How is sound impacting our health?



Noise Reaction Model Wolfgang Babisch (2014)

Health Effect	Decibel Level dB(A)
Annoyance	40 – 60
Elevated Cortisol, Decreased HRV	65+
Blood Pressure/Hypertension	65+
Cardiovascular Disorders	65+
Mental Health and Cognitive Function	65+

Health Effect	Frequency Range Dominance	Study
Cardiovascular Problems	40 – 60 Hz	Kumer et al. (2008)
Hypertension	4,000 Hz	Chang et al. (2012), Liu et al., (2016)
Decreased HRV, Increased Cortisol Production	31 – 125 Hz	Waye et al. (2003), Walker et al. (2016)
Thickening of pericardium , Modulating the Immune System	< 20 Hz	Pimenta et al, 1999, Sousa Pereira et al, 2000, Castros et al, 1999, Aguas et al, 1999

Epidemiology: FREQUENCY

Limitations With Current Sound Metrics and Regulatory Policy :

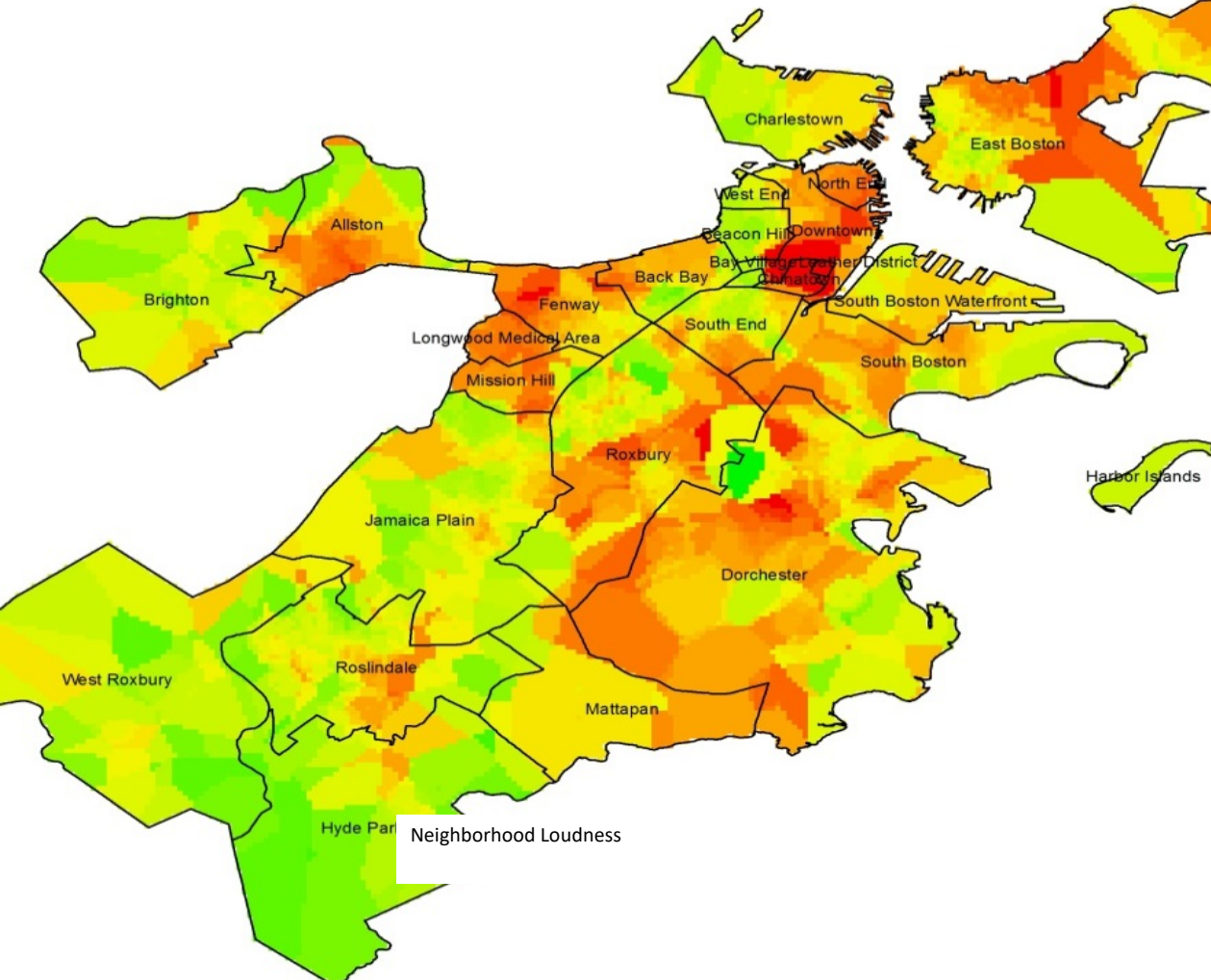
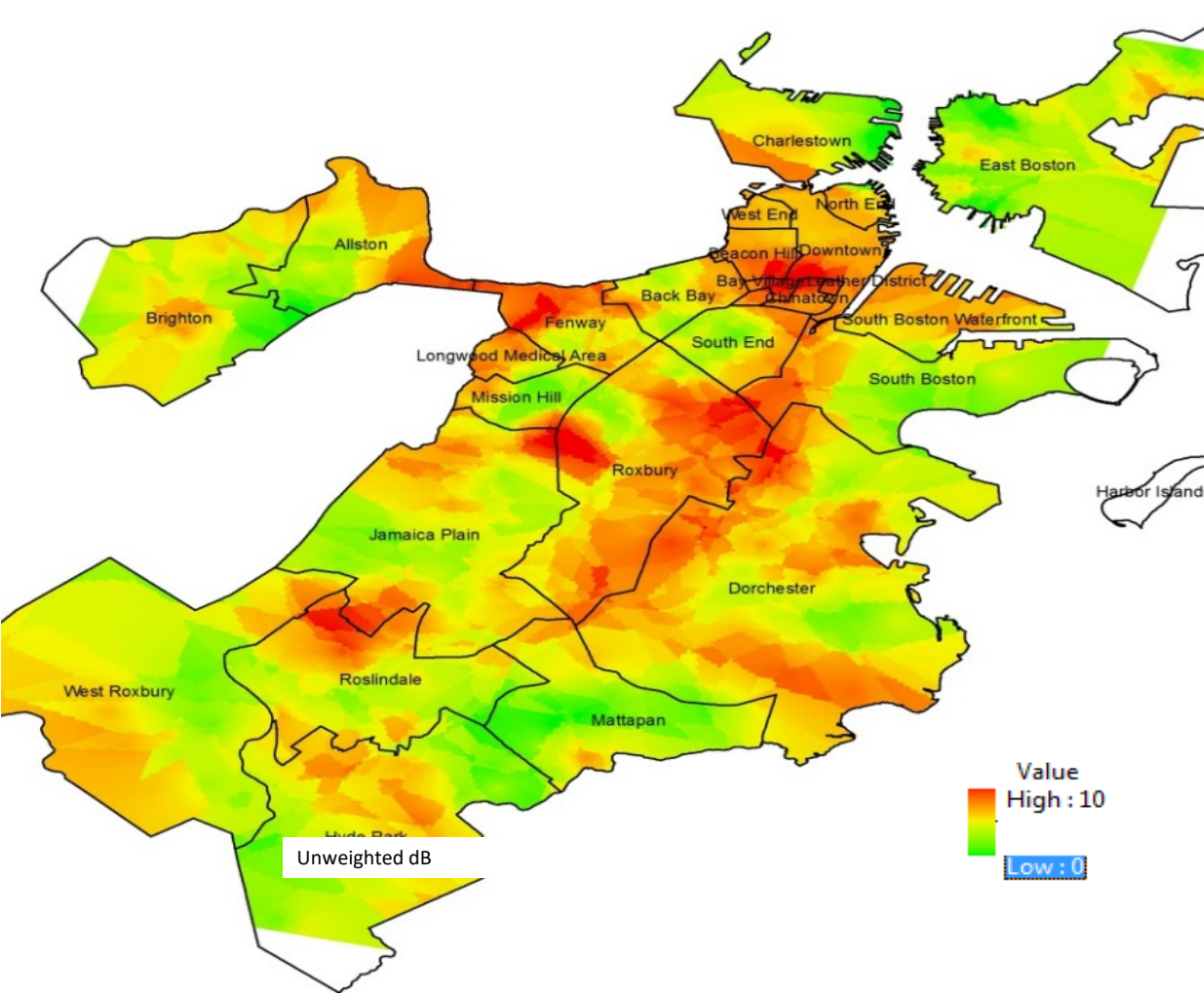
- Ignores the impact of personal perception



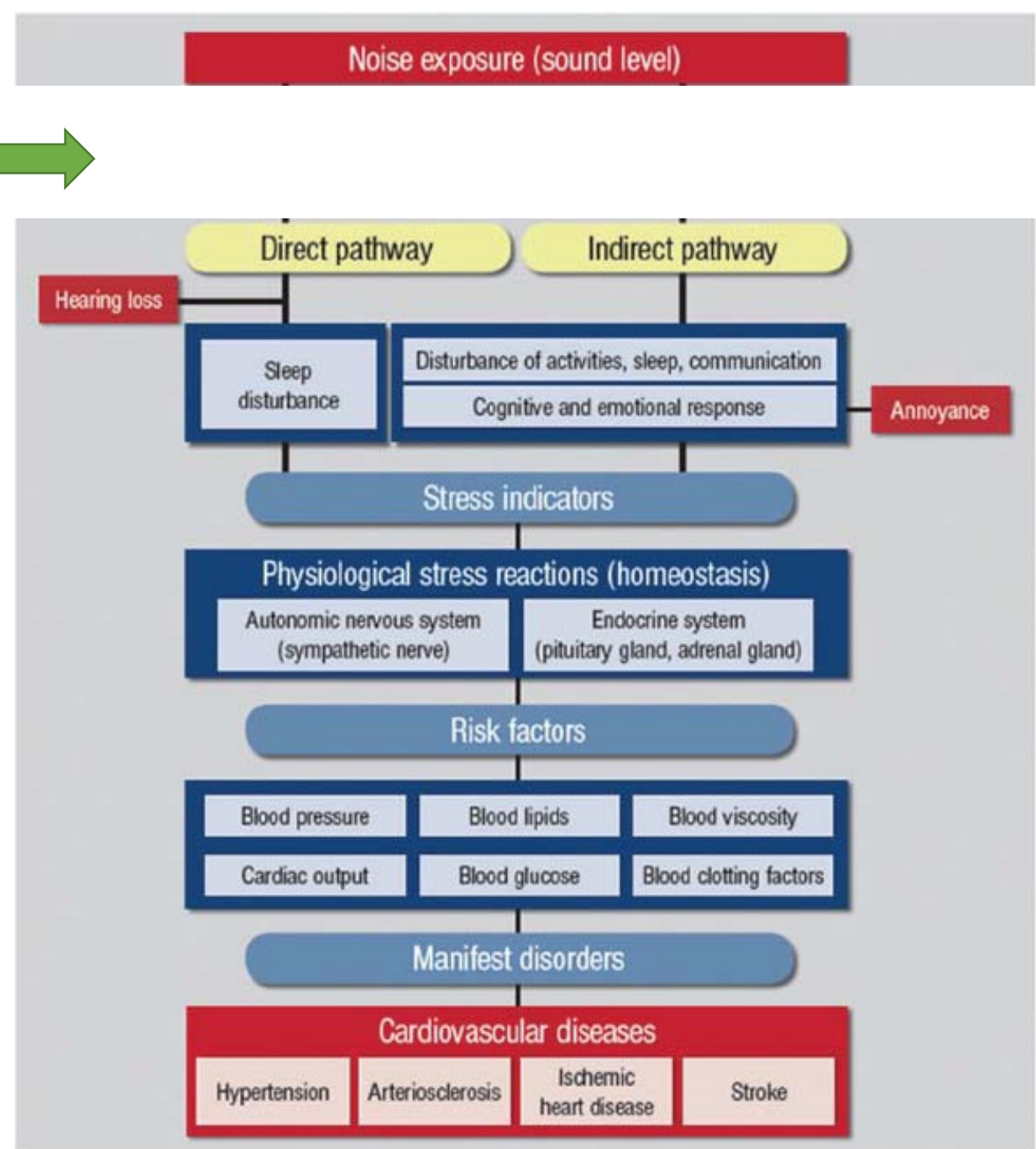
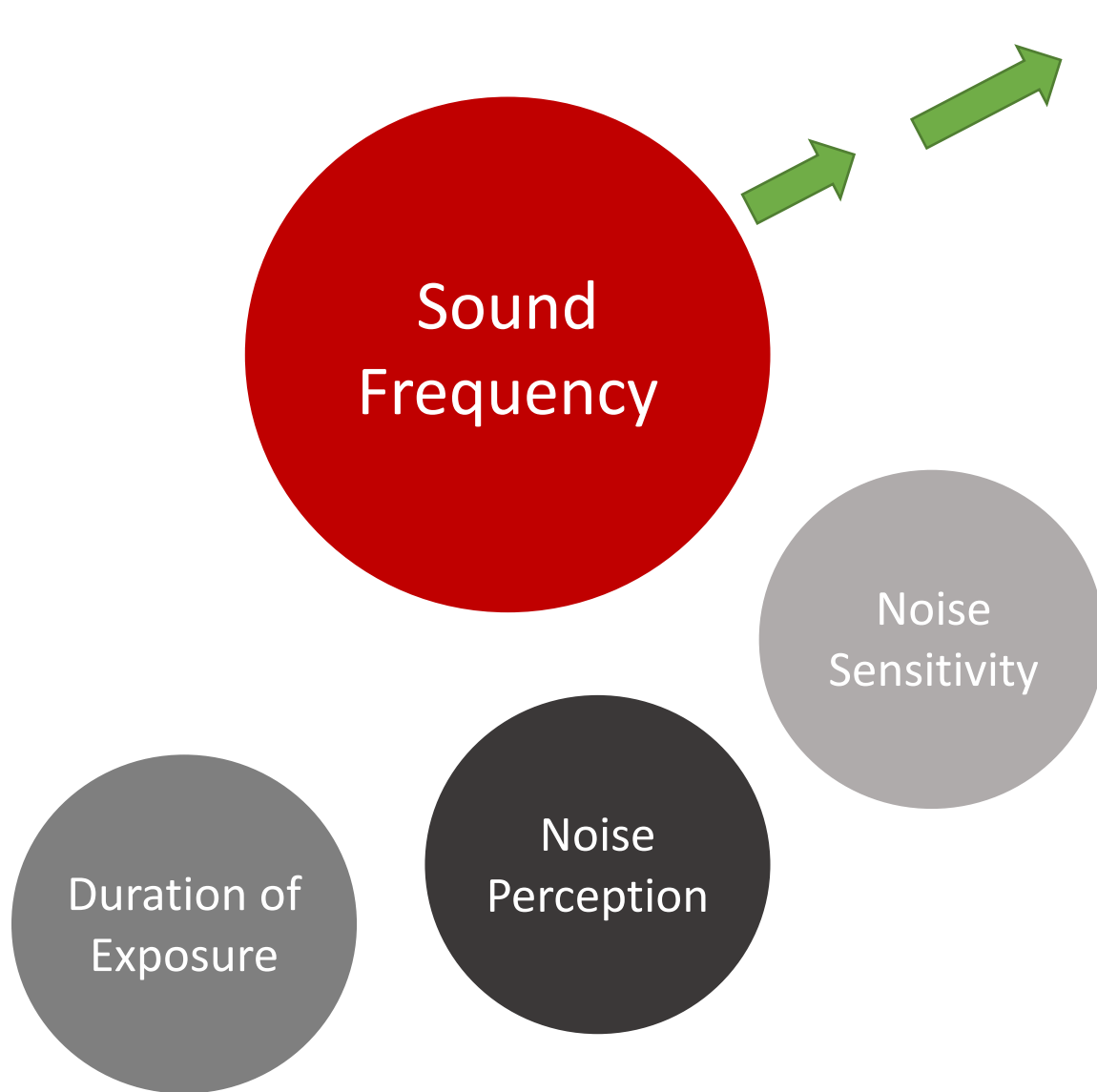
I am sensitive to noise. It seem to impact me *more*.

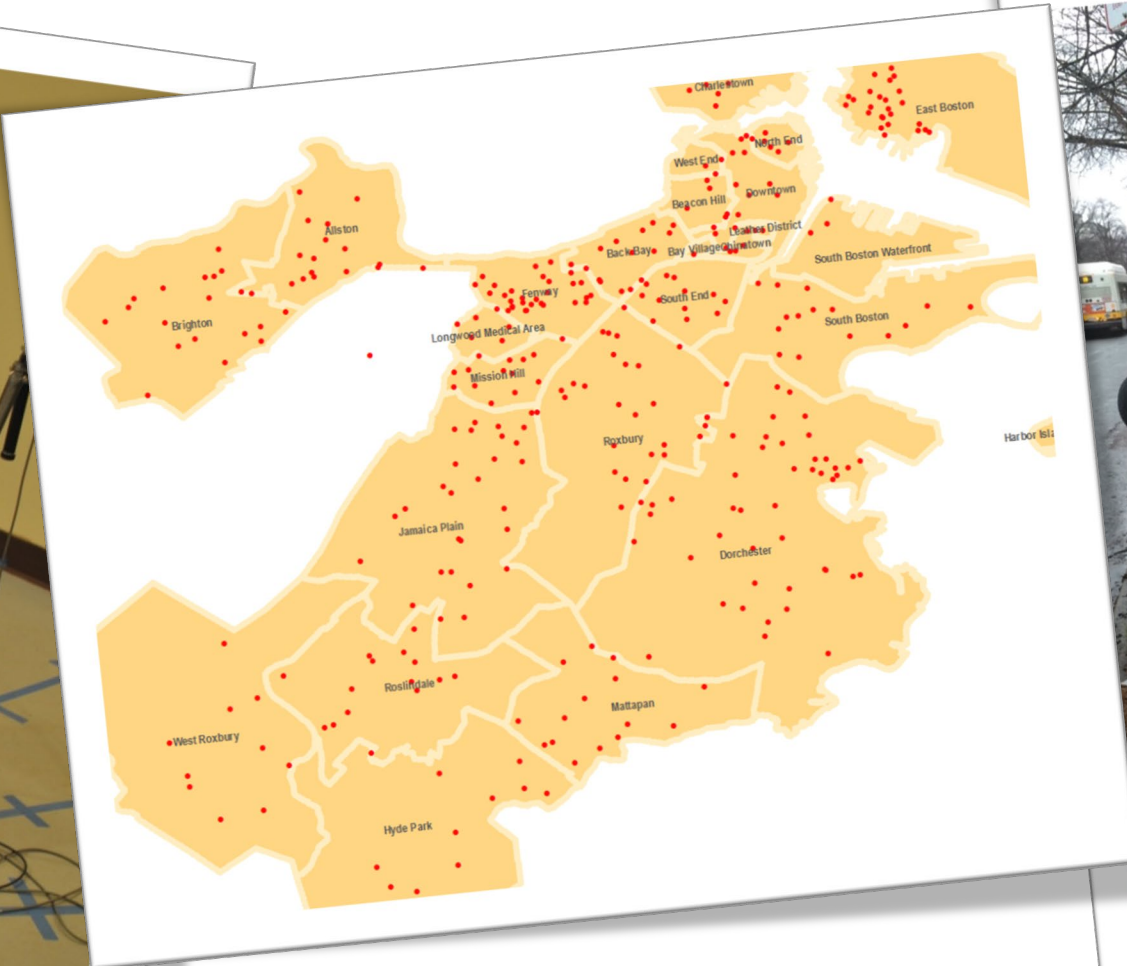
- North End Resident Andrea

Sound Levels vs Noise Perception



A Revised Model





It's **Public** Health, not just **Publication**
Health.

Take 1. An **Academic** Approach

Take 2. A **Community-Centered**
Approach



www.noiseandthecity.org

Boston Neighborhood Noise Survey

Attitudes Towards Noise In Your Community

How **SENSITIVE** are you to noise? If you are not at all sensitive, choose the number zero. If you are extremely sensitive, choose the number ten. If you are somewhere in between, choose a number between zero and ten.

0 1 2 3 4 5 6 7 8 9 10

Not Sensitive ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very Sensitive

To what extent do these specific noises cause you **STRESS**? If these noises cause you no stress, choose zero. If they cause you to be very stressed, choose ten. If you are somewhere in between, choose a number between zero and ten.

0 No Stress 1 2 3 4 5 6 7 8 9 10 Lot of Stress Not Applicable

Road/highway traffic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aircraft (helicopter and airplane)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Idling vehicles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Air conditioner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voices of neighbors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Footsteps of neighbors above or below you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How **LOUD** is your neighborhood?

If you are over the age of 18 and live in the Greater Boston area, we invite you to fill out an online survey to help us gain a better understanding of thoughts and feelings about noise in your community.

Do you live in **GREATER BOSTON**?

Please take a moment to fill out this Greater Boston Neighborhood Noise Survey

[CLICK HERE](#)



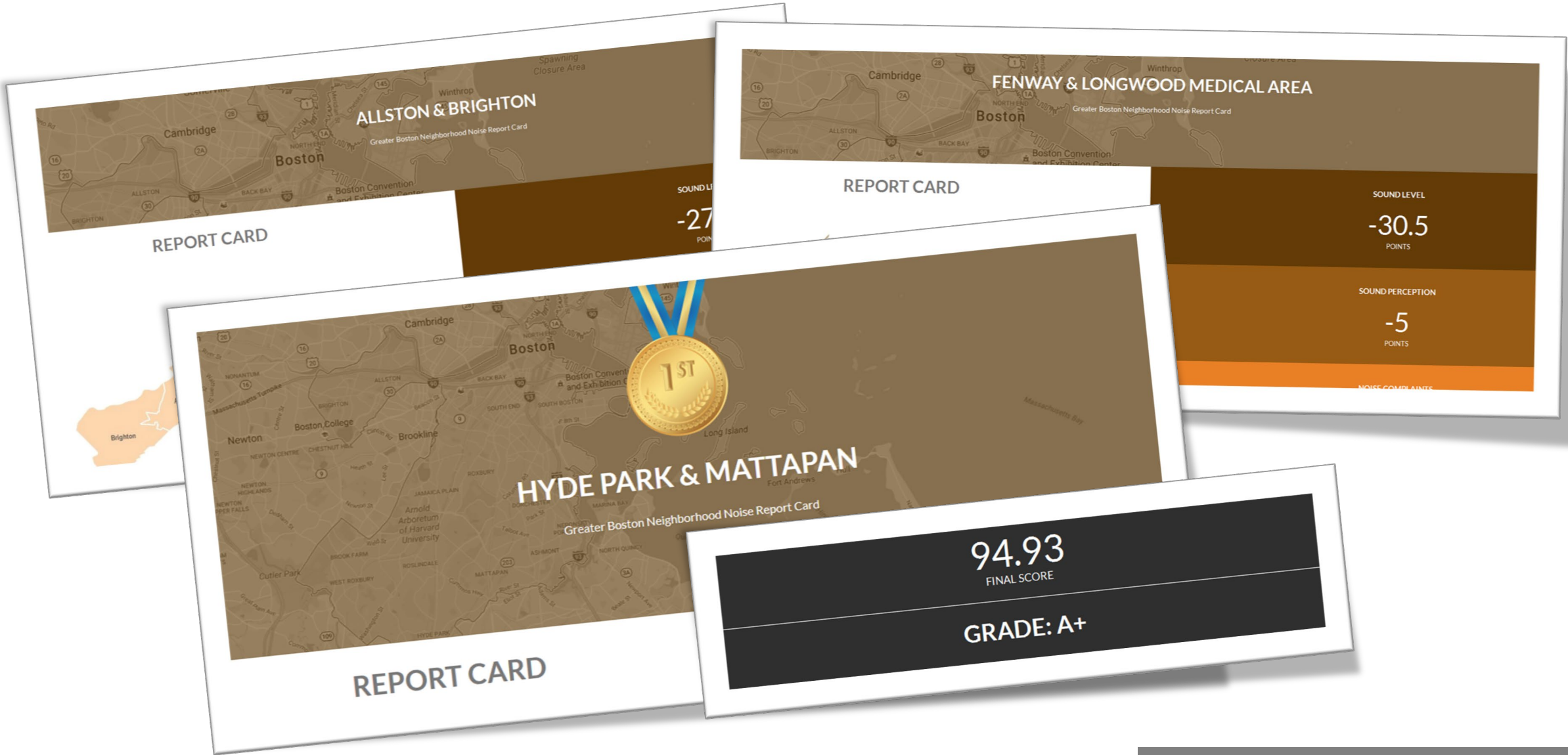
[HOME](#)[INTRODUCTION](#)[SURVEYS](#)[SOUND MAPPING](#)[SOUNDSCAPES](#)[REPORT CARD](#)[ABOUT](#)[CONTACT](#)

Boston Noise Report: 2016-2017

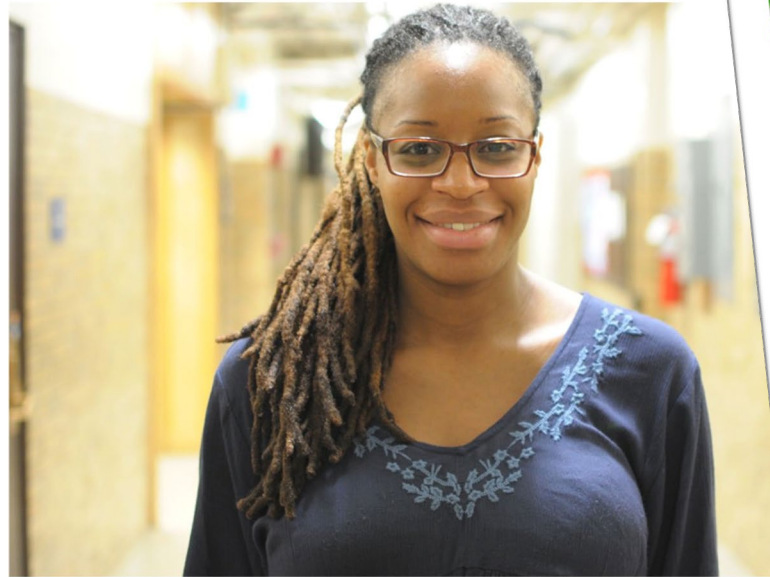
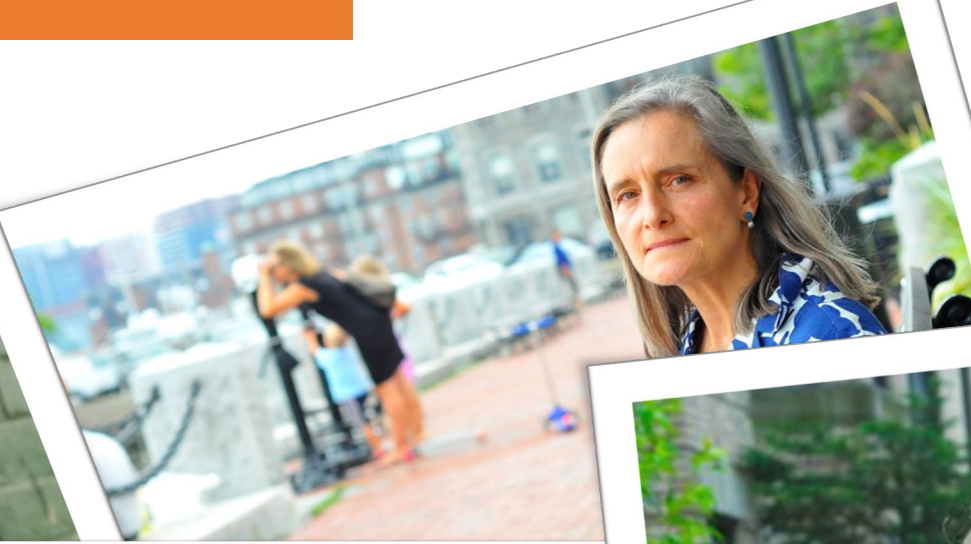
Moving beyond noise ordinances

[COMMUNITY SURVEYS](#)[SOUND MAPPING](#)[REPORT CARD](#)

Community Noise Report Cards



Community Sound Portraits



boston.noiseandthecity.org



no/sescore

Smart Phone App



Download on the
App Store



GET IT ON
Google Play

WWW.NOISEANDTHECITY.ORG 

Funded by The Radcliffe Institute for Advanced Study

Take 1. An **Academic** Approach

Take 2. A **Community-Centered**
Approach

Take 3. A **Ride Sharing** Approach



- **Destination:** Public Health
- **Hypothesis:** Sound and Noise *are* harmful to human health
- **Journey:** Undetermined

Ground Zero

COMMUNITY
NOISE LAB™

BU Initiative on Cities

WHO WE ARE

RESEARCH

METROBRIDGE

FOR STUDENTS

EVENTS

RESOURCES

NEWS

CONTACT US

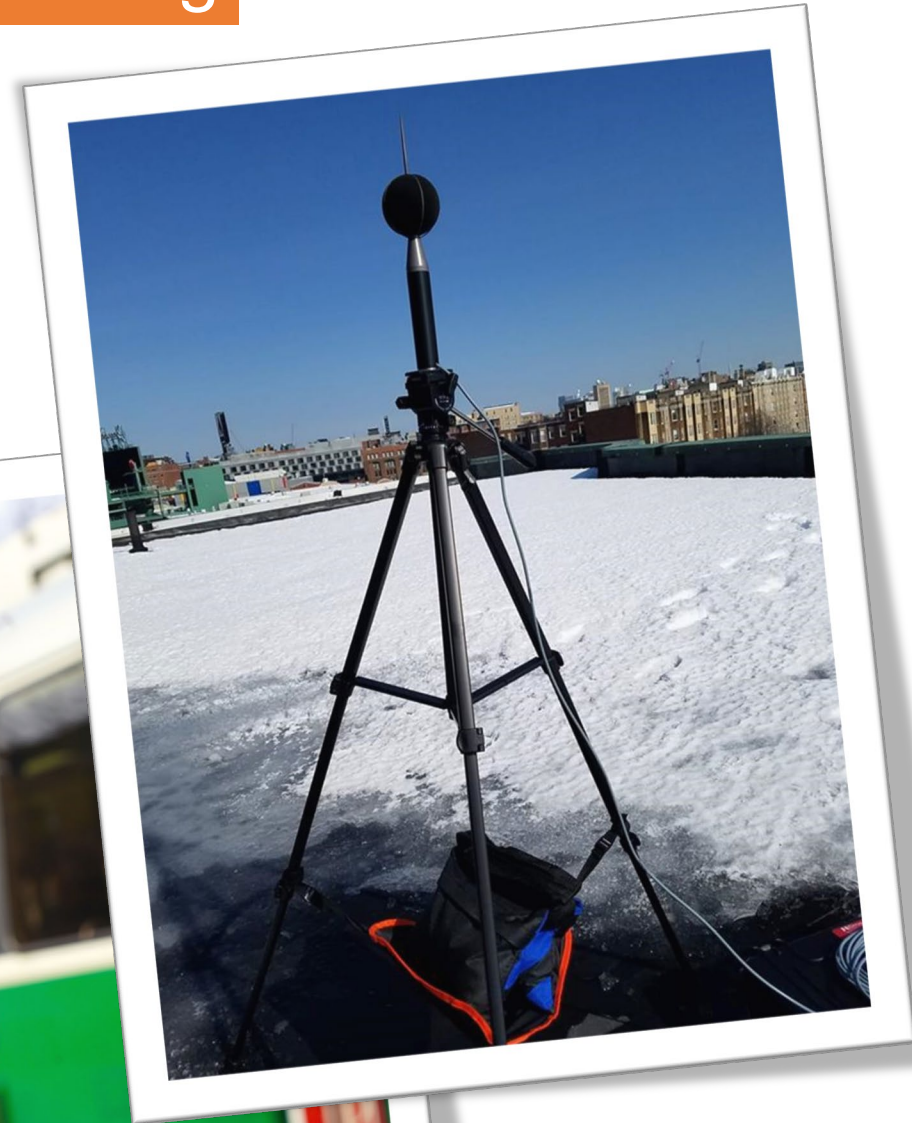
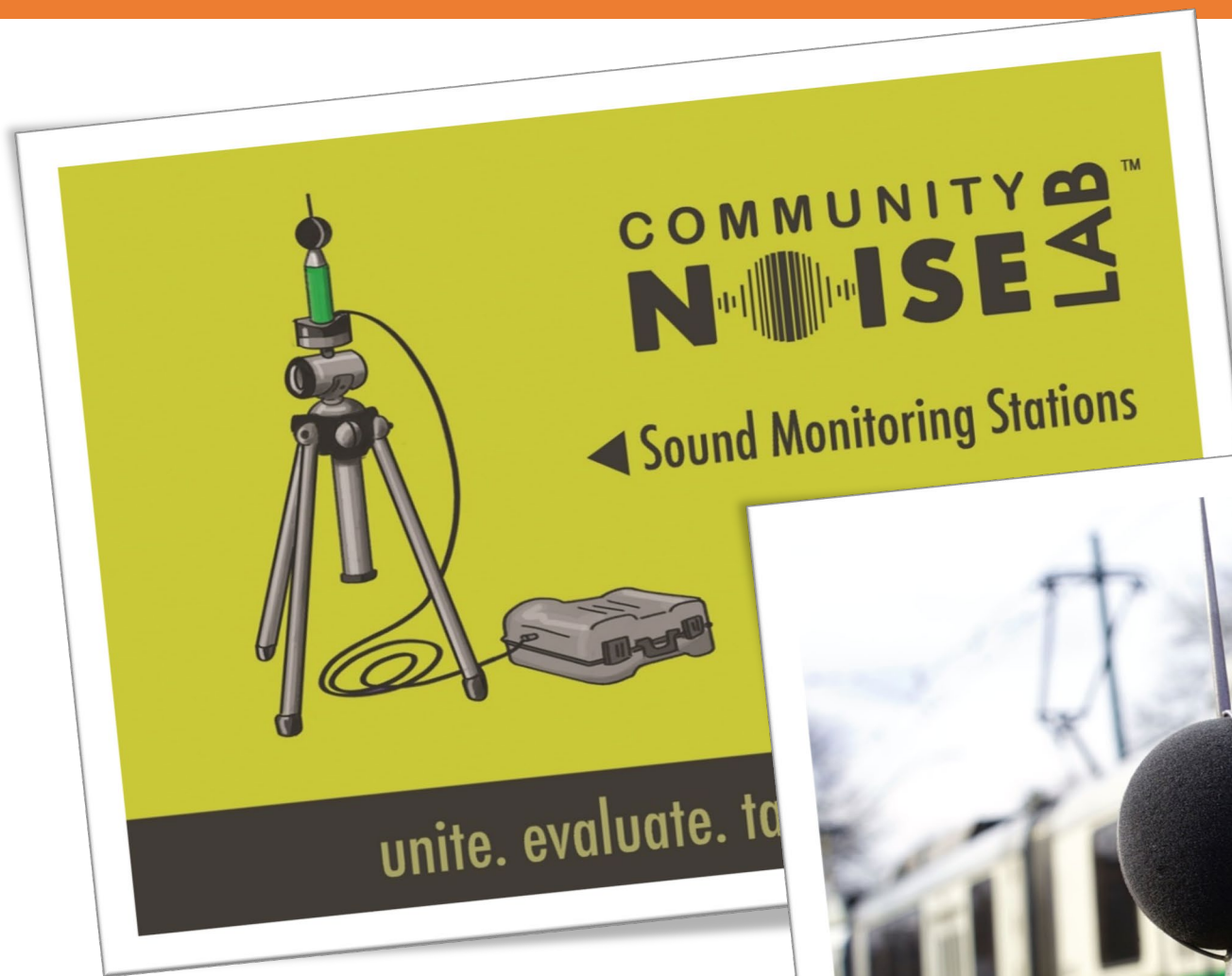
INITIATIVE ON CITIES



Robert Wood Johnson Foundation

- A **community sound exposure assessment** MUST have the following elements to be effective and impactful:
 - Metrics to measure a sound's **loudness**
 - Metrics to measure a sound's **character**
 - Metrics to measure **noise perception**
 - Metrics to describe and identify **vulnerable and at risk populations**
 - **Community inclusion**

Real-time Sound Monitoring



Community Noise Survey



- Administered to gather a better understanding of residents' attitudes and response to community noise.
- 33 questions, takes < 10 minutes to complete
- Available in Spanish and English
- Will correlate with real-time data collection

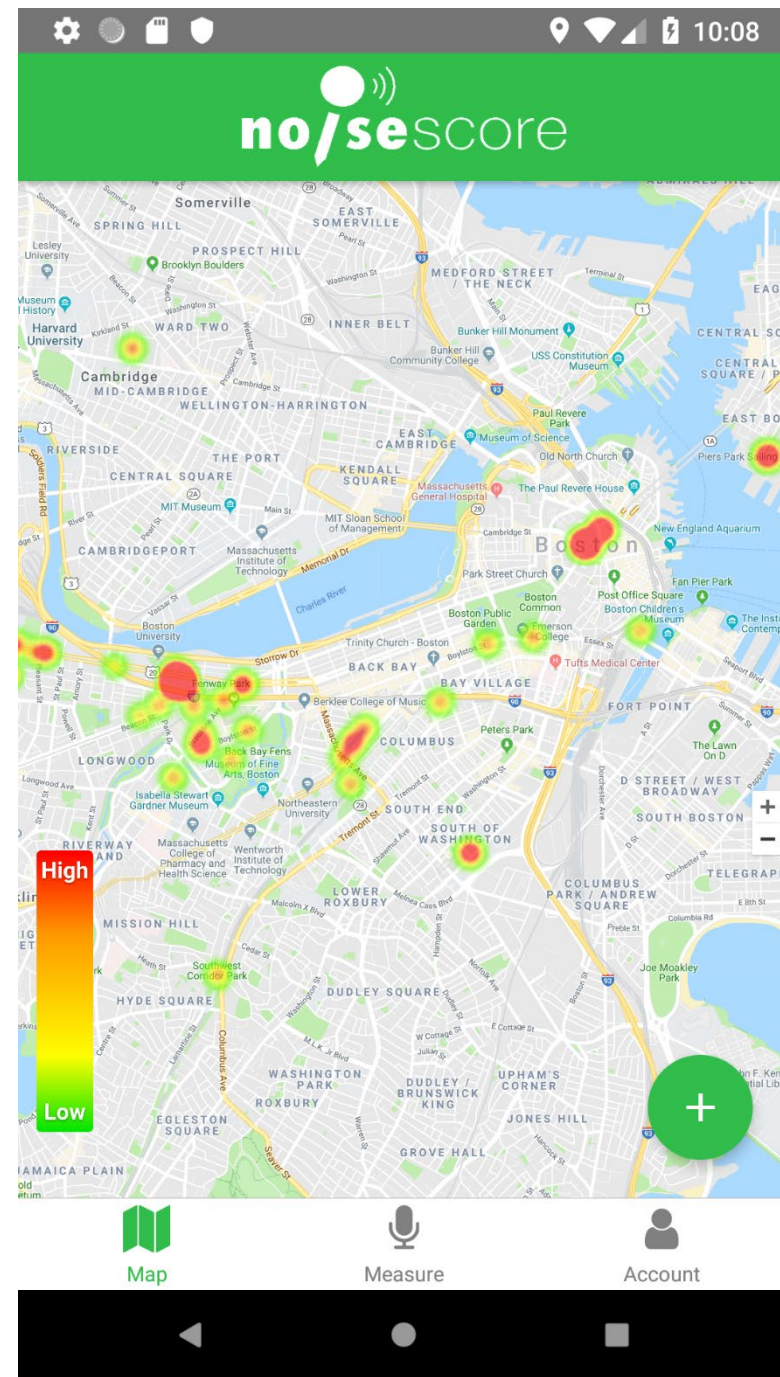
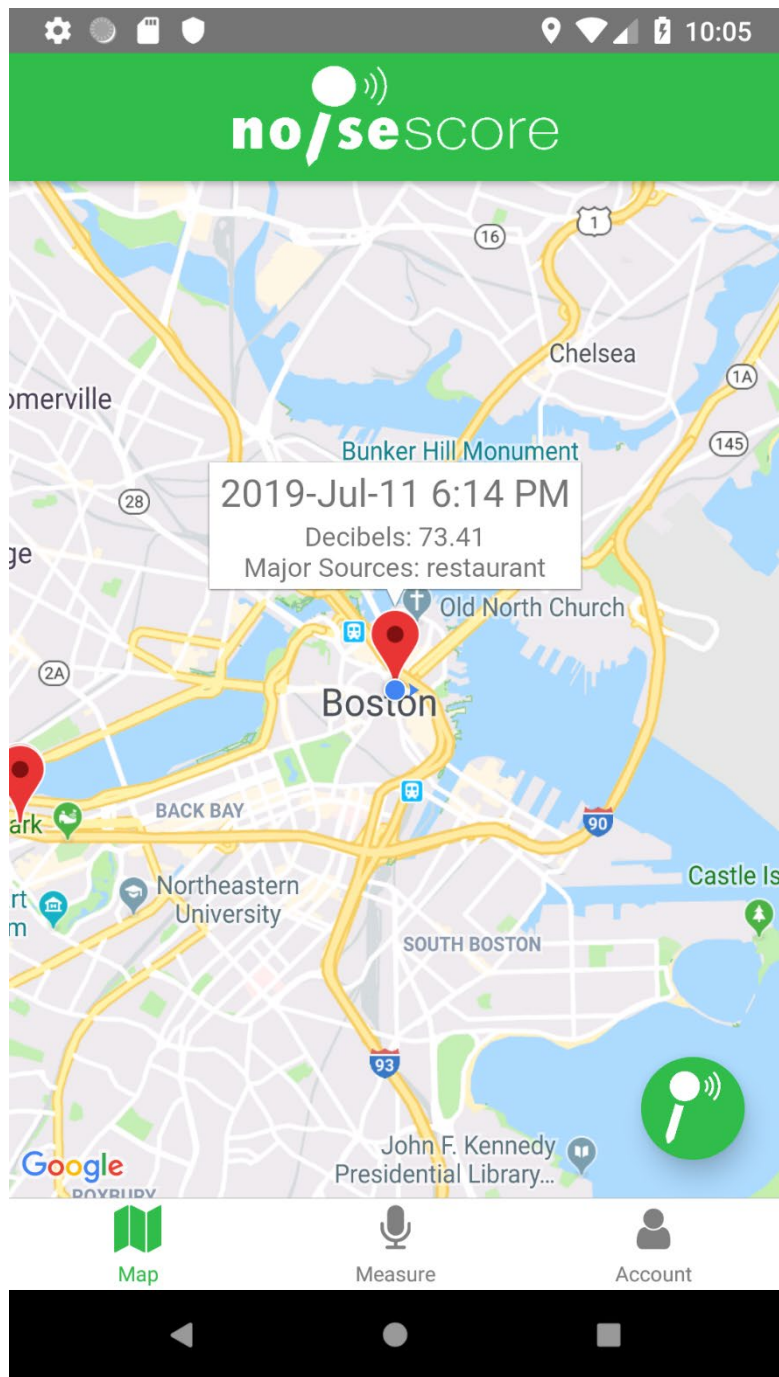
NoiseScore App and Community Noise Metric



Research Collaborators

- Software & Application Innovation Lab (SAIL)
- BU Department of Mathematics and Statistics Master of Science in Statistical Practice



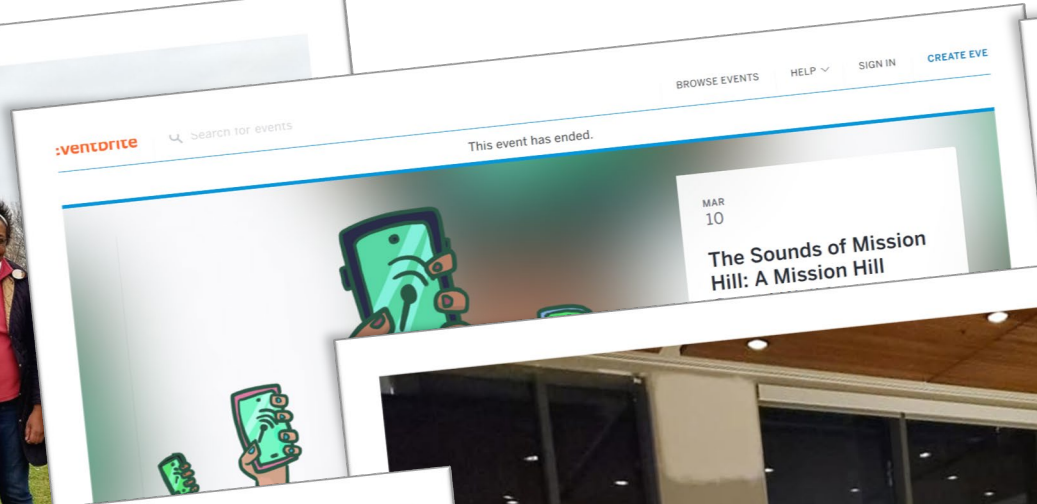


Lab-Based Experiments



- How does exposure to urban environmental sound impact our brain activity?
- How are these responses modified by self-reported noise perception?
- How are these responses modified by hearing loss?
- What is the relationship between hearing loss and noise perception?

Community Engagement Events



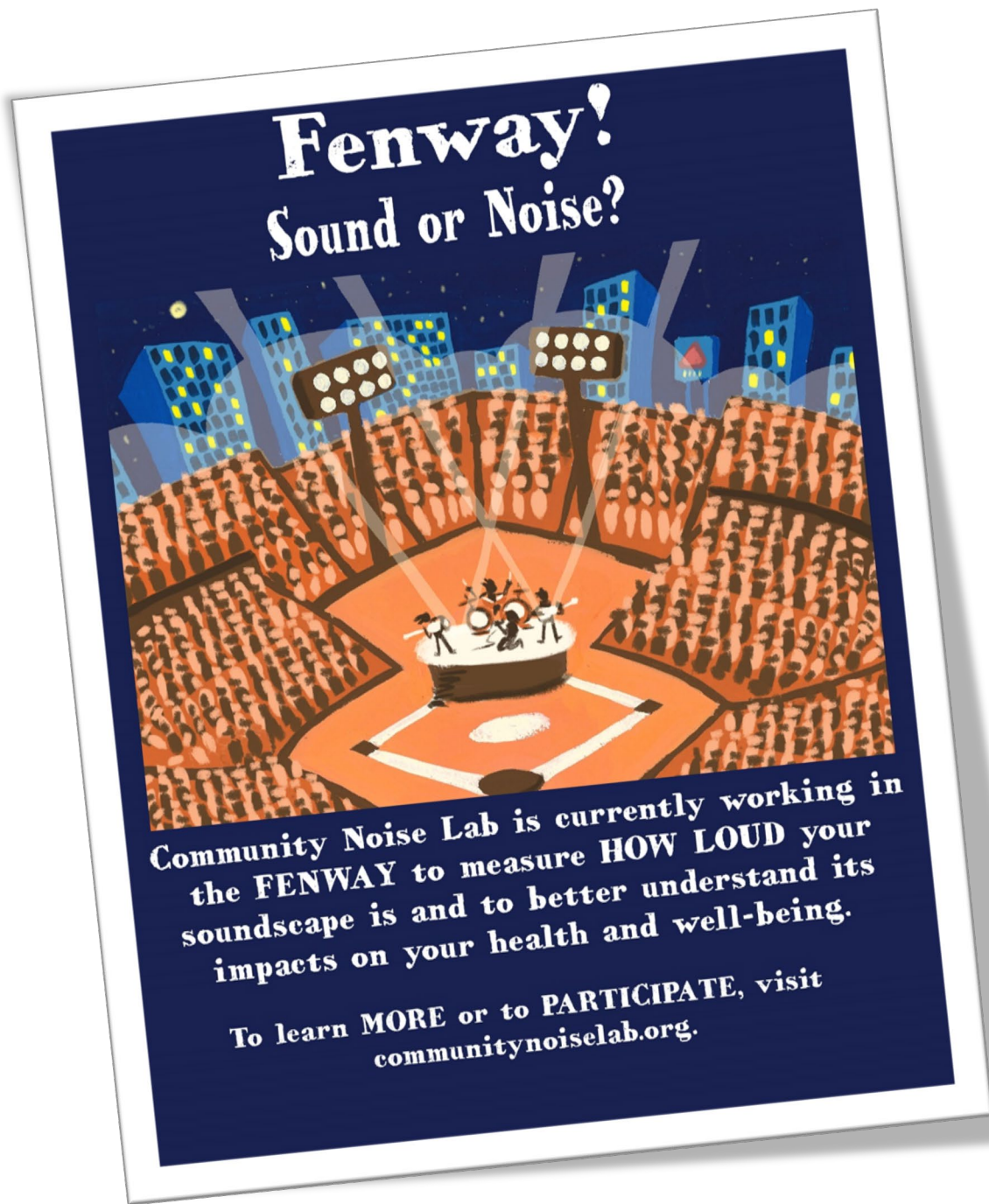
Passenger

- Data to support a revamping of soundproofing criteria
- Association between sound levels and community noise perception.



Passenger

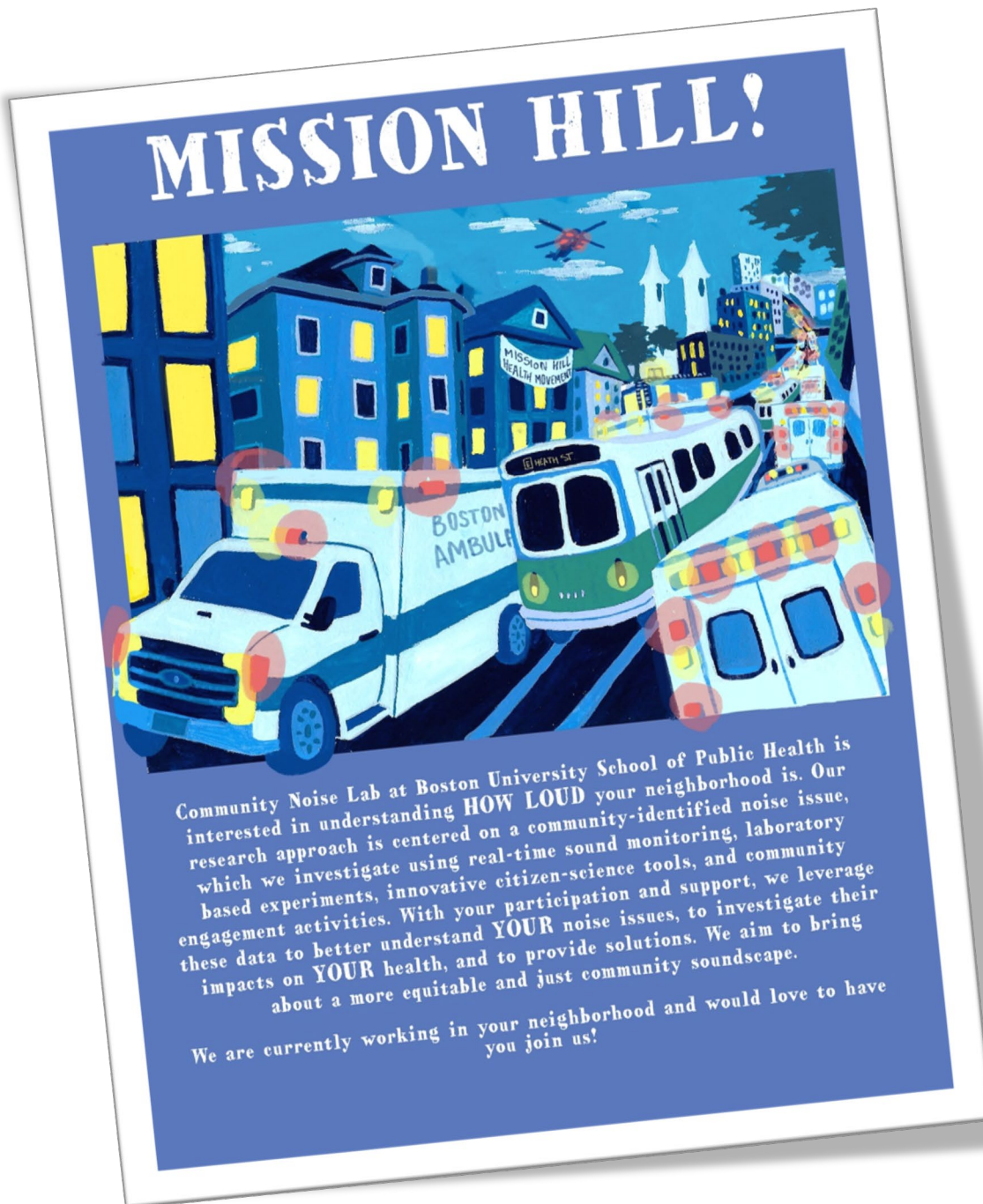
- An understanding of community sound levels during concerts and games
- Data to support a Good Neighbor Agreement between Fenway Park, Live Nation, and the Fenway Neighborhood



Community Identified Issues

Passenger

- An understanding of community sound levels associated with hospital activity AND rapid gentrification.



Passenger

- Data to support a DETAILED sound study for impacts of I 93 and 495

Andover! Sound or Noise?



Community Noise Lab is currently working in Andover to measure **HOW LOUD** your soundscape is and to better understand its impacts on your health and well-being. To learn **MORE** or to **PARTICIPATE**, visit communitynoiselab.org.

HOUSE DOCKET, NO. 1590 FILED ON: 1/16/2019

HOUSE No. 3625

The Commonwealth of Massachusetts

PRESENTED BY:

Frank A. Moran

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act providing for a study of noise impacts from the confluence of Interstates 93 and 495

PETITION OF:

Passenger

- Data to understand the contribution tourism has on the environmental soundscape
- Peaks Island, Portland, Maine

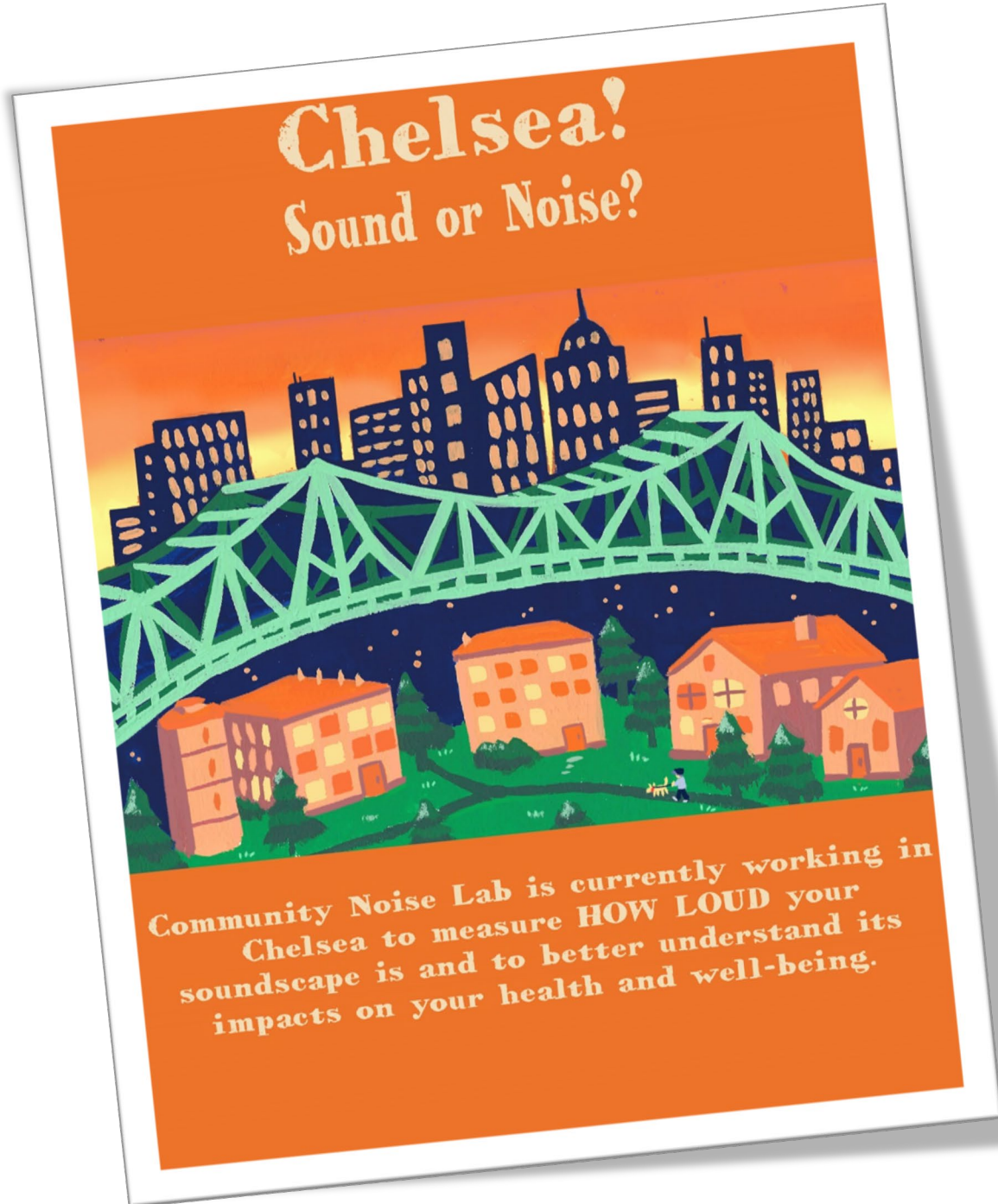
Tourism!



Community Noise Lab is currently measuring sound levels in highly-visited urban and green protected spaces across New England to better understand the impacts tourism may have on their environmental soundscapes.

To learn MORE or to PARTICIPATE, visit communitynoiselab.org.

Community Identified Issues



- Chelsea, MA
- Interested in understanding ambient sound levels due to industrial land use, aircraft activity, and road traffic.
- Interested in engaging its residents using the NoiseScore app and developing another term for “Citizen” Science

Passenger



- Asheville, NC
- Utilized the NoiseScore app to engage its residents around community sound levels and noise perception.



Last updated: 9/2/20

FIREWORKS SAFETY GUIDE

Illegal fireworks pose significant dangers to the safety of our residents and their property. They do not belong in our communities.

Have questions? Contact:

BOS:311



3-1-1 OR 617-635-4500



311@BOSTON.GOV

DOWNLOAD OUR PAMPHLET

NOISE AND MENTAL HEALTH

FIRES, BURNS, AND INJURIES

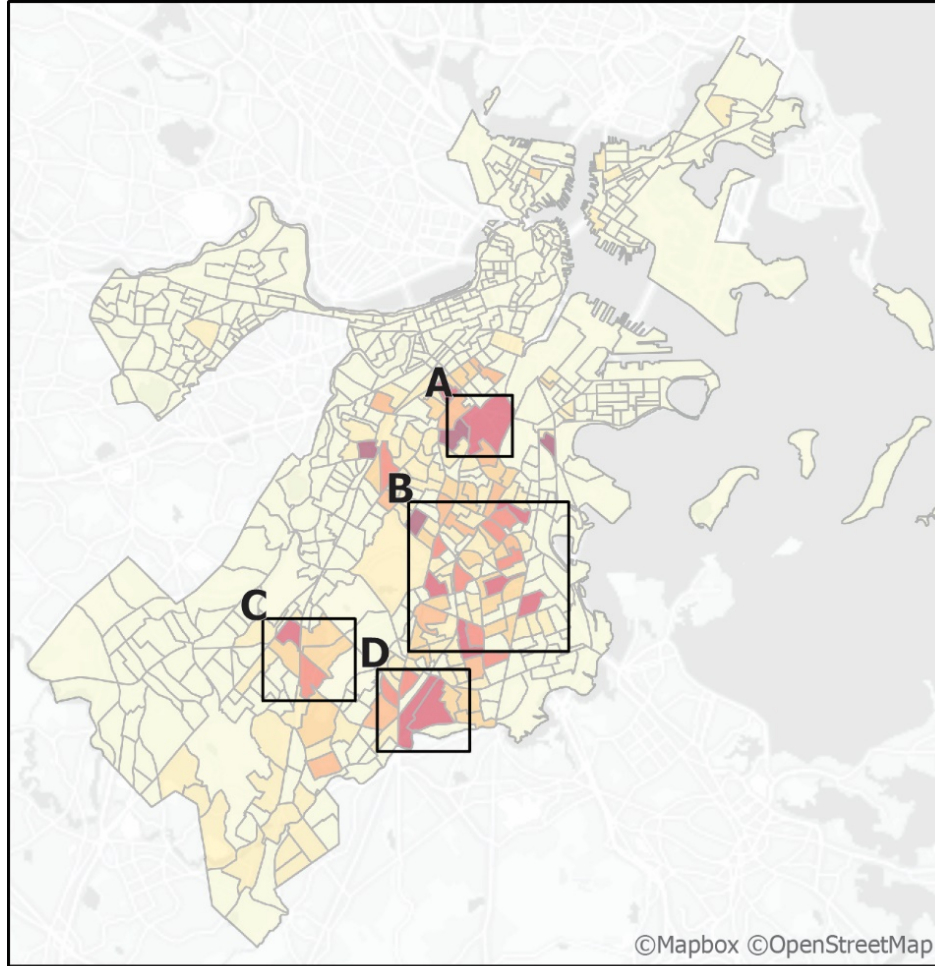
ENVIRONMENTAL IMPACTS

TAKE OUR SURVEY

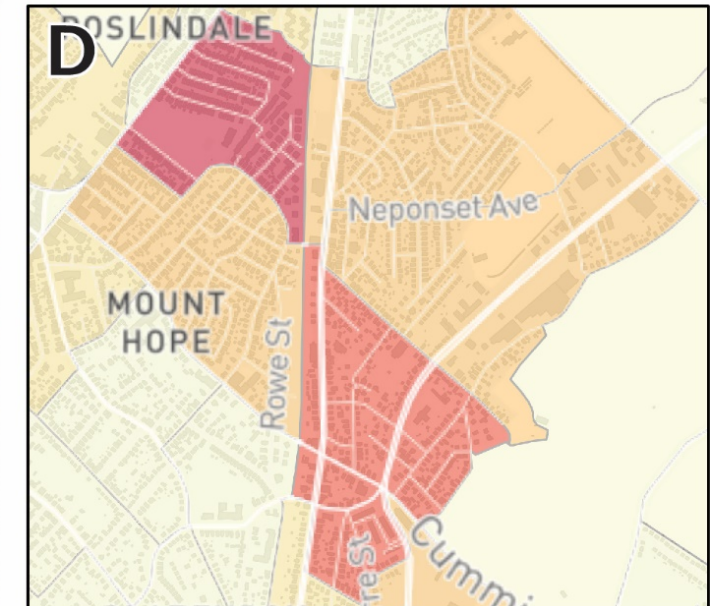
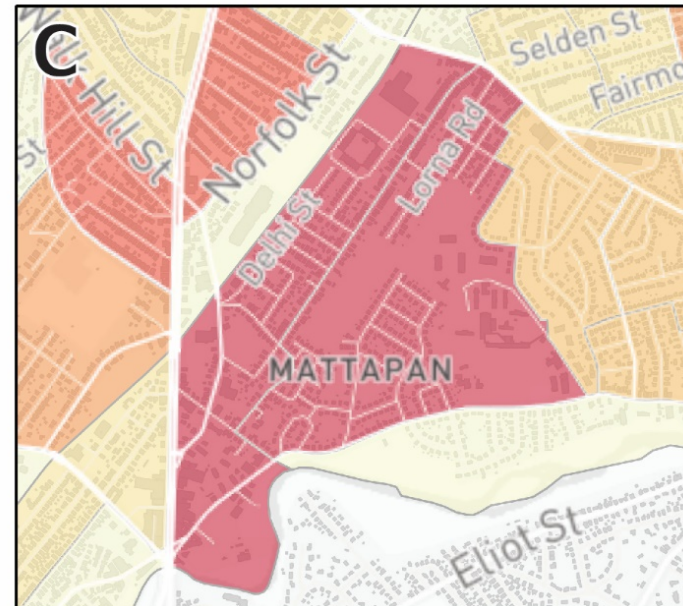
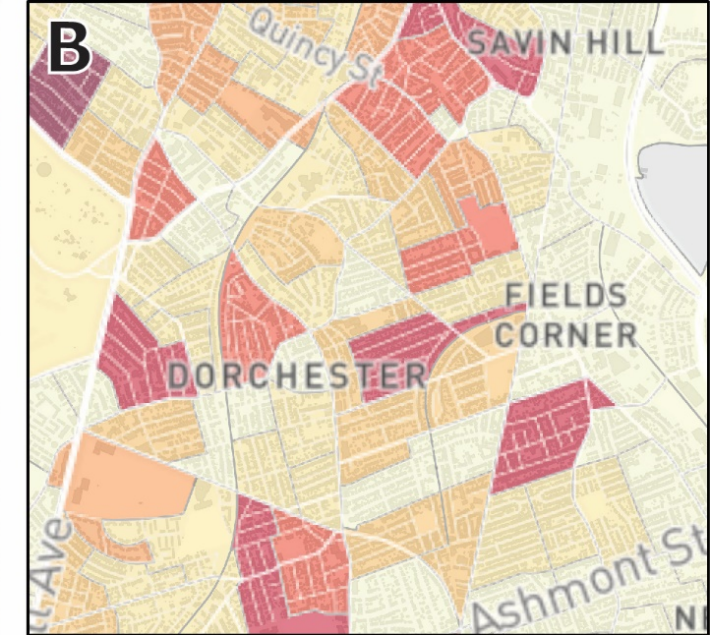
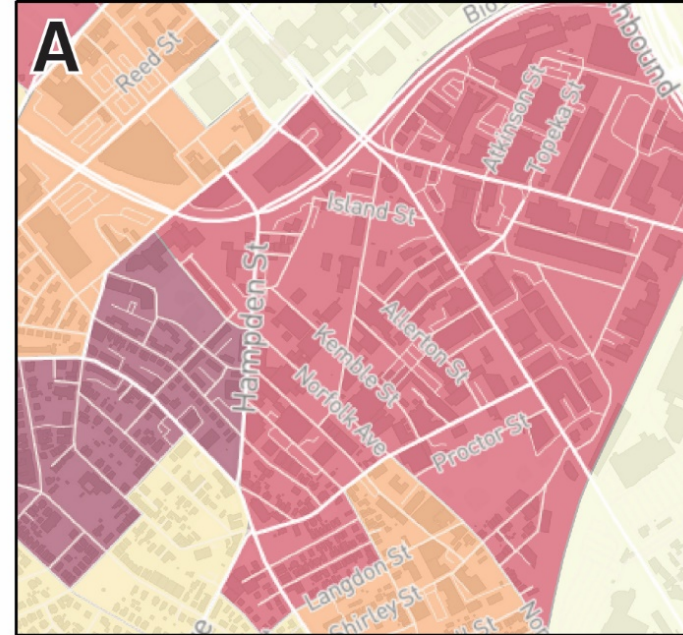
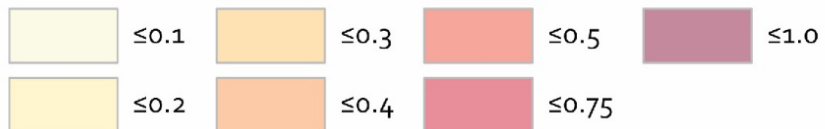
RESOURCES

PROGRAM PARTNERS

TASKFORCE MEMBERS



Firework noise risk index




To learn more about Community Noise Lab:

communitynoiselab.org

 @noiseandthecity

Our Team


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