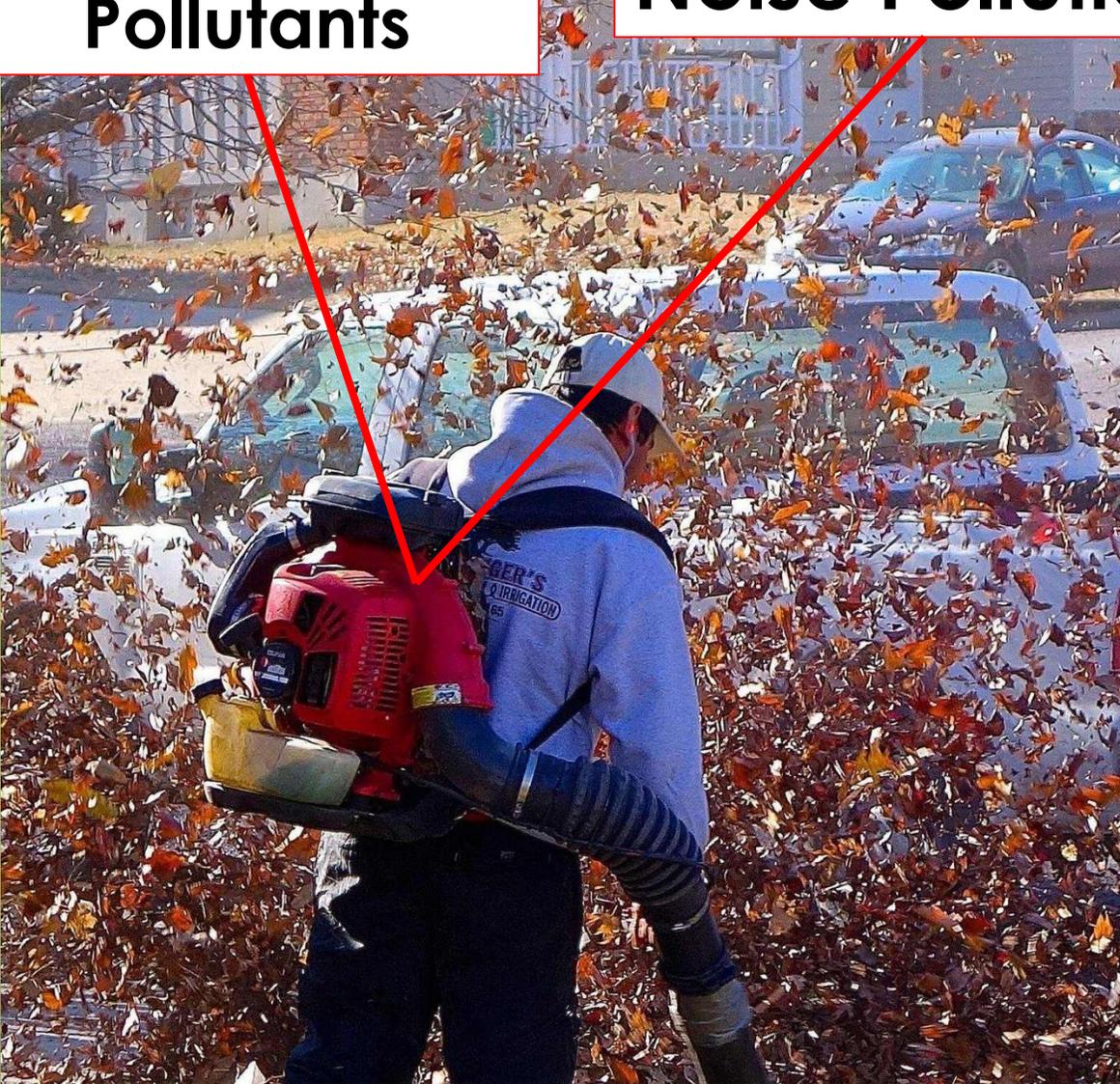


**Emissions of Air
Pollutants**

Noise Pollution



Promoting Alternatives to Leaf Blowers

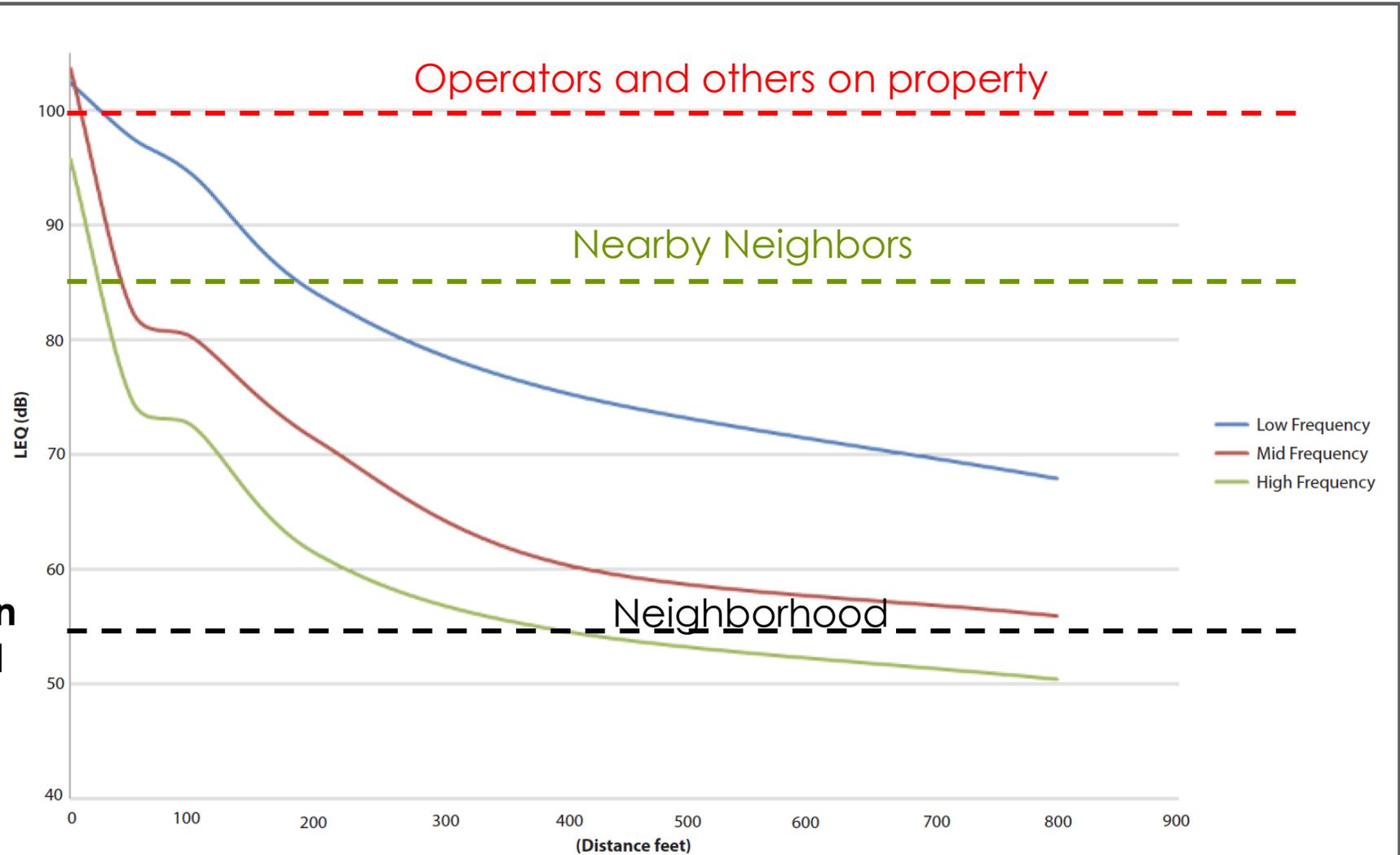
Pleasantville Conservation
Advisory Council

with thanks to Bedford Council

Noise Pollution Produced by Gas Leaf Blowers

Causes acute hearing impairment

Causes hearing impairment



World Health Organization Daytime Sound Standard

*decibel (dB) is expressed on a logarithmic scale

Leaf blower Sound levels by frequency over distance

Health and Environmental Impacts of Leaf Blower Pollution

Children, elderly, and those with pre-existing conditions are particularly sensitive and vulnerable

Noise Pollution (effects generally above 55 dB)

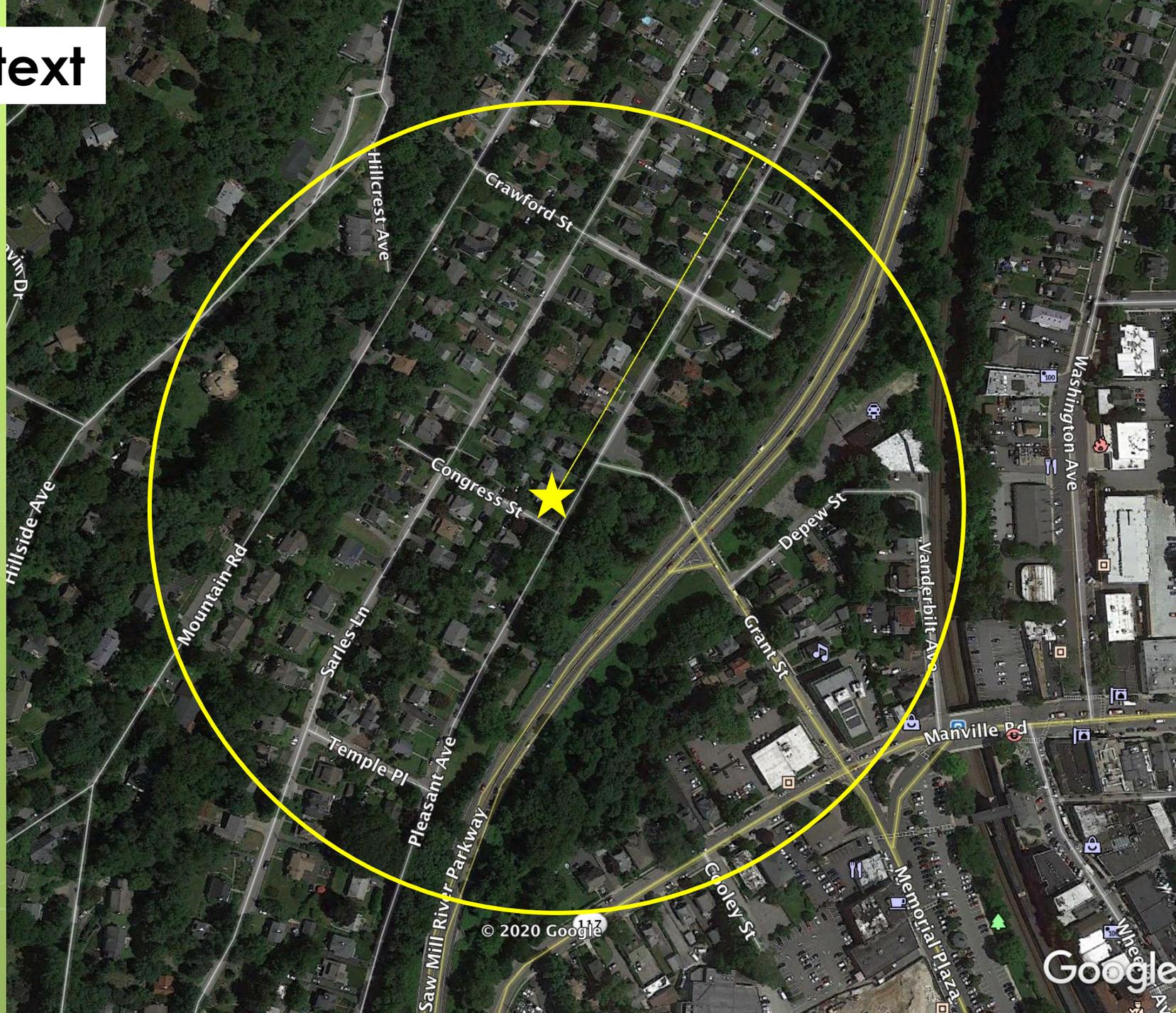
- Change stress hormone levels in blood → cardiovascular effects
- Strong correlations between noise and mental health problems
- Interferes with speech communication, concentration, working memory, sustained attention, learning, etc.
- Reduces school and work productivity
- Threshold for inducing high level of annoyance
- Reduced quality of life



Key Sources: World Health Organization American Speech-Language-Hearing Association, American Psychological Association; Babisch W. Noise Health. 2006;8:1-29. Stansfeld S, Crombie R. Noise Health. 2011;13:229-33.; Banks LB, EPA. <https://www.epa.gov/sites/production/files/2015-09/documents/banks.pdf>; Svah et al. 2015. British Medical Journal. 350:h1295; EPA Integrated Science Assessment for Ozone and Related Photochemical Oxidants. 2020; Integrated Science Assessment (ISA) For Particulate Matter (Final Report, Dec 2009). USA, Washington, U.S. Environmental Protection Agency, EPA/600/R-08/139F, 2009.

Some Pleasantville Context

- Noise is >WHO threshold for **800'**
- ~100 homes within 800'
 - ~300 residents

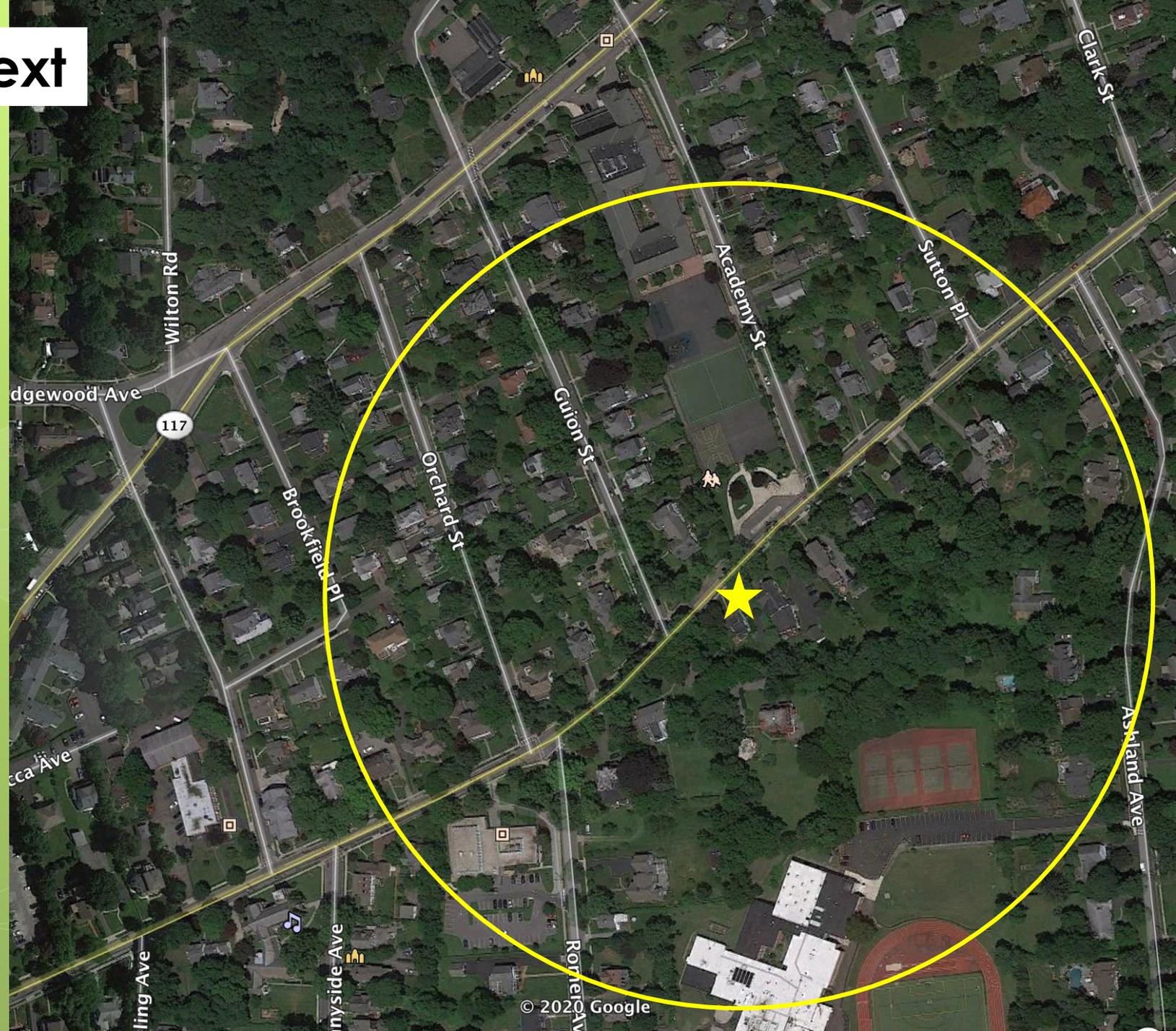


Some Pleasantville Context

- Noise is >WHO threshold for **800'**

~100 homes & 2 schools
within 800'

- ~300 residents
- ~1150 kids and staff



Health and Environmental Impacts of Leaf Blower Pollution

Children, elderly, and those with pre-existing conditions are particularly sensitive and vulnerable

Air Pollutants

- Volatile Organic Compounds (VOCs; Benzene, formaldehyde, etc.)
- Carbon Monoxide, Nitrous Oxides (NOx)
- Particulate matter (<10 microns, <2.5 microns; assimilated by lungs)



Health Impacts

- Carcinogens
- Upper respiratory irritants & exacerbates Asthma and complications associated with COVID-19 and other upper respiratory conditions
- Increased risk of heart attacks, strokes, congestive heart failure, & premature death
- **Mounting evidence of increased risk even from short-term (< 24 hrs) exposure**

Key Sources: World Health Organization American Speech-Language-Hearing Association, American Psychological Association; Babisch W. Noise Health. 2006;8:1-29. Stansfeld S, Crombie R. Noise Health. 2011;13:229-33.; Banks LB, EPA. <https://www.epa.gov/sites/production/files/2015-09/documents/banks.pdf>; Svah et al. 2015. British Medical Journal. 350:h1295; EPA Integrated Science Assessment for Ozone and Related Photochemical Oxidants. 2020; Integrated Science Assessment (ISA) For Particulate Matter (Final Report, Dec 2009). USA, Washington, U.S. Environmental Protection Agency, EPA/600/R-08/139F, 2009.

Alternatives

- ◆ Leaf/grass mulching mowers
 - ◆ Co-benefit of improving soil fertility and reducing need for fertilizer inputs and watering
- ◆ Grass bag / Composting
- ◆ Leaving on garden beds
- ◆ Raking
- ◆ Sweeping



Westchester County Initiatives

- Rye
- Yonkers
- Hastings
- Dobbs Ferry
- Mamaroneck
- Tarrytown
- Tuckahoe
- Ardsley
- Scarsdale
- Pelham
- Greenburgh
- Irvington
- Croton
- Buchanan
- Larchmont
- White Plains
- New Rochelle
- Sleepy Hollow

Restrictions and regulations vary:

- ◇ Summer use ban
- ◇ Time/place/manner restrictions
- ◇ Sunday ban
- ◇ Winter months ban
- ◇ Electric only
- ◇ Landscaper registration
- ◇ Blower permits
- ◇ Decibel limits

(New Castle in discussion.)

Proposed Local Ordinance

Leaf Blowers allowed only in Spring (2-3 wks) and Fall (Oct. 5 – Nov. 15)

- Start/End dates dependent on weather
- No use before 10 am on Saturday
- No use on Sunday
- Request users minimize high-throttle use
- Require landscapers and lawn care companies to use equipment meeting current EPA standards
- Request/encourage 4-stroke or electric leaf blowers
- Develop procedures for enforcement!

This ordinance is supported by and in line with mandates of the Village's Climate Smart Community Task Force

We understand the potential for controversy

- **Many residents have concerns about noise and air pollution produced by lawn care equipment, especially leaf blowers**
- **Many residents and/or their lawn care companies use leaf blowers for yard maintenance and indicate they are needed for spring and fall clean-up**
- **The proposed ordinance represents a compromise between these competing interests that will improve quality of life for many while allowing for yard maintenance**
 - **In line with ordinances in other Westchester municipalities**

Thank you!