



# articulate matter

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**TRANSB-  
BOUNDARY**



Air pollution is responsible for 1 in 8 deaths globally 50,000 premature deaths annually (US) and 3.7 million deaths worldwide.



**Healthy People 2010.** *Leading Health Indicators.*

**World Health Organization.** *UN Media Center. United Nations World Health Organization.*

**Organisation for Economic Co-operation and Development (OECD).** *The Cost of Air Pollution*



Many communities think that large issues such as air quality are government issues and don't feel like they can have ownership about air quality.



**Illah R. Nourbakhsh**, Prof. of Robotics, Head of Robotics MS Program MSU, Director Carnegie Mellon CREATE Lab



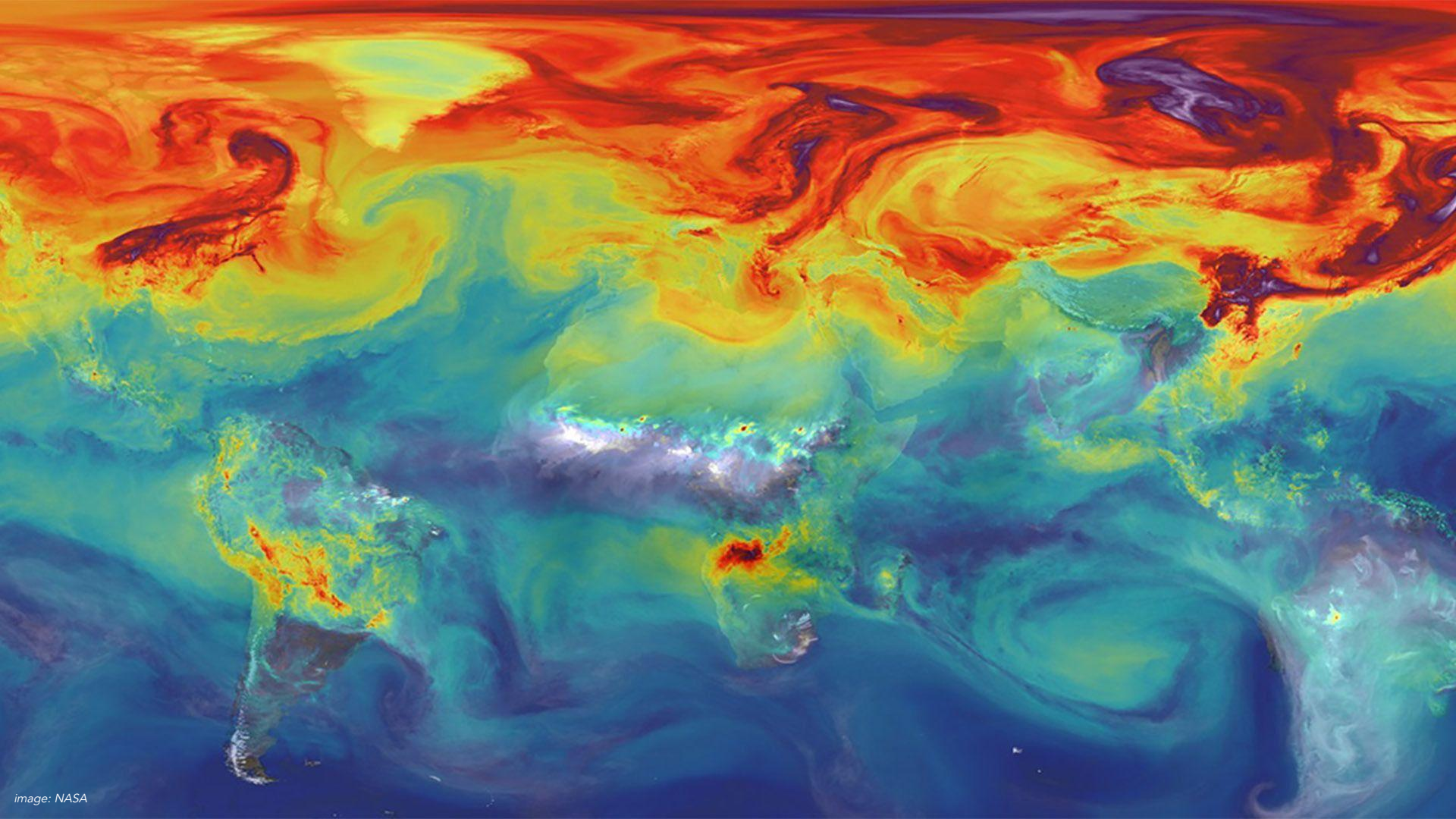


image: NASA



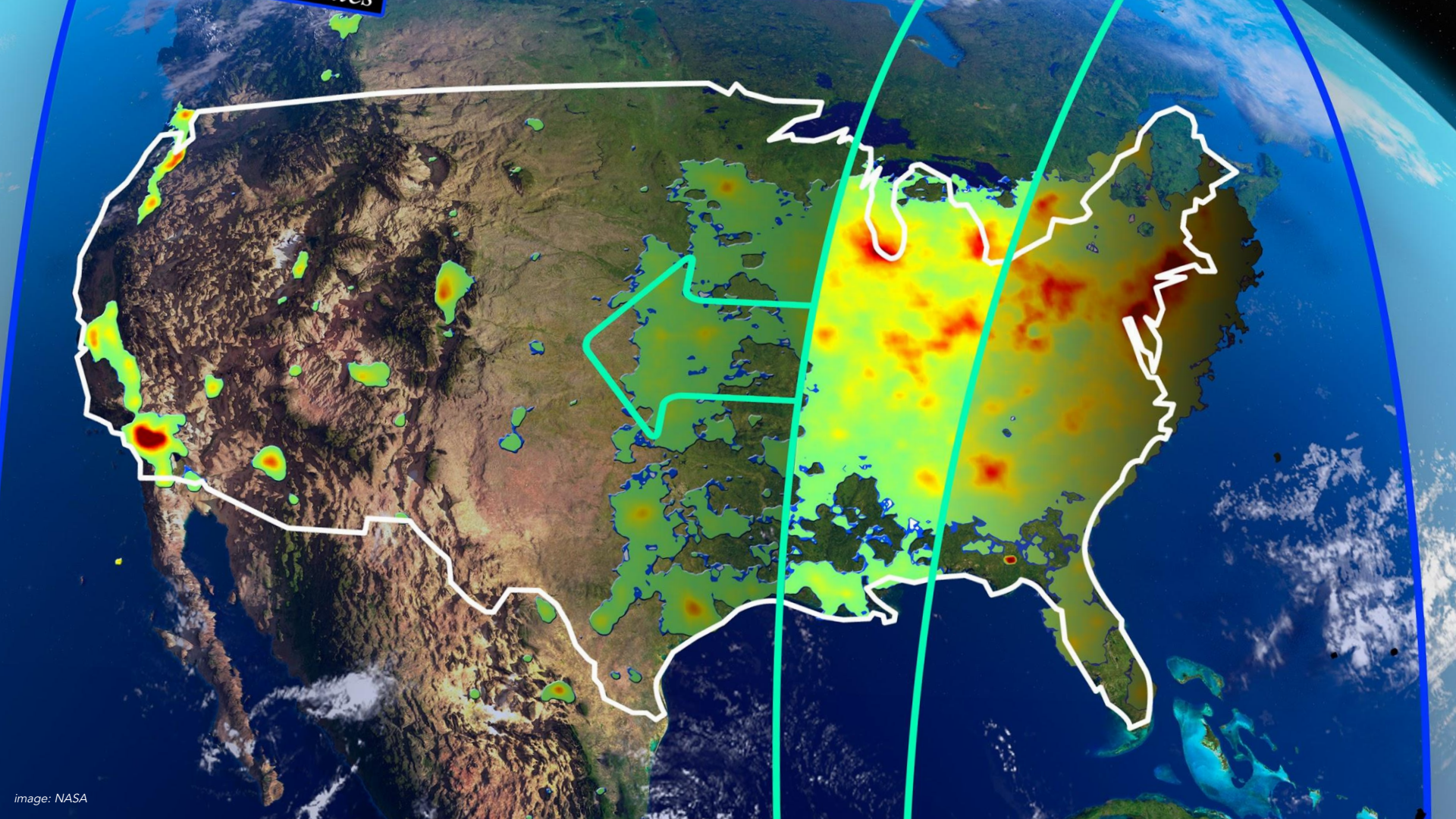


image: NASA



A large, diverse crowd of people walking down a city street, with the text "we need a new vocabulary" overlaid in white. The crowd is dense and fills the frame, with people of various ages and ethnicities. The background shows a city street with buildings and a traffic light.

we need a new  
vocabulary

Phenomena / Symptoms	Feelings / Bodily Reactions	Scientific Language	Expressions / Idioms	Related Actions	Existing Products
Rain Downpour Clouds Storm Fog Hail Wind Gust Thunder Hurricane Sun Snow Ice Dust Puddle Colored Leaves Erosion	wet soaked chilly sore throat humid crisp shiver hazy scared drowsy hot frigid frozen sticky sizzling dizzy itchy skin boiling comfort Vitamin D deficiency	high/low pressure transboundary pollution anthropogenic/Biogenic cold push cold front arid swift arctic blast atmospheric indigestion tranquil weather heat wave triple digit heat gulf moisture moisture vacuum inclement weather storm system spinning cyclone storms rolling in precipitation rapid rise in temperature	umbrella weather nasty weather mother nature mother nature's temper trucks splashing water up hammered by storms sun kissed skirt alert whipping wind sun-screen weather feeling under the weather weather beaten beach weather bikini weather air you can wear turning leaves sun burn nebulous rain falling in buckets high and dry	hiding from rain taking train to avoid bad weather snowboarding swimming hiking cycling skiing sunbathing staying in windsurfing kite flying bleaching drying	Rain Boots Rain Coat Rain Water Collector Umbrella (Rain/Sun) Wellies Gloves Hat (Wool) Hat (Straw) Scarf Fan Sunglasses Sun Lotion Ventilator Polarized Glasses Thermo Clothing Bathing Suit Solar Panels Wind Turbines

# Weather Taxonomy

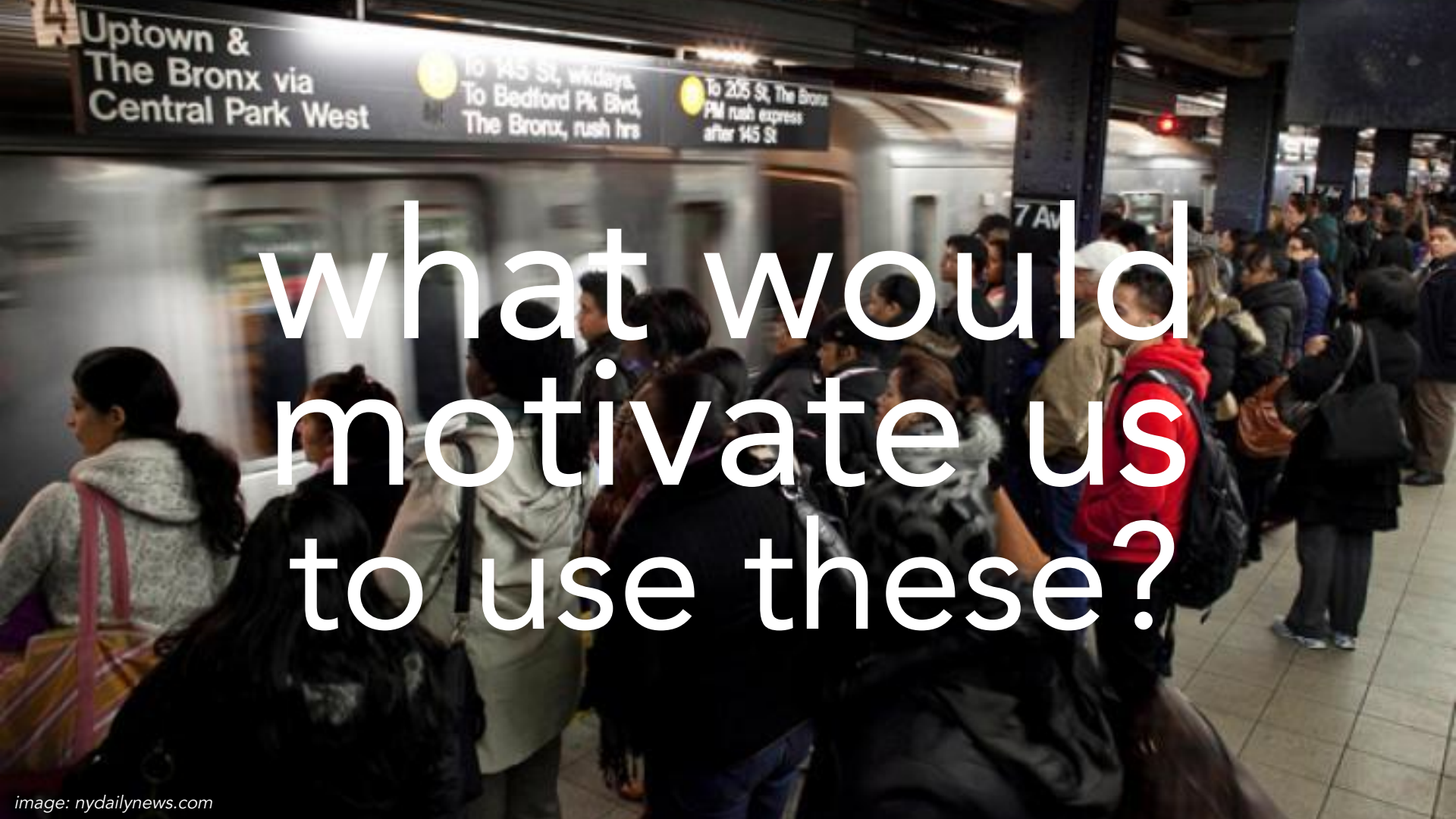


Phenomena / Symptoms	Feelings / Bodily Reactions	Scientific Language	Expressions / Idioms	Related Actions	Existing Products
Haze Smog Dust Acid Rain Clouds Pollen Fog Smoke Wildfire Traffic Industry Cigarettes Good/Bad Ozone	itchy skin sore throat irritated eyes headaches nausea cough dizziness dementia asthma shortness of breath flu symptoms	trapped pollution tropospheric and stratospheric smog/ozone fine particulate matter interhemispheric transport primary/secondary pollution severe asthma episodes aerosols carcinogen carbonmonoxide carbondioxide microparticle powders inner orbit airborne natural emissions photochemical smog trace gas near surface pollution to acidify precipitation	dirty clouds air is democratic clouds of death no vigorous exercise heavy fog hazardous air pollution blows in trapped pollution high ozone days rain cleans air curtain of polluted air chemical mix elevated bowl	traffic restrictions manufacturing - strongholds building standards citizen engagement citizen science gardens data generation of air quality	face masks scarves air-purifiers filters

## Pollution Taxonomy

# melancho<sub>3</sub>

( ˌmɛ • lən • khoʊ • θri )



Uptown &  
The Bronx via  
Central Park West

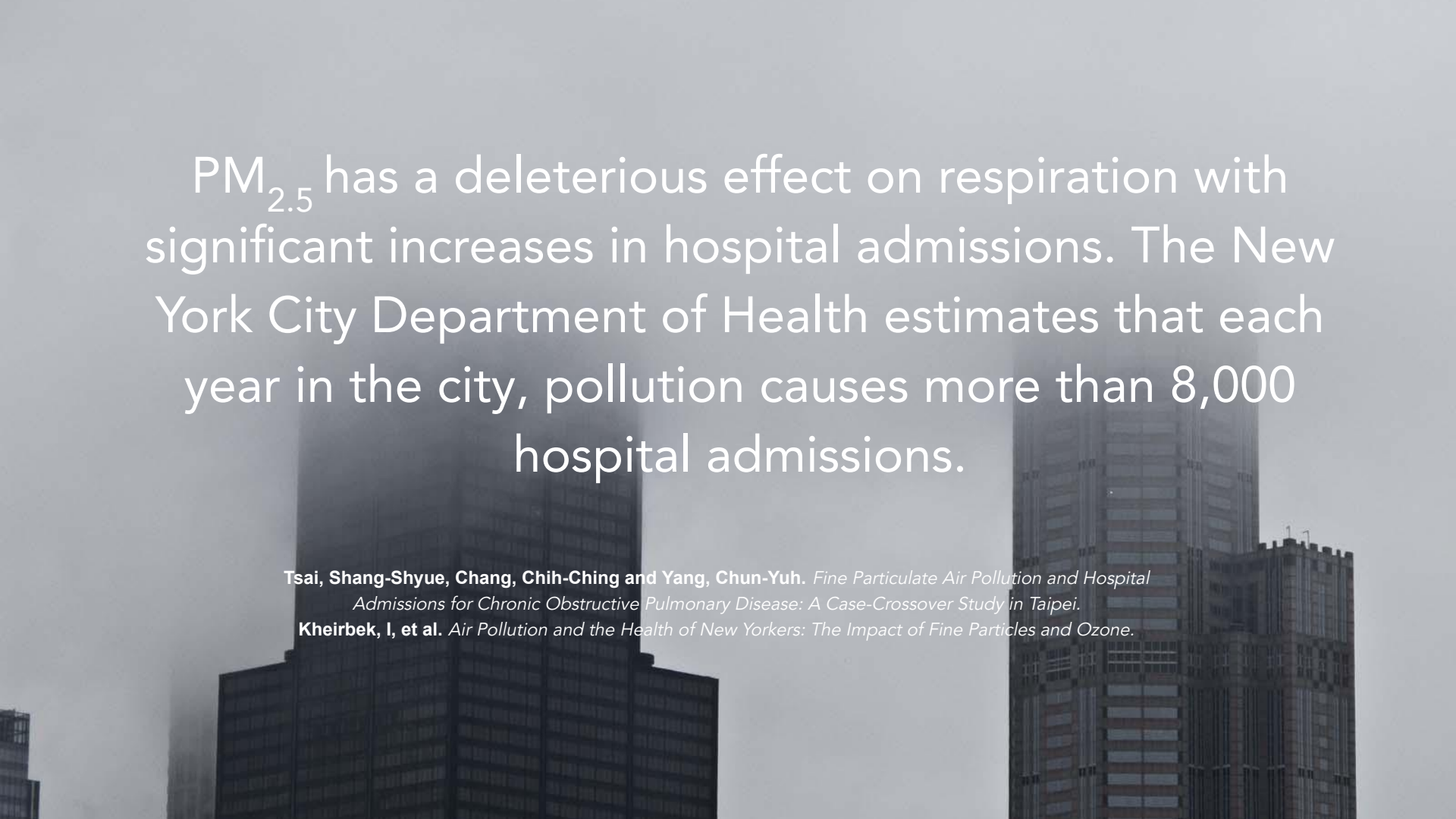
To 145 St, wkdays.  
To Bedford Pk Blvd,  
The Bronx, rush hrs

To 205 St, The Bronx  
PM rush express  
after 145 St

7 Av

what would  
motivate us  
to use these?





PM<sub>2.5</sub> has a deleterious effect on respiration with significant increases in hospital admissions. The New York City Department of Health estimates that each year in the city, pollution causes more than 8,000 hospital admissions.

**Tsai, Shang-Shyue, Chang, Chih-Ching and Yang, Chun-Yuh.** *Fine Particulate Air Pollution and Hospital Admissions for Chronic Obstructive Pulmonary Disease: A Case-Crossover Study in Taipei.*

**Kheirbek, I, et al.** *Air Pollution and the Health of New Yorkers: The Impact of Fine Particles and Ozone.*

# Health insurance as a vehicle for new words.

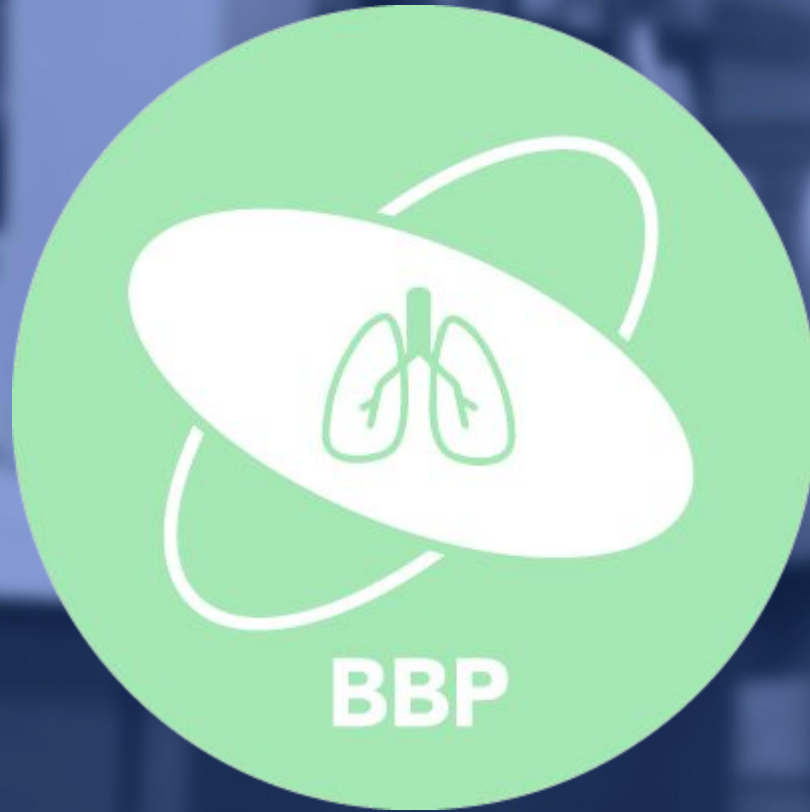
A man with a beard and long hair, wearing a white long-sleeved shirt, is lying down with his head tilted back and eyes closed. He appears to be resting or sleeping. The background is a blurred city skyline at night, with lights from buildings visible. The overall mood is peaceful and refreshing.

# AIRFRESHMENT

( ɛr • frɛʃ • mɪnt )

noun





BETTER BREATHER PROGRAM

A woman with dark, curly hair is looking slightly to her left. She is wearing a black top. The background is a blurred cityscape with tall buildings under a hazy sky.

# LUNGSKWASH

( lʌŋ skwʌʃ )

**noun**

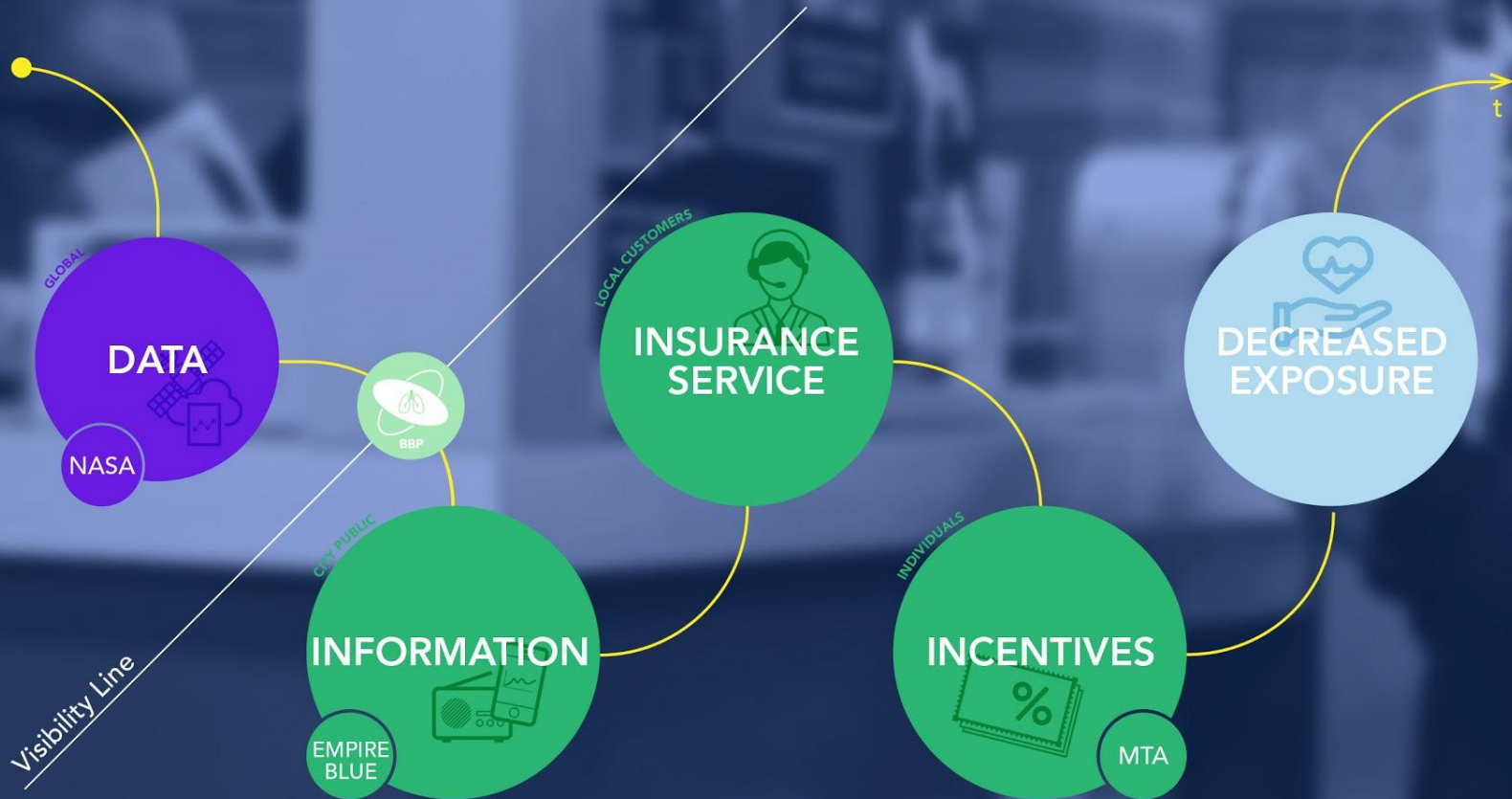
A man with short brown hair and a beard, wearing a black t-shirt, holds a white disposable coffee cup with a brown sleeve in his right hand. He is looking directly at the camera. The background is a stylized, hazy image of a city skyline with tall buildings and a bridge, possibly the Golden Gate Bridge, under a cloudy sky. The text 'TRANSGRESSIVE STREAM' is overlaid in large, white, bold, sans-serif capital letters across the center of the image.

# TRANSGRESSIVE STREAM

( trænz • grɛsɪv strɪm )

noun





Knowledge

Persuasion

Decision

Implementation

Confirmation







**Increased  
Pollution  
Literacy**

**Emerging  
Product  
Typologies**

**Fostered  
Political  
Activism**

Visibility Line

Knowledge

Persuasion

Decision

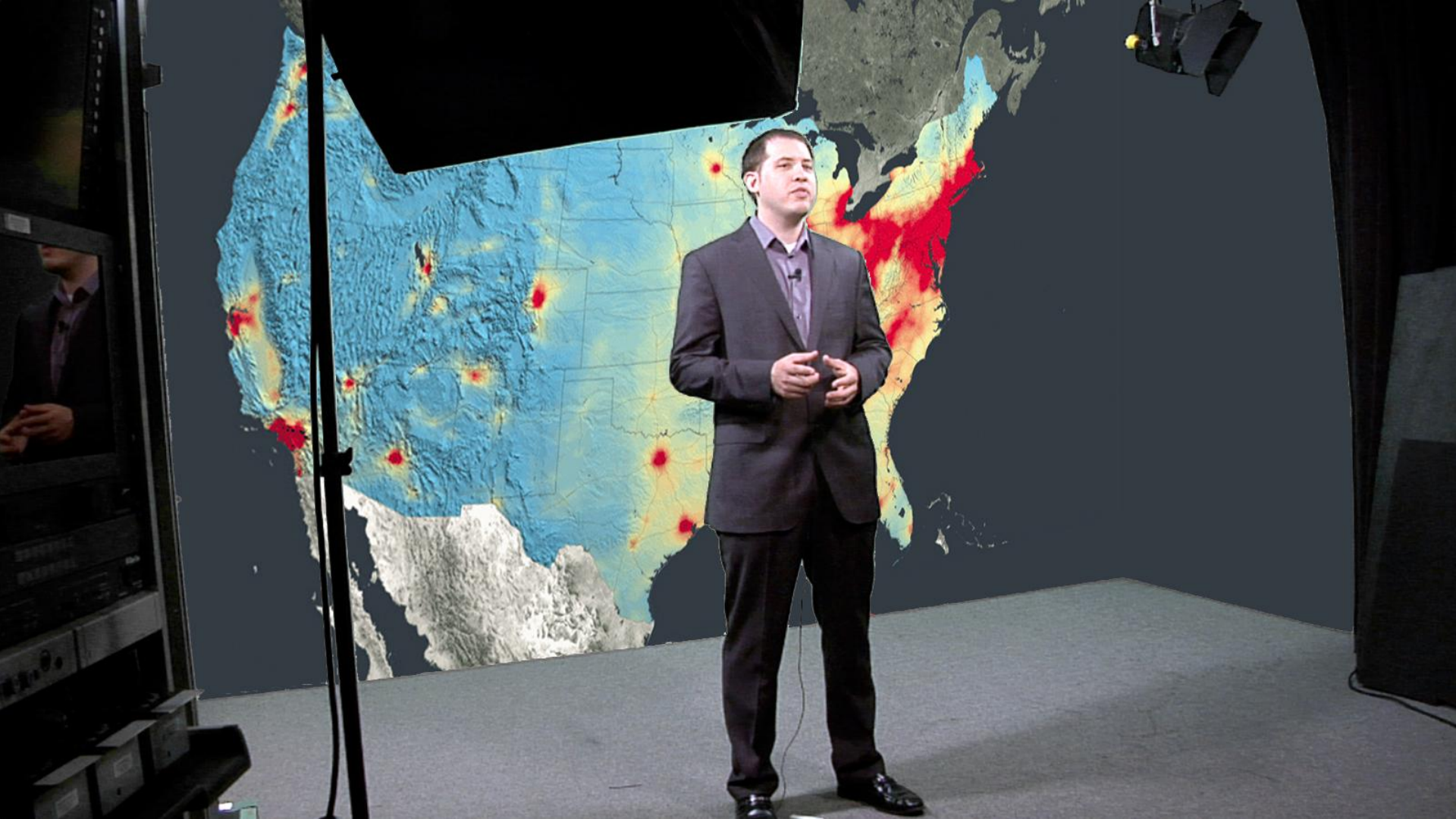
Implementation

Confirmation

A large, blurred crowd of people walking down a city street, with the text "A Future Vision" overlaid in the center. The image is out of focus, showing a dense group of people in various colors of clothing, creating a bokeh effect. The text is white and centered, with a small white dot to the left of the word "Vision".

# A Future • Vision







# lung-squash

| luhng skwahsh |

NOUN • (pl. -s)

A condition of stressed lungs by increased PM2.5 air pollution, especially when caused by pressure or temperature changes that force the atmospheric boundary layer down and further concentrate pollutants beneath it.



**A LASTING  
AIRFRESHMENT  
FOR AMERICANS**



**NO  
MORE  
SQUASH**



image: Getty Images