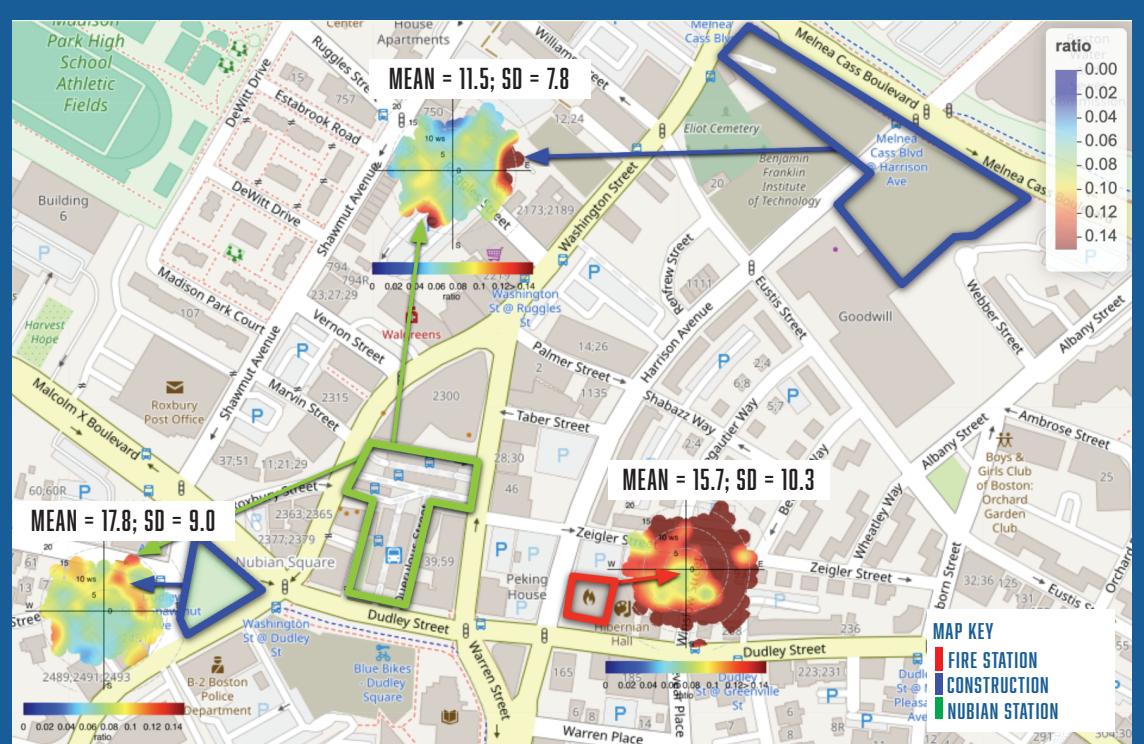


CLEARING THE AIR ON THE IMPACTS OF DIESEL

NO₂ EMISSIONS FROM NUBIAN STATION AND SURROUNDING AREAS

WHERE DOES DIESEL EMISSION COME FROM?



NUBIAN STATION IS SURROUNDED BY MAJOR ROADS, USED BY BOTH GAS VEHICLES [LIKE CARS] AND DIESEL VEHICLES [LIKE BUSES AND CONSTRUCTION EQUIPMENT].

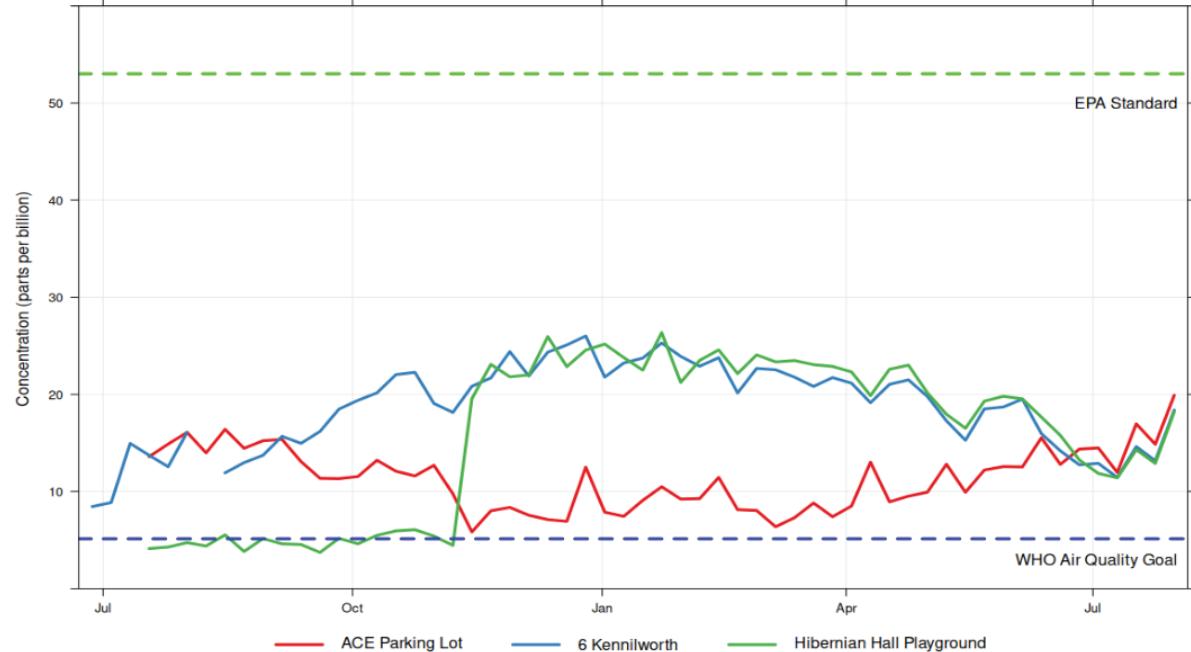
DIESEL COMBUSTION EMITS MORE NITROGEN OXIDES (NO_x) THAN GAS COMBUSTION, SO BY ANALYZING THE RATIO OF NO_x TO CARBON MONOXIDE (CO), WE CAN MAKE INFERENCES ABOUT WHAT PROPORTION OF POLLUTION IS FROM DIESEL COMBUSTION.

MAJOR SOURCES OF DIESEL POLLUTION INCLUDE NUBIAN STATION [GREEN], CONSTRUCTION SITES [BLUE], AND BOSTON FIRE DEPARTMENT ENGINE 14 [RED].

A HIGHER RATIO (INDICATED BY WARMER COLORS) SUGGESTS A HIGHER PROPORTION OF POLLUTION THAT COMES FROM DIESEL COMBUSTION.

HEALTH IMPACTS OF NO₂

WEEKLY NO₂ EMISSIONS NEAR NUBIAN STATION



THE ENVIRONMENTAL PROTECTION AGENCY (EPA) ANNUAL MEAN STANDARD FOR NO₂ (BLUE) IS 53 PARTS PER BILLION (PPB).

THE WORLD HEALTH ORGANIZATION (WHO) ANNUAL MEAN AIR QUALITY GUIDELINE FOR NO₂ (GREEN) IS 5.14 PPB.

OVER THIS ONE YEAR PERIOD FROM JULY 2022-2023, NO₂ LEVELS MET THE EPA STANDARDS BUT FAILED TO MEET WHO AIR QUALITY GUIDELINES.

NO₂ EXPOSURE EFFECTS INCLUDE:

- INCREASED INFLAMMATION OF THE AIRWAYS
- REDUCED LUNG FUNCTION
- WORSENED COUGHING AND WHEEZING

INFANTS, CHILDREN, AND PEOPLE WITH CHRONIC RESPIRATORY DISEASES ARE AT HIGHEST RISK.

