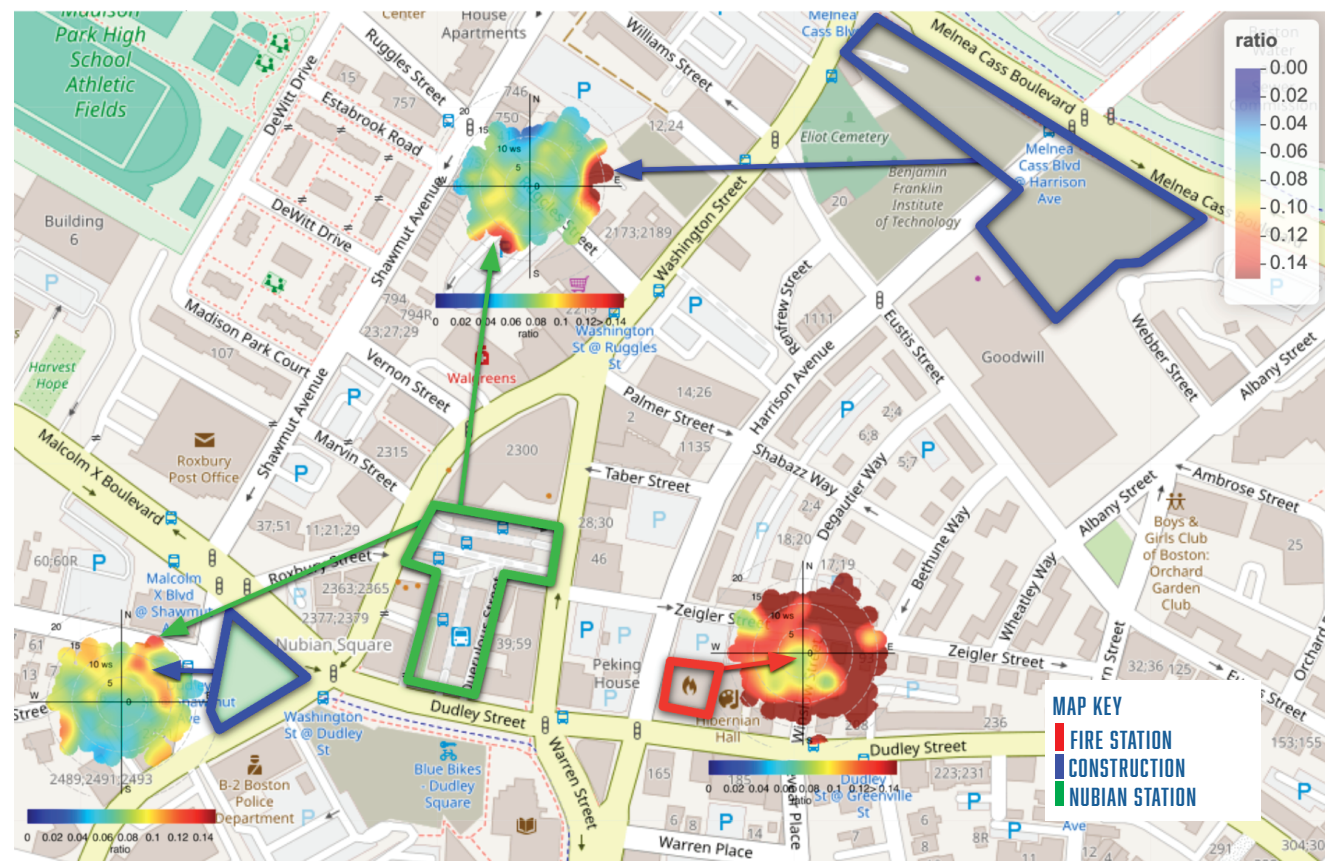


# CLEARING THE AIR ON NUBIAN STATION'S NO<sub>2</sub> IMPACT

NO<sub>2</sub> EMISSIONS FROM NUBIAN STATION AND LOCAL CONSTRUCTION

## WHERE DO GAS-PHASE POLLUTANTS COME FROM?



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

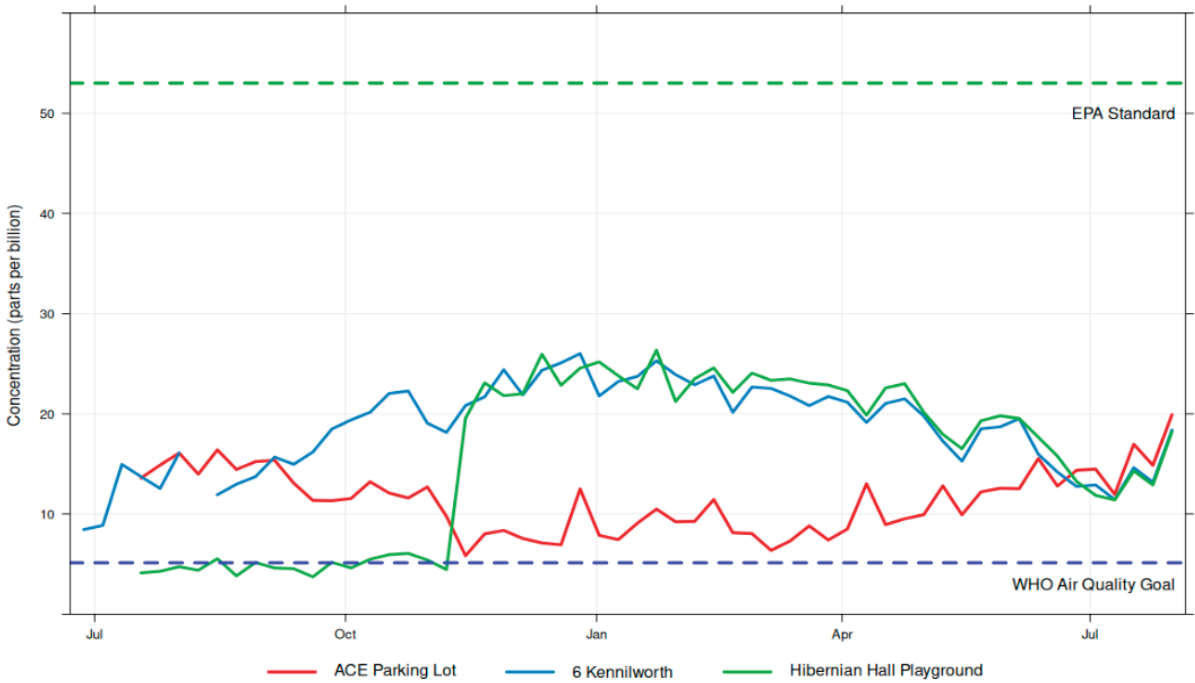
DIESEL COMBUSTION EMITS MORE NITROGEN OXIDES (NO<sub>x</sub>) THAN GAS COMBUSTION, SO BY ANALYZING THE RATIO OF NO<sub>x</sub> TO CARBON MONOXIDE (CO), WE CAN MAKE INFERENCES ABOUT WHAT PROPORTION OF POLLUTION IS FROM DIESEL COMBUSTION.

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

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

## HEALTH IMPACTS OF NO<sub>2</sub>

### WEEKLY NO<sub>2</sub> EMISSIONS NEAR NUBIAN STATION



THE ENVIRONMENTAL PROTECTION AGENCY (EPA) ANNUAL MEAN STANDARD FOR NO<sub>2</sub> (BLUE) IS 53 PARTS PER BILLION (PPB).

THE WORLD HEALTH ORGANIZATION (WHO) ANNUAL MEAN AIR QUALITY GUIDELINE FOR NO<sub>2</sub> (GREEN) IS 5.14 PPB.

OVER THIS ONE YEAR PERIOD FROM JULY 2022-2023, NO<sub>2</sub> LEVELS MET THE EPA STANDARDS BUT FAILED TO MEET WHO AIR QUALITY GUIDELINES.

### HEALTH EFFECTS OF NO<sub>2</sub> EXPOSURE INCLUDE:

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

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

