THE AIRCASTING PLATFORM

HOW IT WORKS

your air quality sensor

AIRBEAM

your air quality recordings and location map

community perspective and awareness

AIRCasting MOBILE APP

AIRCasting WEBSITE

your optional public air quality indicator

LED WEARABLES

individual, community and government change
Component Parts:
1. Main fastener hook
2. Main fastener sleeve
3. Size adjustment slider
4. Internal Breathing Rate Sensor
5. ECG sensors
6. Care label with Size, Serial # & Wash symbols
7. Brand label
8. Strap main body
9. Device receptacle
10. Electrical contacts
11. Shoulder strap (detachable, not visible)
12. Shoulder strap adjuster buckle (not visible)
13. Tension indicator loop
14. Strap (rear)
Biking & Breathing
Real-time portable air monitoring at the Fair!

Visitors to the Eco Experience at the State Fair can learn about an interesting new idea to "crowdsource" air quality monitoring. The MPCA is piloting testing small, portable monitoring devices called AirBeams that measure levels of fine particles in the air. The Airbeam is a low cost air pollution sensor that measures, maps, and graphs fine particle (PM2.5) pollution in real time. The AirBeam connects to an app in any mobile Android device, allowing users to explore air quality wherever they go. MPCA staff have taken Airbeams around the fair to measure pollution levels and show visitors maps of the results.

The power of a crowd
The MPCA measures fine particles at over 20 locations across Minnesota.
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CLEARING THE AIR

How Reforming the Commercial Waste Sector Can Address Air Quality Issues in Environmental Justice Communities

KEY FINDINGS

SOUTH BRONX

Almost half of all trucks are private waste trucks

Up to 7x higher asthma-inducing pollutant levels compared to area average

ONE COMMERCIAL WASTE TRUCK

EVERY 24 SECONDS

NORTH BROOKLYN

1/3 of all trucks are private waste trucks

Up to 5x higher asthma-inducing pollutant levels compared to area average

ONE COMMERCIAL WASTE TRUCK

EVERY 60 SECONDS

WORKER FINDINGS

Asthma-inducing pollutants inside private waste trucks are up to 7x higher in traffic compared to out of traffic
Maximum Half Hour Avg PM2.5 Concentration at Truck Survey Intersections (relative to ambient air as measured by NYSDEC)

- 0 - 2 x ambient
- 2.1 - 4 x ambient
- 4.1 - 6 x ambient
- 6.1 - 8 x ambient

- Waste Transfer Station
- Local Truck Route