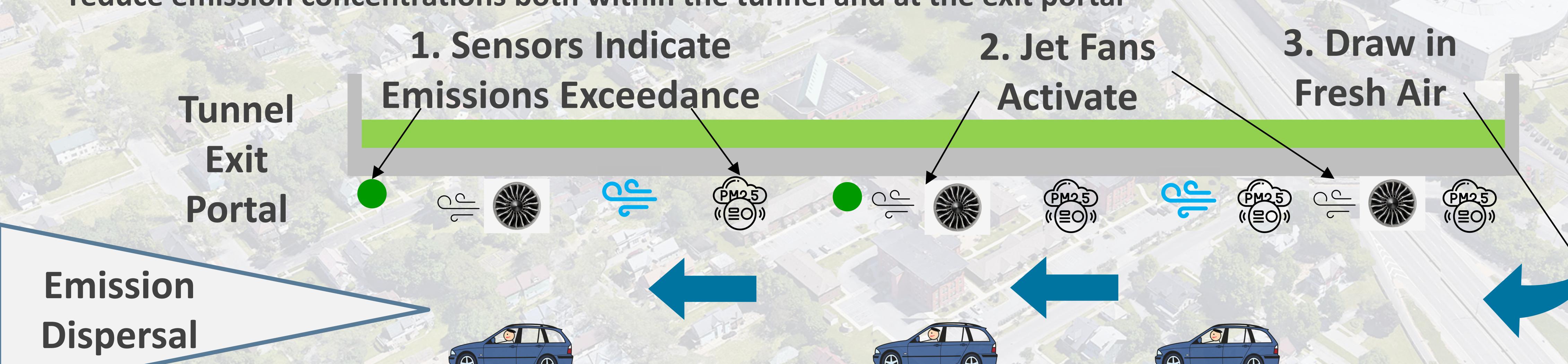
## Build Alternative — Tunnel Ventilation with Jet Fans

- Longitudinal ventilation with jet fans
  - Jet fans at 3 locations: near south portal, near middle of tunnel, and near north portal
  - No exhaust stacks required at portals
- Air quality sensors will monitor emissions in the tunnel. Jet fans will activate if the following sensors detect threshold exceedances:
  - NOx Sensor Monitors for Nitrogen Oxides (NOx)
  - CO Sensor Monitors for Carbon Monoxide (CO)
  - Visibility Sensor Detects particulate matter/dust/smoke
- Anemometers to monitor air speed within the tunnel for jet fan control
- Jet fans would operate when needed, drawing in fresh air from the entrance portal to reduce emission concentrations both within the tunnel and at the exit portal



## LEGEND:



Jet Fan



Air Quality Sensor



Visibility/Smoke Detector

Tunnel

Portal



Anemometer

Longitudinal Profile of Tunnel



