**Table 3.** Evaluation of TracMyAir Automated Inputs for Nearest Outdoor Air Pollution Monitors and Weather Station

| User location (city, county) | TracMyAir: nearest $PM_{2.5}$, ozone monitors, weather station (distance)[1,2] | Google Earth: measured distance to $PM_{2.5}$, ozone monitors [2] | | | | Google Earth: measured distance to weather stations[2] | |
|---|---|---|---|---|---|---|---|
| | | Armory | Millbrook | RTP | RDU (no ozone) | KRDU | KTDF |
| Hillsborough, Orange County | $PM_{2.5}$: Armory (19 km)<br>Ozone: Armory (19 km)<br>Weather: KTDF (23 km) | 19 km* | 52 km | 29 km | 34 km | 35 km | 23 km* |
| Central Durham, Durham County | $PM_{2.5}$: Armory (1 km)<br>Ozone: Armory (1 km)<br>Weather: KRDU (19 km) | 1 km* | 34 km | 13 km | 17 km | 19 km* | 33 km |
| South Durham, Durham County | $PM_{2.5}$: RTP (1 km)<br>Ozone: RTP (1 km)<br>Weather: KRDU (8 km) | 13 km | 27 km | 1 km* | 5 km | 8 km* | 46 km |
| Raleigh, Wake County | $PM_{2.5}$: Millbrook (6 km)<br>Ozone: Millbrook (6 km)<br>Weather: KRDU (17 km) | 32 km | 6 km* | 24 km | 19 km | 17 km* | 62 km |
| Morrisville, Wake County | $PM_{2.5}$: RDU (6 km)<br>Ozone: RTP (10 km)<br>Weather: KRDU (7 km) | 21 km | 23 km | 10 km** | 6 km* | 7 km* | 55 km |
| Chapel Hill, Orange County | $PM_{2.5}$: RTP (16 km)<br>Ozone: RTP (16 km)<br>Weather: KRDU (25 km) | 17 km | 44 km | 16 km* | 22 km | 25 km* | 43 km |

[1] Determined by TracMyAir
[2] Distance is Euclidean distance from user location to location of air pollution monitors and weather stations
* Indicates nearest air pollution monitors and weather stations for each user location
** Indicates second nearest air pollution monitor to obtain ozone measurements

# Table 3

**Table 4**. Sensitivity Analysis of TracMyAir Outputs for Six Different Input Scenarios

| Model inputs | Input scenarios | Model outputs | Effects on exposure metrics |
|---|---|---|---|
| Weather | Summer vs. winter | Summer: AER = 0.11 $h^{-1}$, Winter: AER = 0.28 $h^{-1}$ | Higher AER in winter |
| Home windows | Closed vs. open windows | Closed: AER = 0.19 $h^{-1}$, $F_{inf\_home}$ = 0.39, 0.05 ($PM_{2.5}$, ozone)<br>Open: AER = 0.94 $h^{-1}$, $F_{inf\_home}$ = 0.69, 0.20 ($PM_{2.5}$, ozone) | Higher AER, $F_{inf\_home}$ when opening windows |
| Home window fans | None vs. operating window fans | None: AER = 0.19 $h^{-1}$, $F_{inf\_home}$ = 0.39, 0.05 ($PM_{2.5}$, ozone)<br>Operating: AER = 1.30 $h^{-1}$, $F_{inf\_home}$ = 0.72, 0.25 ($PM_{2.5}$, ozone) | Higher AER, $F_{inf\_home}$ when operating window fan |
| Home air cleaners | None vs. operating air cleaners | None: $F_{inf\_home}$ = 0.39, 0.05 ($PM_{2.5}$, ozone)<br>Operating: $F_{inf\_home}$ = 0.09, 0.05 ($PM_{2.5}$, ozone) | Lower $F_{inf\_home}$ for $PM_{2.5}$ when operating air cleaner |
| Microenvironments | Short vs. long time spent outdoors | Short time: Exposure = 5.0 $\mu g/m^3$, 1.65 ppb ($PM_{2.5}$, ozone)<br>Long time: Exposure = 6.5 $\mu g/m^3$, 6.54 ppb ($PM_{2.5}$, ozone) | Higher exposure when longer time spent outdoors |
| Physical activities | Low vs. high physical activity | Low activity: Dose = 35.7 $\mu g/m^2$, 43.5 $\mu g/m^2$ ($PM_{2.5}$, ozone)<br>High activity: Dose = 59.4 $\mu g/m^2$, 115.5 $\mu g/m^2$ ($PM_{2.5}$, ozone) | Higher dose when higher physical activity |

# Table 4