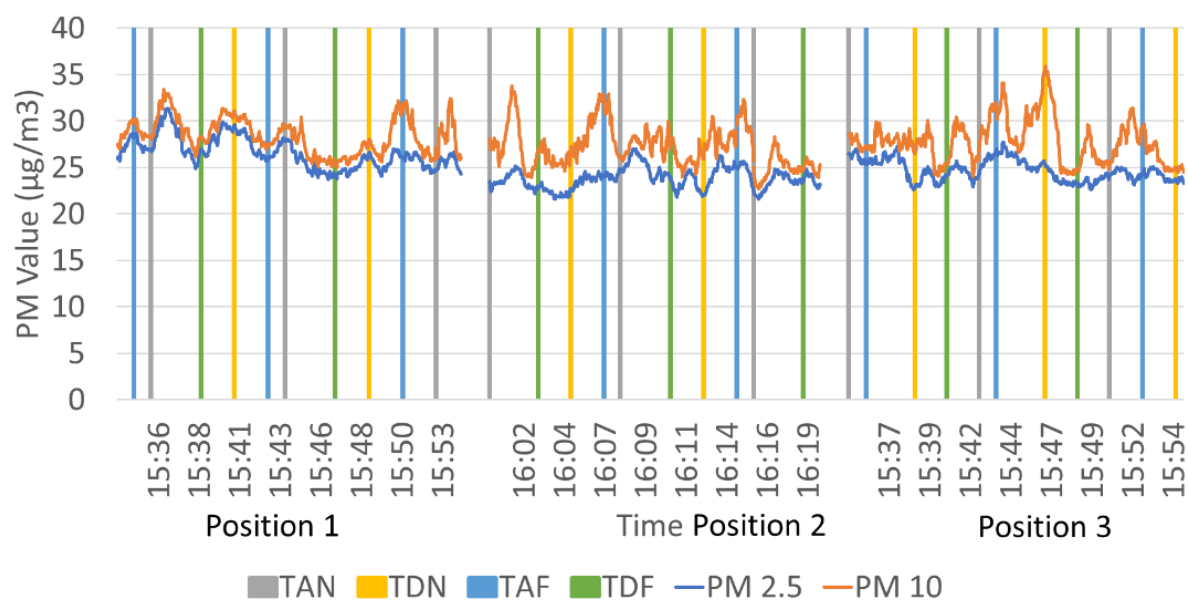
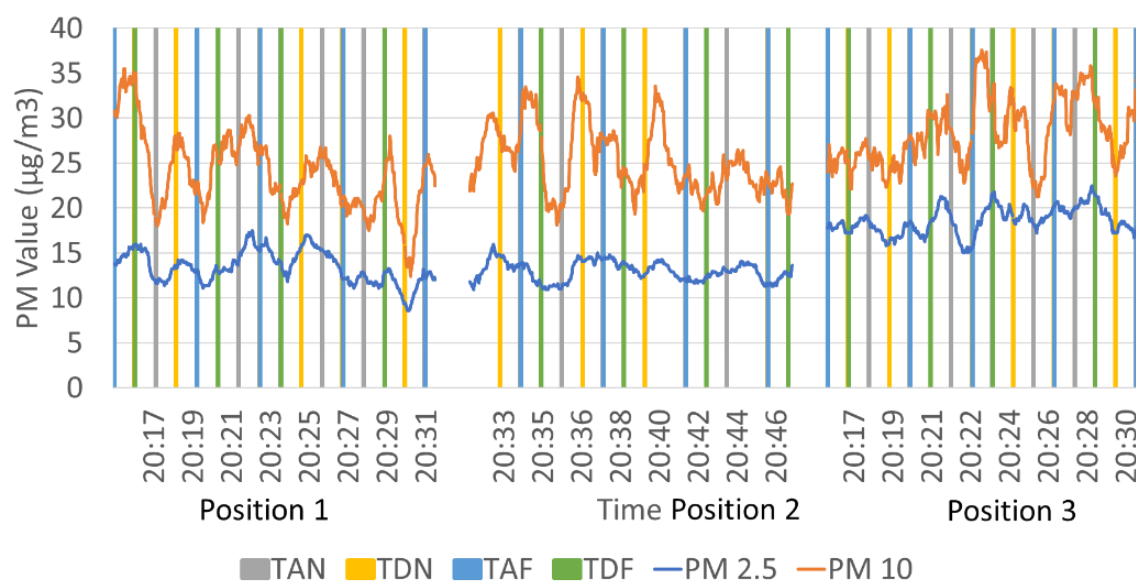
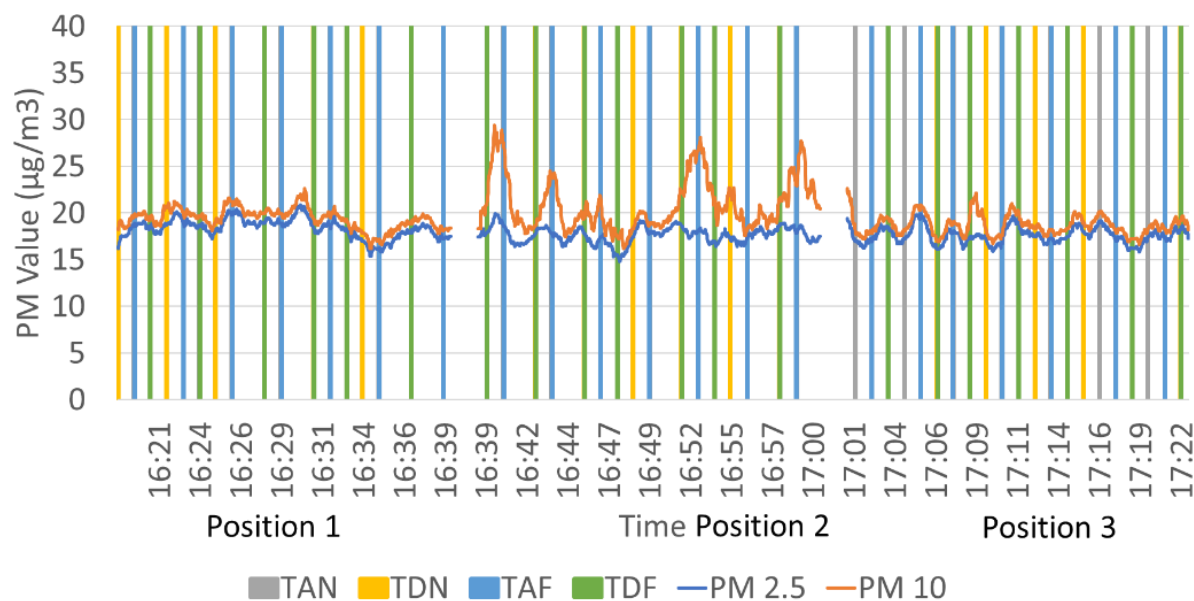




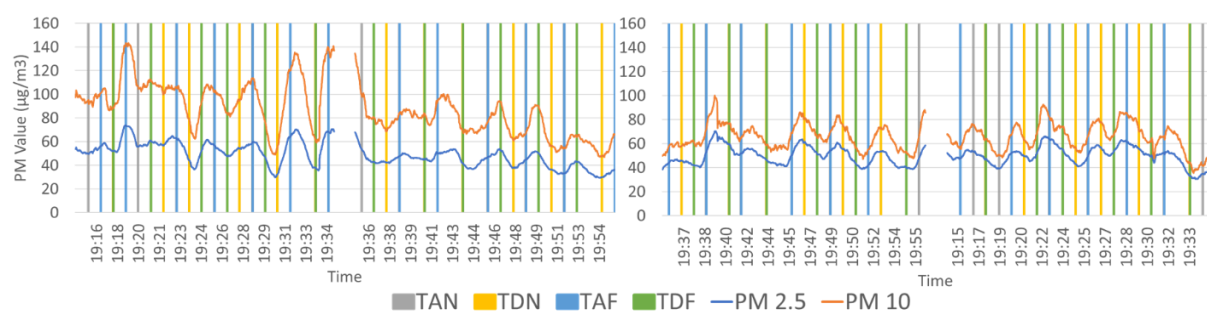
**Figure S1.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 1 on a weekend [17th August 2019].



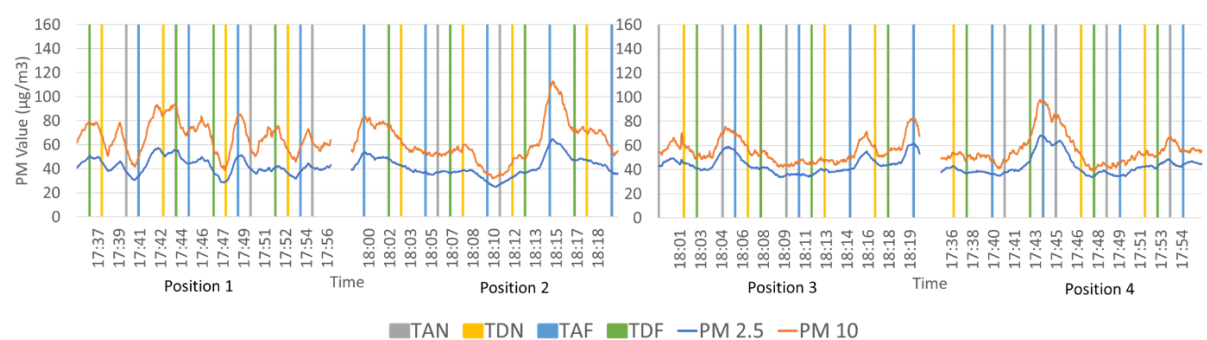
**Figure S2.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 2 on a weekday [15th August 2019].



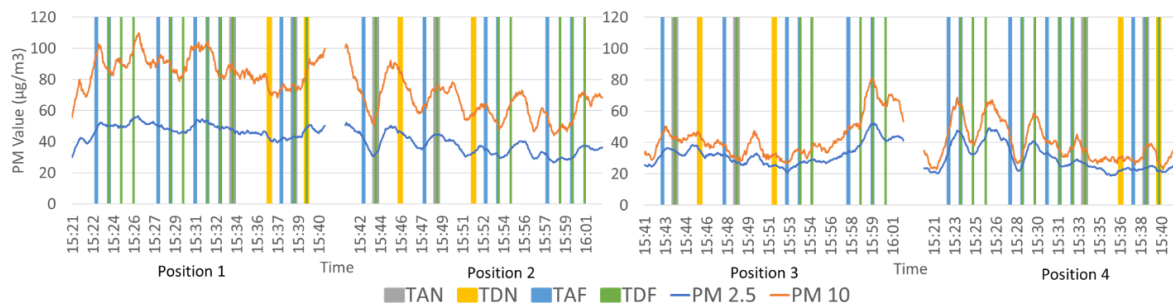
**Figure S3.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 2 on a weekend [18th August 2019].



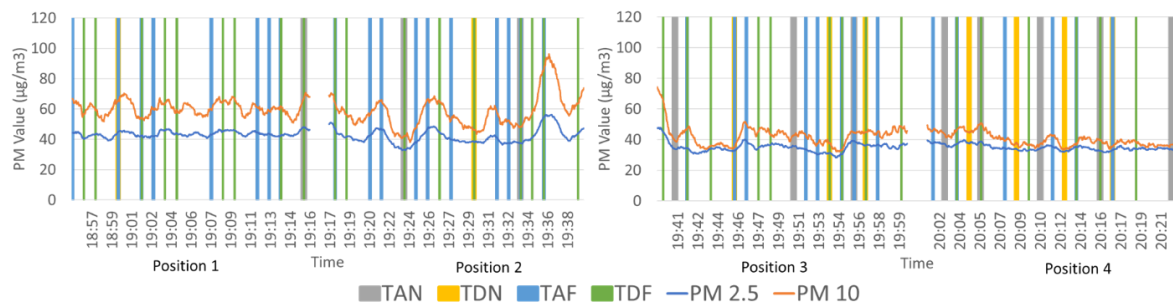
**Figure S4.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 3 and Line 4 on a weekday [15th August 2019].



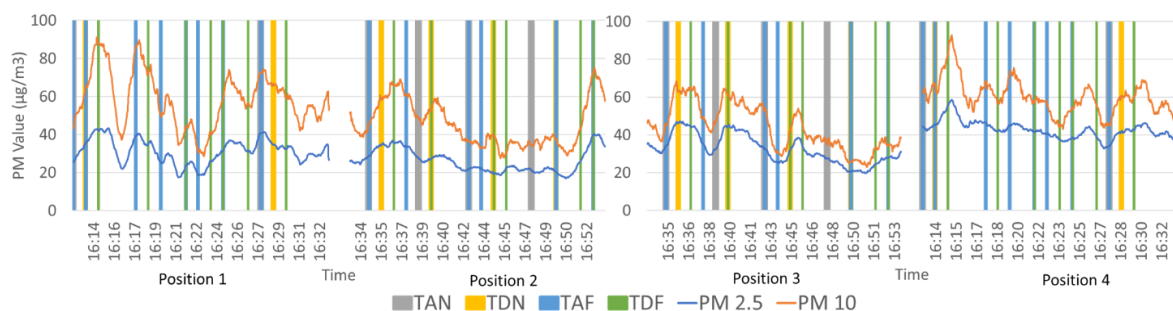
**Figure S5.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 3 and Line 4 on a weekend [18th August 2019].



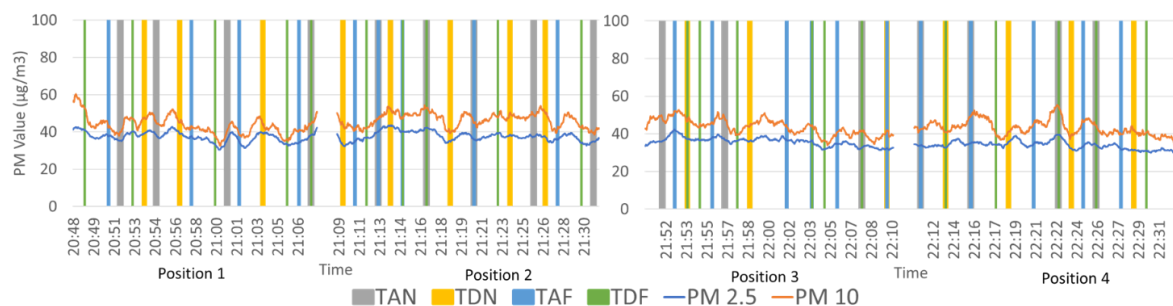
**Figure S6.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 5 on a weekday [15th August 2019].



**Figure S7.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 5 on a weekend [17th August 2019].



**Figure S8.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 6 on a weekday [15th August 2019].



**Figure S9.** Concentration profiles of PM<sub>2.5</sub> and PM<sub>10</sub> on different positions on Line 6 on a weekend [17th August 2019].

**Table S1.** Average, minimum, and maximum PM2.5 values on weekdays across various lines and positions.

| Line       | Position   | Average PM2.5 ( $\mu\text{g}/\text{m}^3$ ) | Min PM2.5 ( $\mu\text{g}/\text{m}^3$ ) | Max PM2.5 ( $\mu\text{g}/\text{m}^3$ ) |
|------------|------------|--------------------------------------------|----------------------------------------|----------------------------------------|
| Line 1     | Position 1 | 11.1                                       | 9.2                                    | 13.9                                   |
|            | Position 2 | 10.4                                       | 8.1                                    | 13.1                                   |
|            | Position 3 | 9.86                                       | 8.3                                    | 12.6                                   |
| Line 2     | Position 1 | 13.44                                      | 8.6                                    | 17.5                                   |
|            | Position 2 | 13                                         | 10.9                                   | 16                                     |
|            | Position 3 | 18.55                                      | 15                                     | 22.5                                   |
| Line 3 & 4 | Position 1 | 54.61                                      | 29.8                                   | 73.7                                   |
|            | Position 2 | 43.33                                      | 29.3                                   | 67.9                                   |
|            | Position 3 | 49.81                                      | 38.4                                   | 70.4                                   |
|            | Position 4 | 49.97                                      | 30.5                                   | 66                                     |
| Line 5     | Position 1 | 47.36                                      | 30                                     | 56.6                                   |
|            | Position 2 | 37.25                                      | 26.5                                   | 52.2                                   |
|            | Position 3 | 32.41                                      | 20.8                                   | 52.7                                   |
|            | Position 4 | 29.62                                      | 18.7                                   | 49.3                                   |
| Line 6     | Position 1 | 31.34                                      | 17.4                                   | 43.4                                   |
|            | Position 2 | 26.13                                      | 17                                     | 40.2                                   |
|            | Position 3 | 32.41                                      | 19.7                                   | 47                                     |
|            | Position 4 | 42.78                                      | 32.8                                   | 58.6                                   |

**Table S2.** Average, minimum, and maximum PM2.5 values on weekends across various lines and positions.

| Line       | Position   | Average PM2.5 ( $\mu\text{g}/\text{m}^3$ ) | Min PM2.5 ( $\mu\text{g}/\text{m}^3$ ) | Max PM2.5 ( $\mu\text{g}/\text{m}^3$ ) |
|------------|------------|--------------------------------------------|----------------------------------------|----------------------------------------|
| Line 1     | Position 1 | 26.57                                      | 23.7                                   | 31.4                                   |
|            | Position 2 | 23.83                                      | 21.6                                   | 27                                     |
|            | Position 3 | 24.69                                      | 22.6                                   | 24.69                                  |
| Line 2     | Position 1 | 18.38                                      | 15.4                                   | 20.9                                   |
|            | Position 2 | 17.63                                      | 14.8                                   | 19.9                                   |
|            | Position 3 | 17.61                                      | 15.8                                   | 19.9                                   |
| Line 3 & 4 | Position 1 | 42.65                                      | 28.4                                   | 57.4                                   |
|            | Position 2 | 41.75                                      | 24.9                                   | 64.8                                   |
|            | Position 3 | 44.16                                      | 33.7                                   | 61.6                                   |
|            | Position 4 | 43.35                                      | 33.9                                   | 68.2                                   |
| Line 5     | Position 1 | 43.58                                      | 39.2                                   | 48                                     |
|            | Position 2 | 41.93                                      | 32.8                                   | 56.3                                   |
|            | Position 3 | 35.04                                      | 28.1                                   | 47.8                                   |
|            | Position 4 | 34.81                                      | 31.6                                   | 39.8                                   |
| Line 6     | Position 1 | 37.26                                      | 30.5                                   | 42.6                                   |
|            | Position 2 | 37.74                                      | 32.2                                   | 43.6                                   |
|            | Position 3 | 35.85                                      | 31.3                                   | 42.3                                   |
|            | Position 4 | 33.86                                      | 29.6                                   | 39.6                                   |

**Table S3.** Average, minimum, and maximum PM10 values on weekdays across various lines and positions.

| Line   | Position   | Average PM10 ( $\mu\text{g}/\text{m}^3$ ) | Min PM10 ( $\mu\text{g}/\text{m}^3$ ) | Max PM10 ( $\mu\text{g}/\text{m}^3$ ) |
|--------|------------|-------------------------------------------|---------------------------------------|---------------------------------------|
| Line 1 | Position 1 | 18.42                                     | 12.2                                  | 23.7                                  |
|        | Position 2 | 17.04                                     | 9.6                                   | 22.9                                  |
|        | Position 3 | 17.24                                     | 12.6                                  | 24.3                                  |
| Line 2 | Position 1 | 23.92                                     | 12.4                                  | 35.5                                  |

|            |            |       |      |       |
|------------|------------|-------|------|-------|
| Line 3 & 4 | Position 2 | 25.29 | 18.1 | 34.6  |
|            | Position 3 | 28.46 | 21.2 | 37.6  |
|            | Position 1 | 99.39 | 48.9 | 143.4 |
|            | Position 2 | 74.53 | 47   | 134.6 |
| Line 5     | Position 3 | 66.01 | 47.2 | 100.1 |
|            | Position 4 | 65.45 | 35.7 | 92.5  |
|            | Position 1 | 86.44 | 55.5 | 109.8 |
|            | Position 2 | 65.61 | 43.9 | 102.7 |
| Line 6     | Position 3 | 43.02 | 26.4 | 81.1  |
|            | Position 4 | 39.25 | 22.8 | 68.8  |
|            | Position 1 | 58.52 | 28.7 | 91.3  |
|            | Position 2 | 45.32 | 27.6 | 75    |
|            | Position 3 | 43.93 | 23   | 68.5  |
|            | Position 4 | 60.2  | 43.1 | 92.9  |

**Table S4.** Average, minimum, and maximum PM10 values on weekends across various lines and positions.

| Line       | Position   | Average PM10 ( $\mu\text{g}/\text{m}^3$ ) | Min PM10 ( $\mu\text{g}/\text{m}^3$ ) | Max PM10 ( $\mu\text{g}/\text{m}^3$ ) |
|------------|------------|-------------------------------------------|---------------------------------------|---------------------------------------|
| Line 1     | Position 1 | 28.39                                     | 25                                    | 33.4                                  |
|            | Position 2 | 27.15                                     | 22.7                                  | 33.8                                  |
|            | Position 3 | 27.84                                     | 24                                    | 35.8                                  |
| Line 2     | Position 1 | 19.41                                     | 16.2                                  | 22.6                                  |
|            | Position 2 | 20.87                                     | 16.2                                  | 29.4                                  |
|            | Position 3 | 18.69                                     | 16.6                                  | 22.6                                  |
| Line 3 & 4 | Position 1 | 67.06                                     | 38.7                                  | 93.6                                  |
|            | Position 2 | 62.59                                     | 31.9                                  | 112.8                                 |
|            | Position 3 | 55.84                                     | 42                                    | 83                                    |
| Line 5     | Position 4 | 56.37                                     | 39.6                                  | 97.8                                  |
|            | Position 1 | 60.55                                     | 50.9                                  | 70.7                                  |
|            | Position 2 | 57.87                                     | 38.2                                  | 96.3                                  |
| Line 6     | Position 3 | 42.76                                     | 32.2                                  | 74.2                                  |
|            | Position 4 | 39.92                                     | 33.5                                  | 51                                    |
|            | Position 1 | 43.54                                     | 32.6                                  | 60.3                                  |
|            | Position 2 | 46.61                                     | 38.5                                  | 54.3                                  |
|            | Position 3 | 43.59                                     | 33.9                                  | 52.7                                  |
|            | Position 4 | 43.14                                     | 33.6                                  | 55.3                                  |

**Table S5.** Comparison between PM levels measured in this study and other studies.

| City               | Measurement Year  | PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) | PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) | Platform Location |
|--------------------|-------------------|------------------------------------------------|-----------------------------------------------|-------------------|
| Athens[22]         | Jun–Aug 2012      | 50.18                                          | 195.27                                        | Underground       |
| Athens [39]        | Apr 2013–Mar 2014 | 68.3                                           | —                                             | Underground       |
| Barcelona [39]     | Apr 2013–Mar 2014 | 58.3                                           | —                                             | Underground       |
| Barcelona [37]     | Oct–Nov 2014      | 42.7                                           | —                                             | Underground       |
| Beijing [42]       | Oct 2016          | 250                                            | 425                                           | Underground       |
| Frankfurt [43]     | August 2013       | 52                                             | 92                                            | Underground       |
| Helsinki [44]      | March 2004        | 60                                             | —                                             | Underground       |
| Hong Kong [45]     | May–Sep 2013      | 10.2                                           | —                                             | Underground       |
| Istanbul [46,47]   | Sep–Oct 2007      | 105                                            | 200                                           | Underground       |
| Italian Metro [48] | January 2014      | 52.3                                           | 195                                           | Underground       |
| Lisbon [49]        | Oct 2014–Mar 2015 | 13                                             | 40                                            | Underground       |
| Los Angeles [21]   | May–Aug 2010      | 56.7                                           | 78                                            | Underground       |

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|                    |                       |       |       |              |
|--------------------|-----------------------|-------|-------|--------------|
| Los Angeles [21]   | May–Aug 2010          | 29.4  | 38.2  | Above ground |
| Mexico City [50]   | Apr–Aug 2002          | 106.2 | —     | Underground  |
| Mexico City [12]   | Nov–Dec 2007          | 37    | 44    | Underground  |
| Montreal [51]      | 2010–2013             | 31.3  | —     | Underground  |
| Oporto [39]        | Apr 2013–Mar 2014     | 83.7  | —     | Underground  |
| Prague [52]        | Mar 2003–Feb 2004     | —     | 120.2 | Underground  |
| Seoul [17]         | Nov 2004–Feb 2005     | 129   | 359   | Underground  |
| Seoul [18]         | Jan 2007              | 115.6 | 129.3 | Underground  |
| Seoul [53]         | Mar 2008–Feb 2009     | 52.2  | 75.7  | Underground  |
| Shanghai [54]      | 2008                  | 287   | 366   | Underground  |
| Stockholm [55]     | Jan–Feb 2000          | 258   | 469   | Underground  |
| Sydney [56]        | Sep–Nov 2015          | 40.6  | 54.9  | Underground  |
| Sydney [57]        | June 2015 - June 2016 | 98    | 102   | Underground  |
| Taipei [58]        | Oct–Dec 2007          | 35    | 51    | Underground  |
| Taipei [23]        | Aug–Nov 2010          | 28    | 37    | Underground  |
| Taipei [59]        | 2016                  | 75.4  | 97.2  | Underground  |
| Toronto [51]       | 2010–2013             | 124.6 | —     | Underground  |
| Vancouver [51]     | 2010–2013             | 18.3  | —     | Underground  |
| Tokyo (this study) | Aug 2019              | 17.09 | 22.73 | Above ground |
| Tokyo (this study) | Aug 2019              | 39.54 | 56.98 | Underground  |

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