## **Supplement Materials:**

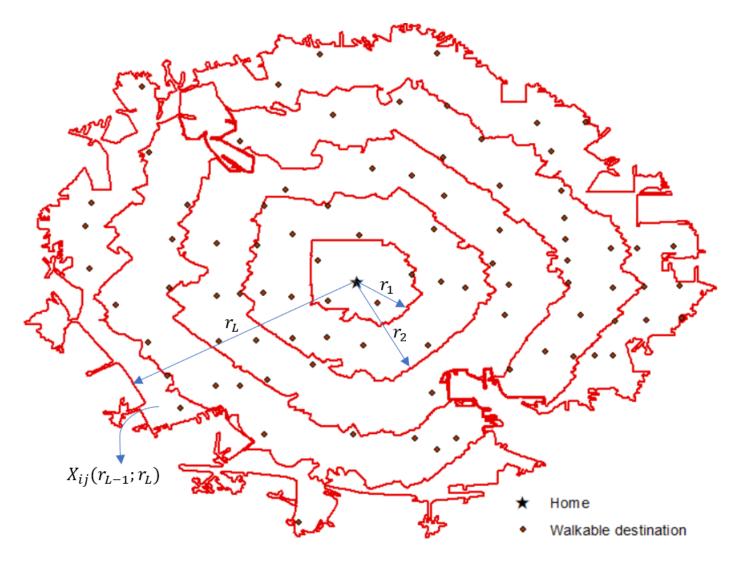
Supplement Table 1. List of walkable destinations and subdomains used in this study

| Primary Domain                    | Destinations  |  |  |
|-----------------------------------|---|--|--|
| 1. Walkable destinations          | Small grocers/bodegas/medium-sized grocers                          |  |  |
|                                   | Bakery, Candy, Ice Cream, Coffee shops                              |  |  |
|                                   | Convenience stores  |  |  |
|                                   | Restaurants/Eating places/Fast food                                 |  |  |
|                                   | Mass Merchandiser/Wholesale/warehouse/Supercenters/Supermarkets     |  |  |
|                                   | Other food stores/Department Stores                                 |  |  |
|                                   | Bars and nightclubs serving alcohol/Liquor stores                   |  |  |
|                                   | Beauty shops and barbers  |  |  |
|                                   | Banks and Credit unions   |  |  |
|                                   | Pharmacies/Drug Stores  |  |  |
|                                   | Laundromat/Dry cleaning   |  |  |
|                                   | Libraries   |  |  |
|                                   | U.S. Postal Service   |  |  |
|                                   | Light/moderate/vigorous/multi-use physical activity                 |  |  |
|                                   | Massage parlors/Spas/Tanning Salons                                 |  |  |
|                                   | Amusement parks, carnival, rodeo/arcades/gambling                   |  |  |
|                                   | Day care/Preschool/Elementary and Secondary                         |  |  |
|                                   | schools/Colleges/Universities                                       |  |  |
|                                   | Museum and art gallery/Zoo, aquarium, arboretum                     |  |  |
|                                   | Performance based entertainment/Sports and stadium entertainment    |  |  |
|                                   | Political Organizations/Religious institutions                      |  |  |
|                                   | Social clubs/Recreation Clubs/Individual and family social services |  |  |
| Sub-domains                       | Destinations  |  |  |
| 1.1. Frequent social destinations | Light/moderate/vigorous/multi-use physical activity                 |  |  |
|                                   | Beauty shop/Barber  |  |  |
|                                   | Libraries   |  |  |
|                                   | Non-physical activity recreation clubs                              |  |  |
|                                   | Religion institutions   |  |  |
| 1.2. Food stores                  | Mass Merchandiser/Wholesale/warehouse/Supercenters/Supermarkets     |  |  |
|                                   | Small grocers/bodegas/medium-sized grocers                          |  |  |
|                                   | Convenience Stores  |  |  |
|                                   | Bakery, Candy, Ice Cream, Coffee shops                              |  |  |
|                                   | Other food stores/Discount Department Stores                        |  |  |

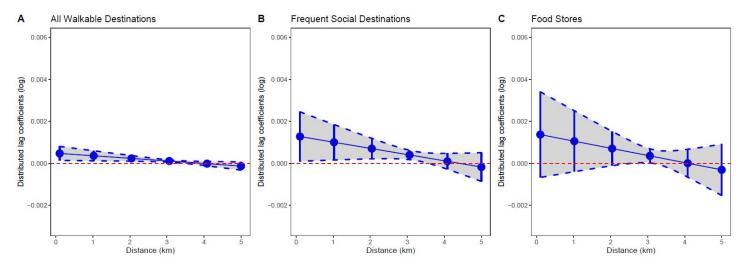
|                                   | Count of walkable destinations |                |                |                |  |
|-----------------------------------|--------------------------------|----------------|----------------|----------------|--|
|                                   | Exam 1                         | Exam 2         | Exam 3         | Exam 5         |  |
|                                   | Median (Q1-Q3)                 | Median (Q1-Q3) | Median (Q1-Q3) | Median (Q1-Q3) |  |
| 1. Walkable destinations          |                                |                |                |                |  |
| 0 - 0.5 km                        | 9 (2-30)                       | 9 (2-31)       | 10 (2-32)      | 11 (3-35)      |  |
| 0.5 - 1 km                        | 38 (10-104)                    | 38 (10-106)    | 39 (10-112)    | 42 (12-118)    |  |
| 1 - 1.5 km                        | 59 (24-148)                    | 61 (24-156)    | 62 (23-161)    | 68 (25-179)    |  |
| 1.5 - 2 km                        | 76 (34-184)                    | 79 (34-197)    | 80 (34-205)    | 95 (38-230)    |  |
| 2 - 3 km                          | 229 (121-529)                  | 235 (119-540)  | 236 (117-551)  | 280 (119-595)  |  |
| 3 - 4 km                          | 346 (179-708)                  | 354 (170-740)  | 364 (163-755)  | 407 (177-829)  |  |
| 4 - 5 km                          | 369 (196-779)                  | 384 (193-809)  | 397 (188-828)  | 447 (207-945)  |  |
| 1.1. Frequent social destinations |                                |                |                |                |  |
| 0 - 0.5 km                        | 3 (1-10)                       | 3 (1-10)       | 3 (1-10)       | 4 (1-11)       |  |
| 0.5 - 1 km                        | 12 (4-36)                      | 13 (4-37)      | 13 (4-38)      | 14 (4-39)      |  |
| 1 - 1.5 km                        | 19 (8-52)                      | 21 (8-54)      | 21 (7-57)      | 23 (8-60)      |  |
| 1.5 - 2 km                        | 25 (11-66)                     | 26 (11-71)     | 27 (11-72)     | 31 (12-75)     |  |
| 2 - 3 km                          | 74 (38-180)                    | 77 (39-188)    | 80 (36-191)    | 94 (39-200)    |  |
| 3 - 4 km                          | 106 (56-210)                   | 115 (57-218)   | 118 (53-226)   | 136 (58-265)   |  |
| 4 - 5 km                          | 122 (63-225)                   | 127 (65-236)   | 129 (63-244)   | 147 (66-295)   |  |
| 1.2. Food stores                  |                                |                |                |                |  |
| 0 - 0.5 km                        | 1 (0-5)                        | 1 (0-5)        | 1 (0-4)        | 1 (0-4)        |  |
| 0.5 - 1 km                        | 5 (1-16)                       | 5 (1-17)       | 5 (1-17)       | 5 (1-16)       |  |
| 1 - 1.5 km                        | 7 (3-25)                       | 8 (3-25)       | 8 (2-26)       | 8 (2-25)       |  |
| 1.5 - 2 km                        | 9 (3-33)                       | 10 (4-33)      | 10 (4-33)      | 10 (3-34)      |  |
| 2 - 3 km                          | 29 (12-89)                     | 30 (12-90)     | 31 (12-91)     | 30 (12-84)     |  |
| 3 - 4 km                          | 40 (18-109)                    | 40 (18-110)    | 41 (17-108)    | 42 (19-120)    |  |
| 4 - 5 km                          | 46 (21-103)                    | 47 (20-106)    | 50 (20-107)    | 53 (20-121)    |  |

Supplement Table 2. Descriptive statistics for NETS built environment exposures at different spatial scales.

Note: the counts of built environment destinations are in ring-shaped network buffered areas.



Supplement Figure 1: Ring-shaped network buffers within which built environment destinations were assessed.



Supplement Figure 2. Distributed lag modeling results for transport walking and BE at Exam 5. Panel A: all walkable destinations; Panel B: frequent social destinations; Panel C: food stores. Dashed gray lines represent 95% confidence intervals. Each model adjusted age, gender, race, education, per capita income and wealth index, BMI, self-rated health, arthritis last 2 weeks, car ownership, marital status, employment status, population density in 1-mile residential buffer, street network ratio at 1-mile residential buffer.