## Supplementary Materials

## Combined Analysis of Both Areas

Table S1. Difference between gendered based perceptions of safety.

| Safety related problem while walking in daily travel area |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No | Yes, during the <br> day only | Yes, at night <br> only | Yes, during the <br> day and at night |
| Male | $56.5 \%$ | $15.3 \%$ | $11.7 \%$ | $11.1 \%$ |
| Female | $60.8 \%$ | $12.6 \%$ | $9.9 \%$ | $12.6 \%$ |
| Safety related problem in bus stops |  |  |  |  |
| Male | $56.4 \%$ | $15.0 \%$ | $10.6 \%$ |  |
| Female | $60.2 \%$ | $9.1 \%$ | $12.9 \%$ |  |
| Safety related problem during bus ride |  |  |  |  |
| Male | $59.3 \%$ | $5.6 \%$ | $15.3 \%$ | $11.4 \%$ |
| Female | $61.7 \%$ | $5.8 \%$ | $14.3 \%$ | $12.8 \%$ |

Table S2. Summary Item Statistics.

|  | Mean | Minimum | Maximum | Range | Maximum / <br> Minimum |  |  |  |  |  |  |  |  | Variance | N of Items |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item Means | 4.516 | 2.999 | 5.621 | 2.622 | 1.874 | .500 | 36 |  |  |  |  |  |  |  |  |
| Inter-Item Correlations | .121 | -.220 | .733 | .953 | -3.333 | .025 | 36 |  |  |  |  |  |  |  |  |



Figure S1. Scree plot indicating that the data have 10 factors

Table S3. Total Variance Explained.

| Compo nent | Initial Eigenvalues |  |  | Extraction Sums of Squared Loadings |  |  | Rotation Sums of Squared Loadings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | \% of Variance | Cumulative \% | Total | \% of Variance | Cumulative \% | Total | \% of Variance | Cumulative \% |
| 1 | 6.929 | 19.248 | 19.248 | 6.929 | 19.248 | 19.248 | 4.419 | 12.276 | 12.276 |
| 2 | 3.187 | 8.853 | 28.101 | 3.187 | 8.853 | 28.101 | 3.086 | 8.571 | 20.847 |
| 3 | 2.310 | 6.416 | 34.517 | 2.310 | 6.416 | 34.517 | 2.772 | 7.699 | 28.546 |
| 4 | 1.854 | 5.151 | 39.668 | 1.854 | 5.151 | 39.668 | 2.580 | 7.167 | 35.713 |
| 5 | 1.672 | 4.644 | 44.313 | 1.672 | 4.644 | 44.313 | 1.784 | 4.957 | 40.669 |
| 6 | 1.335 | 3.707 | 48.020 | 1.335 | 3.707 | 48.020 | 1.783 | 4.952 | 45.621 |
| 7 | 1.298 | 3.606 | 51.626 | 1.298 | 3.606 | 51.626 | 1.512 | 4.201 | 49.822 |
| 8 | 1.124 | 3.122 | 54.748 | 1.124 | 3.122 | 54.748 | 1.403 | 3.896 | 53.718 |
| 9 | 1.083 | 3.007 | 57.755 | 1.083 | 3.007 | 57.755 | 1.308 | 3.634 | 57.352 |
| 10 | 1.060 | 2.945 | 60.700 | 1.060 | 2.945 | 60.700 | 1.205 | 3.348 | 60.700 |
| 11 | . 953 | 2.648 | 63.348 |  |  |  |  |  |  |
| 12 | . 933 | 2.591 | 65.939 |  |  |  |  |  |  |
| 13 | . 911 | 2.530 | 68.468 |  |  |  |  |  |  |
| 14 | . 885 | 2.457 | 70.925 |  |  |  |  |  |  |
| 15 | . 794 | 2.204 | 73.130 |  |  |  |  |  |  |
| 16 | . 725 | 2.013 | 75.143 |  |  |  |  |  |  |
| 17 | . 695 | 1.930 | 77.073 |  |  |  |  |  |  |
| 18 | . 673 | 1.871 | 78.944 |  |  |  |  |  |  |
| 19 | . 659 | 1.830 | 80.774 |  |  |  |  |  |  |
| 20 | . 604 | 1.677 | 82.451 |  |  |  |  |  |  |
| 21 | . 592 | 1.645 | 84.095 |  |  |  |  |  |  |
| 22 | . 556 | 1.545 | 85.641 |  |  |  |  |  |  |
| 23 | . 526 | 1.461 | 87.102 |  |  |  |  |  |  |
| 24 | . 515 | 1.430 | 88.532 |  |  |  |  |  |  |
| 25 | . 488 | 1.356 | 89.888 |  |  |  |  |  |  |
| 26 | . 458 | 1.271 | 91.159 |  |  |  |  |  |  |
| 27 | . 421 | 1.168 | 92.328 |  |  |  |  |  |  |
| 28 | . 399 | 1.108 | 93.436 |  |  |  |  |  |  |
| 29 | . 371 | 1.031 | 94.467 |  |  |  |  |  |  |
| 30 | . 344 | . 956 | 95.423 |  |  |  |  |  |  |
| 31 | . 329 | . 915 | 96.338 |  |  |  |  |  |  |
| 32 | . 319 | . 887 | 97.224 |  |  |  |  |  |  |
| 33 | . 281 | . 781 | 98.005 |  |  |  |  |  |  |
| 34 | . 276 | . 767 | 98.772 |  |  |  |  |  |  |
| 35 | . 260 | . 722 | 99.495 |  |  |  |  |  |  |
| 36 | . 182 | . 505 | 100.000 |  |  |  |  |  |  |

Extraction Method: Principal Component Analysis.

Table S4. Coefficients ${ }^{\text {a }}$

| Model |  | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: |
|  |  | Tolerance | VIF |
| 1 | Use of carpool to work | . 483 | 2.072 |
|  | Use of home as workplace or work from home | . 435 | 2.301 |
|  | Whether use public transit or not | . 904 | 1.106 |
|  | A-R factor score 1 for analysis 1 | . 825 | 1.211 |
|  | A-R factor score 2 for analysis 1 | . 823 | 1.216 |
|  | A-R factor score 3 for analysis 1 | . 876 | 1.141 |
|  | A-R factor score 4 for analysis 1 | . 896 | 1.116 |
|  | A-R factor score 5 for analysis 1 | . 934 | 1.071 |
|  | A-R factor score 6 for analysis 1 | . 871 | 1.148 |
|  | A-R factor score 7 for analysis 1 | . 881 | 1.136 |
|  | A-R factor score 8 for analysis 1 | . 875 | 1.143 |
|  | A-R factor score 9 for analysis 1 | . 813 | 1.231 |
|  | A-R factor score 10 for analysis 1 | . 922 | 1.085 |
|  | Occupation: Unemployed | . 187 | 5.357 |
|  | Income level: 15000-30000 BDT | . 727 | 1.375 |
|  | Age category of 25-34 years | . 824 | 1.214 |
|  | Employment status: Not employed | . 160 | 6.253 |
|  | Occupation: Govt_service | . 767 | 1.304 |
|  | Income level of more than 75000 BDT | . 844 | 1.184 |
|  | Average daily distance traveled during weekday | . 604 | 1.655 |
|  | Average daily trip duration during weekday | . 580 | 1.724 |


a. Dependent Variable: individual weekday activity space in sq. mile

Table S5. Coefficients ${ }^{\text {a. }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | 95.0\% Confidence Interval for B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Lower Bound | Upper Bound |
| 1 | (Constant) | 1.235 | . 242 |  | 5.101 | . 000 | . 759 | 1.710 |
|  | Gender of the respondent | -. 077 | . 131 | -. 026 | -. 589 | . 556 | -. 334 | . 180 |
|  | Use of carpool to work | 7.671E-5 | . 002 | . 002 | . 031 | . 975 | -. 005 | . 005 |
|  | Use of home as workplace or work from home | . 002 | . 003 | . 030 | . 582 | . 561 | -. 004 | . 007 |
|  | Whether use public transit or not | . 002 | . 004 | . 025 | . 664 | . 507 | -. 005 | . 010 |
|  | A-R factor score 1 for analysis 1 | -. 035 | . 053 | -. 026 | -. 657 | . 511 | -. 140 | . 070 |
|  | A-R factor score 2 for analysis 1 | . 062 | . 054 | . 045 | 1.148 | . 251 | -. 044 | . 168 |
|  | A-R factor score 3 for analysis 1 | . 099 | . 052 | . 071 | 1.883 | . 060 | -. 004 | . 202 |
|  | A-R factor score 4 for analysis 1 | -. 038 | . 050 | -. 028 | -. 756 | . 450 | -. 137 | . 061 |
|  | A-R factor score 5 for analysis 1 | -. 005 | . 052 | -. 003 | -. 091 | . 928 | -. 106 | . 097 |
|  | A-R factor score 6 for analysis 1 | -. 072 | . 054 | -. 051 | -1.339 | . 181 | -. 179 | . 034 |
|  | A-R factor score 7 for analysis 1 | -. 045 | . 052 | -. 033 | -. 875 | . 382 | -. 147 | . 056 |
|  | A-R factor score 8 for analysis 1 | . 040 | . 056 | . 027 | . 712 | . 476 | -. 070 | . 151 |
|  | A-R factor score 9 for analysis 1 | -. 063 | . 055 | -. 045 | -1.144 | . 253 | -. 170 | . 045 |
|  | A-R factor score 10 for analysis 1 | -. 011 | . 052 | -. 008 | -. 210 | . 834 | -. 113 | . 091 |
|  | Occupation: Unemployed | -. 049 | . 165 | -. 015 | -. 296 | . 767 | -. 372 | . 275 |
|  | Income level: 15000-30000 BDT | . 179 | . 152 | . 049 | 1.177 | . 240 | -. 120 | . 479 |
|  | Age category of 25-34 years | -. 153 | . 120 | -. 050 | -1.275 | . 203 | -. 389 | . 083 |
|  | Occupation: Govt_service | . 088 | . 205 | . 017 | . 428 | . 669 | -. 315 | . 491 |
|  | Income level of more than 75000 BDT | -. 058 | . 196 | -. 012 | -. 299 | . 765 | -. 443 | . 326 |
|  | 18 to 20 years of age | -. 703 | . 290 | -. 109 | -2.419 | . 016 | -1.273 | -. 132 |
|  | Greater than and equals to 65 years of age | . 020 | . 513 | . 002 | . 039 | . 969 | -. 988 | 1.028 |


a. Dependent Variable: individual weekday activity space in sq. mile

Table S6. Coefficients ${ }^{\text {a. }}$


a. Dependent Variable: individual weekend activity space in sq. mile

Table S7. Coefficients ${ }^{\text {a. }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | 95.0\% Confidence Interval for B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Lower Bound | Upper Bound |
| 1 | (Constant) | . 943 | .224 |  | 4.199 | . 000 | . 502 | 1.384 |
|  | Gender of the respondent | -. 178 | . 117 | -. 063 | -1.519 | . 129 | -. 409 | . 052 |
|  | Use of carpool to work | . 000 | . 003 | -. 004 | -. 077 | . 938 | -. 005 | . 005 |
|  | Use of home as workplace or work from home | -. 005 | . 003 | -. 075 | -1.558 | . 120 | -. 011 | . 001 |
|  | Whether use public transit or not | . 015 | . 004 | . 165 | 4.119 | . 000 | . 008 | . 023 |
|  | A-R factor score 1 for analysis 1 | . 125 | . 049 | . 100 | 2.539 | . 011 | . 028 | . 222 |
|  | A-R factor score 2 for analysis 1 | . 066 | . 050 | . 052 | 1.322 | . 187 | -. 032 | . 165 |
|  | A-R factor score 3 for analysis 1 | -. 031 | . 051 | -. 023 | -. 613 | . 540 | -. 130 | . 068 |
|  | A-R factor score 4 for analysis 1 | . 200 | . 049 | . 157 | 4.091 | . 000 | . 104 | . 296 |
|  | A-R factor score 5 for analysis 1 | -. 005 | . 050 | -. 004 | -. 096 | . 924 | -. 104 | . 094 |
|  | A-R factor score 6 for analysis 1 | . 148 | . 055 | . 107 | 2.674 | . 008 | . 039 | . 257 |
|  | A-R factor score 7 for analysis 1 | -. 040 | . 051 | -. 030 | -. 789 | . 430 | -. 141 | . 060 |
|  | A-R factor score 8 for analysis 1 | . 114 | . 052 | . 084 | 2.189 | . 029 | . 012 | . 217 |
|  | A-R factor score 9 for analysis 1 | . 139 | . 054 | . 099 | 2.591 | . 010 | . 034 | . 244 |
|  | A-R factor score 10 for analysis 1 | . 015 | . 054 | . 011 | . 272 | . 786 | -. 092 | . 121 |
|  | Occupation: Unemployed | -. 098 | . 170 | -. 030 | -. 578 | . 563 | -. 432 | . 236 |
|  | Income level: 15000-30000 BDT | . 315 | . 135 | . 095 | 2.331 | . 020 | . 049 | . 580 |
|  | Age category of 25-34 years | . 110 | . 107 | . 040 | 1.025 | . 306 | -. 101 | . 321 |
|  | Occupation: Govt_service | -. 122 | . 175 | -. 029 | -. 700 | . 485 | -. 466 | . 222 |
|  | Income level of more than 75000 BDT | -. 122 | . 191 | -. 026 | -. 640 | . 523 | -. 496 | . 252 |
|  | 18 to 20 years of age | . 247 | . 349 | . 030 | . 708 | . 479 | -. 439 | . 934 |
|  | Greater than and equals to 65 years of age | -. 183 | . 481 | -. 016 | -. 380 | . 704 | -1.128 | . 762 |


a. Dependent Variable: individual weekend activity space in sq. mile

Table S8. Coefficients ${ }^{\text {a }}$

| Model |  | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: |
|  |  | Tolerance | VIF |
| 1 | Number of employed persons in the HH | . 943 | 1.060 |
|  | Car ownership status | . 904 | 1.106 |
|  | Number of cars HH use for travel including office vehicles | . 914 | 1.094 |
|  | number of members surveyed in each HH | . 859 | 1.164 |
|  | Intersection count per sq. mile within weekday activity spaces | . 689 | 1.452 |
|  | Job count per sq. mile within weekday activity spaces | . 300 | 3.338 |
|  | School count per sq. mile within weekday activity spaces | . 287 | 3.487 |
|  | Shop count per sq. mile within weekday activity spaces | . 526 | 1.901 |
|  | Number of household members: 2 | . 834 | 1.199 |
|  | household size greater than equals to 5 | . 897 | 1.115 |
|  | ownership of another vehicle bicycle | . 943 | 1.060 |
|  | ownership of another vehicle rickshaw | . 931 | 1.075 |
|  | Residence count per sq. mile within weekday activity spaces | . 830 | 1.204 |
|  | Population count per sq. mile within weekday activity spaces | . 546 | 1.833 |

a. Dependent Variable: weekday activity space in sq. mile

Table S9. Coefficients ${ }^{\text {a. }}$

| Model |  | Unstandardized Coefficients |  | $\left\|\begin{array}{c}\text { Standardiz } \\ \text { ed } \\ \text { Coefficient } \\ \text { s }\end{array}\right\|$ | t | Sig. | 95.0\% Confidence Interval for B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Lower Bound | Upper Bound |
| 1 | (Constant) | 5.110 | . 824 |  | 6.201 | . 000 | 3.488 | 6.732 |
|  | Number of employed persons in the HH | . 067 | . 321 | . 009 | . 208 | . 835 | -. 565 | . 699 |
|  | Car ownership status | . 269 | . 228 | . 051 | 1.178 | . 240 | -. 180 | . 718 |
|  | Number of cars HH use for travel including office vehicles | . 447 | . 209 | . 092 | 2.142 | . 033 | . 036 | . 858 |
|  | number of members surveyed in each HH | . 281 | . 110 | . 113 | 2.566 | . 011 | . 065 | . 497 |
|  | Intersection count per sq. mile within weekday activity spaces | -. 002 | . 009 | -. 009 | -. 187 | . 851 | -. 019 | . 015 |
|  | Job count per sq. mile within weekday activity spaces | -. 007 | . 001 | -. 408 | -5.443 | . 000 | -. 009 | -. 004 |
|  | School count per sq. mile within weekday activity spaces | . 002 | . 002 | . 076 | 1.000 | . 318 | -. 002 | . 005 |
|  | Shop count per sq. mile within weekday activity spaces | -. 003 | . 001 | -. 274 | -4.846 | . 000 | -. 005 | -. 002 |
|  | Number of household members: 2 | . 202 | . 231 | . 039 | . 871 | . 384 | -. 254 | . 657 |
|  | household size greater than equals to 5 | -. 400 | . 346 | -. 050 | -1.156 | . 249 | -1.080 | . 281 |
|  | ownership of another vehicle bicycle | 1.197 | . 389 | . 130 | 3.078 | . 002 | . 431 | 1.963 |
|  | ownership of another vehicle rickshaw | . 592 | . 681 | . 037 | . 870 | . 385 | -. 748 | 1.932 |
|  | Residence count per sq. mile within weekday activity spaces | 7.856E-5 | . 000 | . 032 | . 722 | . 471 | . 000 | . 000 |
|  | Population count per sq. mile within weekday activity spaces | -1.004E-5 | . 000 | -. 331 | -5.971 | . 000 | . 000 | . 000 |

a. Dependent Variable: weekday activity space in sq. mile

Table S10. Coefficients ${ }^{\text {a }}$

| Model |  | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: |
|  |  | Tolerance | VIF |
| 1 | Car ownership status | . 913 | 1.095 |
|  | Number of cars HH use for travel including office vehicles | . 952 | 1.050 |
|  | number of members surveyed in each HH | . 915 | 1.093 |
|  | Intersection count per sq. mile within weekend activity spaces | . 629 | 1.590 |
|  | Job count per sq. mile within weekend activity spaces | . 250 | 4.000 |
|  | School count per sq. mile within weekend activity spaces | . 256 | 3.909 |
|  | Shop count per sq. mile within weekend activity spaces | . 679 | 1.473 |
|  | Number of household members: 2 | . 799 | 1.251 |
|  | household size greater than equals to 5 | . 914 | 1.094 |
|  | ownership of another vehicle bicycle | . 900 | 1.111 |
|  | ownership of another vehicle rickshaw | . 933 | 1.072 |
|  | Residence count per sq. mile within weekend activity spaces | . 843 | 1.186 |

a. Dependent Variable: weekend activity space in sq. mile

Table S11. Coefficients ${ }^{\text {a. }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | 95.0\% Confidence Interval for B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Lower Bound | Upper Bound |
| 1 | (Constant) | 4.561 | . 451 |  | 10.103 | . 000 | 3.671 | 5.450 |
|  | Car ownership status | . 137 | . 183 | . 035 | . 748 | . 455 | -. 224 | . 498 |
|  | Number of cars HH use for travel including office vehicles | -. 275 | . 166 | -. 077 | -1.657 | . 099 | -. 601 | . 052 |
|  | number of members surveyed in each HH | . 131 | . 084 | . 073 | 1.548 | . 123 | -. 036 | . 297 |
|  | Intersection count per sq. mile within weekend activity spaces | . 007 | . 006 | . 066 | 1.149 | . 252 | -. 005 | . 020 |
|  | Job count per sq. mile within weekend activity spaces | -. 004 | . 001 | -. 256 | $-2.824$ | . 005 | -. 006 | -. 001 |
|  | School count per sq. mile within weekend activity spaces | -. 004 | . 001 | -. 248 | $-2.773$ | . 006 | -. 007 | -. 001 |
|  | Shop count per sq. mile within weekend activity spaces | -. 004 | . 000 | -. 471 | -8.564 | . 000 | -. 005 | -. 003 |
|  | Number of household members: 2 | -. 378 | . 184 | -. 104 | -2.055 | . 041 | -. 741 | -. 016 |
|  | household size greater than equals to 5 | . 945 | . 270 | . 166 | 3.506 | . 001 | . 414 | 1.476 |
|  | ownership of another vehicle bicycle | . 203 | . 321 | . 030 | . 635 | . 526 | -. 428 | . 835 |
|  | ownership of another vehicle rickshaw | -. 382 | . 503 | -. 036 | -. 759 | . 449 | -1.373 | . 610 |
|  | Residence count per sq. mile within weekend activity spaces | $\begin{gathered} -9.80 \\ 5 \mathrm{E}-6 \end{gathered}$ | . 000 | -. 008 | -. 170 | . 865 | . 000 | . 000 |

a. Dependent Variable: weekend activity space in sq. mile

Table S12. Model Summary.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | . $743^{\text {a }}$ | . 552 | . 529 | 5.99288 | . 552 | 23.772 | 14 | 270 | . 000 |

a. Predictors: (Constant), Population count per sq. mile within weekday activity spaces, Number of household members: 2, Job count per sq. mile within weekday activity spaces, ownership of other vehicle_rickshaw, Number of employed persons in the HH, ownership of other vehicle_bicycle, Car ownership status, Number of cars HH use for travel including office vehicles, Residence count per sq. mile within weekday activity spaces, household size greater than equals to 5 , number of members surveyed in each HH, Intersection count per sq. mile within weekday activity spaces, Shop count per sq. mile within weekday activity spaces, School count per sq. mile within weekday activity spaces

Table S13. ANOVA ${ }^{\text {b }}$

| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 11952.676 | 14 | 853.763 | 23.772 | $.000^{\mathrm{a}}$ |
|  | Residual | 9696.941 | 270 | 35.915 |  |  |
|  | Total | 21649.616 | 284 |  |  |  |

a. Predictors: (Constant), Population count per sq. mile within weekday activity spaces, Number of household members: 2, Job count per sq. mile within weekday activity spaces, ownership of other vehicle_rickshaw, Number of employed persons in the HH, ownership of other vehicle_bicycle, Car ownership status, Number of cars HH use for travel including office vehicles, Residence count per sq. mile within weekday activity spaces, household size greater than equals to 5 , number of members surveyed in each HH, Intersection count per sq. mile within weekday activity spaces, Shop count per sq. mile within weekday activity spaces, School count per sq. mile within weekday activity spaces
b. Dependent Variable: weekday activity length in mile

Table S14. Coefficients ${ }^{\text {a. }}$

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients <br> Beta | t | Sig. | 95.0\% Confidence Interval for B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. <br> Error |  |  |  | Lower Bound | Upper Bound |
| 1 | (Constant) | 20.951 | 3.103 |  | 6.751 | . 000 | 14.842 | 27.061 |
|  | Number of employed persons in the HH | . 214 | 1.209 | . 007 | . 177 | . 860 | -2.166 | 2.594 |
|  | Car ownership status | 1.046 | . 859 | . 052 | 1.217 | . 225 | -. 646 | 2.738 |
|  | Number of cars HH use for travel including office vehicles | 1.577 | . 786 | . 086 | 2.007 | . 046 | . 030 | 3.124 |
|  | number of members surveyed in each HH | . 911 | . 412 | . 097 | 2.209 | . 028 | . 099 | 1.723 |
|  | Intersection count per sq. mile within weekday activity spaces | -. 004 | . 033 | -. 006 | -. 123 | . 902 | -. 068 | . 060 |
|  | Job count per sq. mile within weekday activity spaces | -. 026 | . 005 | -. 428 | -5.756 | . 000 | -. 035 | -. 017 |
|  | School count per sq. mile within weekday activity spaces | . 006 | . 006 | . 074 | . 968 | . 334 | -. 006 | . 018 |
|  | Shop count per sq. mile within weekday activity spaces | -. 013 | . 003 | -. 278 | -4.944 | . 000 | -. 019 | -. 008 |
|  | Number of household members: 2 | . 723 | . 872 | . 037 | . 829 | . 408 | -. 994 | 2.439 |
|  | household size greater than equals to 5 | -1.248 | 1.302 | -. 041 | -. 959 | . 339 | -3.811 | 1.315 |
|  | ownership of other vehicle_bicycle | 4.276 | 1.465 | . 122 | 2.918 | . 004 | 1.391 | 7.160 |
|  | ownership of other vehicle_rickshaw | 2.134 | 2.563 | . 035 | . 832 | .406 | -2.913 | 7.181 |
|  | Residence count per sq. mile within weekday activity spaces | . 000 | . 000 | . 026 | . 579 | . 563 | . 000 | . 001 |
|  | Population count per sq. mile within weekday activity spaces | $-3.774 \mathrm{E}-5$ | . 000 | -. 329 | -5.959 | . 000 | . 000 | . 000 |

a. Dependent Variable: weekday activity length in mile

Table S15. Model Summary.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .725 ${ }^{\text {a }}$ | . 526 | . 501 | 4.60941 | . 526 | 21.287 | 12 | 230 | . 000 |

a. Predictors: (Constant), Residence count per sq. mile within weekend activity spaces, School count per sq. mile within weekend activity spaces, household size greater than equals to 5 , Number of cars HH use for travel including office vehicles, ownership of other vehicle_bicycle, Car ownership status, number of members surveyed in each HH, ownership of other vehicle_rickshaw, Intersection count per sq. mile within weekend activity spaces, Number of household members: 2, Shop count per sq. mile within weekend activity spaces, Job count per sq. mile within weekend activity spaces

Table S16. ANOVA ${ }^{\text {b. }}$

| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 5427.279 | 12 | 452.273 | 21.287 | $.000^{\circ}$ |
|  | Residual | 4886.740 | 230 | 21.247 |  |  |
|  | Total | 10314.018 | 242 |  |  |  |

a. Predictors: (Constant), Residence count per sq. mile within weekend activity spaces, School count per sq. mile within weekend activity spaces, household size greater than equals to 5 , Number of cars HH use for travel including office vehicles, ownership of other vehicle_bicycle, Car ownership status, number of members surveyed in each HH , ownership of other vehicle_rickshaw, Intersection count per sq. mile within weekend activity spaces, Number of household members: 2, Shop count per sq. mile within weekend activity spaces, Job count per sq. mile within weekend activity spaces
b. Dependent Variable: weekend activity length in mile

Table S17. Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | 95.0\% Confidence Interval for B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Lower Bound | Upper Bound |
| 1 ${ }^{\prime}$ | (Constant) | 18.719 | 1.770 |  | 10.579 | . 000 | 15.233 | 22.206 |
|  | Car ownership status | . 510 | . 718 | . 034 | .711 | . 478 | -. 903 | 1.924 |
|  | Number of cars HH use for travel including office vehicles | -1.058 | . 650 | -. 076 | -1.629 | . 105 | -2.338 | . 222 |
|  | number of members surveyed in each HH | . 487 | . 331 | . 070 | 1.472 | . 142 | -. 165 | 1.139 |
|  | Intersection count per sq. mile within weekend activity spaces | . 029 | . 025 | . 067 | 1.176 | . 241 | -. 020 | . 079 |
|  | Job count per sq. mile within weekend activity spaces | -. 014 | . 005 | -. 262 | -2.886 | . 004 | -. 024 | -. 005 |
|  | School count per sq. mile within weekend activity spaces | -. 016 | . 006 | -. 244 | -2.715 | . 007 | -. 027 | -. 004 |
|  | Shop count per sq. mile within weekend activity spaces | -. 015 | . 002 | -. 473 | -8.587 | . 000 | -. 018 | -. 011 |
|  | Number of household members: 2 | -1.463 | . 721 | -. 103 | -2.027 | . 044 | -2.884 | -. 041 |
|  | household size greater than equals to 5 | 3.581 | 1.056 | . 161 | 3.389 | . 001 | 1.499 | 5.663 |
|  | ownership of other vehicle_bicycle | . 803 | 1.257 | . 031 | . 639 | . 524 | -1.674 | 3.279 |
|  | ownership of other vehicle_rickshaw | -1.405 | 1.973 | -. 033 | -. 712 | . 477 | -5.292 | 2.482 |
|  | Residence count per sq. mile within weekend activity spaces | $-5.036 \mathrm{E}-5$ | . 000 | -. 011 | -. 223 | . 824 | . 000 | . 000 |

a. Dependent Variable: weekend activity length in mile

Table S18. Network Information.


a. Excluding the bias unit

Table S19. Parameter Estimates.

| Predictor |  | Predicted |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hidden Layer 1 |  |  |  |  |  | Output Layer |
|  |  | H(1:1) | H(1:2) | $\mathrm{H}(1: 3)$ | $\mathrm{H}(1: 4)$ | $\mathrm{H}(1: 5)$ | H(1:6) | Activity_space_wd_ind |
| Input Layer | (Bias) | -. 218 | -. 064 | -. 598 | . 580 | -. 353 | . 339 |  |
|  | Gender | -. 359 | -. 268 | -. 060 | . 066 | -. 187 | . 096 |  |
|  | Age | -. 278 | . 290 | . 236 | -. 081 | -. 686 | -. 006 |  |
|  | Education | . 531 | . 629 | . 304 | . 483 | -. 021 | -. 198 |  |
|  | Employment_status | -. 076 | . 160 | -. 147 | . 160 | . 385 | . 649 |  |
|  | Occupation | -. 188 | . 238 | -. 035 | -. 148 | . 265 | . 578 |  |
|  | Income | . 303 | . 608 | -. 413 | . 368 | -. 390 | -. 024 |  |
|  | Status_marrital | . 270 | -. 058 | . 032 | . 016 | -. 355 | -. 207 |  |
|  | Carpool | -. 148 | . 452 | . 512 | . 118 | . 309 | . 082 |  |
|  | Work_at_home_typical | -. 374 | . 547 | . 352 | -. 098 | -. 074 | . 752 |  |
|  | Use_transit_or_not | . 229 | . 256 | . 390 | -. 215 | . 066 | -. 290 |  |
|  | FAC1_1 | . 384 | . 545 | -. 125 | . 374 | -. 204 | -. 200 |  |
|  | FAC2_1 | . 258 | -. 355 | -. 677 | -. 421 | . 485 | . 406 |  |
|  | FAC3_1 | . 115 | . 439 | . 501 | -. 483 | -. 399 | -. 765 |  |
|  | FAC4_1 | -. 483 | -. 166 | -. 187 | . 121 | -. 379 | . 488 |  |
|  | FAC5_1 | . 374 | . 405 | . 023 | -. 182 | -. 323 | -. 328 |  |
|  | FAC6_1 | -. 371 | -. 477 | -. 163 | -. 473 | . 811 | . 556 |  |
|  | FAC7_1 | -. 097 | . 259 | . 184 | . 257 | . 385 | -. 027 |  |
|  | FAC8_1 | . 440 | . 482 | . 338 | . 282 | -. 277 | -. 181 |  |
|  | FAC9_1 | -. 466 | -. 203 | . 241 | . 373 | . 029 | -. 359 |  |
|  | FAC10_1 | . 070 | . 105 | . 054 | . 003 | . 105 | -. 464 |  |
|  | Avg_distance_wd | . 627 | -. 024 | . 471 | -. 125 | -. 415 | . 833 |  |
|  | Avg_duartion_wd | . 418 | . 233 | . 512 | -. 631 | -. 712 | 1.189 |  |
|  | Avg_cost_wd | . 790 | . 568 | -. 649 | -. 649 | -. 551 | . 179 |  |
| Hidden Layer 1 | (Bias) |  |  |  |  |  |  | . 132 |
|  | H(1:1) |  |  |  |  |  |  | . 426 |
|  | H(1:2) |  |  |  |  |  |  | -. 467 |
|  | H(1:3) |  |  |  |  |  |  | . 492 |
|  | H(1:4) |  |  |  |  |  |  | -. 064 |
|  | H(1:5) |  |  |  |  |  |  | -. 251 |
|  | H(1:6) |  |  |  |  |  |  | . 341 |

Table S20. Network Information.


a. Excluding the bias unit

Table S21. Parameter Estimates.

| Predictor |  | Predicted |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hidden Layer 1 |  |  |  |  |  | Output Layer |
|  |  | H(1:1) | H(1:2) | H(1:3) | $\mathrm{H}(1: 4)$ | $\mathrm{H}(1: 5)$ | H(1:6) | Activity_space_we_ind |
| Input Layer | (Bias) | -. 315 | -. 347 | -.760 | -. 722 | -. 156 | -. 324 |  |
|  | Gender | . 196 | . 666 | . 157 | . 470 | . 283 | -. 316 |  |
|  | Age | -. 218 | -. 334 | -. 478 | -. 005 | -. 077 | -. 349 |  |
|  | Education | . 463 | -. 265 | -. 291 | -. 226 | -. 098 | . 551 |  |
|  | Employment_status | . 162 | -. 265 | . 332 | . 044 | -. 252 | . 081 |  |
|  | Occupation | . 594 | -. 082 | . 009 | -. 067 | -. 173 | . 370 |  |
|  | Income | -. 101 | -. 155 | . 422 | -. 441 | -. 027 | -. 153 |  |
|  | Status_marrital | -. 615 | -. 397 | -. 041 | -. 127 | -. 009 | . 115 |  |
|  | Carpool | -. 886 | . 235 | -. 465 | . 038 | . 120 | -. 193 |  |
|  | Work_at_home_typical | -. 087 | . 605 | . 252 | -. 506 | -. 463 | -. 385 |  |
|  | Use_transit_or_not | -. 238 | . 174 | . 579 | -. 255 | . 424 | -. 253 |  |
|  | FAC1_1 | . 496 | . 077 | . 660 | -. 007 | . 130 | . 244 |  |
|  | FAC2_1 | -. 259 | -. 405 | -. 600 | . 198 | . 280 | . 093 |  |
|  | FAC3_1 | . 102 | . 542 | . 431 | -. 571 | . 607 | -. 219 |  |
|  | FAC4_1 | -. 105 | . 338 | . 833 | . 077 | -. 619 | . 246 |  |
|  | FAC5_1 | . 448 | . 071 | . 001 | -. 148 | -. 011 | . 499 |  |
|  | FAC6_1 | -. 005 | -. 022 | . 921 | -. 448 | -. 044 | . 406 |  |
|  | FAC7_1 | . 036 | . 132 | . 001 | . 010 | -. 111 | . 255 |  |
|  | FAC8_1 | . 723 | -. 384 | . 501 | . 194 | -. 432 | . 432 |  |
|  | FAC9_1 | . 523 | . 153 | . 544 | . 562 | . 239 | -. 113 |  |
|  | FAC10_1 | . 033 | . 083 | . 366 | . 124 | -. 305 | -. 201 |  |
|  | Avg_distance_we | . 233 | -1.109 | -. 280 | . 968 | -. 250 | 1.226 |  |
|  | Avg_duration_we | -. 047 | -. 333 | . 283 | . 482 | -. 652 | . 649 |  |
|  | Avg_cost_we | -. 330 | -. 467 | . 132 | -. 568 | . 382 | . 140 |  |
| Hidden Layer 1 | (Bias) |  |  |  |  |  |  | . 399 |
|  | H(1:1) |  |  |  |  |  |  | -. 480 |
|  | H(1:2) |  |  |  |  |  |  | -. 337 |
|  | $\mathrm{H}(1: 3)$ |  |  |  |  |  |  | . 629 |
|  | H(1:4) |  |  |  |  |  |  | . 415 |
|  | H(1:5) |  |  |  |  |  |  | . 251 |
|  | H(1:6) |  |  |  |  |  |  | . 412 |

Table S22. Network Information.

| Input Layer | Covariates | 1 | Number of members in the HH |
| :---: | :---: | :---: | :---: |
|  |  | 2 | Number of employed persons in the HH |
|  |  | 3 | Car ownership status |
|  |  | 4 | Number of cars HH use for travel including office vehicles |
|  |  | 5 | Ownership status of other vehicles |
|  |  | 6 | number of members surveyed in each HH |
|  |  | 7 | Intersection count per sq. mile within weekday activity spaces |
|  |  | 8 | Job count per sq. mile within weekday activity spaces |
|  |  | 9 | School count per sq. mile within weekday activity spaces |
|  |  | 10 | Shop count per sq. mile within weekday activity spaces |
|  |  | 11 | Residence count per sq mile within weekday activity spaces |
|  |  | 12 | Population count per sq mile within weekday activity spaces |
|  |  | Number of Units ${ }^{\text {a }}$ | 12 |
|  |  | Rescaling Method for Covariates | Standardized |
| Hidden Layer(s) |  | Number of Hidden Layers |  |
|  |  | Number of Units in Hidden Layer ${ }^{1 a}$ |  |
|  |  | Activation Function | Hyperbolic tangent |
| Output Layer | Dependent Variables | 1 | weekday activity length in mile |
|  |  | 2 | weekday activity space in sq. mile |
|  | Number of Units |  |  |


| Rescaling Method for Scale Dependents |
| :--- | :--- |
| Activation Function |
| Error Function |$\quad$| Standardized |
| :--- |
| Identity |
| Sum of Squares |

a. Excluding the bias unit

Table S23. Network Information.

| Input Layer | Covariates | 1 | Number of members in the HH |
| :---: | :---: | :---: | :---: |
|  |  | 2 | Number of employed persons in the HH |
|  |  | 3 | Car ownership status |
|  |  | 4 | Number of cars HH use for travel including office vehicles |
|  |  | 5 | Ownership status of other vehicles |
|  |  | 6 | number of members surveyed in each HH |
|  |  | 7 | Intersection count per sq. mile within weekend activity spaces |
|  |  | 8 | Job count per sq. mile within weekend activity spaces |
|  |  | 9 | School count per sq. mile within weekend activity spaces |
|  |  | 10 | Shop count per sq. mile within weekend activity spaces |
|  |  | 11 | Residence count per sq mile within weekend activity spaces |
|  |  | Number of Units ${ }^{\text {a }}$ | 11 |
|  |  | $\begin{array}{lll} \text { Rescaling } & \text { Method } & \text { for } \\ \text { Covariates } \end{array}$ | Standardized |
| Hidden Layer(s) |  | Number of Hidden Layers |  |
|  |  | Number of Units in Hidden Layer ${ }^{1 a}$ | ${ }^{2}$ |
|  |  | Activation Function | Hyperbolic tangent |
| Output Layer | Dependent Variables | 1 | weekend activity length in mile |
|  |  | 2 | weekend activity space in sq. mile |


| Number of Units |
| :--- | :--- |
| Rescaling Method for Scale Dependents |
| Activation Function |
| Error Function |$\quad$| Standardized |
| :--- |
| Identity |
| Sum of Squares |

a. Excluding the bias unit

Table S24. Parameter Estimates

|  | Predictor | Predicted |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hidden Layer 1 |  | Output Layer |  |
|  |  | H (1:1) | H (1:2) | Activity_length_wd | Activity_area_wd |
| Input Layer | (Bias) | . 835 | -. 418 |  |  |
|  | HH_size | . 024 | -. 037 |  |  |
|  | No_of_employee | . 012 | -. 111 |  |  |
|  | Car_ownership | -. 030 | -. 427 |  |  |
|  | No_of_car | -. 020 | -. 004 |  |  |
|  | Other_vehicles | . 078 | -. 295 |  |  |
|  | No_of_members | . 025 | -. 010 |  |  |
|  | Intersection_density_wd | -. 010 | -. 312 |  |  |
|  | Job_density_wd | . 232 | . 291 |  |  |
|  | School_density_wd | . 211 | . 165 |  |  |
|  | Retailshop_density_wd | . 231 | -. 087 |  |  |
|  | Residential_density_wd | -. 099 | . 174 |  |  |
| Hidden Layer 1 | Population_density_wd (Bias) | 1.536 | . 205 | . 323 | . 425 |
|  | H (1:1) |  |  | -1.637 | -1.719 |
|  | H (1:2) |  |  | -. 431 | -. 300 |

Table S25. Parameter Estimates


## HOUSEHOLD SURVEY

## HOUSEHOLD SURVEY

# TRAVEL AND ACTIVITY STUDY IN DHAKA CITY, BANGLADESH 

Institute of Transportation Studies
UNIVERSITY OF CALIFORNIA, IRVINE

Household ID:


This code will be assigned by the research team.

## Name of the Surveyor:

PART A

## General and Household Information



| 18. | What is your preferred mode of travel? | 1. On foot | 7. CNG Auto <br> Rickshaw |
| :--- | :--- | :--- | :--- |
|  |  | 2. Bicycle | 8. Jeep |
|  |  | 3. Rickshaw | 9. Microbus |
|  |  | 4. Motorcycle | 10. Bus |
|  |  | 5. Car | 11. Human Hauler |
|  |  | 6. Taxicab | 12. Pickup |

${ }^{1}$ Age $=1: 18-20$ years, 2:21-24 years, 3:25-34 years, 4:35-54 years, 5:55-64 years, 6:65 years or older
${ }^{2}$ Education = 1: Primary, 2: Secondary, 3: SSC, 4: HSC, 5: Undergraduate, 6: Postgraduate, 7: More highly educated
${ }^{3}$ Occupation = 1: Private Service Holder, 2:Govt. Service Holder, 3: Teacher, 4: Lawyer, 5: Physician/Doctor, 6: Engineer, 7: Nurse, 8: Businessman, 9: Retired 10: Unemployed
${ }^{4}$ Monthly Income $=1$ : Less than BDT 15,000, 2: BDT 15,000-29,999, 3: BDT 30,000-49,999, 4: BDT 50000-74,999, 5: BDT 75,000 or more
${ }^{5}$ Household size $=1: 1,2: 2,3: 3,4: 4,5:>=5$

## PART B

## General Travel Information (Weekday)

## About Your Typical Weekday Travel

Now think about your travel on a typical weekday (Sunday through Thursday). Please answer the following questions about how you travel to your work on a typical weekday:

On a typical workday, I travel to work by (check all that applies):
1=Car
2=Bus
3=Train
4=Bicycle
5=Rickshaw
6=Walking
6=others (specify)
$7=$ I work at home
8=I am not employed
On a typical workday, do you carpool to work with other people?
$1=$ Yes
2=No

During a typical work week, do you work at home?
$1=$ Yes
2=No

How many days per week do you usually work at home?
1=1
$2=2$
$3=3$
$4=4$
$5=5$
$6=6$
$7=7$

Do you use public transit frequently?
$1=\mathrm{No}, 2=\mathrm{Yes}$

If No, why?
1=Long distance to nearest transit stop
2=Lack of Personal safety
3=Lack of Comfort
4=Lack of Privacy
5=Due to certain Social norms
6=Specific Gender issues
7=Inbuilt negative perception toward public transit
$8=$ others (specify)

If yes, how often do you use public transit?
1=hardly ever
$2=$ few times a year
3=few times a month
$4=$ few times a week
$5=$ almost every day

During the past 2 weeks, how many days did you use public transit (bus)?
$1=0$ days $2=1-3$ days $3=4-6$ days $4=7-9$ days $5=10$ days or more

Please estimate the average time it takes to walk from your home to the nearest public transit stop:
$1=$ Less than 5 minutes
$2=5$ to 10 minutes
3=10 to 15 minutes
$4=15$ to 30 minutes
5=More than 30 minutes

## PART B

## Perception (attitude) Related Information

The next set of questions asks you about individual characteristics and preferences which could be related to your travel choices. You will be asked your opinion on a range of transportation topics. Please select the answer that most closely reflects your feeling or experience.

Please read each of the following statements and indicate how much you agree or disagree with each of them.

| Statement | Strongly <br> disagree | Moderately <br> disagree | Slightly <br> disagree | Neither agree <br> or disagree | Slightly <br> agree | Moderately <br> agree |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I am satisfied with how I am getting into my daily <br> locations every day. |  |  |  |  |  |  |
| Much of my travel is done to meet the needs of <br> others in my household. |  |  |  |  |  |  |
| I enjoy walking or bicycling near my home to travel <br> short distance. |  |  |  |  |  |  |
| Public bus schedule is convenient for me. |  |  |  |  |  |  |
| Public bus takes me where I need to go. |  |  |  |  |  |  |
| I can get things done while riding public bus that I <br> can't do in my car. |  |  |  |  |  |  |
| Taking the bus could save me money compared to <br> driving a car. |  |  |  |  |  |  |
| I am facing difficulty to get access to public bus. |  |  |  |  |  |  |
| I am uncomfortable on a crowded bus. |  |  |  |  |  |  |
| I don't know enough about public transit within <br> my daily travel area to use it. |  |  |  |  |  |  |
| I feel pressed for time in my daily travels. |  |  |  |  |  |  |
| Using public bus takes too long to reach <br> destination compared to going by car. |  |  |  |  |  |  |
| I carry negative attitude towards using public <br> transit. |  |  |  |  |  |  |
| I feel restricted because I don't have access to a car <br> often enough. |  |  |  |  |  |  |


| Statement | Strongly disagree | Moderately disagree | Slightly disagree | Neither agree or disagree | Slightly agree | Moderately agree | Strongly agree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Due to not having a private car I often miss social functions especially during night. |  |  |  |  |  |  |  |
| Due to social trend, I want/wanted to buy private car. |  |  |  |  |  |  |  |
| I am feeling socially deprived for not having a car. |  |  |  |  |  |  |  |
| My car is an important part of who I am. |  |  |  |  |  |  |  |
| My car acts as a symbol of social status for me. |  |  |  |  |  |  |  |
| I like the privacy of riding in a car compared to other modes of traveling. |  |  |  |  |  |  |  |
| According to me, car is more safe/secure in compare to other travel modes. |  |  |  |  |  |  |  |
| My accessibility to car helps travel greater distance. |  |  |  |  |  |  |  |
| It is/would be difficult to get everything done without a car especially when multiple destinations are needed to be covered. |  |  |  |  |  |  |  |
| I do not have a car due to affordability issues. |  |  |  |  |  |  |  |
| I am saving money by cutting down other household expenses to buy a car. |  |  |  |  |  |  |  |
| There are plenty of places to shop within walking distance of my home. |  |  |  |  |  |  |  |
| I can get most of my personal business (like banking, laundry, etc.) done within walking distance of my home. |  |  |  |  |  |  |  |
| There are good restaurants within walking distance of my home. |  |  |  |  |  |  |  |
| I can easily access to different facilities along my daily travel path. |  |  |  |  |  |  |  |
| There are enough places in my daily travel area where I can go for recreation or entertainment. |  |  |  |  |  |  |  |
| Protecting the environment is important to me. |  |  |  |  |  |  |  |


| Statement | Strongly disagree | Moderately disagree | Slightly disagree | Neither agree or disagree | Slightly agree | Moderately agree | Strongly agree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Noise and pollution from cars and trucks is a problem in my daily travel area. |  |  |  |  |  |  |  |
| Reducing car use is beneficial to the environment. |  |  |  |  |  |  |  |
| To protect the environment, I try to use my car as less as possible. |  |  |  |  |  |  |  |
| Increasing use of public transit is beneficial to the environment. |  |  |  |  |  |  |  |
| I try to minimize my impact on the environment by taking the bus whenever I can. |  |  |  |  |  |  |  |

## Your Thoughts About Safety and Transportation

The following section includes questions about safety and security concerns you might have in your daily travel area (activity space) and when you use transit. Please select only one answer for each of the questions below.
Have you ever had a problem with personal safety while walking in your daily travel area?
$1=$ No
$2=$ Yes, during the day only
$3=$ Yes, at night only
$4=$ Yes, during the day and at night

Have you ever had a problem with personal safety where you get on and off the bus?
$1=$ No
$2=$ Yes, during the day only
$3=$ Yes, at night only
$4=$ Yes, during the day and at night
Have you ever had a problem with personal safety while riding the bus?
$1=$ No
$2=$ Yes, during the day only
$3=$ Yes, at night only
$4=$ Yes, during the day and at night
If you have had a personal safety problem when using public transit, what was it?
1=none
2=harassment
3=robbery
4=physical attack
$5=$ more than one of the above
$6=$ others (specify)

Please indicate how safe you feel when...

|  | Completely <br> unafraid | Unafraid | Somewhat <br> unafraid | Neither | Somewhat <br> afraid | Afraid | Extremely <br> afraid |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Walking in your <br> daily travel area <br> during the day. |  |  |  |  |  |  |  |
| Walking in your <br> daily travel area <br> at night. |  |  |  |  |  |  |  |
| Where you get <br> on and off of the <br> bus during the <br> day. |  |  |  |  |  |  |  |
| Where you get <br> on and off of the <br> train/bus at <br> night. |  |  |  |  |  |  |  |
| While riding on <br> the bus during <br> the day. |  |  |  |  |  |  |  |


| While riding on <br> the bus at night. |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TRAVEL LOG
TRAVEL AND ACTIVITY STUDY
IN DHAKA CITY, BANGLADESH
Institute of Transportation Studies

## UNIVERSITY OF CALIFORNIA, IRVINE

Household ID (same as the respective survey questionnaire):


Person ID:


These codes will be assigned by the research team.

Thank you for completing the above portion of the study (Questionnaire part). Your response is very important to us. The next step is to fill out the seven-day travel logs for all the members (age greater than or equal to 12) in the household. Following is a sample of one travel $\log$ which will be completed by one individual member of the household for all seven days of a week. Each adult member needs to fill-up the log by him or herself. For the travel logs of members under age 18, any other adult member from the household can fill up. Please try to be as accurate as possible with your responses. The quality of this study depends on the getting the best possible information from you. You are an important member of the study team!

## Working Day 1 (Sunday):

কাজের দিন ১ (রবিবার)

| Trip <br> ভ্রম न | Trip <br> Segment <br> (TS) <br> [if any] <br> ভরমনরে <br> ভাগ (যদি <br> থাকে) | Origin <br> (Provide <br> detail <br> address) <br> যাএ শুরুর <br> জায়গা <br> (বস্তিারা <br> ত ঠঠিিানা <br> প্রদান <br> করুন) | Destination (Provide detail <br> address) <br> গন্তব্য <br> (বস্তিতারতি <br> ঠিকানা প্রদান <br> করুন) | Purpose ${ }^{1}$ <br> ভরমনরর <br> উদ্দণ্মে | Mode ${ }^{2}$ <br> যান <br> বাহন | Distanc <br> e <br> (km) <br> দূরত্ব <br> (কিমি.) | Duration (minutes) সময়কাল (মিনিট) | Cost <br> (BDT) <br> থরচ <br> (টাকা) | Time ${ }^{3}$ সময় |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
| 1 | TS 2 <br> ভরমন ভাগ २ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |



Working Day 2 (Monday):
কাজের দিন ২ (সোমবার)

| Trip <br> ভ্রম <br> न | Trip <br> Segment <br> (TS) <br> [if any] <br> ভরমনরে <br> ভাগ (যদি <br> থাকে) | Origin <br> (Provide <br> detail <br> address) <br> যাএ শুরুর <br> জায়গা <br> (বস্তিরারা <br> ত ঠঠকিাना <br> প্রদান <br> করুন) | Destination (Provide detail address) <br> গন্তব্য <br> (বস্ত্তারতি <br> ঠিকানা প্রদান করুন) | Purpose ${ }^{1}$ <br> ভ্রমনরে <br> উদ্দশ্যে | Mode ${ }^{2}$ <br> যান <br> বাহন | Distanc <br> e <br> (km) <br> দূরত্ব <br> (কিমি.) | Duration (minutes) সময়কাল (মিনিট) | Cost <br> (BDT) <br> থরচ <br> (টাকা) | Time ${ }^{3}$ <br> সময় |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ २ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 2 | TS 1 <br> ভ্রমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভ্রমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |



Working Day 3 (Tuesday):
কাজের দিন ৩ (মঙ্গলবার)

| Trip <br> ভরম <br> न | Trip <br> Segment <br> (TS) <br> [if any] <br> ভরমনরে <br> ভাগ (যদি <br> থাকে) | Origin <br> (Provide <br> detail <br> address) <br> যাএ শুরুর <br> জায়গা <br> (বস্তিার্রা <br> ত ঠঠকिাना <br> প্রদান <br> করন) | Destination (Provide detail <br> address) <br> গন্তব্য <br> (বস্তিারতি <br> ঠিকানা প্রদান করুন) | Purpose ${ }^{1}$ <br> ভরমনরে <br> উদ্দশ্যে | Mode ${ }^{2}$ <br> যান <br> বাহন | $\begin{gathered} \text { Distanc } \\ \text { e } \\ \text { (km) } \\ \text { দृরত্ব } \\ \text { (কিমি.) } \end{gathered}$ | Duration (minutes) সময়কাল (মিনিট) | Cost <br> (BDT) <br> থরচ <br> (টাকা) | Time ${ }^{3}$ সময় |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 2 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 3 | TS 1 <br> ভ্রমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভ্রমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 |  |  |  |  |  |  |  |  |


|  | ভ্রমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | TS 1 <br> ভররমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভররমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |

Working Day 4 (Wednesday):
কাজের দিন 8 (বুধবার)

| Trip <br> ভৃরম न | Trip <br> Segment <br> (TS) <br> [if any] <br> ভরমনরে <br> ভাগ (যদি <br> থাকে) | Origin (Provide detail address) याএा শুরুর জाয়গা (বস্তিরা ত ঠঠকিনना প্রদান করুন) | Destination (Provide detail <br> address) <br> গন্তব্য <br> (বস্ত্তারতি <br> ঠিকানা প্রদান করুন) | Purpose ${ }^{1}$ <br> ভ্রমনরে <br> উদ্দশ্ম্য | Mode ${ }^{2}$ <br> यान <br> বাহন | Distanc <br> e <br> (km) <br> দূরত্ব <br> (কিমি.) | Duration (minutes) সময়কাল (মিনিট) | Cost <br> (BDT) <br> খরচ <br> (টাকা) | Time ${ }^{3}$ সময় |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | $\text { TS } 2$ <br> ভরমন ভাগ २ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভূরমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 2 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভ্রমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 3 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 4 | TS 1 <br> ভ্রমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |



Working Day 5 (Thursday):
কাজের দিন ৫ (বৃহস্পতিবার)

| Trip <br> ভ্রম न | $\begin{gathered} \text { Trip } \\ \text { Segment } \\ \text { (TS) } \\ \text { [if any] } \\ \text { ভ্রমনরে } \\ \text { ভাগ (যদি } \\ \text { থাকে) } \end{gathered}$ | Origin <br> (Provide <br> detail <br> address) <br> যাআ শুরুর <br> জায়গা <br> (বস্তিার্রা <br> ত ঠঠকিানা <br> প্রদান <br> করুন) | Destination (Provide detail <br> address) <br> গন্তব্য <br> (বস্তিতারতি <br> ঠিকানা প্রদান করুন) | Purpose ${ }^{1}$ <br> ভ্রমনরে <br> উদ্দশ্যে | Mode ${ }^{2}$ <br> যান <br> বাহন | e <br> (km) <br> দূরত্ব <br> (কিমি.) | Duration (minutes) সময়কাল (মিনিট) | Cost <br> (BDT) <br> থরচ <br> (টাকা) | Time ${ }^{3}$ <br> সময় |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ७ |  |  |  |  |  |  |  |  |
| 2 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 3 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |
| 4 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৩ |  |  |  |  |  |  |  |  |

Weekend Day 1 (Friday):
ছুটির দিন > (শুক্রবার)

| Trip <br> ভরম <br> न | $\begin{gathered} \text { Trip } \\ \text { Segment } \\ \text { (TS) } \\ \text { [if any] } \\ \text { ভ্রমনরে } \\ \text { ভাগ (যদি } \\ \text { থাকে) } \end{gathered}$ | Origin <br> (Provide <br> detail <br> address) <br> যাআ শুরুর <br> জায়গা <br> (বস্তিার্রা <br> ত ঠঠকিানা <br> প্রদান <br> করুন) | Destination (Provide detail <br> address) <br> গন্তব্য <br> (বস্ত্তারতি <br> ঠিকানা প্রদান <br> করুন) | Purpose ${ }^{1}$ <br> ভরমনরে <br> উদ্দ্মে্য | Mode ${ }^{2}$ <br> यान <br> বাহন | $\begin{gathered} \text { Distanc } \\ \text { e } \\ \text { (km) } \\ \text { দृরত্ব } \\ \text { (কিমি.) } \end{gathered}$ | Duration (minutes) সময়কাল (মিনিট) | Cost <br> (BDT) <br> থরচ <br> (টাকা) | Time ${ }^{3}$ সময় |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভূরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৮ |  |  |  |  |  |  |  |  |
| 2 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ๒ |  |  |  |  |  |  |  |  |
| 3 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভররমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভ়রমন ভাগ ৫ |  |  |  |  |  |  |  |  |
| 4 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমম ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভ়রমন ভাগ ৫ |  |  |  |  |  |  |  |  |

ছুটির দিন ২ (শনিবার)

| Trip <br> ভ্রম <br> न | Trip <br> Segment <br> (TS) <br> [if any] <br> ভ্রমনরে <br> ভাগ (যদি <br> থাকে) | Origin <br> (Provide <br> detail <br> address) <br> যাএ শুরুর <br> জায়গা <br> (বস্তিার্রা <br> ত ঠঠকিাना <br> প্রদান <br> করুন) | Destination (Provide detail <br> address) <br> গন্তব্য <br> (বস্ত্তারতি <br> ঠিকানা প্রদান করুন) | Purpose ${ }^{1}$ <br> ভ্রমনরে <br> উদ্দশ্রেয | Mode ${ }^{2}$ <br> যান <br> বাহন | e <br> (km) <br> দূরত্ব <br> (কিমি.) | Duration (minutes) সময়কাল (মিনিট) | Cost <br> (BDT) <br> থরচ <br> (টাকা) | Time ${ }^{3}$ সময় |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ २ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ๒ |  |  |  |  |  |  |  |  |
| 2 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভূরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভররমন ভাগ ৫ |  |  |  |  |  |  |  |  |
| 3 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভররমন ভাগ ৫ |  |  |  |  |  |  |  |  |
| 4 | TS 1 <br> ভরমন ভাগ ১ |  |  |  |  |  |  |  |  |
|  | TS 2 <br> ভরমন ভাগ ২ |  |  |  |  |  |  |  |  |
|  | TS 3 <br> ভরমন ভাগ ৫ |  |  |  |  |  |  |  |  |

${ }^{1}$ Purpose $=1:$ Home, 2: Work, 3: School, 4: Shopping Center/Store/Bazar, 5: Lunch/Dinner, 6: Social Contacts
${ }^{2}$ Mode = 1:On foot, 2:Bicycle, 3:Rickshaw, 4:Motorcycle, 5:Car, 6:Taxicab, 7:CNG Auto Rickshaw, 8:Jeep,
9:Microbus, 10:Bus, 11:Human Hauler, 12:Pickup
${ }^{3}$ Time $=1: 6 \mathrm{am}$ to $9 \mathrm{am}, 2: 9 \mathrm{am}$ to $12 \mathrm{pm}, 3: 12 \mathrm{pm}$ to $3 \mathrm{pm}, 4: 3 \mathrm{pm}$ to $6 \mathrm{pm}, 5: 6 \mathrm{pm}$ to $9 \mathrm{pm}, 6: 9 \mathrm{pm}$ to 12 am

## Instructions:

- Consider each trip you take during each day.
- Ignore walk trips with duration of less than 5 minutes.
- Consider trips you take for recreation or exercise also.
- Consider each trip mode as a separate trip segment (car, walk etc.) within a complete trip of one specific origin and destination.
- Maximum three trip segments are assumed for each trip. It can be more or less in number. Adjust accordingly in the travel log.
- Maximum four trips are assumed per day. It can be more or less in number. Adjust accordingly in the travel log.
Sample filled up questionnaire of household 60 and travel logs of 2 members from the household



