

Supplementary Data

Table S1. Association between NEWS-Y Subscales and Children's Physical Activity and BMI with NEWS-Y and Gender Interaction Effects

NEWS-Y Scale	Minutes per week of vigorous activity	Minutes per week of moderate activity	BMI Z-score
A. Land-Use Mix: Diversity	-6.22 (-24.428, 11.993)	-2.81 (-19.540, 13.927)	-0.02 (-0.185, 0.142)
Land-Use Mix: Diversity × Female	13.10 (-14.432, 40.641)	14.39 (-10.989, 39.765)	0.15 (-0.101, 0.395)
B. Neighborhood Recreation Facilities	25.68* (6.026, 45.334)	20.99* (3.127, 38.847)	0.07 (-0.095, 0.244)
Recreation Facilities × Female	-27.48 (-54.958, 0.005)	-12.49 (-37.530, 12.556)	0.02 (-0.216, 0.259)
C. Residential Density	-1.92 (-21.000, 17.161)	-0.83 (-18.262, 16.611)	0.03 (-0.138, 0.205)
Residential Density × Female	-10.79 (-37.777, 16.204)	-12.21 (-36.921, 12.500)	-0.18 (-0.419, 0.063)
D. Land-Use Mix: Access	-1.19 (-20.854, 18.471)	7.62 (-10.419, 25.656)	-0.07 (-0.245, 0.101)
Land-Use Mix: Access × Female	4.05 (-23.020, 31.112)	0.56 (-24.278, 25.390)	0.09 (-0.149, 0.325)
E. Street Connectivity	-8.22 (-27.186, 10.753)	3.39 (-13.984, 20.765)	-0.07 (-0.239, 0.096)
Street Connectivity × Female	1.36 (-25.490, 28.217)	-17.37 (-41.989, 7.257)	0.11 (-0.127, 0.345)
F. Walking/cycling Facilities	2.61 (-16.574, 21.803)	5.24 (-12.351, 22.833)	-0.07 (-0.238, 0.100)
Walking/cycling Facilities × Female	3.03 (-23.906, 29.956)	-8.44 (-33.175, 16.292)	0.08 (-0.161, 0.314)
G. Neighborhood Aesthetics	5.01 (-13.874, 23.899)	-2.12 (-19.567, 15.326)	-0.01 (-0.182, 0.155)
Neighborhood Aesthetics × Female	-1.35 (-27.944, 25.248)	3.54 (-20.958, 28.040)	-0.05 (-0.287, 0.185)
H. Pedestrian/automobile Traffic Safety	10.23 (-8.731, 29.199)	16.51 (-0.855, 33.876)	-0.08 (-0.244, 0.089)
Traffic Safety × Female	-23.36 (-50.196, 3.476)	-13.83 (-38.307, 10.648)	0.15 (-0.083, 0.387)
I. Crime Safety	19.27 (-0.545, 39.087)	13.17 (-5.135, 31.482)	0.04 (-0.138, 0.214)
Crime Safety × Female	-15.62 (-42.358, 11.117)	-3.08 (-27.754, 21.596)	-0.09 (-0.333, 0.143)

All regressions were adjusted for socio-demographic covariates. Figures in parentheses are standard errors.

** $p < 0.01$, * $p < 0.05$.

Table S2. Association between NEWS-Y Subscales and Children’s Physical Activity and BMI by On- and Off-Post – Controlling for Installation Fixed Effects

NEWS-Y Scale	On-Post			Off-Post		
	Minutes/Week of vigorous activity	Minutes/Week of moderate activity	BMI Z-score	Minutes/Week of vigorous activity	Minutes/Week of moderate activity	BMI Z-score
A. Land-Use Mix: Diversity	6.36 (-16.366, 29.091)	12.97 (-7.568, 33.516)	-0.00 (-0.211, 0.207)	-5.86 (-23.082, 11.357)	-2.85 (-18.714, 13.008)	0.07 (-0.084, 0.225)
B. Neighborhood Recreation Facilities	8.01 (-17.921, 33.936)	18.29 (-4.657, 41.235)	0.03 (-0.197, 0.265)	16.78 (-1.222, 34.777)	18.10* (1.503, 34.701)	0.10 (-0.049, 0.246)
C. Residential Density	2.59 (-21.811, 26.998)	1.45 (-20.437, 23.333)	-0.08 (-0.298, 0.135)	-19.03 (-38.277, 0.210)	-11.82 (-29.556, 5.916)	-0.08 (-0.261, 0.095)
D. Land-Use Mix: Access	15.06 (-9.626, 39.738)	14.40 (-7.938, 36.739)	-0.00 (-0.219, 0.216)	-8.61 (-25.720, 8.504)	7.84 (-8.121, 23.796)	-0.03 (-0.185, 0.120)
E. Street Connectivity	16.35 (-6.288, 38.994)	5.02 (-15.392, 25.441)	0.02 (-0.176, 0.223)	-31.58** (-49.823, -13.345)	-13.14 (-30.286, 4.000)	-0.09 (-0.252, 0.076)
F. Walking/cycling Facilities	19.28 (-11.085, 49.636)	18.48 (-8.759, 45.711)	-0.14 (-0.406, 0.129)	-4.91 (-22.576, 12.759)	-5.61 (-22.109, 10.887)	0.06 (-0.094, 0.223)
G. Neighborhood Aesthetics	19.42 (-2.719, 41.556)	5.25 (-14.767, 25.269)	-0.03 (-0.224, 0.170)	-4.39 (-22.318, 13.540)	-0.04 (-16.797, 16.722)	-0.08 (-0.242, 0.081)
H. Pedestrian/automobile Traffic Safety	-2.95 (-25.528, 19.633)	9.01 (-11.084, 29.100)	0.02 (-0.179, 0.221)	-3.89 (-21.530, 13.755)	6.95 (-9.346, 23.251)	-0.00 (-0.157, 0.151)
I. Crime Safety	13.14 (-8.557, 34.829)	16.67 (-2.831, 36.174)	0.01 (-0.187, 0.203)	7.81 (-10.329, 25.946)	0.33 (-16.648, 17.310)	-0.07 (-0.229, 0.094)

All regressions were adjusted for socio-demographic covariates. Figures in parentheses are 95% confidence intervals.

**p < 0.01, *p < 0.05.

Table S3. Association between NEWS-Y Subscales and Children’s Physical Activity and BMI by On- and Off-Post – Controlling for Region Fixed Effects

NEWS-Y Scale	On-Post			Off-Post		
	Minutes/Week of vigorous activity	Minutes/Week of moderate activity	BMI Z-score	Minutes/Week of vigorous activity	Minutes/Week of moderate activity	BMI Z-score
A. Land-Use Mix: Diversity	5.51 (-16.790, 27.802)	10.75 (-9.872, 31.379)	0.02 (-0.187, 0.221)	-6.16 (-23.335, 11.009)	-3.48 (-19.128, 12.173)	0.07 (-0.084, 0.223)
B. Neighborhood Recreation Facilities	3.23 (-21.846, 28.305)	13.58 (-9.268, 36.425)	0.09 (-0.135, 0.314)	17.26 (-0.268, 34.796)	17.92* (1.823, 34.019)	0.08 (-0.070, 0.221)
C. Residential Density	-0.40 (-22.928, 22.130)	-4.23 (-24.998, 16.535)	-0.04 (-0.244, 0.156)	-15.65 (-34.762, 3.461)	-10.60 (-28.024, 6.831)	-0.08 (-0.258, 0.093)
D. Land-Use Mix: Access	12.92 (-10.443, 36.276)	10.12 (-11.500, 31.747)	-0.04 (-0.243, 0.168)	-6.42 (-23.319, 10.486)	8.13 (-7.496, 23.753)	-0.05 (-0.202, 0.098)
E. Street Connectivity	13.20 (-8.365, 34.758)	1.90 (-18.052, 21.859)	0.02 (-0.168, 0.213)	-24.91*** (-42.728, -7.094)	-10.36 (-26.860, 6.140)	-0.09 (-0.246, 0.072)
F. Walking/cycling Facilities	16.89 (-12.749, 46.534)	20.95 (-6.361, 48.265)	-0.11 (-0.365, 0.155)	1.36 (-14.445, 17.162)	-3.70 (-18.321, 10.915)	-0.00 (-0.145, 0.138)
G. Neighborhood Aesthetics	16.87 (-4.578, 38.313)	5.19 (-14.719, 25.094)	-0.01 (-0.205, 0.176)	-9.84 (-26.874, 7.198)	-2.35 (-18.127, 13.432)	-0.05 (-0.201, 0.105)
H. Pedestrian/automobile Traffic Safety	-4.22 (-26.048, 17.604)	10.86 (-9.129, 30.842)	0.03 (-0.161, 0.229)	-3.21 (-20.702, 14.287)	7.68 (-8.342, 23.710)	-0.00 (-0.156, 0.148)
I. Crime Safety	12.36 (-8.549, 33.275)	21.28* (2.027, 40.535)	0.02 (-0.169, 0.208)	7.16 (-10.854, 25.175)	1.04 (-15.680, 17.751)	-0.07 (-0.226, 0.092)

All regressions were adjusted for socio-demographic covariates including Census Region (West, Midwest, Northeast, and South). Figures in parentheses are 95% confidence intervals.
 ***p < 0.01, *p < 0.05.