

Supplemental Tables

Supplemental Table 1: Characteristics of excluded participants and analytic sample

	N	Excluded participants	Analytic sample
		67	34
		M (SD)	M (SD)
Age (in years)		45.6 (13.3)	45.0 (13.3)
Residency (in years) in current neighborhood		11.0 (12.1)	15.9 (13.6)
		%	%
Women		52.2	55.9
Race/ethnicity			
Non-Hispanic white		31.8	17.6
Hispanic/Latino		13.4	20.6
Non-Hispanic Black/African American		55.2	61.8
Highest level of education completed			
No high school diploma or GED		16.4	8.8
High school diploma or GED only		20.8	29.4
Trade/vocational school, associate's degree, or some college		29.9	38.2
Bachelors degree or higher		32.9	23.5
Employment status ^a			
Working now		53.0	32.4
Retired		7.6	11.8
Disabled		13.6	8.8
Student		4.5	14.7
Unemployed		21.2	17.6
Other		0.0	14.7
Annual household income			
Less than \$15,000		31.3	33.3
\$15,000 - \$29,999		31.3	36.4
\$30,000 or more		37.5	30.3
Receive government assistance (e.g., WIC, SNAP)		46.6	52.9
Own home		19.4	35.3
Own or lease car		37.3	38.2
Current marital status			
Single or never married		56.7	58.8
Married/living with partner		22.4	23.5
Separated		7.5	5.9
Divorced		11.9	11.8
Widowed		1.0	0.0

M = mean SD = standard deviation GED = general equivalency diploma WIC = Supplemental Program for Women, Infants, and Children SNAP = Supplemental Nutrition Assistance Program

^a Participants had the option to indicate more than one employment status. Responses were categorized hierarchically in the order listed (e.g. a participant who indicated they are both currently working and a student is classified here as currently working)

Supplemental Table 2: Descriptive statistics for cumulative day and mean daily activity space measures, days 7, 14, 21, and 28

	Cumulative Measures						Mean Daily Measures					
	M (SD)	Min	Q1	Med	Q3	Max	M (SD)	Min	Q1	Med	Q3	Max
Convex Hull Area (mi ²)												
7	59.47 (77.85)	0.5 4	13. 05	25. 33	71.7 5	324. 14	13.30 (17.7 0)	0.1 2	2.9 8	7.01	14.6 6	81.7 5
14	81.67 (87.48)	0.6 7	25. 83	42. 65	92.9 2	324. 25	11.48 (10.4 3)	0.0 7	3.9 7	8.96	15.4 1	42.1 4
21	128.70 (142.89)	7.1 5	28. 27	58. 94	182. 08	533. 67	11.66 (9.47)	0.3 0	3.9 5	9.25	16.3 5	33.6 9
28	147.12 (146.33)	19. 83	43. 45	75. 27	200. 14	537. 87	10.89 (8.11)	0.3 5	4.9 5	9.07	15.2 4	30.4 6
Supermarkets Count												
7	66.68 (61.98)	1	17	48. 5	105	274	16.15 (16.4 7)	0.1 4	4.2 9	11.5 0	19.7 1	67.0 0
14	85.74 (62.70)	1	34	76	122	274	15.00 (14.1 1)	0.0 7	4.0 7	11.8 6	18.8 6	69.2 9
21	118.47 (87.16)	11	51	88	173	366	15.02 (13.6 6)	0.5 2	4.8 6	13.6 4	20.1 4	68.8 6
28	133.71 (87.45)	20	75	106	178	368	14.35 (13.2 3)	0.6 4	5.5 7	11.9 3	18.6 1	71.1 8
Density												
7	1.47 (0.56)	0.3 2	1.0 2	1.6 2	1.84	2.34	1.90 (1.82)	0.2 0	1.1 3	1.53	2.06	11.2 4
14	1.39 (0.55)	0.3 2	1.0 8	1.3 7	1.81	2.67	1.83 (1.37)	0.2 9	1.0 7	1.42	2.39	6.49
21	1.33 (0.57)	0.4 3	0.9 0	1.2 6	1.81	2.58	1.95 (1.87)	0.2 5	0.9 9	1.40	2.31	10.2 5
28	1.29 (0.58)	0.4 2	0.7 9	1.1 7	1.73	2.79	1.86 (1.50)	0.2 5	0.9 7	1.46	2.23	8.15
Fast food restaurants Count												
7	524.29	5	148	445	923	201	130.8	1.1	35.	72.1	202.	554.

	(464.69)					7	2	4	43	4	86	43
							(134.12)					
							121.28	0.64	33.57	100.86	168.57	574.57
14	687.88 (486.76)	7	252	662.5	981	2017	(119.19)					
							118.57	3.95	32.38	104.40	149.48	568.62
21	939.47 (680.58)	91	420	805	1349	2835	(113.55)					
							113.21	5.14	38.57	102.21	127.39	579.93
28	1059.50 (681.3)	118	578	895.5	1361	2849	(109.59)					
Density												
7	12.17 (6.29)	2.97	6.62	11.63	16.74	26.35	13.03 (8.46)	1.33	6.67	12.36	16.90	41.17
14	11.37 (5.65)	2.97	6.53	10.44	15.12	25.24	12.89 (6.76)	2.59	6.07	13.23	18.69	26.72
21	10.67 (5.22)	3.28	6.10	10.26	14.37	23.14	12.15 (5.80)	2.66	7.25	12.32	17.36	23.50
28	10.36 (5.43)	3.41	5.93	9.17	14.37	25.97	12.32 (5.63)	2.75	6.87	12.90	15.29	22.01
Parks Count												
7	78.06 (89.06)	1	22	40	102	355	18.68 (20.97)	0.57	4.57	11.43	19.57	93.00
14	107.00 (100.77)	2	35	66.5	132	355	16.54 (13.69)	0.36	6.14	13.71	21.07	49.29
21	163.06 (164.31)	14	45	89	237	618	16.70 (12.75)	0.86	6.62	15.19	23.67	45.67
28	187.74 (176.26)	25	64	105	258	653	15.67 (11.26)	0.68	7.04	14.05	20.21	47.07
Land ^a												
7	0.05 (0.05)	0.01	0.04	0.05	0.06	0.29	0.04 (0.03)	0.00	0.02	0.03	0.04	0.19
14	0.06 (0.04)	0.02	0.04	0.05	0.06	0.26	0.03	0.00	0.00	0.03	0.04	0.10

								(0.02)	1	2			
		0.0	0.0	0.0				0.03	0.0	0.0	0.03	0.04	0.08
21	0.06 (0.02)	3	4	5	0.07	0.12		(0.02)	1	2			
		0.0	0.0	0.0				0.03	0.0	0.0	0.03	0.04	0.08
28	0.06 (0.02)	3	4	5	0.06	0.12		(0.02)	1	2			
500m Route Buffer Area (m ²)													
	23.74	1.9	12.	18.	30.1	77.4	7.52	1.0	4.1	6.75	11.2	17.5	
7	(16.78)	7	40	59	9	9	(4.45)	8	3		2	4	
	31.72	2.2	19.	27.	36.2	77.9	6.98	1.1	3.6	6.76	9.90	14.6	
14	(18.22)	5	27	77	7	7	(3.57)	4	9			0	
	41.32	7.6	24.	32.	57.4	94.9	6.80	1.3	3.6	6.59	9.32	14.1	
21	(23.99)	5	99	96	2	6	(3.44)	0	3			4	
	46.25	13.	28.	38.	66.3	97.1	6.59	1.1	4.1	6.73	8.88	13.3	
28	(24.31)	09	40	48	4	0	(3.18)	7	5			3	
Supermarkets Count													
	36.06			32.			11.13	2.0	5.1	10.2	15.8	25.4	
7	(21.21)	3	18	5	51	87	(6.88)	0	4	1	6	3	
	46.41			45.			10.75	1.2	5.2	10.2	14.7	28.6	
14	(23.99)	6	28	5	64	111	(6.61)	9	1	1	1	4	
	57.85						10.54	1.2	5.1	10.0	15.1	29.8	
21	(29.69)	9	36	59	76	131	(6.46)	9	4	2	0	6	
	64.06						10.30	1.5	5.2	10.2	13.1	29.9	
28	(30.49)	17	42	62	83	150	(6.29)	4	1	0	8	6	
Density													
		0.5	1.1	1.7			1.64	0.3	1.1	1.70	2.01	2.97	
7	1.68 (0.60)	2	6	4	2.16	2.88	(0.66)	5	5				
		0.4	1.1	1.6			1.63	0.2	1.2	1.54	1.99	3.10	
14	1.62 (0.62)	0	3	6	2.00	2.89	(0.66)	5	2				
		0.4	1.1	1.4			1.65	0.2	1.0	1.59	2.09	3.44	
21	1.53 (0.57)	0	7	5	1.88	2.87	(0.72)	7	8				
		0.5	1.1	1.4			1.63	0.2	1.0	1.53	2.12	3.37	
28	1.51 (0.57)	5	1	7	1.87	2.99	(0.71)	6	9				
Fast food restaurants Count													
							92.28	6.1	36.	86.7	118.	293.	
7	300.09						(72.7	4	71	1	14	00	
	(206.34)	15	112	307	425	726	2)						
							90.08	5.0	38.	81.7	118.	278.	
14	404.68			433			(70.1	0	21	1	00	07	
	(242.78)	19	177	.5	552	965	6)						

								86.04	9.1	36.	74.2	118.	280.
	21	500.38 (260.29)	61	324	524	687	107 5	(64.2 2)	4	19	1	24	90
	28	554.82 (255.68)	113	419	570	719	109 7	84.01 (60.5 7)	12. 00	37. 32	73.1 8	107. 25	276. 00
Density													
	7	13.54 (7.22)	4.2 7	6.4 8	14. 45	18.2 1	28.0 1	13.04 (7.52)	3.0 9	5.6 3	12.7 6	18.1 3	30.9 3
	14	13.48 (6.40)	2.9 4	7.0 1	14. 75	18.2 9	25.1 1	13.05 (7.22)	3.3 1	6.2 7	12.9 7	17.8 4	33.7 6
	21	13.19 (5.66)	3.0 5	9.4 5	12. 79	17.8 5	22.9 2	12.76 (6.99)	3.3 8	6.9 8	12.1 3	17.1 4	34.0 2
	28	13.29 (6.12)	4.0 4	9.7 4	11. 82	17.6 9	30.3 0	12.85 (7.17)	3.3 4	7.0 3	12.1 7	17.3 4	36.8 9
Parks Count													
	7	38.50 (24.85)	4	20	30. 5	50	95	12.07 (7.71)	1.4 3	6.2 9	9.71	17.0 0	31.8 6
	14	50.68 (28.94)	5	31	45	65	117	11.82 (6.65)	1.4 3	5.7 1	11.7 1	15.7 1	25.7 1
	21	65.03 (36.60)	13	35	55. 5	85	154	11.71 (6.34)	1.2 9	6.0 0	11.4 0	14.6 2	25.1 4
	28	72.47 (36.29)	17	44	62. 5	103	154	11.37 (5.84)	1.0 7	7.0 0	11.5 4	15.3 2	25.6 4
Land ^a													
	7	0.06 (0.03)	0.0 1	0.0 3	0.0 5	0.07	0.17	0.05 (0.03)	0.0 1	0.0 3	0.04	0.05	0.20
	14	0.06 (0.03)	0.0 3	0.0 4	0.0 5	0.07	0.15	0.04 (0.03)	0.0 1	0.0 3	0.04	0.05	0.20
	21	0.06 (0.02)	0.0 3	0.0 4	0.0 5	0.07	0.12	0.05 (0.03)	0.0 1	0.0 3	0.04	0.05	0.18
	28	0.06 (0.02)	0.0 3	0.0 4	0.0 5	0.06	0.10	0.04 (0.03)	0.0 1	0.0 3	0.04	0.05	0.18
Kernel Density Supermarkets													
	7	0.80 (1.03)	0.0 1	0.1 4	0.3 0	0.98	3.90	0.80 (1.03)	0.0 1	0.1 4	0.30	0.98	3.90
	14	0.79 (1.02)	0.0 1	0.1 0	0.3 8	0.84	4.00	0.78 (1.02)	0.0 1	0.1 0	0.37	0.83	4.00
	21	0.79 (1.03)	0.0 1	0.0 9	0.3 4	0.89	3.98	0.78 (1.03)	0.0 1	0.0 9	0.33	0.89	3.98
	28	0.80 (1.03)	0.0	0.0	0.3	1.03	3.93	0.80	0.0	0.0	0.33	1.02	3.93

		1	9	3			(1.03)	1	9				
Fast food restaurants													
		0.2	2.7	4.7		14.6	5.19	0.2	2.8	4.71	8.18	14.6	
7	5.18 (3.53)	1	6	1	8.18	3	(3.54)	1	2			3	
		0.2	2.1	4.5		14.4	5.02	0.2	2.1	4.59	7.90	14.4	
14	5.03 (3.41)	7	2	9	7.9	3	(3.40)	7	2			3	
		0.2	1.7	4.6		13.6	4.99	0.2	1.7	4.68	7.12	13.6	
21	5.00 (3.36)	7	6	8	7.12	2	(3.35)	7	6			2	
		0.5	2.0	4.8		14.1	5.09	0.5	2.0	4.81	7.71	14.1	
28	5.10 (3.43)	1	0	3	7.71	4	(3.42)	1	0			4	
Parks													
							24.84	0.0	8.0	18.3	26.7	171.	
7	24.85 (31.73)	0.0	8.0	18.	26.7	171.	(31.7	0	3	4	4	82	
		0	3	35	4	82	4)						
							25.21	0.0	10.	19.6	27.6	169.	
14	25.24 (31.18)	0.0	10.	19.	27.6	169.	(31.1	0	22	2	3	16	
		0	22	62	6	16	7)						
							24.81	0.0	9.4	19.8	28.4	164.	
21	24.82 (30.46)	0.0	9.4	19.	29.2	164.	(30.4	0	0	8	3	11	
		0	0	88	1	11	5)						
							24.48	0.0	8.3	19.1	27.5	163.	
28	24.48 (30.32)	0.0	8.3	19.	27.6	163.	(30.3	0	5	9	9	23	
		0	8	19	1	23	2)						

M = mean SD = standard deviation Min = minimum Q = quartile Med = median
 Max = maximum mi = miles

^a Park land measures for convex hull and 500m route buffer are the proportion of the activity space area that is parkland

Highlights

- In contrast to current norm of 7 days, at least 14 days of valid GPS monitoring are needed.
- Days for valid estimates varied by activity space representation, measure, and environmental attribute.
- Kernel density measures achieved reliable estimates after a few days.
- Reliable estimates were not found for convex hull and route buffer measures.
- Activity space attributes, when not weighted by time, vary considerably day-to-day.