

**Expanding Tools for Investigating Neighborhood Indicators of Drug Use and Violence:  
Validation of the NifETy for Virtual Street Observation**

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**SUPPLEMENTAL MATERIAL**

**Table S1:** Inter-Rater Reliability and Validity of Neighborhood Inventory for Environmental Typology (NifETy) Items Collected Using Google Street View

Domain	Variable	n (%)	Inter-rater Reliability (ICC)	Correlation with In-person NifETy (rho)
<b>Physical Layout</b>				
	Length of Block		.557*	0.609
	Less than 1/10 mile	41 (11.7)		
	1/10 mile	192 (54.9)		
	More than 1/10 mile	92 (26.3)		
	More than twice 1/10 mile	25 (7.1)		
	Width of Block		.651*	0.758
	Less than 4 car widths	96 (27.4)		
	4 car widths	196 (56.0)		
	More than 4 car widths	53 (15.1)		
	More than twice 4 car widths	5 (1.4)		
	Alleys Present		.745*	1.000
	Yes	171 (48.9)		
	Proportion of block with Bicycle Lanes		.863*	0.687
	None	318 (90.9)		
	Half or less	2 (0.6)		
	More than half	0 (0)		
	All	29 (8.3)		
	Proportion of block with Sidewalks		.823*	--
	None			
	Half or less			
	More than half			
	All			
	Dead End Block		.765*	0.878
	Yes	8 (2.3)		
	Median Present		.823*	0.987
	Yes	28 (8.0)		
	Dwelling Count <i>Median (Range)</i>	18 (0-87)	.973*	0.964
<b>Types of Structures</b>				
	Apartment Buildings Count	0 (0-14)	.935*	0.500
	Percent of Apartment Buildings			0.926
	0%	303 (86.6)		
	1-20%	20 (5.7)		
	21-40%	4 (1.1)		
	41-60%	5 (1.4)		
	61-80%	2 (0.6)		
	81-100%	16 (4.6)		
	Single Family/Detached Count	14.5 (0-87)	--	-0.022
	Percent Single Family/Detached Homes		.122*	0.427
	0%	54 (15.4)		
	1-20%	7 (2.0)		
	21-40%	4 (1.1)		
	41-60%	10 (2.9)		
	61-80%	7 (2.0)		
	81-100%	268 (76.6)		
	Multi Family Count	0 (0-21)	.388*	0.460

Percent Multi-Family Homes		.322*	0.827
0%	301 (86.0)		
1-20%	32 (9.1)		
21-40%	7 (2.0)		
41-60%	3 (0.9)		
61-80%	3 (0.9)		
81-100%	4 (1.1)		
Commercial Business Count	0 (0-13)	.804*	0.818
Illegitimate or Informal Businesses Count	0 (0-1)	--	0.540
Liquor Stores Count	0 (0-1)	.795*	0.899
Bars Count	0 (0-2)	0.341	0.863
Daycare Count	0 (0-1)	.459*	0.825
Restaurant Count	0 (0-3)	.447*	0.810
Carry-out Count	0 (0-2)	.233*	0.811
Churches			0.973
Yes	47 (13.4)		
Church Count	0 (0-2)	.770*	0.803
Other Non-Residential Property			0.493
Yes	91 (26.0)		
Other Non-Residential Property Count	0 (0-14)	0.104	0.168
Percent Residential Occupancy		.613*	0.723
0%	4 (1.1)		
1-20%	2 (0.6)		
21-40%	7 (2.0)		
41-60%	36 (10.3)		
61-80%	20 (5.7)		
81-100%	281 (80.3)		

### Physical Order and Disorder

Total Broken Windows Count	0 (0-19)	.808*	0.479
Structures with Broken Windows Count	0 (0-7)	.820*	0.727
Eviction Evidence	8 (2.3)		--
Yes			
Eviction Signs Count	0 (0-1)	0.217	--
Boarded Abandoned Buildings			0.912
None	253 (72.3)		
Few	59 (16.9)		
Some	19 (5.4)		
Many	19 (5.4)		
Boarded Abandoned Buildings Count	0 (0-22)	.916*	0.414
Unboarded Abandoned Buildings			0.443
None	341 (97.4)		
Few	9 (2.6)		
Some	0 (0.0)		
Many	0 (0.0)		
Unboarded Abandoned Buildings Count	0 (0-3)	0.088	0.121
Vacant Houses			0.377
None	300 (85.7)		
Few	48 (13.7)		
Some	2 (0.6)		
Many	0 (0.0)		
Vacant Houses Count	0 (0-4)	.161*	0.324
Vacant Commercial Buildings Count	0 (0-4)	.536*	0.477
New Construction or Renovations		.396*	0.063

Zero	314 (89.7)		
1-3	36 (10.3)		
4-7	0 (0.0)		
8 or more	0 (0.0)		
Unmaintained Property		.616*	0.578
Zero	164 (46.9)		
1-3	110 (31.4)		
4-7	35 (10.0)		
8 or more	41 (11.7)		
Trash in Street		--	0.561
A piece here or there	156 (44.6)		
About 1 grocery bag	95 (27.1)		
About 2 grocery bags	71 (20.3)		
3 or more grocery bags	28 (8.0)		
Trash in Alley		.249*	0.717
A piece here or there	298 (85.1)		
About 1 grocery bag	16 (4.6)		
About 2 grocery bags	10 (2.9)		
3 or more grocery bags	26 (7.4)		
Trash in Other Open Spaces		.677*	0.681
A piece here or there	157 (44.9)		
About 1 grocery bag	75 (21.4)		
About 2 grocery bags	46 (13.1)		
3 or more grocery bags	72 (20.6)		
Vacant Lots		--	0.882
Zero	287 (82.0)		
1-3	61 (17.4)		
4-7	2 (0.6)		
8 or more	0 (0.0)		
Graffiti		.222*	0.353
Zero	291 (83.1)		
1-3	39 (11.1)		
4-7	15 (4.3)		
8 or more	5 (1.4)		
Fire Escapes		.577*	0.748
Zero	294 (84.0)		
1-3	53 (15.1)		
4-7	3 (0.9)		
8 or more	0 (0.0)		
Damaged Sidewalks		.471*	0.369
Zero	87 (24.9)		
1-3	99 (28.3)		
4-7	65 (18.6)		
8 or more	99 (28.3)		
Warning Signs		.334*	0.197
Zero	197 (56.3)		
1-3	127 (36.3)		
4-7	24 (6.9)		
8 or more	2 (0.6)		
Bus Stops		.668*	0.749
Zero	195 (55.7)		
1-3	144 (41.1)		
4-7	11 (3.1)		

8 or more	0 (0.0)		
Train Stations		--	--
Yes	0 (0.0)		
Trolleys/Light Rail		--	--
Yes	0 (0.0)		
Taxis		.324*	--
Yes	10 (2.9)		
Hacks		--	--
Yes	0 (0.0)		
Other Public Transportation		--	--
Yes	2 (0.6)		
Murals		.435*	0.602
Zero	328 (93.7)		
1-3	21 (6.0)		
4-7	1 (0.3)		
8 or more	0 (0.0)		
Speed Devices		.619*	0.267
Zero	190 (54.3)		
1-3	149 (42.6)		
4-7	10 (2.9)		
8 or more	1 (0.3)		
Government Camera		.382*	0.803
Yes	34 (9.7)		
Other Surveillance Camera		.390*	0.369
Yes	23 (6.6)		
Flood Lights		--	0.739
Zero	343 (98.0)		
1-3	7 (2.0)		
4-7	0 (0.0)		
8 or more	0 (0.0)		
Police Present		.341*	--
Zero	339 (96.9)		
1-3	10 (2.9)		
4-7	1 (0.3)		
8 or more	0 (0.0)		
Parked Marked Police Cars		.540*	--
Yes	8 (2.3)		
Police Engaging with Civilians		--	--
Yes	0 (0.0)		
Days of the Week Posted for Street Cleaning		0.776	0.787
No sign posted	270 (77.1)		
Signs with Positive/Neutral Messages		0.103	0.077
Yes	125 (35.7)		
Signs with Negative Messages		--	--
Yes	35 (10.0)		
Signs/Print Ads Related to Alcohol		.590*	0.833
Zero	336 (96.0)		
1-3	10 (2.9)		
4-7	4 (1.1)		
8 or more	0 (0.0)		
Signs/Print Ads Related to Tobacco		.703*	0.418
Zero	342 (97.7)		
1-3	7 (2.0)		

4-7	1 (0.3)		
8 or more	0 (0.0)		
Security Alarm Signs on Houses		.674*	0.573
Zero	164 (46.9)		
1-3	108 (30.9)		
4-7	60 (17.1)		
8 or more	18 (5.1)		
Evidence of Landscaping		.641*	0.849
None	41 (11.7)		
Less than half of the structures	60 (17.1)		
About half of the structures	53 (15.1)		
Almost all or all of the structures	196 (56.0)		
Operable Vehicles		.660*	0.630
Zero	8 (2.3)		
1-3	21 (6.0)		
4-7	46 (13.1)		
8 or more	275 (78.6)		
Inoperable Vehicles		0.109	0.241
Zero	344 (98.3)		
1-3	3 (0.9)		
4-7	3 (0.9)		
8 or more	0 (0.0)		
Used Condoms		--	--
Yes	0 (0.0)		
<b>Social Order and Disorder</b>			
Outdoor Community Recreation Outlets		.349*	0.598
Zero	311 (88.9)		
1-3	38 (10.9)		
4-7	1 (0.3)		
8 or more	0 (0.0)		
Parks and Playgrounds		.540*	0.751
Yes	29 (8.3)		
Court Yards		.344*	0.668
Yes	18 (5.1)		
Organized Game Courts		--	0.897
Yes	5 (1.4)		
Benches		.414*	0.542
Yes	28 (8.0)		
People Loitering		.501*	0.542
Zero	317 (90.6)		
1-3	27 (7.7)		
4-7	6 (1.7)		
8 or more	0 (0.0)		
Police Tape/Outlines in Street		--	--
Yes	1 (0.3)		
Memorials		0.664	--
Yes	4 (1.1)		
<b>Adult Activity</b>			
Adults Present		.886*	0.419
Zero	108 (30.9)		
1-3	151 (43.1)		
4-7	56 (16.0)		
8-10	22 (6.3)		

11 or more	13 (3.7)		
<b>Adults in Work Uniforms Count</b>		<b>.637*</b>	<b>0.043</b>
Zero	307 (87.7)		
1-3	39 (11.1)		
4-7	3 (0.9)		
8-10	1 (0.3)		
11 or more	0 (0.0)		
<b>Adults Sitting on Steps</b>		<b>.779*</b>	<b>0.409</b>
Zero	247 (70.6)		
1-3	76 (21.7)		
4-7	24 (6.9)		
8-10	3 (0.9)		
11 or more			
<b>Male Adults Sitting on Steps Count</b>		<b>.748*</b>	<b>0.292</b>
Zero	263 (75.1)		
1-3	74 (21.1)		
4-7	13 (3.7)		
8-10	0 (0.0)		
11 or more	0 (0.0)		
<b>Adults Exercising</b>		<b>--</b>	<b>--</b>
Zero	334 (95.4)		
1-3	15 (4.3)		
4-7	1 (0.3)		
8-10	0 (0.0)		
11 or more			
<b>Adults Doing Home Repairs</b>		<b>.630*</b>	<b>0.112</b>
Zero	334 (95.4)		
1-3	15 (4.3)		
4-7	1 (0.3)		
8-10	0 (0.0)		
11 or more	0 (0.0)		
<b>Adults Doing Yard Work</b>		<b>.429*</b>	<b>0.073</b>
Zero	326 (93.1)		
1-3	24 (6.9)		
4-7	0 (0.0)		
8-10	0 (0.0)		
11 or more	0 (0.0)		

### **Youth Activity**

<b>Youth Present</b>		<b>0.018</b>	<b>0.145</b>
Zero	337 (96.3)		
1-3	9 (2.6)		
4-7	2 (0.6)		
8-10	1 (0.3)		
11 or more	1 (0.3)		
<b>Corner Kids - Youth on a Corner</b>		<b>.439*</b>	<b>0.664</b>
Zero	343 (98.0)		
1-3	7 (2.0)		
4-7	0 (0.0)		
8-10	0 (0.0)		
11 or more	0 (0.0)		
<b>Corner Boys - Male Youth on a Corner Count</b>		<b>--</b>	<b>--</b>
Zero	347 (99.1)		

1-3	3 (0.9)
4-7	0 (0.0)
8-10	0 (0.0)
11 or more	0 (0.0)

\* indicates  $p < 0.05$  or less