

Supplementary Online Content

Culyba AJ, Jacoby SF, Richmond TS, Fein JA, Hohl BC, Branas CC. Modifiable neighborhood features associated with adolescent homicide. *JAMA Pediatr*. Published online March 7, 2016. doi:10.1001/jamapediatrics.2015.4697.

eFigure 1. Original and Stitched Panorama Photographs and Example Environmental Codings From a Sample Location

eFigure 2. Location of Adolescent Outdoor Homicide Case and Matched Control Participants, Philadelphia, PA, 2010-2012

eTable. Pictometry Coding Guide

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Original and Stitched Panorama Photographs and Example Environmental Codings From a Sample Location*



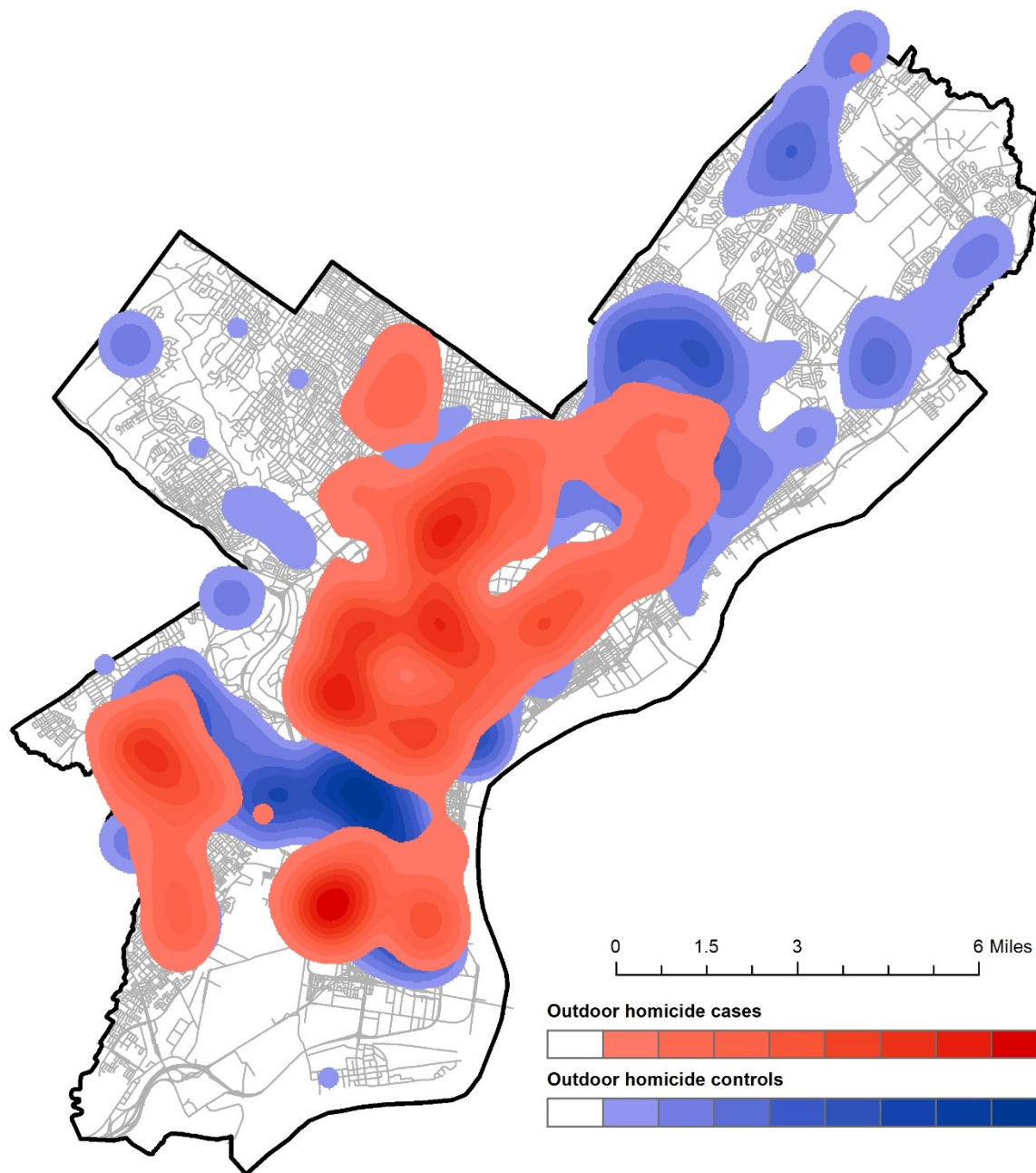
1. Trash

2. Pull-down metal fencing

3. Sidewalk condition

* This location is presented only to illustrate the study's methods and is not an actual location of a study participant

eFigure 2. Location of Adolescent Outdoor Homicide Case and Matched Control Participants, Philadelphia, PA, 2010-2012



eTable. Pictometry Coding Guide

Street Conditions	
Trash	1 – No trash
	2 – Minimal trash/littering (1-3 pieces)
	3 – Moderate trash/littering (4-10 pieces)
	4 – Heavy or extensive trash/littering (more than 10 pieces but no large objects like appliances or furniture)
	5 – Extreme trash/dumping (large items like appliances, tires, or furniture)
	<i>Combining categories for analysis: 1-2 vs. 3-5</i>
Street Lights	1 – None
	2 – At least 1
Illuminated walk/don't walk signs	1 – None
	2 – At least 1
Painted Crosswalks	1 – None
	2 – At least 1
Stop Signs	1 – None
	2 – At least 1
Public Transportation available/visible (i.e. trolley, bus, subway, tracks, or signage)	1 – No 2 – Yes
Sidewalk condition	1 – Excellent (smooth, even, well-maintained, with unbroken concrete or bricks)
	2 – Good (well maintained, with no broken concrete or bricks, but lopsided)
	3 – Fair (One or two missing sections concrete or bricks, or other tripping hazards; unsightly)
	4 – Poor (3 or more tripping hazards, multiple sections of broken or missing bricks or concrete)
	5 – Very poor (Unsound, not passable)
	<i>Combining categories for analysis: 1 vs. 2 vs. 3 vs. 4-5</i>

Street Type	1 – One lane (one-way street)
(answer based on the street with the most lanes at the study intersection)	2 – Two lanes (one-way street)
	3 – More than two lanes (one-way street)
	4 – Two lanes (two-way street)
	5 – More than two lanes (two-way street)
	<i>Note: no locations were coded as 5 in the study sample</i>
Building Conditions	
Property type	1 – Exclusively residential
	2 – Primarily residential
	3 – Equal mix residential and commercial/municipal
	4 – Primarily commercial/municipal
	5 – Exclusively commercial/municipal
	Municipal/institutional – includes schools, churches, hospitals or medical facilities, nursing homes, community centers, etc.
	Commercial – includes private enterprise of any kind, such as retail establishments, businesses, food outlets, etc.
	Residential – includes private homes or apartment buildings
	<i>Combining categories for analysis: 1-2 vs. 3 vs. 4-5</i>
Detached houses	1 – None
	2 – At least 1
Attached/row homes	1 – None
	2 – At least 1
Housing over storefronts	1 – None
	2 – At least 1
Building structural condition	1 – Very well kept (clearly maintained with no visible signs of deterioration)
(Assessed separately for each property type: Commercial, Residential, Municipal, Religious)	2 – Moderately well kept (Minimal deterioration present, including peeling paint or surface damage)

	3 – Fairly well kept (some likely structural issues that go beyond surface cosmetic concerns)
If only one building within a property type is visible, base the rating on that single building. If several buildings within one property type are visible, report the average condition across all buildings of that type.	4 – Poor (Structure seriously deteriorated, perhaps in danger of collapse)
	N/A – Property type not present
	<i>A given 360-degree panorama could contain anywhere from 1-4 of these different property types. We used the 4 building condition variables (Commercial, Residential, Municipal, and Religious) to create a mean building condition variable that averaged the scores of the property types present in the image, giving equal weight to each property type present. Mean building condition ranges from 1-4 and uses the same definitions listed above as reference points.</i>
Broken/boarded up windows	1 – No visible broken or boarded windows or doors
	2 – One visible broken or boarded window or door
	3 – Multiple visible broken or boarded windows or doors
Security bars/gratings on houses	1 – On none of the houses/apartments
	2 – On a few houses/apartments
	3 – On about half of houses/apartments
	4 – On almost all houses/apartments
	N/A – No houses/apartments are visible
	<i>Combining categories for analysis: 1 vs. 2-4</i>
Security bars/gratings on business	1 – On none of businesses
	2 – On a few businesses
	3 – On about half of businesses
	4 – On almost all businesses
	N/A – No commercial establishments are visible
	<i>Combining categories for analysis: 1 vs. 2-4</i>
Pull-down metal fencing on business	1 – 0%
	2 – Only a few (1-10%)
	3 – Fewer than half (11-49%)
	4 – Most (50-89%)
	5 – Almost all (90% or more)

	N/A – No commercial establishments are visible
	<i>Combining categories for analysis: 1-2 vs. 3-5</i>
Security fences	1 – None
	2 – At least 1
Furniture on street, sidewalk, porch	1 – None
	2 – At least 1 visible item
Murals	1 – None
	2 – At least 1
Graffiti	1 – No visible graffiti
	2 – Evidence of cleaned up graffiti
	3 – Small amount – for example, 1 tag on a stop sign or wall, covering less than 2x2 feet
	4 – Moderate amount – for example, 1 large area of graffiti not bigger than 5x5 feet (but bigger than 2x2 feet); or two + smaller areas of 2x2 feet
	5 – Extensive amount, covering more than 5x5 feet in any one location
	<i>Combining categories for analysis: 1 vs. 2-5</i>
Natural Surroundings	
Park	1 – No parks present in photo
(defined as open space designed for public use, possibly with benches or tables, but not with play equipment or playing fields)	2 – 1 park present in photo
	3 – More than 1 park present in photo
	<i>Combining categories for analysis: 1 vs. 2-3</i>
Playground	1 – No playground present in photo
(defined as open space designed with play equipment or playing fields)	2 – 1 playground present in photo
	3 – More than 1 playground present in photo
	<i>Combining categories for analysis: 1 vs. 2-3</i>
Neglected vacant lot	1 – None
(defined as poorly tended (overgrown grass, excessive trash))	2 – At least 1

Maintained vacant lot	1 – None
(defined as moderately well-tended (overgrown grass, minimal trash) to very well-tended (cut grass, no trash))	2 – At least 1
Planted trees	1 – Densely planted with 10 or more trees visible
	2 – Moderately planted, with 5 to 9 trees visible
	3 – Sparsely planted, with 2 to 4 trees planted
	4 – Only one tree
	5 – No trees visible
	<i>Combining categories for analysis: 1-2 vs. 3-5</i>
Public bushes or plantings	1 – Dense presence of bushes – 10 or more bushes
(i.e. located in parks, vacant lots)	2 – Multiple plantings – 2 to 9 bushes or (non)flowering plants
	3 – Single bush or (non)flowering plant
	4 – No visible bushes or plantings
	N/A – No public spaces in picture
	<i>Combining categories for analysis: 1-3 vs. 4</i>
Private bushes or plantings	1 – Dense presence of bushes – 10 or more bushes
(i.e. located adjacent to residences)	2 – Multiple plantings – 2 to 9 bushes or (non)flowering plants
	3 – Single bush or (non)flowering plant
	4 – No visible bushes or plantings
	N/A –No private or residential spaces in picture
	<i>Combining categories for analysis: 1-3 vs. 4</i>