

VISION ZERØ

CITY OF PHILADELPHIA

Neighborhood Slow Zone Program Score Report 2019

APPLICATION SCORING & METHODOLOGY

Jointly led by Managing Director's Office of Transportation,
Infrastructure, & Sustainability (oTIS) and Department of Streets



City of
Philadelphia

OVERVIEW

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Speeding on residential streets is a common concern of neighbors living across the city. Despite the common understanding that speeding is a problem and it can be deadly, it is not always clear what tools exist to improve traffic safety or how residents can request or access the City to effect change on their own streets.

Instead of responding to complaints and installing traffic calming on one block at a time, the Neighborhood Slow Zone Program supports the City's Vision Zero goals, inviting neighbors to apply for traffic calming in an entire zone of residential streets.

The Neighborhood Slow Zone Program is jointly led by the Managing Director's Office of Transportation, Infrastructure, & Sustainability (OTIS) and the Streets Department.

The Neighborhood Slow Zone Program was first announced by Mayor Jim Kenney on October 19, 2018. By the January 18, 2019 deadline, the City received Neighborhood Slow Zone applications from forty (40) communities.

Several communities submitted application materials in advance of the deadline with Slow Zone boundaries that were not clear or otherwise did not meet the Slow Zone Program's criteria, so we asked for clarification. Ultimately, twelve (12) communities did not provide a map of a Slow Zone with boundaries that met the Program criteria. Of these, eleven (11) were applications for traffic calming on a single street. These eleven (11) application materials have been sent to the Streets Department Traffic Unit for further study under the

existing traffic calming program (<https://www.philadelphiastreet.com/traffic-and-lighting/traffic-calming-policy-information/>).

As a result, there were twenty-eight (28) complete Slow Zone applications submitted. The 2019 Program will work with community applicants to install two (2) Neighborhood Slow Zone Programs.

The Neighborhood Slow Zone Program is made possible by Automated Red Light Enforcement (ARLE) funding, which is distributed by the Pennsylvania Department of Transportation. In 2018, the City of Philadelphia was awarded funding to support the design and construction of two Neighborhood Slow Zones. The total ARLE funding award was \$1M, which includes design and construction costs associated with two (2) Neighborhood Slow Zones. Each Slow Zone will have a construction budget up to \$450,000. Neighborhood Slow Zone projects will be completed by September 2021.

ABOUT VISION ZERO

Vision Zero aims to eliminate all traffic-related deaths and severe injuries on Philadelphia streets by 2030, while increasing safety, health, and mobility for all.

For more information, visit: www.VisionZeroPHL.com.

SELECTED SLOW ZONES

We have scored complete applications and are pleased to announce the two (2) communities who will join the Neighborhood Slow Zone Program in 2019:

- 27 - Willard Elementary School
- 8 - Fairhill

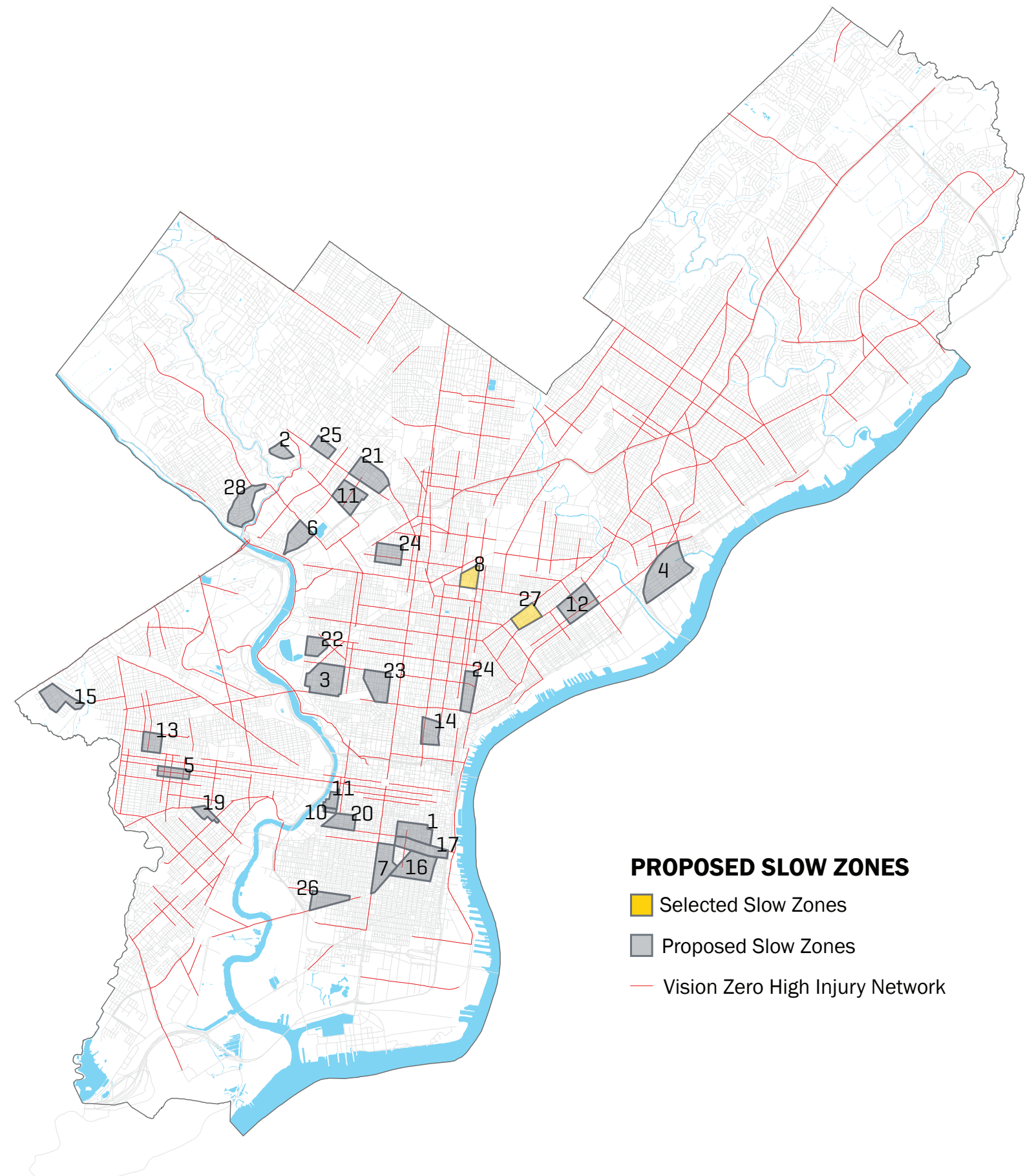
PROPOSED SLOW ZONES

(In alphabetical order by application name)

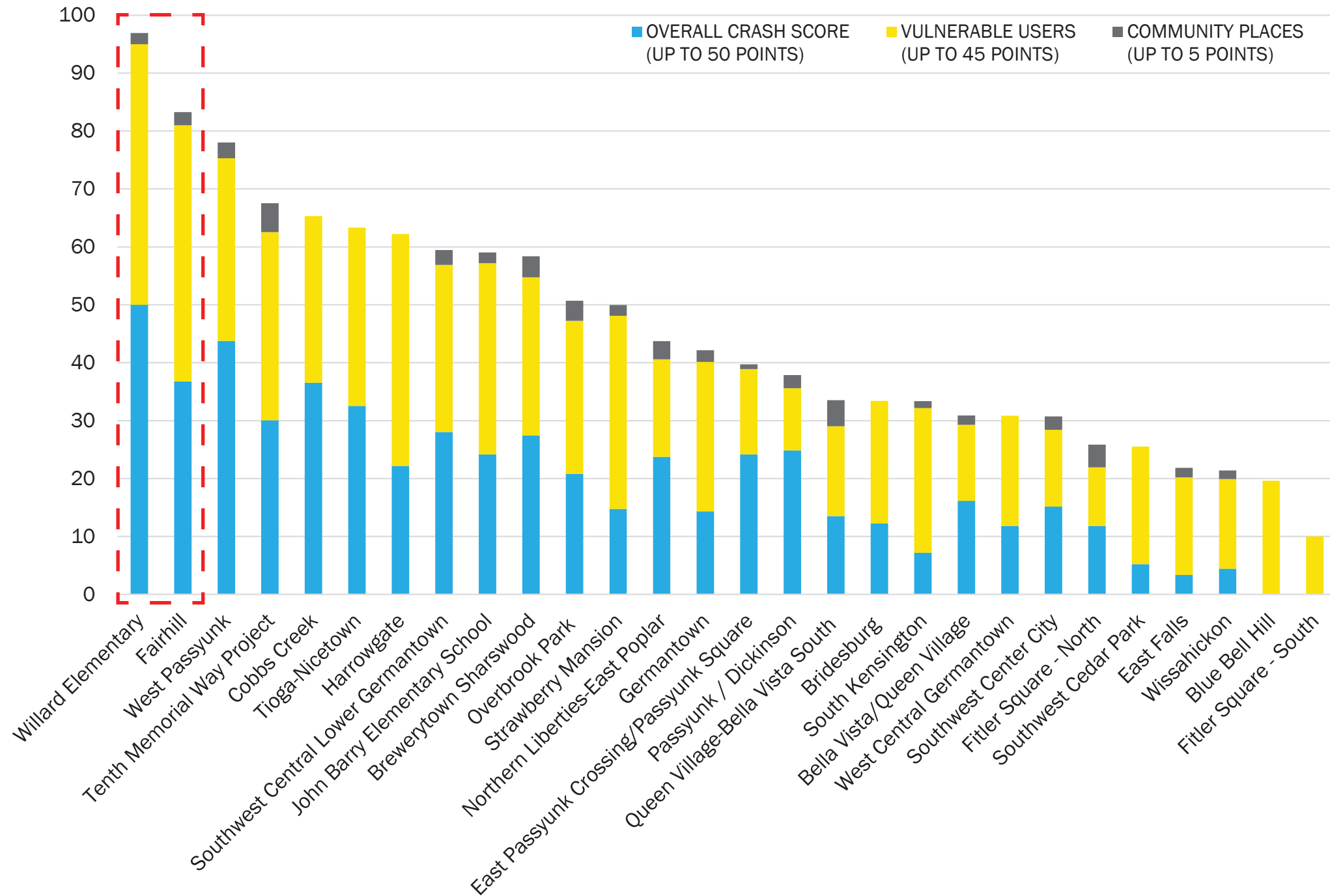
- 1 - Bella Vista Queen Village
- 2 - Blue Bell Hill
- 3 - Brewerytown/Sharswood
- 4 - Bridesburg
- 5 - Cobbs Creek
- 6 - East Falls
- 7 - East Passyunk Crossing/Passyunk Square
- 8 - Fairhill
- 9 - Fidler Square - North
- 10 - Fidler Square - South
- 11 - Germantown
- 12 - Harrowgate
- 13 - John Barry Elementary School
- 14 - Northern Liberties/East Poplar
- 15 - Overbrook Park
- 16 - Passyunk/Dickinson
- 17 - Queen Village/Bella Vista South
- 18 - South Kensington
- 19 - Southwest Cedar Park
- 20 - Southwest Center City
- 21 - Southwest Central Lower Germantown

- 22 - Strawberry Mansion
- 23 - Tenth Memorial Way
- 24 - Tioga/Nicetown
- 25 - West Central Germantown
- 26 - West Passyunk
- 27 - Willard Elementary School
- 28 - Wissahickon

The numbers assigned to each proposed Slow Zone correspond to the map (right).



PROPOSED SLOW ZONES SCORES



Selected Slow Zones

SCORE CRITERIA

We scored each complete Slow Zone application using the criteria that were described in the [2018 - 2019 Neighborhood Slow Zone Program Application](#) (page 16). The data sources used for this analysis can be found on Open Data Philly (<https://www.opendataphilly.org/>).

SCORING

The maximum possible application score was 100 points, broken down as follows:

Score category	Maximum score
Crash history	50
Vulnerable user	45
Community places	5
<i>Total maximum score</i>	<i>100</i>

The highest score in each of the three (3) score categories received the maximum score for that score category. All other applications received pro-rated scores by score category. This means that, by score category, applications received scores that were a fraction of the highest score, based on their percent of the highest score.

Because the proposed Slow Zones varied in size, normalization was applied to each score category. Normalization methodology details are provided on each of the three (3) score category pages, beginning on page 6.

SCORE CATEGORIES

CRASH HISTORY: UP TO 50 POINTS

Our commitment to Vision Zero means prioritizing traffic safety projects on streets with demonstrated crash histories. The Neighborhood Slow Zone Program prioritizes traffic safety improvements to residential streets with crash histories.

- People killed or seriously injured in traffic crashes on Slow Zone streets (PennDOT, 2013 - 2017)
- People injured in traffic crashes on Slow Zone streets (PennDOT, 2013 - 2017)

VULNERABLE USERS: UP TO 45 POINTS

Children and older adults are more likely to rely on walking to make trips in their neighborhoods—and they are more vulnerable if involved in a traffic crash. Vision Zero prioritizes safety of people who are most vulnerable while using the street. Additionally, households living below the poverty line are more likely to be transit-dependent and need to walk to transportation options.

- Households with children under 18
- Households with people aged 60 and over
- Households with incomes below poverty line

COMMUNITY PLACES: UP TO 5 POINTS

Neighborhood Slow Zone Program supports walkability in neighborhoods. Community places generate walking activity.

- Free Library locations
- Schools
- City Health Centers
- Philadelphia Housing Authority communities

For details on each of the three (3) score categories, see next pages.

CRASH HISTORY

Our commitment to Vision Zero means prioritizing traffic safety projects on streets with demonstrated crash histories. The Neighborhood Slow Zone Program prioritizes traffic safety improvements to residential streets with crash histories.

SCORING

We used five-year PennDOT crash data (2013 - 2017) to identify the number of people injured, seriously injured, or killed on the streets within each proposed Slow Zone. At the time this Score Report was published, PennDOT 2018 crash data had not been released.

Because the Neighborhood Slow Zone Program will not focus on boundary streets, crashes that occurred on boundary streets were not included. For each Slow Zone, the total number of people injured in crashes (classified as minor or moderate injury) was multiplied by a factor of one (1). The total number of people seriously injured (classified as major injury) or killed in traffic crashes was multiplied by a factor of three (3).

For each Slow Zone, the crash history total was normalized by dividing it by the number of street miles inside of the Slow Zone, not including boundary streets:

$$([3 \times \text{people killed or seriously injured}] + [1 \times \text{people injured}]) / \text{Slow Zone street miles}$$

The highest Crash History score received maximum score (50 points). All other applications received pro-rated Crash History scores. This means that

applications received scores that were a fraction of the highest score, based on their percent of the highest score.

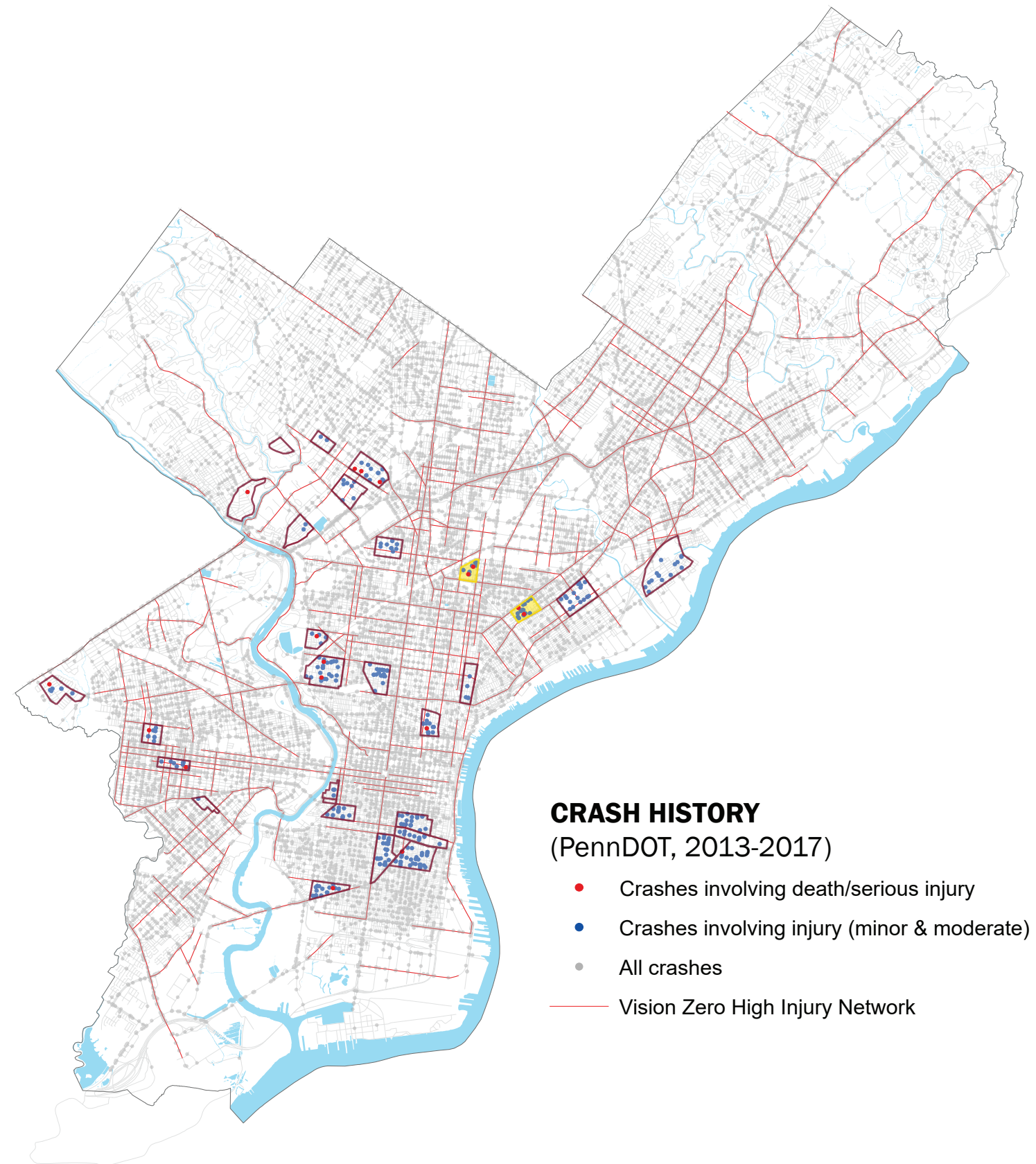
For detailed scores by proposed Slow Zone, see page 9.

ABOUT PENNSYLVANIA CRASH DATA

Each state establishes its own criteria for what makes a crash “reportable.” In Pennsylvania, a crash is reportable if it involves a motor vehicle and:

- A motor vehicle is towed from the scene, or
- Someone is transported to the hospital in an ambulance, or
- A fatality occurs

(PA Vehicle Code Title 75 Section 3746 (a))



VULNERABLE USERS

Children and older adults are more likely to rely on walking to make trips in their neighborhoods—and they are more vulnerable if involved in a traffic crash. Vision Zero prioritizes safety of people who are most vulnerable while using the street. Additionally, households living below the poverty line are more likely to be transit-dependent and need to walk to transportation options.

SCORING

We used the following American Community Survey 2017 (5-year estimates) data at the Census tract level:

1. Percent of households with children under the age of 18 years
2. Percent of households with people above the age of 60 years
3. Percent of households with income below poverty level in the past 12 months

For each Slow Zone, we calculated each of the three percentages and added them together.

The Slow Zone with the largest total received the maximum Vulnerable User score (45 points). All other applications received pro-rated Vulnerable User scores. This means that applications received scores that were a fraction of the highest score, based on their percent of the highest score.

For detailed scores by proposed Slow Zone, see page 9.

CALCULATING PERCENTAGES

To calculate each of the three (3) percentages, we calculated each percentage for the Census tract or Census tracts that intersected the Slow Zone. Census tracts that border a Slow Zone were not considered, only Census tracts that intersect Slow Zones.

If a Slow Zone was intersected by more than one Census tract, we calculated a weighted average using the Census tracts' total households. For example, if we were calculating the poverty percentage for a Slow Zone that was intersected by two Census tracts:

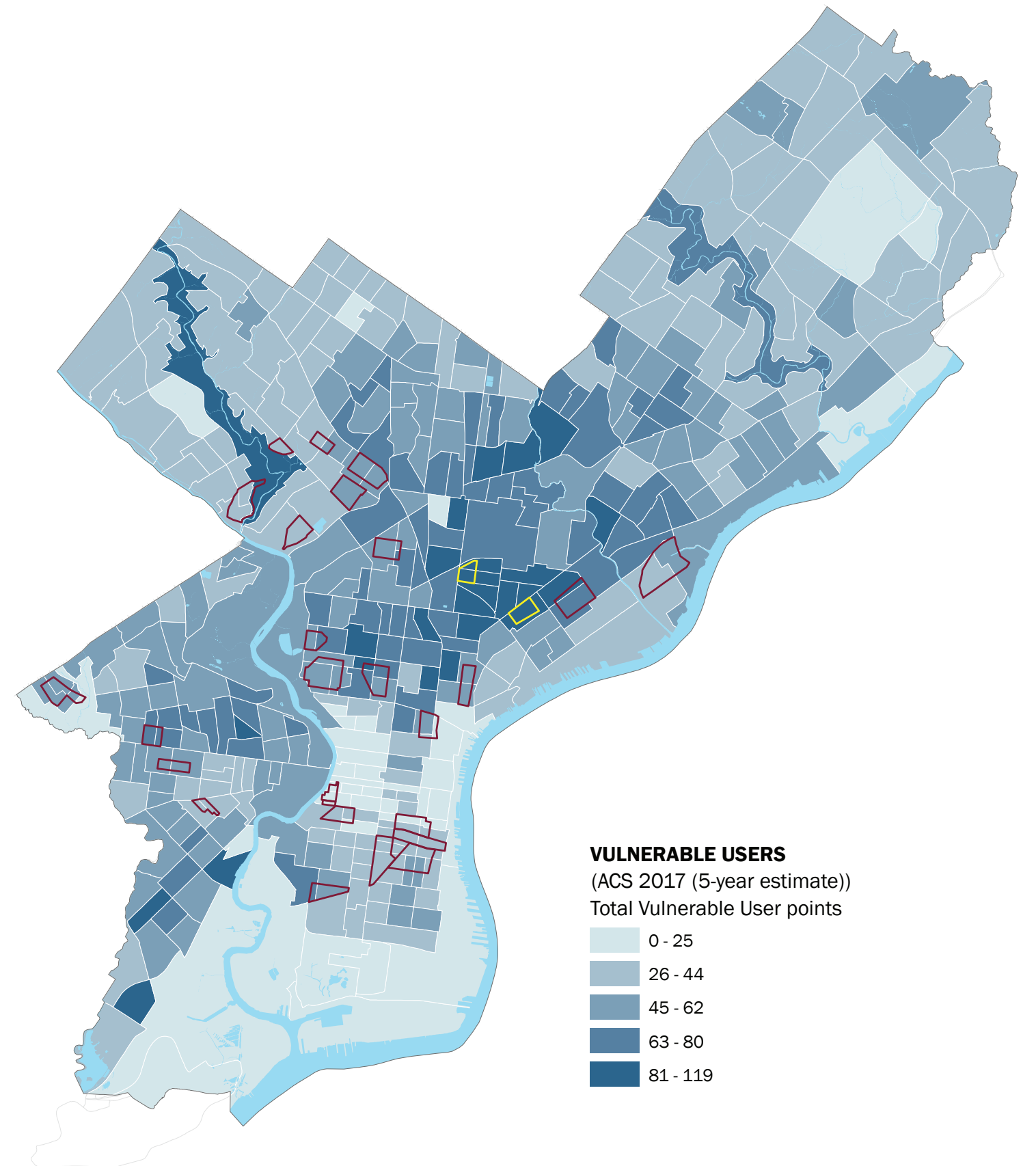
- One Census tract with 60 total households, 50% percent of which have incomes below the poverty level
- Another Census tract with 40 total households, 30% of which have incomes below the poverty level

The total weight was 1.00, representing the total number of households, in this example 100. The first Census tract had a weight of 0.60 (60 of the total 100 households) and the second had a weight of 0.40 (40 of the total 100 households).

This Slow Zone's poverty percentage would be calculated using: $(50\% \times 0.6) + (30\% \times 0.4) = 42\%$

ABOUT AMERICAN COMMUNITY SURVEY & CENSUS TRACTS

American Community Survey (ACS) is a source for detailed population and housing information that is released by the U.S. Census Bureau. Census tracts are relatively small geographic units used to represent statistical data, including ACS data. Philadelphia is comprised of 384 Census tracts.



COMMUNITY PLACES

Neighborhood Slow Zone Program supports walkability in neighborhoods. Community places generate walking activity.

SCORING

We used City-maintained data sets to count how many of each of the following types of community places were located inside Slow Zones:

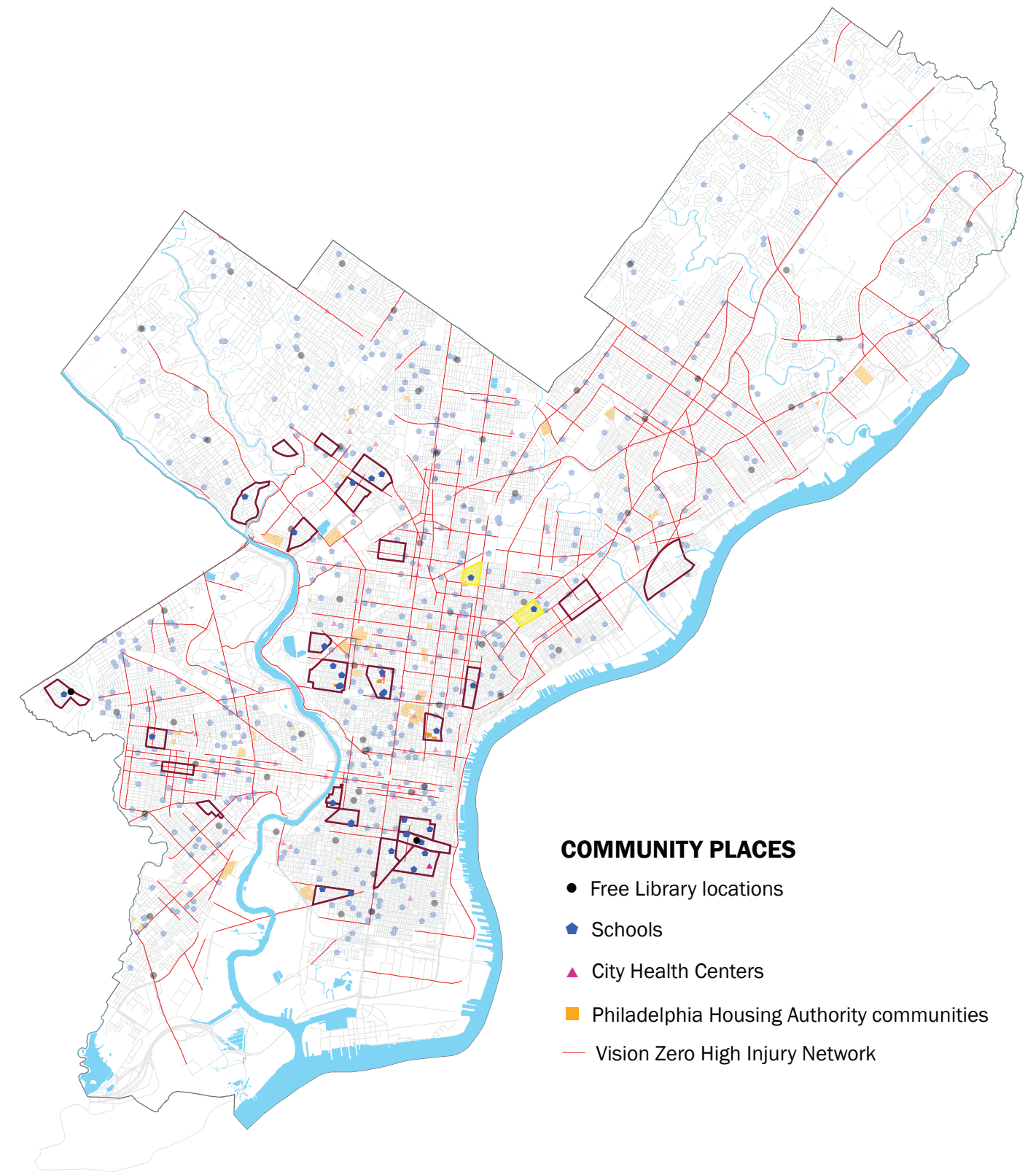
- Free Library locations
- Schools
- City Health Centers
- Philadelphia Housing Authority communities

For each Slow Zone, the total number of community places was normalized by dividing it by the number of street miles inside of the Slow Zone, not including boundary streets:

(Total number of community places / Slow Zone street miles)

The highest Community Places score received maximum score (5 points). All other applications received pro-rated Community Places scores. This means that applications received scores that were a fraction of the highest score, based on their percent of the maximum score.

For detailed scores by proposed Slow Zone, see page 9.



FULL SCORE TABLE

APPLICATION NUMBER	APPLICATION NAME	STREET MILES IN SLOW ZONE	OVERALL CRASH SCORE (UP TO 50 POINTS)	VULNERABLE USERS (UP TO 45 POINTS)	COMMUNITY PLACES (UP TO 5 POINTS)	FINAL SCORE
27	Willard Elementary	3.13	50.00	45.00	1.92	96.92
8	Fairhill	2.62	36.76	44.23	2.29	83.29
26	West Passyunk	4.40	43.78	31.53	2.73	78.03
23	Tenth Memorial Way Project	6.01	30.05	32.51	5.00	67.56
5	Cobbs Creek	2.47	36.55	28.74	0.00	65.29
24	Tioga-Nicetown	3.33	32.54	30.81	0.00	63.35
12	Harrowgate	5.16	22.16	40.07	0.00	62.23
21	Southwest Central Lower Germantown	4.72	28.06	28.86	2.55	59.46
13	John Barry Elementary School	3.24	24.15	33.03	1.85	59.03
3	Brewerytown Sharswood	9.87	27.44	27.29	3.65	58.39
15	Overbrook Park	3.47	20.82	26.42	3.46	50.70
22	Strawberry Mansion	3.26	14.77	33.35	1.84	49.96
14	Northern Liberties-East Poplar	3.80	23.76	16.82	3.16	43.74
11	Germantown	2.94	14.33	25.80	2.04	42.18
7	East Passyunk Crossing/Passyunk Square	7.22	24.18	14.73	0.83	39.74
16	Passyunk / Dickinson	10.65	24.87	10.75	2.26	37.87
17	Queen Village-Bella Vista South	5.34	13.53	15.51	4.50	33.54
4	Bridesburg	9.34	12.24	21.15	0.00	33.40
18	South Kensington	5.03	7.18	25.01	1.19	33.39
1	Bella Vista/Queen Village	7.45	16.16	13.13	1.61	30.91
25	West Central Germantown	1.02	11.80	19.05	0.00	30.85
20	Southwest Center City	5.16	15.16	13.23	2.33	30.73
9	Fitler Square - North	1.53	11.80	10.12	3.93	25.85
19	Southwest Cedar Park	1.15	5.23	20.28	0.00	25.52
6	East Falls	3.60	3.34	16.86	1.67	21.87
28	Wissahickon	4.09	4.42	15.51	1.47	21.40
2	Blue Bell Hill	0.81	0.00	19.62	0.00	19.62
10	Fitler Square - South	0.42	0.00	10.01	0.00	10.01