PLACE MATTERS

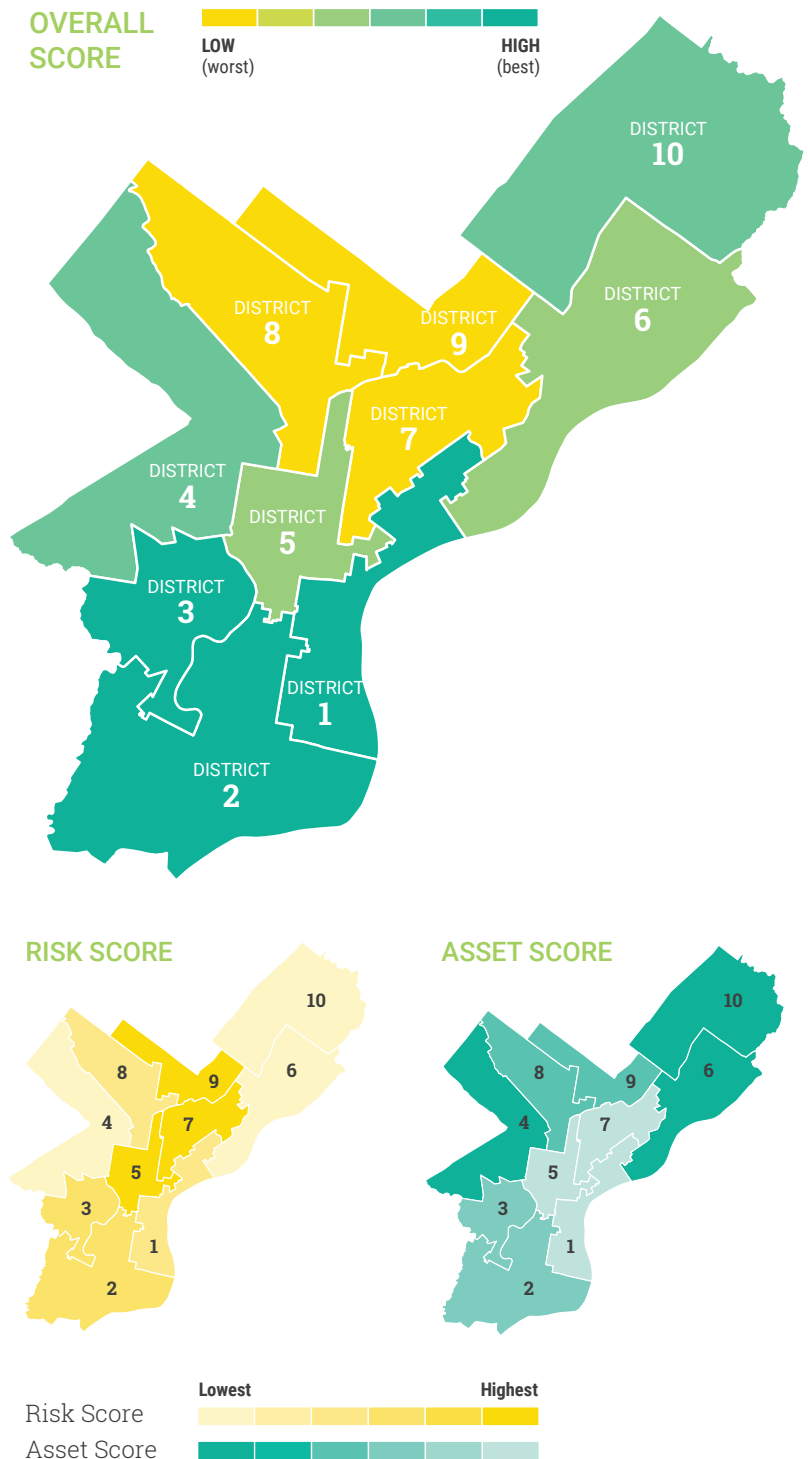# Philadelphia Children's Health & Well-being

There are too many maps of Philadelphia's risks and problems. Do we know what assets exist? Place Matters seeks to identify where assets and risks lie across the city's council districts. Although we rank the ten council districts from best to worst, all districts have assets in addition to risks. There is variability across districts, but we present the information in a way that can guide decision making. The project also seeks to show the relationship between risks and assets and social mobility and life expectancy. There is a 20 year difference in average life expectancy in different parts of the city. We hope to provide a roadmap for the city to build upon existing assets and work to address the significant inequities in our city.

How can assets mitigate risks?

Where you are born significantly impacts your lifelong health and well-being. Philadelphia has many assets to strengthen. Yet, it is concerning that District 7 has the highest risks and the highest percentage of children, while District 1 has the highest cumulative score when assets and risks are combined. Additionally, it has higher than average social mobility and life expectancy. Although District 7 is the worst scoring district, it has the highest SNAP utilization and behavioral health utilization. These assets should be used to address the high number of Adverse Childhood Experiences (ACEs) and lower educational attainment in the district. When implementing large-scale initiatives such as Rebuild, we must consider both the level of risk and assets in each community when distributing resources.

KEY TAKEAWAYS

The city's risks impact how much money we earn and how long we live. Philadelphia must acknowledge the inequities in assets and risks across the city and build upon the existing assets. We must stop reacting to maps that only highlight our challenges and focus on our strengths. Philadelphia can only be a world class city if **all** of its children are living in healthy neighborhoods that provide equitable opportunities for optimal health and well-being.

OVERALL SCORE

LOW (worst)   HIGH (best)

DISTRICT 10
DISTRICT 8
DISTRICT 9
DISTRICT 6
DISTRICT 7
DISTRICT 4
DISTRICT 5
DISTRICT 3
DISTRICT 1
DISTRICT 2

RISK SCORE

10
8
6
9
4
7
5
3
1
2

ASSET SCORE

10
8
9
6
4
7
5
3
1
2

Lowest   Highest

Risk Score
Asset Score

SCATTERGOOD
THINK | DO | SUPPORT

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PLACE MATTERS

Philadelphia Children's Health & Well-being
Questions & Answers

1. Why should I be interested in community assets and risk factors?

Although Philadelphia has many maps highlighting its risks, few of those maps address the range of risks affecting children as well as the assets that can help mitigate those risks. This mapping project does both. By highlighting assets, we show that all communities have strengths to build upon and provide a roadmap for city government, community organizations, and residents to further support communities.

2. Don't we have enough maps of Philadelphia?

There are a lot of maps of Philadelphia. However, most of these maps are deficit focused. For example, we have seen many versions of maps portraying the opioid epidemic in Philadelphia and highlighting Kensington as a "hot spot" of activity. Yet, this neighborhood contains many assets; for instance, there is the highest behavioral health and SNAP utilization. Utilization of benefits can help mitigate poverty and exposure to trauma.

3. What does this all mean for children and how we allocate resources?

Achieving equity for children in Philadelphia will not occur by simply allocating the same amount of resources equally in every community, because the risk in those communities varies. We must use data to guide decision-making about how to effectively distribute the city's resources.

4. What can I do with these maps?

These maps provide guidance for government, funders, and local communities to identify where particular strengths and risks are located. We can build upon existing strengths and work to reduce risks. For instance, if a community has high quality schools but high exposure to trauma, schools can be an effective partner to mitigate this risk.

5. Where is the data from?

Most of the data used is publicly available except for the Adverse Childhood Experiences (ACE) data and the behavioral health utilization data. Please see the methods description for more detail. All of the methods on how to do this yourself are available through GitHub.

6. How were scores calculated?

Scores were generated for each risk and asset at the census tract level and then aggregated to each city council district. Risks were subtracted from assets to compute the final cumulative score. Scores for each council district were ranked highest (best) to lowest (worst). The scores at the census tract level are percentiles. Because the aggregation to city council district took the mean, the scores at the city council district level will not represent a scale of 0 to 100.

7. What is a percentile?

A percentile is a score where a certain percentage of scores fall below that number. If you know that your score on a test is in the 90th percentile, that means you scored better than 90% of people who took the test. We used percentiles as a way to compare district scores to each other.

8. Why is this data presented at the district level?

This data is broken down to the census tract level, but by showing the data at the city council district, we hope that council members and the mayor can more easily use the data for informed decision making.

9. How should assets be utilized to mitigate risk?

Assets should be strengthened to help mitigate risks to the extent possible. We also need to take a person-centered approach. Some risks, such as poverty, pose significant risks to communities and need to be addressed through a variety of evidence-based programs and policies.

10. Do the risks and assets consider quality?

The risks and assets include indicators of quality when data is available. Some assets, such as behavioral health utilization, only account for access, not quality or outcomes.

11. How can the city allocate resources to build assets to offset risks?

When allocating resources, the city should consider both the level of risk in each community and the existing assets that can be built upon to mitigate those risks.

12. How will Scattergood use these maps?

Scattergood strives to use data to guide our decision-making and inform our work. We plan to build upon these maps and look forward to expanding our partners; continual improvement of the maps will help inform program planning, implementation, and evaluation of city initiatives.

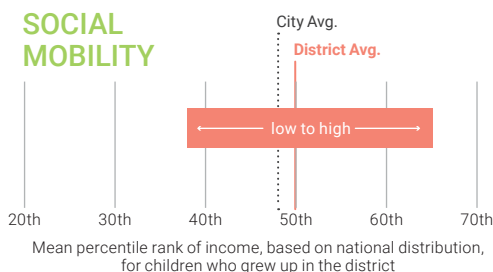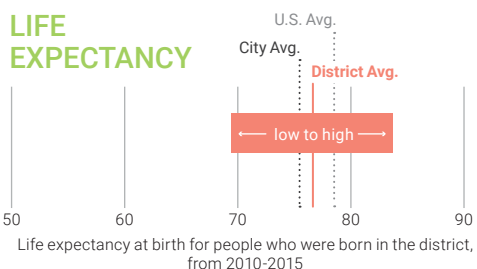**13. Why isn't the risk or asset I am interested in on the map?**

We see this map as a start. Let us know what is missing.

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To learn more and engage, visit **scattergoodfoundation.org**

District 1 ranks 1st among all districts. However, there are many maps that only highlight this district's risks. The significant assets, including school quality, should be recognized.

Philadelphia Children's Health & Well-being

PERCENT ENGLISH-ONLY	
69%	
PERCENT FOREIGN-BORN	
16%	
PERCENT CHILDREN (0-17)	
18% (29,283)	

RACE/ETHNICITY

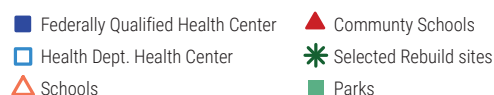| MAJORITY	SECOND-LARGEST
WHITE†	**LATINX****

The district average for life expectancy and social mobility is above the city average. District 1 has the smallest percentage of children in the city. There are no Health Dept. health centers, 9 Federally Qualified Health Centers, 22 district schools, 3 community schools, 7 selected Rebuild sites, and 61 parks contained within or bordering the district.
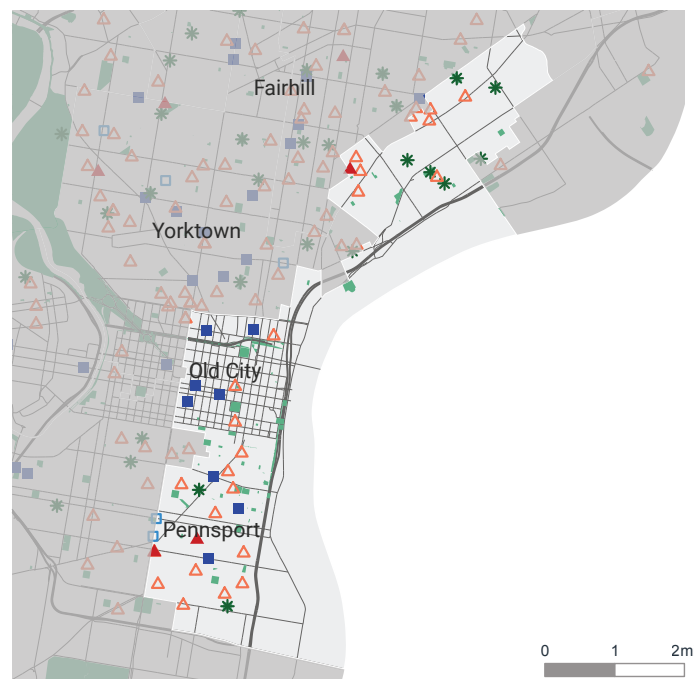
LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.
District Avg.

low to high

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Fairhill
Yorktown
Old City
Pennsport

0   1   2mi

MITIGATING ASSETS

- ■ Federally Qualified Health Center
- □ Health Dept. Health Center
- △ Schools
- ▲ Communty Schools
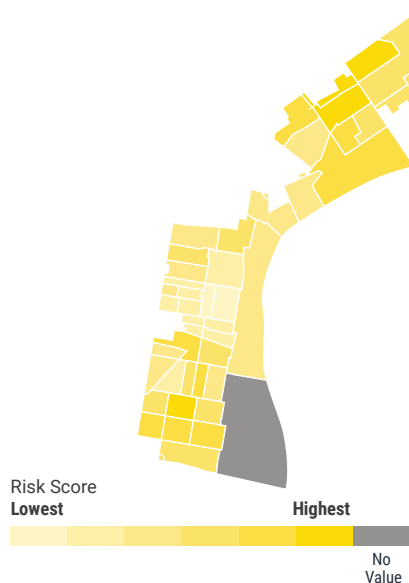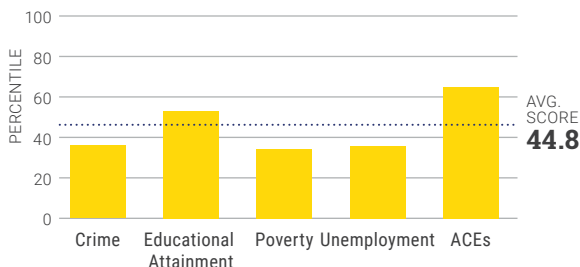- ✳ Selected Rebuild sites
- ■ Parks

Fairhill
Yorktown
Old City
Pennsport

0   1   2mi

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) **Referred to as Hispanic in the U.S. Census †Non-hispanic

SCATTER**GOOD**
THINK|DO|SUPPORT

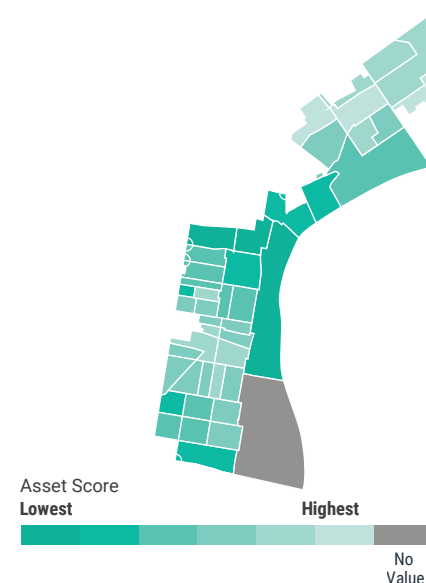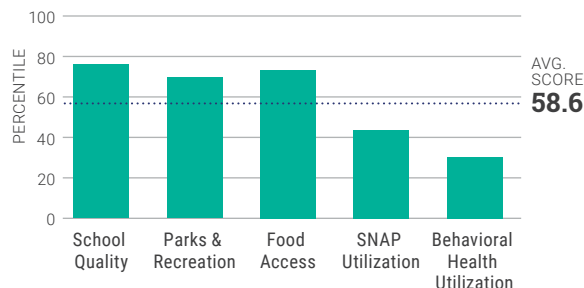azavea

Philadelphia Children's Health & Well-being

RISK SCORE

Adults experiencing an Adverse Childhood Experience (ACE) is in the 60th percentile. Incidents of shootings and poverty for families are in the 37th and 34th percentiles.

PERCENTILE

Crime | Educational Attainment | Poverty | Unemployment | ACEs

AVG. SCORE **44.8**

Risk Score
Lowest   **Highest**

No Value

ASSET SCORE

School quality is high and there is access to parks and recreation, as well as fresh food. SNAP and behavioral health utilization are lower, but may not be needed.

PERCENTILE

School Quality | Parks & Recreation | Food Access | SNAP Utilization | Behavioral Health Utilization

AVG. SCORE **58.6**

Asset Score
Lowest   **Highest**

No Value

MITIGATING ASSETS

	District 1 Score	Best Score (District #)	Comparison
School Quality	**76.1**	**82.3** (10)	
Park and Recreation Access	**69.6**	**72.9** (5)	
Fresh Food Access	**73.4**	**73.4** (1)	
SNAP Utilization	**43.5**	**77.9** (7)	
Children's Behavioral Health Services Utilization	**30.2**	**78.4** (7)	

0   25   50   75   100

KEY TAKEAWAY

District 1 has significant assets to build upon, particularly school quality and fresh food access. That said, risks remain that should be addressed, including childhood exposure to trauma. District 1 should use its assets to address these risks. For instance, the schools can be a strong partner in providing trauma-informed interventions and connecting with the broader community.

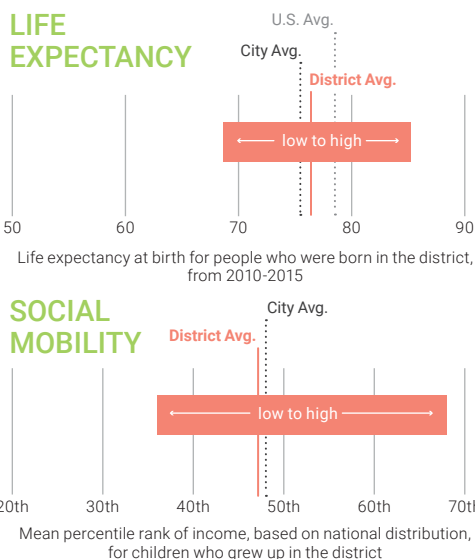SCATTERGOOD
THINK | DO | SUPPORT

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RANKING:*

3

District 2 ranks 3rd among all districts. There are several assets, including school quality, to be leveraged to mitigate risks such as exposure to Adverse Childhood Experiences (ACEs).
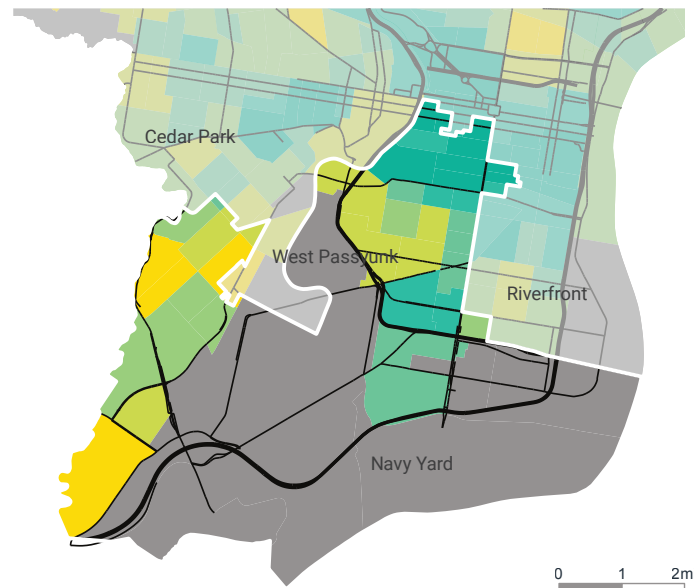
Philadelphia Children's Health & Well-being

	PERCENT ENGLISH-ONLY
	78%
	PERCENT FOREIGN-BORN
	14%
	PERCENT CHILDREN (0-17)
	19% (27,161)

RACE/ETHNICITY	
MAJORITY	SECOND-LARGEST
AFRICAN-AMERICAN†	**WHITE**†

District 2 has a higher average life expectancy and social mobility than the city average. There is a relatively low percentage of children living in the district. There are 2 Health Dept. health centers, 3 Federally Qualified Health Centers, 16 district schools, 1 community school, 6 selected Rebuild sites, and 49 parks contained within or bordering the district.

LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.
District Avg.

← low to high →

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) †Non-hispanic

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Cedar Park

West Passyunk

Riverfront

Navy Yard

0   1   2mi

MITIGATING ASSETS

■ Federally Qualified Health Center   ▲ Communty Schools
□ Health Dept. Health Center   ✳ Selected Rebuild sites
△ Schools   ■ Parks

Cedar Park

West Passyunk

Riverfront

Navy Yard

SCATTERGOOD
THINK|DO|SUPPORT

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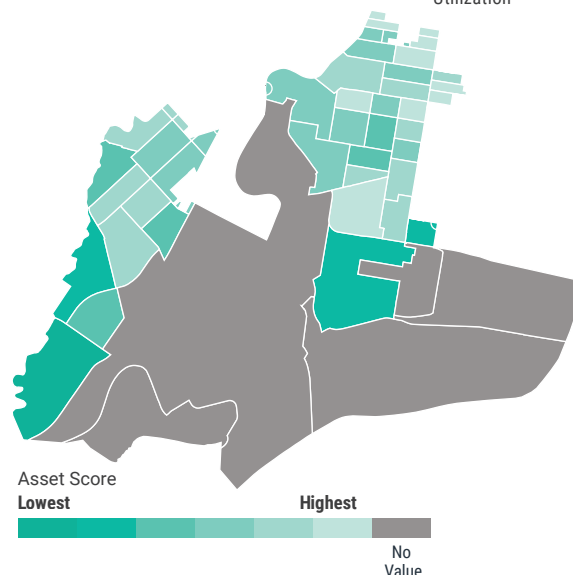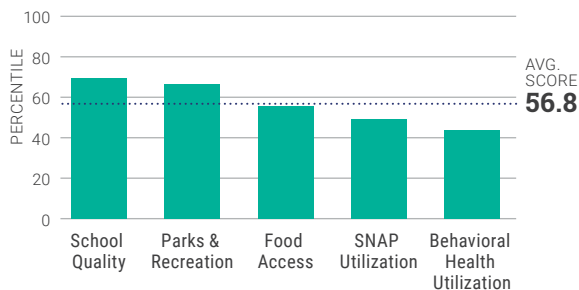# Philadelphia Children's Health & Well-being

RANKING:

3

RISK SCORE

Adults experiencing an Adverse Childhood Experience (ACE) is in the 75th percentile. Shooting incidents are in the 52nd percentile; family poverty is in the 44th percentile.

PERCENTILE

AVG. SCORE **51.3**

Crime · Educational Attainment · Poverty · Unemployment · ACEs

Risk Score
Lowest — **Highest**
No Value
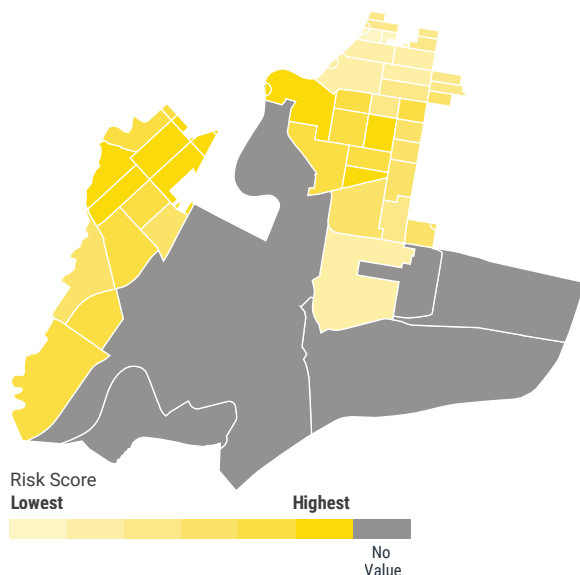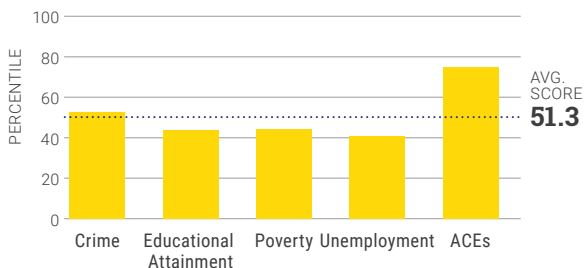
ASSET SCORE

School quality is high and there is access to parks and recreation. SNAP utilization and behavioral health utilization are lower, but may not be needed.

PERCENTILE

AVG. SCORE **56.8**

School Quality · Parks & Recreation · Food Access · SNAP Utilization · Behavioral Health Utilization

Asset Score
Lowest — **Highest**
No Value

MITIGATING ASSETS

	District 2 Score	Best Score (District #)	Comparison
School Quality	**69.3**	**82.3** (10)	
Park and Recreation Access	**66.3**	**72.9** (5)	
Fresh Food Access	**55.6**	**73.4** (1)	
SNAP Utilization	**49.1**	**77.9** (7)	
Children's Behavioral Health Services Utilization	**43.7**	**78.4** (7)	

0   25   50   75   100

KEY TAKEAWAY

District 2 has significant assets to build upon, particularly school quality and access to parks and recreation. That said, risks remain in the district that should be addressed, including childhood exposure to trauma. Schools may be a particularly good setting to provide trauma-informed interventions.
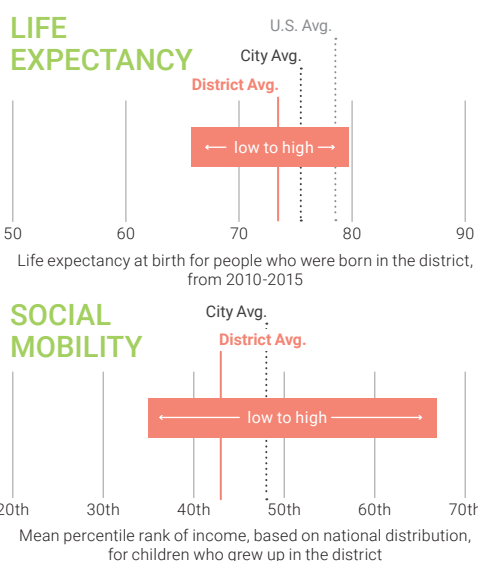
SCATTERGOOD
THINK | DO | SUPPORT

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RANKING:*

2

District 3 ranks 2nd among all districts. There are significant assets, such as access to fresh food and parks and recreation. However, the average life expectancy and social mobility is below the city average.
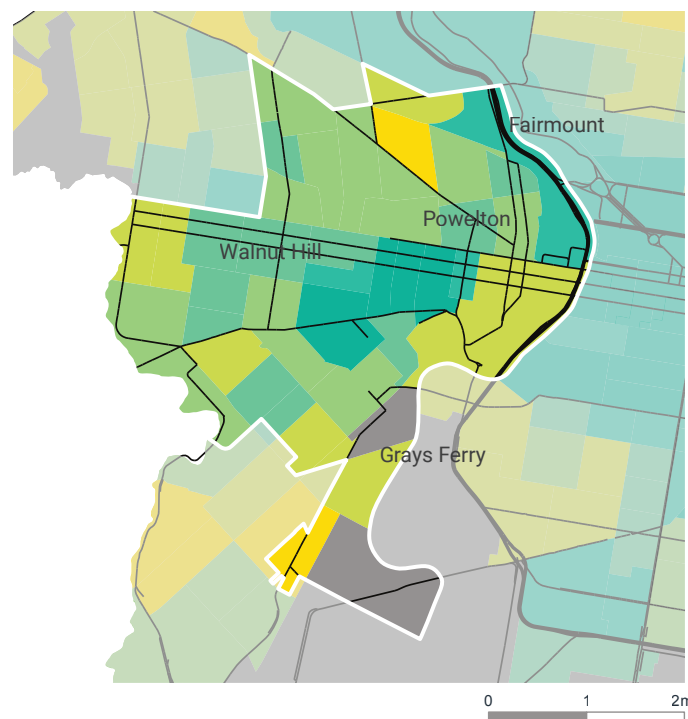
Philadelphia Children's Health & Well-being

PERCENT ENGLISH-ONLY	**82%**
PERCENT FOREIGN-BORN	**10%**
PERCENT CHILDREN (0-17)	**20%** (30,943)

RACE/ETHNICITY

MAJORITY	SECOND-LARGEST
AFRICAN-AMERICAN†	WHITE†

District 3 has a lower average life expectancy and social mobility than the city average. The level of social mobility varies greatly across the district. Among all residents, 20% are children. There are 2 Health Dept. health centers, 6 Federally Qualified Health Centers, 28 district schools, 1 community school, 7 selected Rebuild sites, and 34 parks contained within or bordering the district.
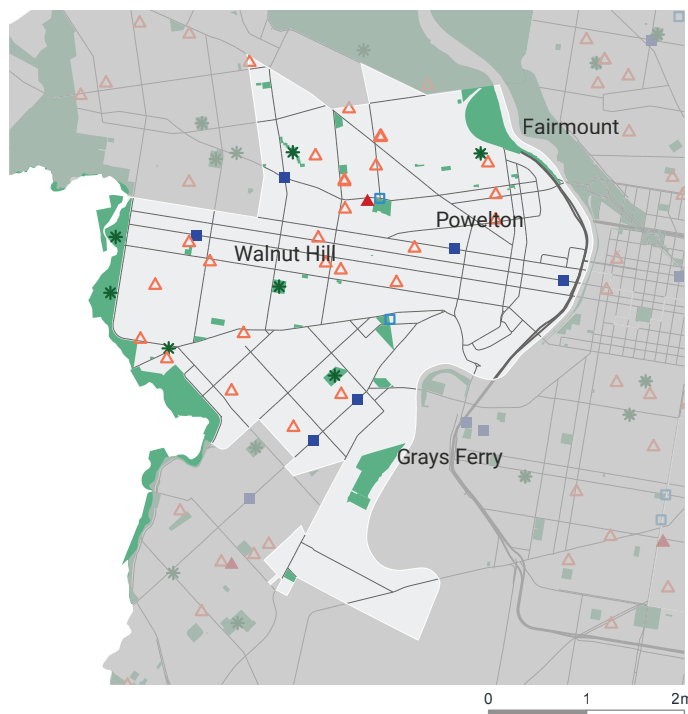
LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.
District Avg.

low to high

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) †Non-hispanic

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Fairmount
Powelton
Walnut Hill
Grays Ferry

0   1   2mi

MITIGATING ASSETS

- ■ Federally Qualified Health Center
- □ Health Dept. Health Center
- △ Schools
- ▲ Community Schools
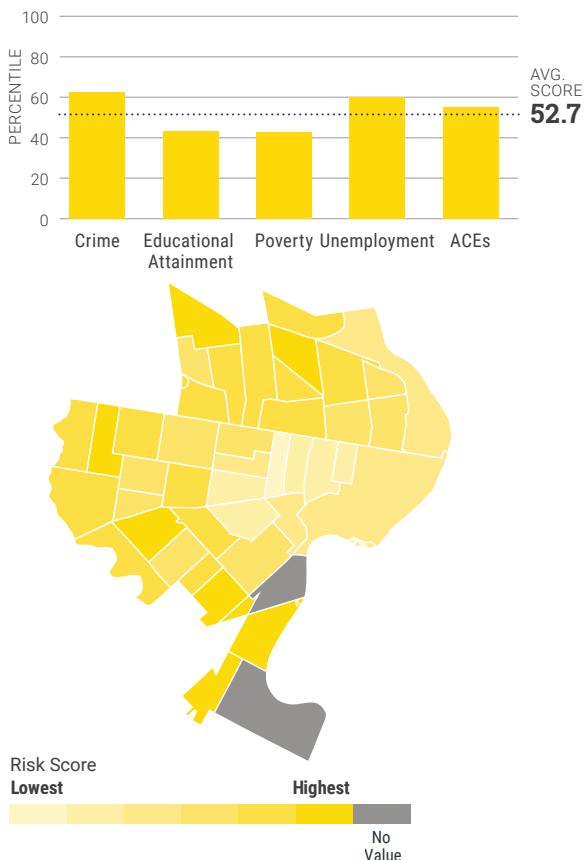- ✳ Selected Rebuild sites
- ■ Parks

Fairmount
Powelton
Walnut Hill
Grays Ferry

0   1   2mi

SCATTER**GOOD**
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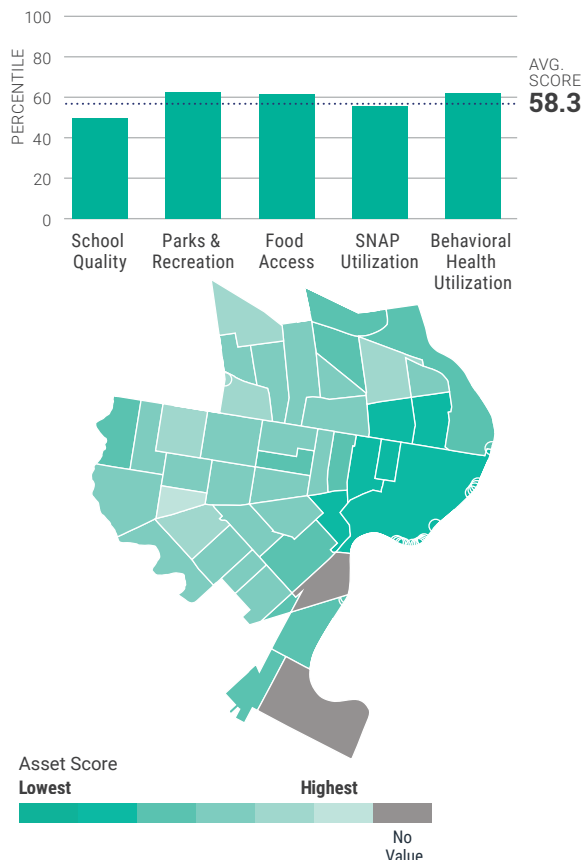# Philadelphia Children's Health & Well-being

RISK SCORE

Shooting incidents are in the 63rd percentile. Adults experiencing an Adverse Childhood Experience (ACE) is in the 55th percentile. Unemployment is in the 59th percentile.

PERCENTILE

AVG. SCORE **52.7**

Crime | Educational Attainment | Poverty | Unemployment | ACEs

Risk Score
Lowest — **Highest**
No Value

ASSET SCORE

There is relatively high access to parks and recreation, food access, and behavioral health utilization. School quality is in the 55th percentile.

PERCENTILE

AVG. SCORE **58.3**

School Quality | Parks & Recreation | Food Access | SNAP Utilization | Behavioral Health Utilization

Asset Score
Lowest — **Highest**
No Value

MITIGATING ASSETS

MITIGATING ASSETS	District 3 Score	Best Score (District #)	Comparison
School Quality	49.9	82.3 (10)	
Park and Recreation Access	62.6	72.9 (5)	
Fresh Food Access	61.4	73.4 (1)	
SNAP Utilization	55.4	77.9 (7)	
Children's Behavioral Health Services Utilization	61.9	78.4 (7)	

0   25   50   75   100

KEY TAKEAWAY

District 3 has significant assets to build upon, particularly access to parks and recreation, and behavioral health utilization. That said, risks remain in the district that should be addressed, including exposure to crime and unemployment. Using the high level of behavioral health utilization to mitigate these risks may be a helpful strategy.

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THINK | DO | SUPPORT

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COUNCIL
DISTRICT **4**
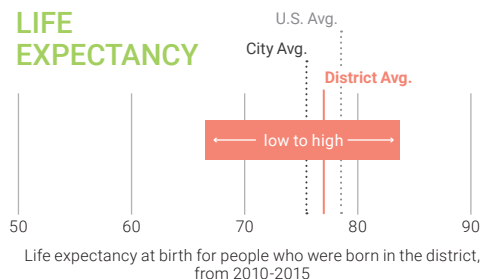
RANKING:*

4

District 4 ranks 4th among all districts. There are relatively low risks in the district; however, the assets are also relatively low and need to be strengthened.

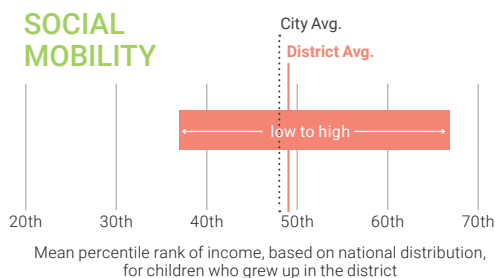# Philadelphia Children's Health & Well-being

	PERCENT ENGLISH-ONLY **86%**
	PERCENT FOREIGN-BORN **7%**
	PERCENT CHILDREN (0-17) **19%** (29,346)

RACE/ETHNICITY	
MAJORITY **AFRICAN-AMERICAN†**	SECOND-LARGEST **WHITE†**

The life expectancy and social mobility is above the city average. However, there is variability in life expectancy and social mobility across the district. Among all residents, 19% are children. There are no Health Dept. health centers, 3 Federally Qualified Health Centers, 18 district schools, 1 community school, 8 selected Rebuild sites, and 41 parks contained within or bordering the district.
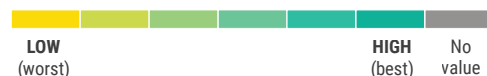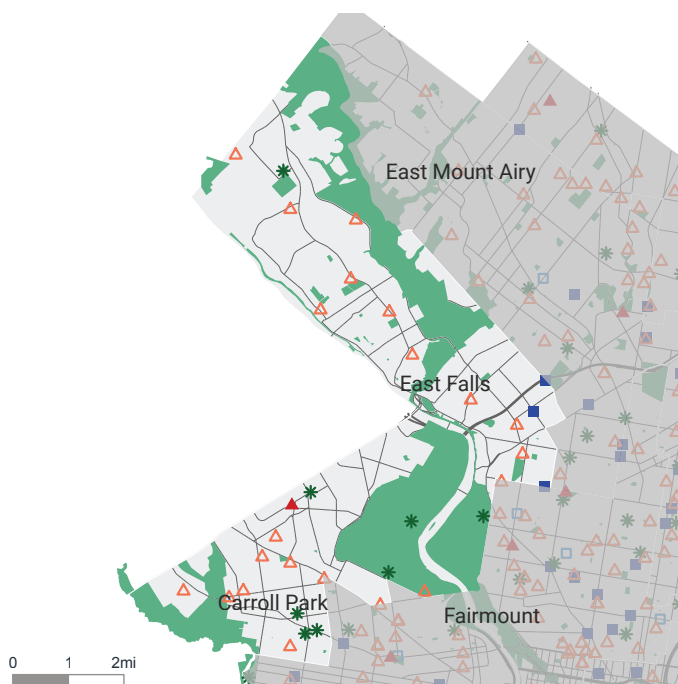
LIFE EXPECTANCY

U.S. Avg.

City Avg.

District Avg.

low to high

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.

District Avg.

low to high

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) †Non-hispanic

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

East Mount Airy

East Falls

Carroll Park   Fairmount

0   1   2mi

MITIGATING ASSETS

■ Federally Qualified Health Center
□ Health Dept. Health Center
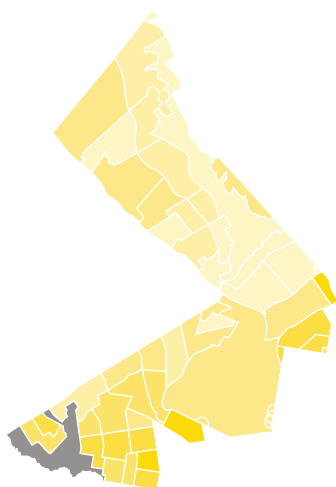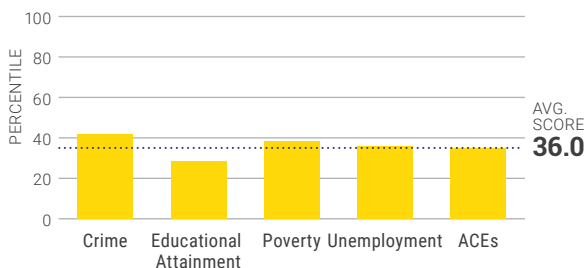△ Schools
▲ Communty Schools
✳ Selected Rebuild sites
■ Parks

East Mount Airy

East Falls

Carroll Park   Fairmount

0   1   2mi

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Philadelphia Children's Health & Well-being

COUNCIL DISTRICT **4**

RANKING:

4

RISK SCORE

Shooting incidents are in the 41st percentile. The unemployment rate is in the 36th percentile, similar to family poverty which is in the 38th percentile.

AVG. SCORE **36.0**

Risk Score
Lowest — Highest — No Value

ASSET SCORE

There is relatively high behavioral health utilization and access to parks and recreation. School qualtiy is in the 30th percentile.

AVG. SCORE **40.9**

Asset Score
Lowest — Highest — No Value
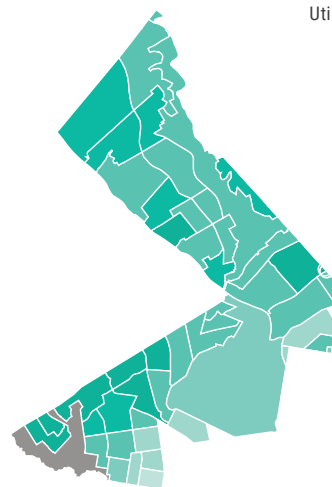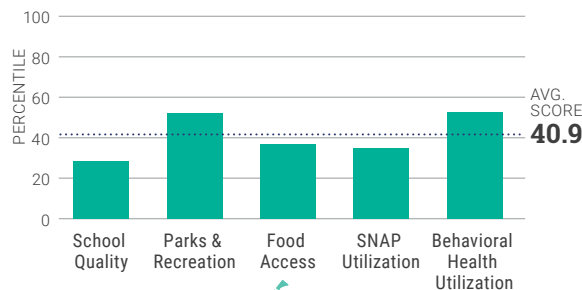
MITIGATING ASSETS

	District 4 Score	Best Score (District #)	Comparison
School Quality	28.3	82.3 (10)	
Park and Recreation Access	51.9	72.9 (5)	
Fresh Food Access	37.0	73.4 (1)	
SNAP Utilization	34.6	77.9 (7)	
Children's Behavioral Health Services Utilization	52.7	78.4 (7)	

0   25   50   75   100

KEY TAKEAWAY

District 4 has assets to build upon, particularly behavioral health utilization. School quality is of concern and should be addressed. The district variability in life expectancy and social mobility suggests there are inequities across the district.

SCATTERGOOD
THINK | DO | SUPPORT

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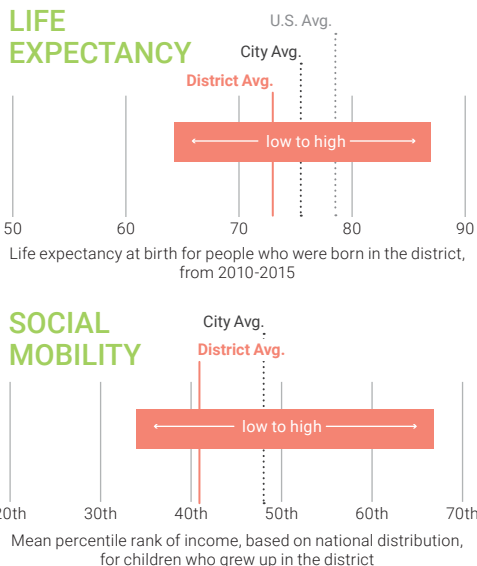
7

District 5 ranks 7th among all districts. Behavioral health utilization is high and may help mitigate the elevated risks, such as exposure to childhood trauma. There is variability across life expectancy and social mobility across the district.
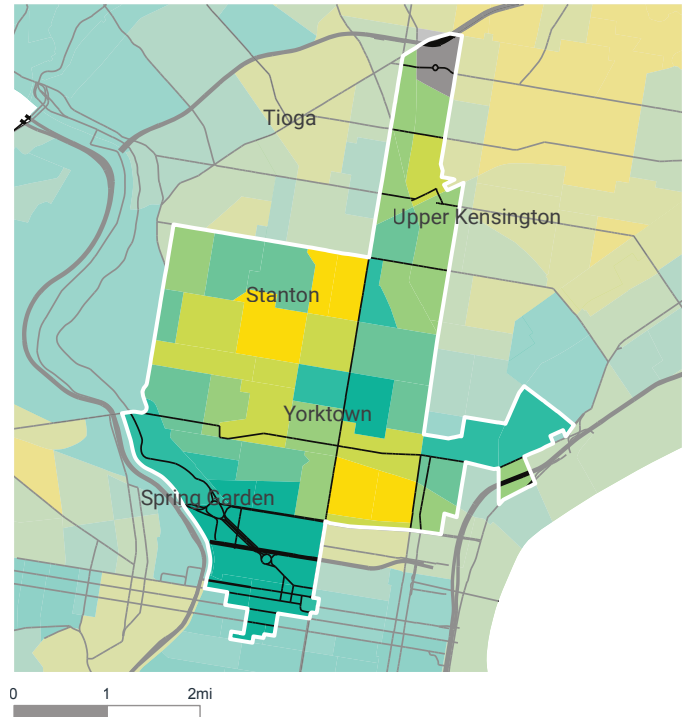
Philadelphia Children's Health & Well-being

PERCENT ENGLISH-ONLY
79%

PERCENT FOREIGN-BORN
7%

PERCENT CHILDREN (0-17)
19% (28,344)

RACE/ETHNICITY	
MAJORITY **AFRICAN-AMERICAN†**	SECOND-LARGEST **WHITE†**

The average life expectancy and social mobility is lower than the city average. Among all residents, 19% are children. There are 3 Health Dept. health centers, 10 Federally Qualified Health Centers, 37 district schools, 2 community schools, 8 selected Rebuild sites, and 54 parks contained within or bordering the district.
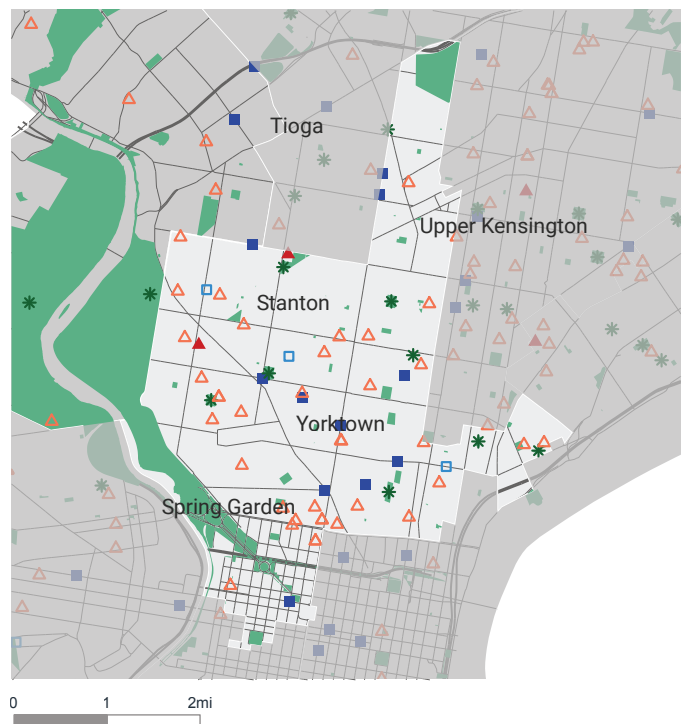
LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

low to high

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.
District Avg.

low to high

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) †Non-hispanic

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Tioga
Upper Kensington
Stanton
Yorktown
Spring Garden

0   1   2mi

MITIGATING ASSETS

- ■ Federally Qualified Health Center
- □ Health Dept. Health Center
- △ Schools
- ▲ Communty Schools
- ✳ Selected Rebuild sites
- ▪ Parks

Tioga
Upper Kensington
Stanton
Yorktown
Spring Garden

0   1   2mi

SCATTERGOOD
THINK|DO|SUPPORT

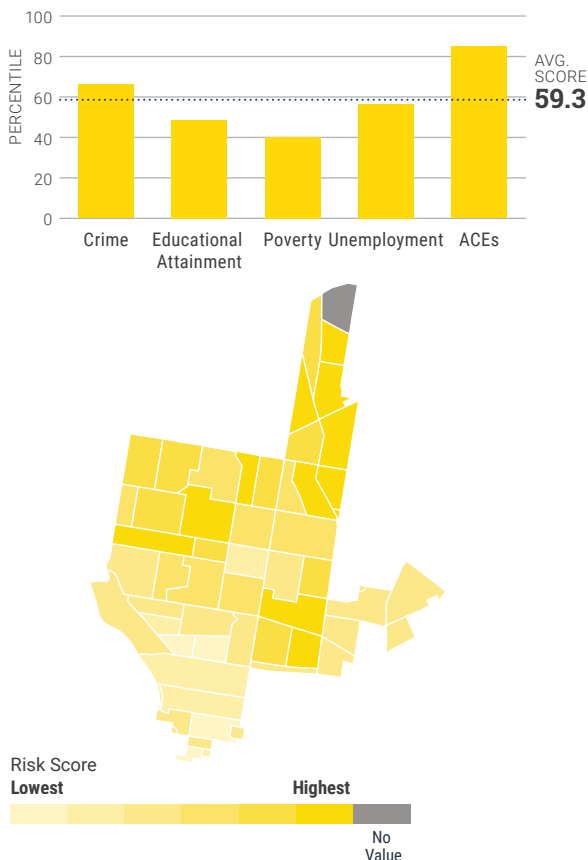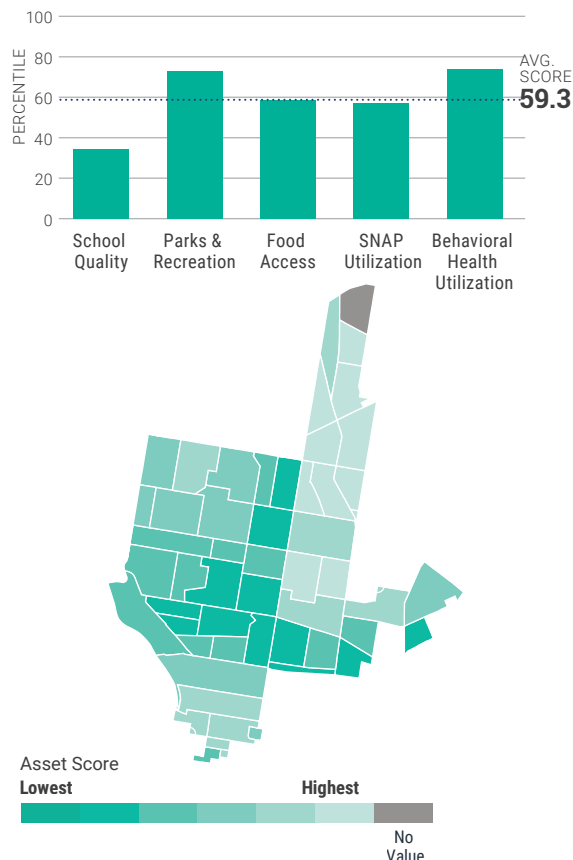## azavea

Philadelphia Children's Health & Well-being

RISK SCORE

Adults experiencing an Adverse Childhood Experience (ACE) is in the 85th percentile. Shooting incidents and the unemployment rate are in the 66th and 56th percentiles.

PERCENTILE

AVG. SCORE **59.3**

Crime | Educational Attainment | Poverty | Unemployment | ACEs

Risk Score

Lowest — Highest

No Value

ASSET SCORE

There is high behavioral health utilization and parks and recreation access. School quality is below the 40th percentile.

PERCENTILE

AVG. SCORE **59.3**

School Quality | Parks & Recreation | Food Access | SNAP Utilization | Behavioral Health Utilization

Asset Score

Lowest — Highest

No Value

MITIGATING ASSETS

	District 5 Score	Best Score (District #)	Comparison
School Quality	**34.2**	**82.3** (10)	
Park and Recreation Access	**72.9**	**72.9** (5)	
Fresh Food Access	**58.7**	**73.4** (1)	
SNAP Utilization	**56.9**	**77.9** (7)	
Children's Behavioral Health Services Utilization	**73.9**	**78.4** (7)	

0   25   50   75   100

KEY TAKEAWAY

District 5 has assets to build upon, particularly behavioral health utilization and access to parks and recreation. That said, risks remain in the district that should be addressed, including exposure to childhood trauma and crime. It is recommended that behavioral health centers focus on these risks, especially given the high utilization in the district.

SCATTERGOOD
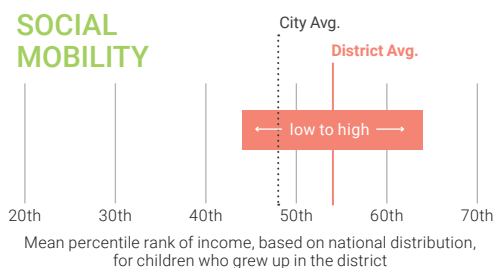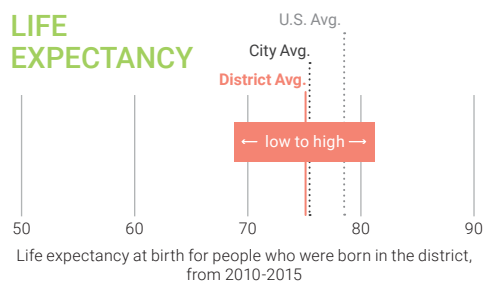THINK | DO | SUPPORT

azavea

RANKING:*

6

District 6 ranks 6th among all districts. There is relatively high school quality and lower exposure to childhood trauma. Access to parks and recreation and green space are relatively low in this district.
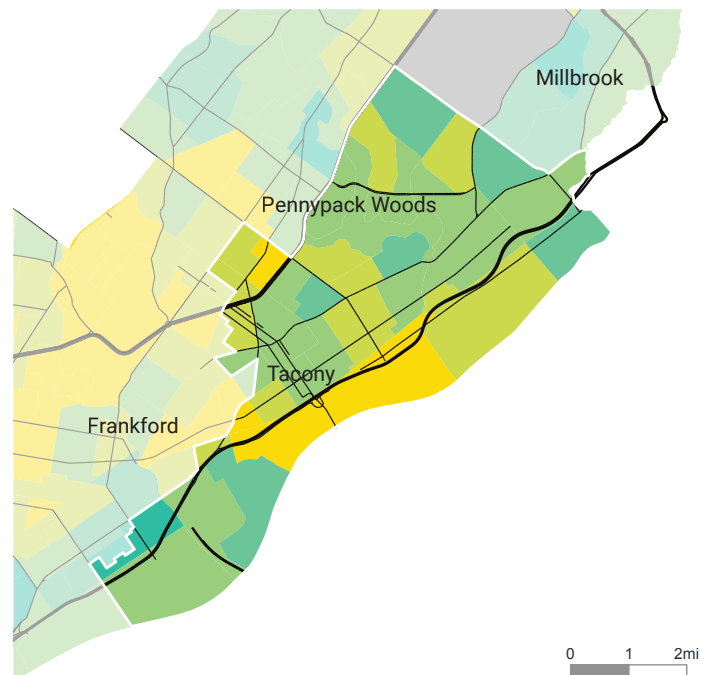
Philadelphia Children's Health & Well-being

PERCENT ENGLISH-ONLY
71%

PERCENT FOREIGN-BORN
15%

PERCENT CHILDREN (0-17)
22% (33,986)

RACE/ETHNICITY

MAJORITY	SECOND-LARGEST
WHITE†	**AFRICAN-AMERICAN†**

The social mobility for District 6 is above the city average. The life expectancy is just about the city average. Among all residents, 22% are children. There is 1 Health Dept. health center, no Federally Qualified Health Centers, 15 district schools, no community schools, 6 selected Rebuild sites, and 42 parks contained within or bordering the district.
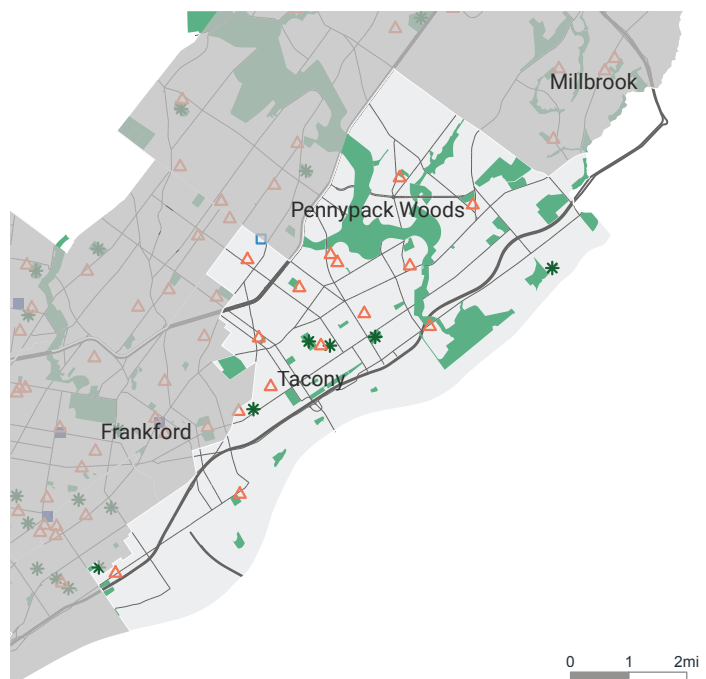
LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.
District Avg.

← low to high →

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) †Non-hispanic

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Millbrook
Pennypack Woods
Tacony
Frankford

0   1   2mi

MITIGATING ASSETS

- ■ Federally Qualified Health Center
- ☐ Health Dept. Health Center
- △ Schools
- ▲ Communty Schools
- ✳ Selected Rebuild sites
- ■ Parks

Millbrook
Pennypack Woods
Tacony
Frankford

0   1   2mi

SCATTER**GOOD**
THINK|DO|SUPPORT

azavea

Philadelphia Children's Health & Well-being

COUNCIL DISTRICT **6**
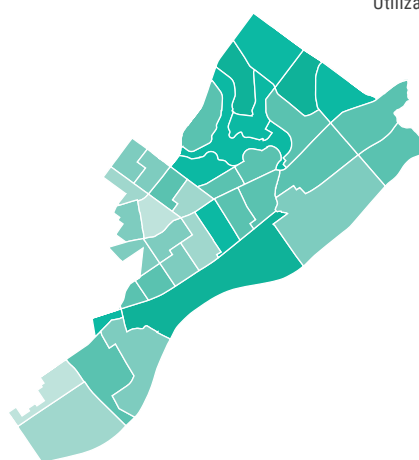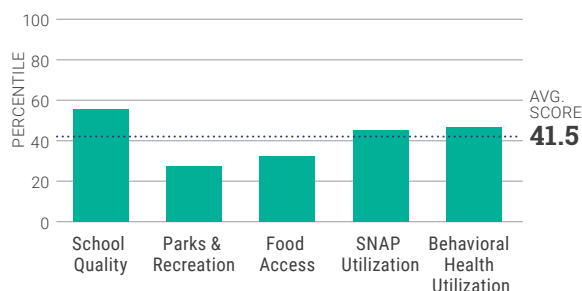
RANKING:

6

RISK SCORE

Family poverty is in the 59th percentile while low educational attainment and the unemployment rate are in the 52nd and 43rd percentiles.

AVG. SCORE **40.4**

Bars: Crime, Educational Attainment, Poverty, Unemployment, ACEs

Risk Score
Lowest — Highest
No Value
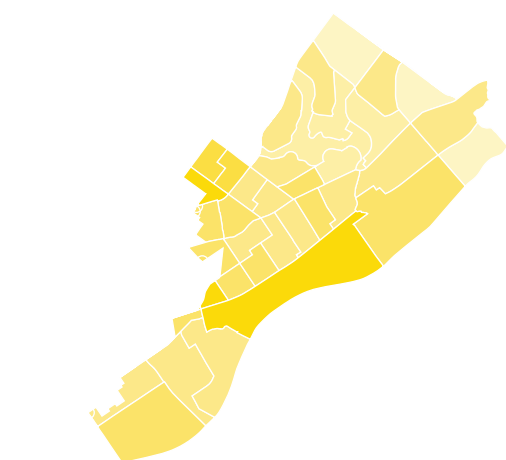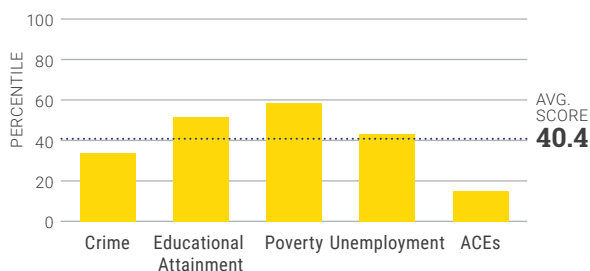
ASSET SCORE

School quality is relatively high, as well as SNAP utilization and behavioral health utilization. Access to parks and recreation could be strengthened.

AVG. SCORE **41.5**

Bars: School Quality, Parks & Recreation, Food Access, SNAP Utilization, Behavioral Health Utilization

Asset Score
Lowest — Highest
No Value

MITIGATING ASSETS

	District 6 Score	Best Score (District #)	Comparison
School Quality	55.7	82.3 (10)	
Park and Recreation Access	27.5	72.9 (5)	
Fresh Food Access	32.4	73.4 (1)	
SNAP Utilization	45.1	77.9 (7)	
Children's Behavioral Health Services Utilization	46.6	78.4 (7)	

KEY TAKEAWAY

District 6 has assets to build upon, particularly school quality. That said, risks remain in the district that should be addressed, including poverty and low educational attainment. High quality schools could potentially be used to mitigate the risk of low educational attainment.

SCATTERGOOD
THINK | DO | SUPPORT

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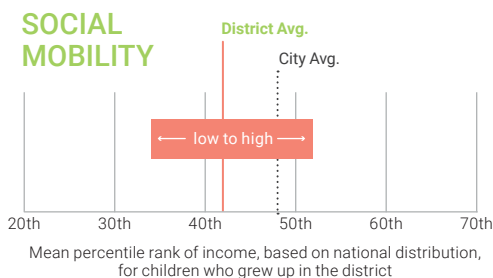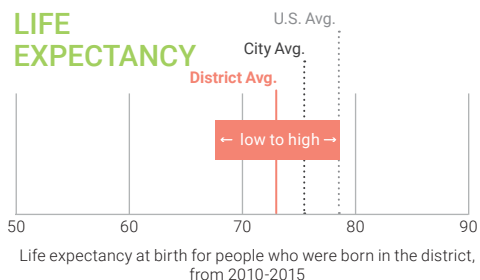
COUNCIL DISTRICT 7

RANKING:*
10

District 7 ranks 10th, the lowest of all districts. This is of significant concern as this district has the highest percentage of the children in the city. Life expectancy and social mobility are lower than the city average.
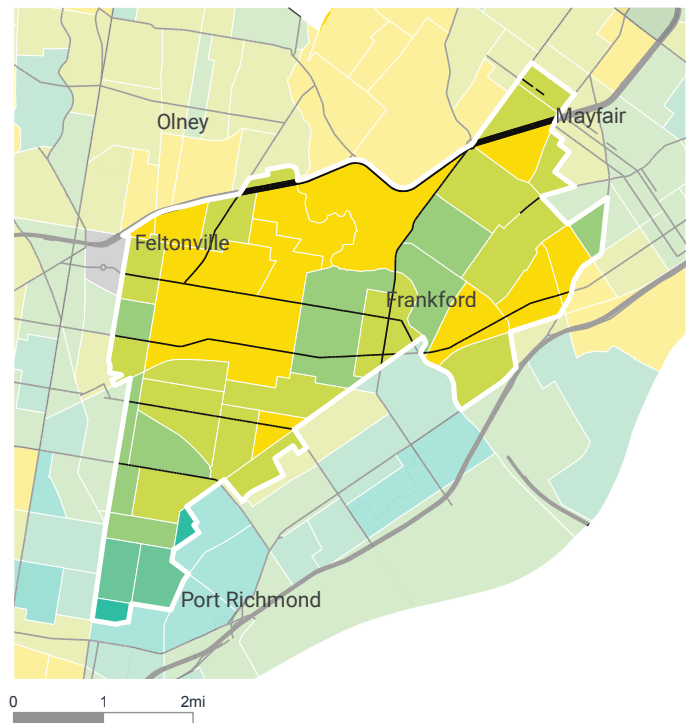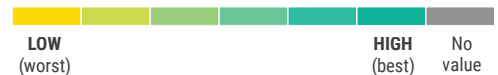
Philadelphia Children's Health & Well-being

	PERCENT ENGLISH-ONLY
	45%
	PERCENT FOREIGN-BORN
	13%
	PERCENT CHILDREN (0-17)
	32% (52,119)

RACE/ETHNICITY

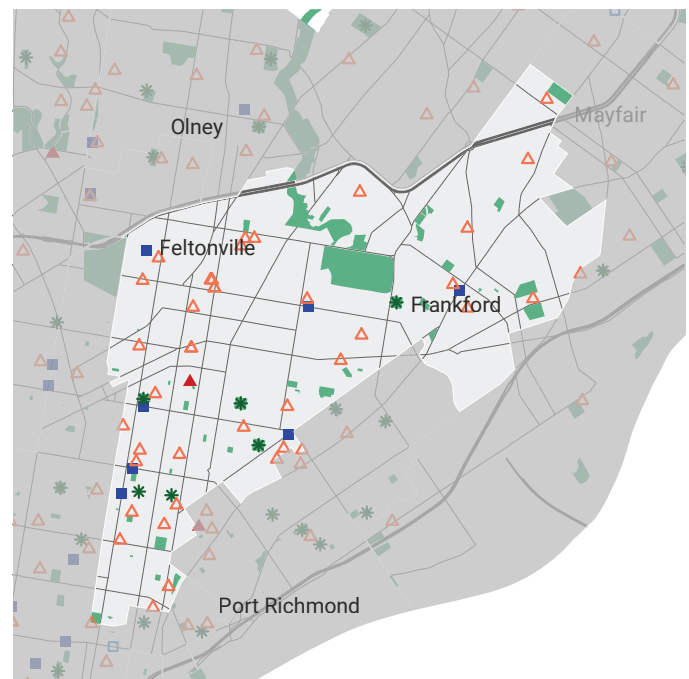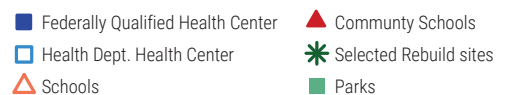| MAJORITY	SECOND-LARGEST
LATINX**	**AFRICAN-AMERICAN†**

District 7 has the highest population of children living across the city. Forty-five percent are English speaking only. There are no Health Dept. health centers, 9 Federally Qualified Health Centers, 38 district schools, 1 community school, 6 selected Rebuild sites, and 42 parks contained within or bordering the district.

LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.
← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

District Avg.
City Avg.
← low to high →

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Olney
Mayfair
Feltonville
Frankford
Port Richmond

0   1   2mi

MITIGATING ASSETS

■ Federally Qualified Health Center
□ Health Dept. Health Center
△ Schools
▲ Communty Schools
✴ Selected Rebuild sites
■ Parks

Olney
Mayfair
Feltonville
Frankford
Port Richmond

0   1   2mi

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) **Referred to as Hispanic in the U.S. Census †Non-hispanic

SCATTERGOOD
THINK | DO | SUPPORT

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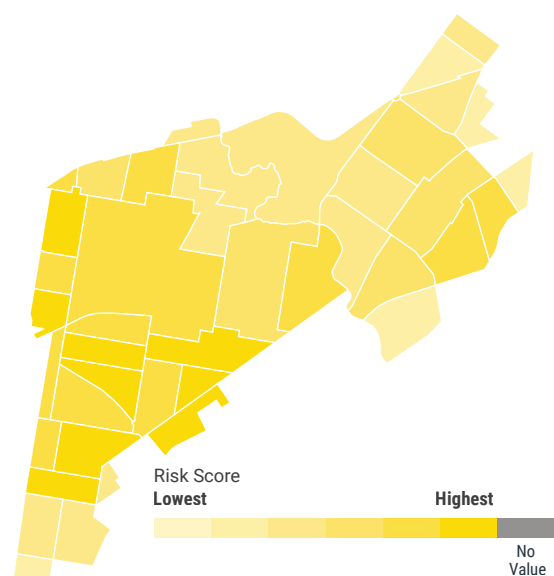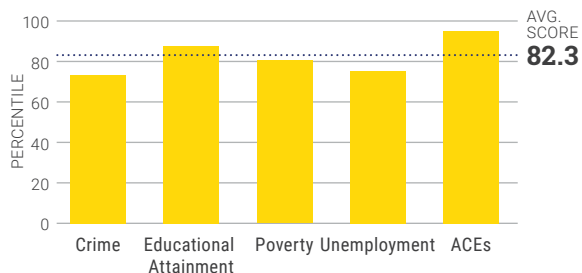# Philadelphia Children's Health & Well-being

COUNCIL DISTRICT **7**

RANKING:

10

RISK SCORE

Adults experiencing an Adverse Childhood Experience (ACE) is in the 95th percentile. Low educational attainment and family poverty are in the 88th and 80th percentiles.

AVG. SCORE **82.3**

Risk Score

Lowest   **Highest**

No Value

ASSET SCORE

There is high behavioral health and SNAP utilization. School quality is below the 40th percentile.

AVG. SCORE **58.7**

Asset Score

Lowest   **Highest**

No Value
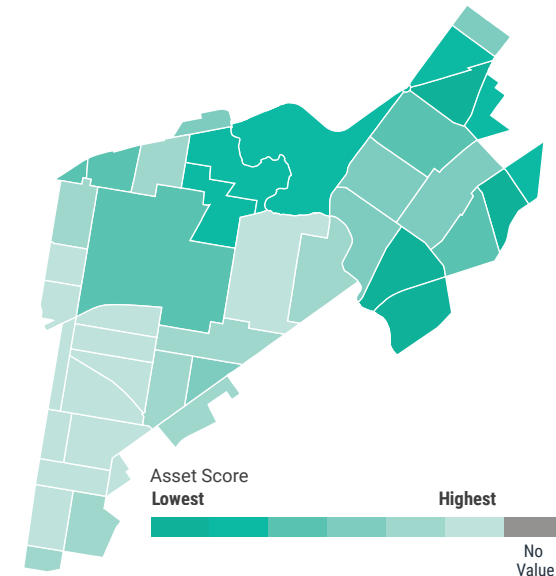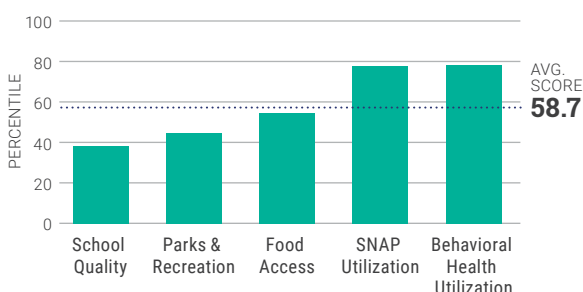
MITIGATING ASSETS

	District 7 Score	Best Score (District #)	Comparison
School Quality	**38.1**	**82.3** (10)	
Park and Recreation Access	**44.7**	**72.9** (5)	
Fresh Food Access	**54.4**	**73.4** (1)	
SNAP Utilization	**77.9**	**77.9** (7)	
Children's Behavioral Health Services Utilization	**78.4**	**78.4** (7)	

0 25 50 75 100

KEY TAKEAWAY

District 7 ranked the lowest across the city. Almost every adult living here reported exposure to childhood trauma. That said, the district has assets to build upon, particularly behavioral health and SNAP utilization. It is good that residents are accessing these services and they should be used to help mitigate the significant risks in this district. Given that Latinx comprise the largest ethnic group, assets and risks must be considered from a cultural context.

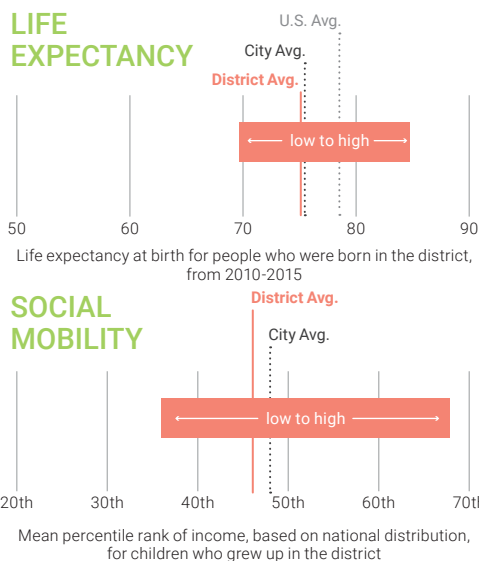SCATTERGOOD
THINK | DO | SUPPORT

azavea

8

District 8 ranks 8th among all districts. The average social mobility of residents is above the city average and there is relatively low exposure to childhood trauma. That said, there is variability in the life expectancy and social mobility across the district.
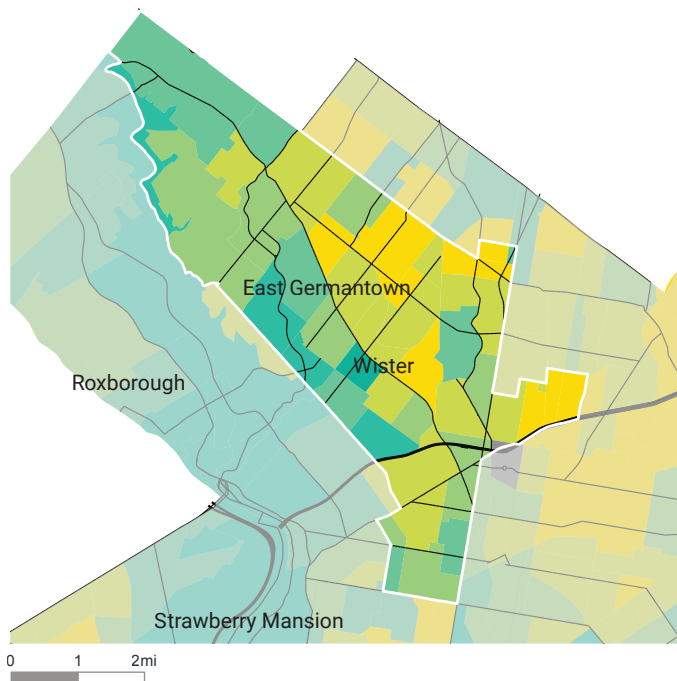
Philadelphia Children's Health & Well-being

	PERCENT ENGLISH-ONLY
	85%
	PERCENT FOREIGN-BORN
	5%
	PERCENT CHILDREN (0-17)
	23% (35,445)

RACE/ETHNICITY	
MAJORITY	SECOND-LARGEST
AFRICAN-AMERICAN†	**WHITE**†

The average life expectancy is slightly lower than the city average. Among all residents, 23% are children. There is 1 Health Dept. health center, 3 Federally Qualified Health Centers, 24 district schools, 1 community school, 7 selected Rebuild sites, and 53 parks contained within or bordering the district.
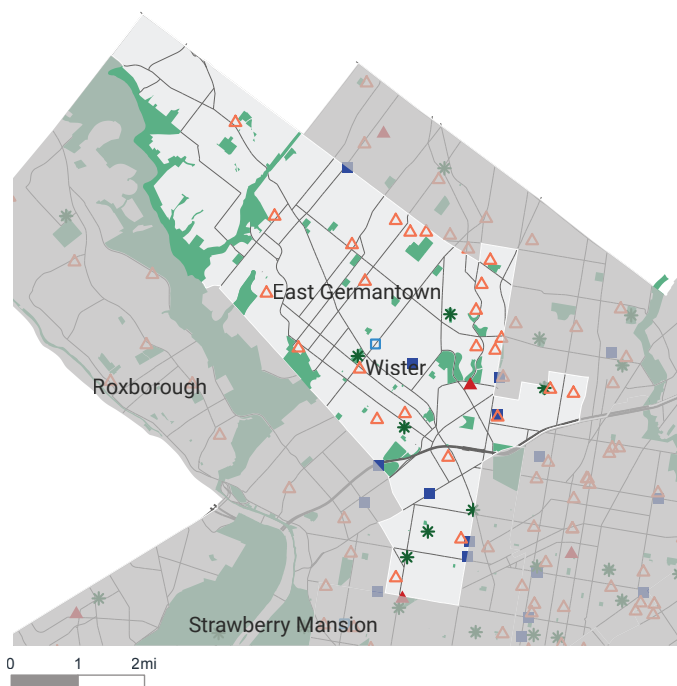
LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

District Avg.
City Avg.

← low to high →

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) † Non-hispanic

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

East Germantown
Wister
Roxborough
Strawberry Mansion

0   1   2mi

MITIGATING ASSETS

- ■ Federally Qualified Health Center
- □ Health Dept. Health Center
- △ Schools
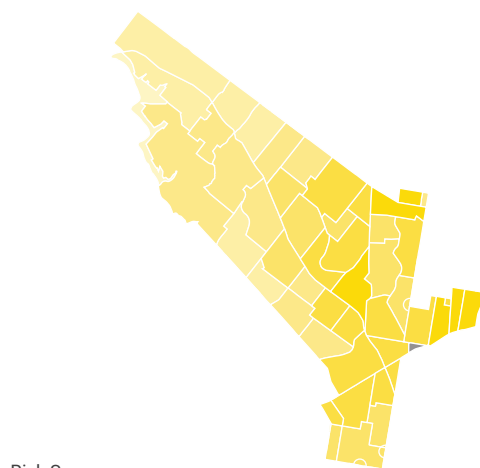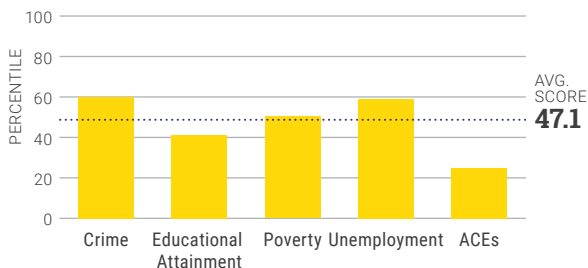- ▲ Communty Schools
- ✳ Selected Rebuild sites
- ■ Parks

East Germantown
Wister
Roxborough
Strawberry Mansion

0   1   2mi

SCATTERGOOD
THINK|DO|SUPPORT

azavea

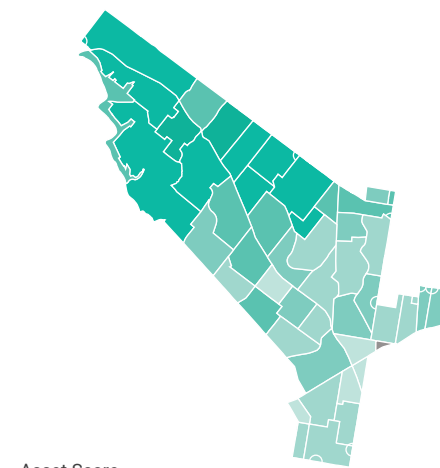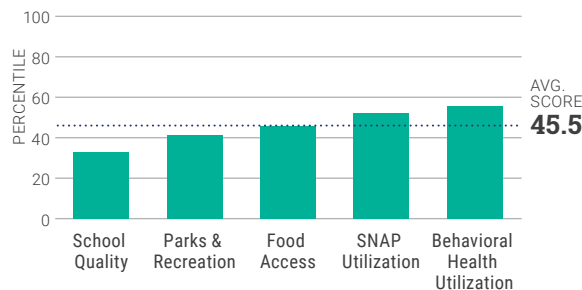# Philadelphia Children's Health & Well-being

RISK SCORE

Shooting incidents and the unemployment rate are both in the 59th percentile. Family poverty is in the 50th percentile, while low educational attainment is in the 41st percentile.

AVG. SCORE **47.1**

Crime | Educational Attainment | Poverty | Unemployment | ACEs

Risk Score
Lowest — Highest
No Value

ASSET SCORE

There is relatively high behavioral health and SNAP utilization. School quality is below the 40th percentile.

AVG. SCORE **45.5**

School Quality | Parks & Recreation | Food Access | SNAP Utilization | Behavioral Health Utilization

Asset Score
Lowest — Highest
No Value

MITIGATING ASSETS

	District 8 Score	Best Score (District #)	Comparison
School Quality	32.9	82.3 (10)	
Park and Recreation Access	41.3	72.9 (5)	
Fresh Food Access	45.5	73.4 (1)	
SNAP Utilization	52.2	77.9 (7)	
Children's Behavioral Health Services Utilization	55.4	78.4 (7)	

0   25   50   75   100

KEY TAKEAWAY

District 8 has assets to build upon, particularly behavioral health access. There is also relatively low exposure to childhood trauma. That said, risks remain in the district that should be addressed, including exposure to crime and unemployment. Behavioral health centers may be able to partner with other organizations to address these risks.

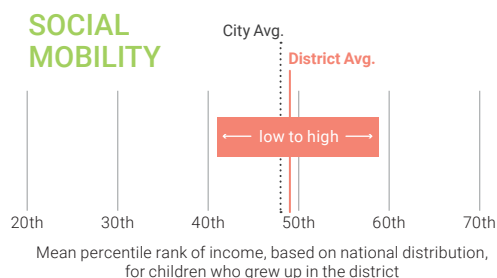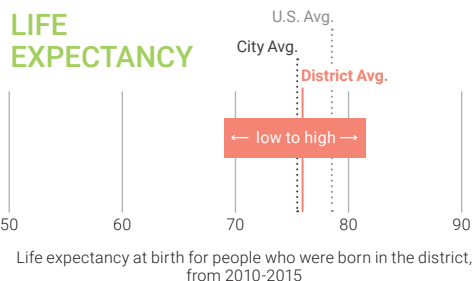SCATTERGOOD
THINK | DO | SUPPORT

azavea

RANKING:*

9
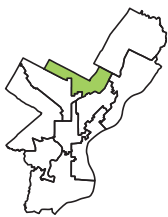
District 9, which ranks 9th among all districts, is the second worst scoring district. There is a high level of poverty and unemployment. That said, there is relatively high access to fresh food and SNAP utilization.
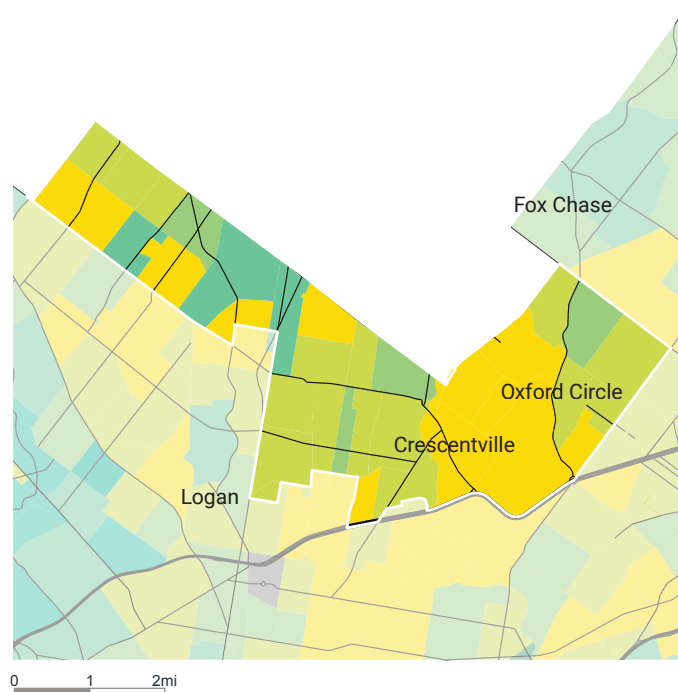
Philadelphia Children's Health & Well-being

PERCENT ENGLISH-ONLY
67%

PERCENT FOREIGN-BORN
19%

PERCENT CHILDREN (0-17)
26% (45,507)

RACE/ETHNICITY

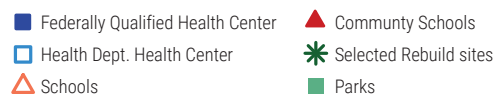| MAJORITY	SECOND-LARGEST
AFRICAN-AMERICAN†	**LATINX***

The average life expectancy and social mobility is similar to the city average. Among all residents, 26% are children. There are no Health Dept. health centers, 3 Federally Qualified Health Centers, 18 district schools, 1 community school, 5 selected Rebuild sites, and 18 parks contained within or bordering the district.

LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.
District Avg.

← low to high →

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Fox Chase
Oxford Circle
Crescentville
Logan

0   1   2mi

MITIGATING ASSETS

- ■ Federally Qualified Health Center
- □ Health Dept. Health Center
- △ Schools
- ▲ Community Schools
- ✳ Selected Rebuild sites
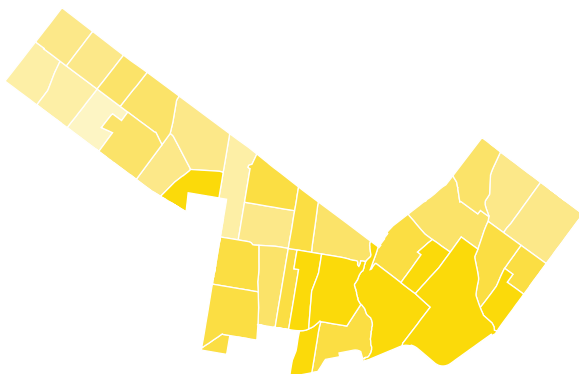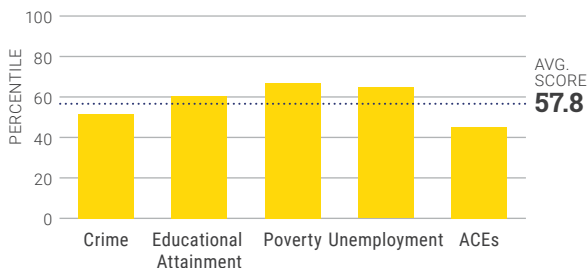- ■ Parks

Fox Chase
Oxford Circle
Crescentville
Logan

0   1   2mi

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) ** Referred to as Hispanic in the U.S. Census. † Non-hispanic

SCATTER**GOOD**
THINK | DO | SUPPORT

azavea

Philadelphia Children's Health & Well-being

COUNCIL DISTRICT **9**

RANKING:

9

RISK SCORE

Family poverty is in the 67th percentile, while the unemployment rate is in the 65th percentile. Low educational attainment is in the 60th percentile.

AVG. SCORE **57.8**

Risk Score

Lowest — Highest

No Value

ASSET SCORE

There is relatively high food and SNAP utilization. Access to parks and recreation is in the 30th percentile.

AVG. SCORE **44.3**

Asset Score

Lowest — Highest

No Value
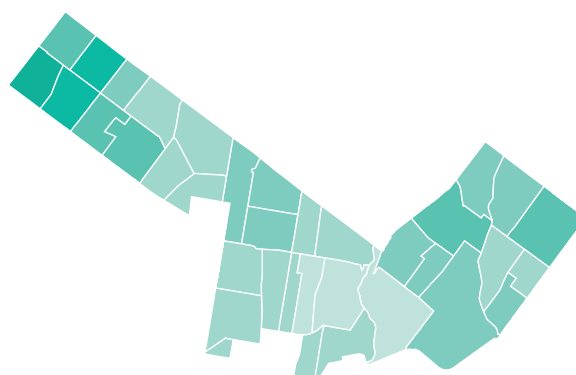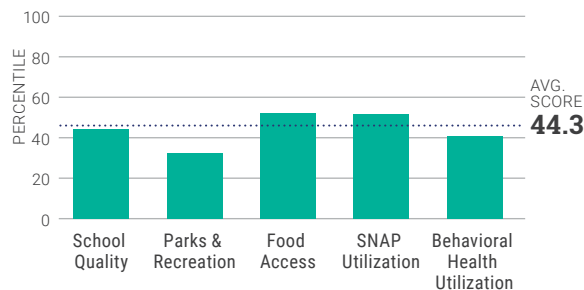
MITIGATING ASSETS

	District 9 Score	Best Score (District #)	Comparison
School Quality	**44.1**	**82.3** (10)	
Park and Recreation Access	**32.6**	**72.9** (5)	
Fresh Food Access	**52.0**	**73.4** (1)	
SNAP Utilization	**51.6**	**77.9** (7)	
Children's Behavioral Health Services Utilization	**41.0**	**78.4** (7)	

KEY TAKEAWAY

District 9 has assets to build upon, particularly access to fresh food and SNAP utilization. That said, risks remain in the district that should be addressed, including poverty and unemployment. Organizations could potentially partner with benefit access providers to mitigate risks since residents are accessing SNAP benefits.

WINTER 2019
Data Sources: 2016 ACS 5-Year Estimates, City of Philadelphia Crime Statistics, PHMC
For full report, see scattergoodfoundation.org

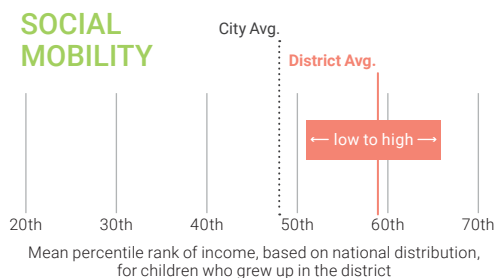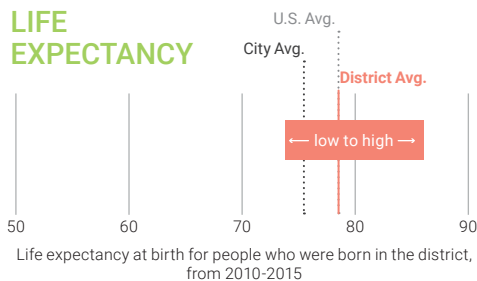SCATTERGOOD
THINK | DO | SUPPORT

azavea

RANKING:*

5

District 10 ranks 5th among all districts. There is higher than average life expectancy and social mobility compared to the city average. There is also low exposure to childhood trauma.

Philadelphia Children's Health & Well-being

PERCENT ENGLISH-ONLY
66%

PERCENT FOREIGN-BORN
23%

PERCENT CHILDREN (0-17)
21% (32,679)

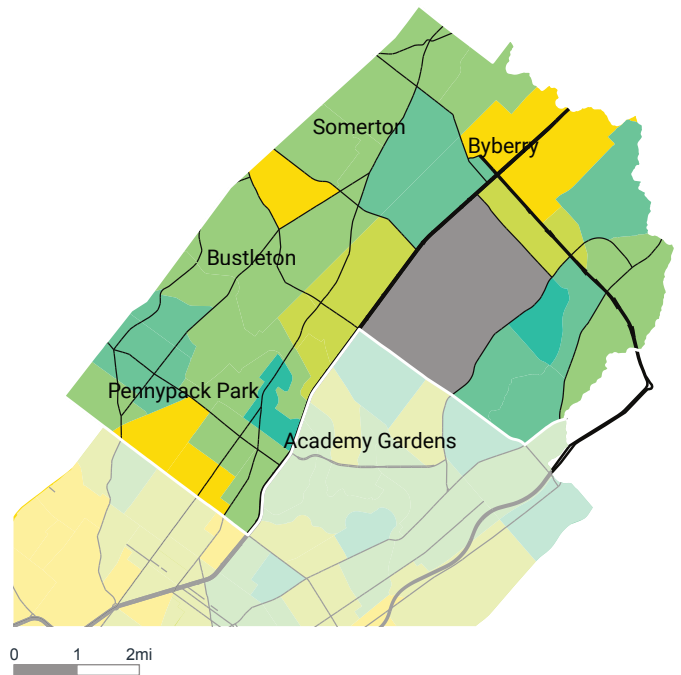| RACE/ETHNICITY	
MAJORITY	SECOND-LARGEST
WHITE†	**ASIAN**†

District 10 has 21% children living in the district. There are no Health Dept. health centers, no Federally Qualified Health Centers, 17 district schools, 1 community school, 4 selected Rebuild sites, and 30 parks contained within or bordering the district.

LIFE EXPECTANCY

U.S. Avg.
City Avg.
District Avg.

← low to high →

50   60   70   80   90

Life expectancy at birth for people who were born in the district, from 2010-2015

SOCIAL MOBILITY

City Avg.
District Avg.

← low to high →

20th   30th   40th   50th   60th   70th

Mean percentile rank of income, based on national distribution, for children who grew up in the district

* Districts are ranked from 1 (best scoring) to 10 (worst scoring) †Non-hispanic

OVERALL SCORE

LOW (worst)   HIGH (best)   No value

Somerton   Byberry

Bustleton

Pennypack Park

Academy Gardens

0   1   2mi

MITIGATING ASSETS

■ Federally Qualified Health Center   ▲ Communty Schools
□ Health Dept. Health Center   ✳ Selected Rebuild sites
△ Schools   ■ Parks

Somerton   Byberry

Bustleton

Pennypack Park

Academy Gardens

0   1   2mi

SCATTER**GOOD**
THINK|DO|SUPPORT
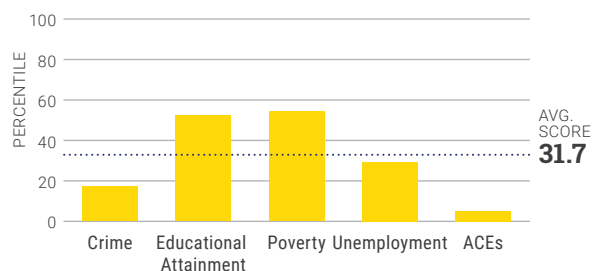
azavea

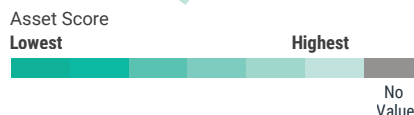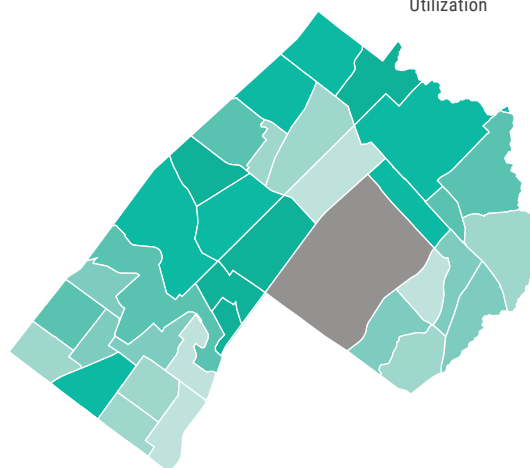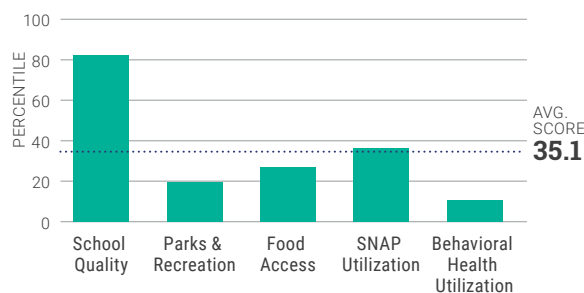# Philadelphia Children's Health & Well-being

RISK SCORE

Family poverty is in the 54th percentile and low educational attainment is in the 52nd percentile. The unemployment rate is in the 32nd percentile.

AVG. SCORE **31.7**

Crime | Educational Attainment | Poverty | Unemployment | ACEs

Risk Score
Lowest   Highest
No Value
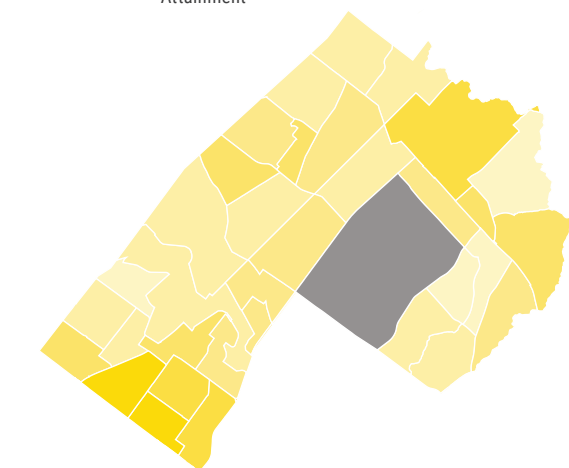
ASSET SCORE

There is high school quality. Access to behavioral health services and parks and recreation could be strengthened.

AVG. SCORE **35.1**

School Quality | Parks & Recreation | Food Access | SNAP Utilization | Behavioral Health Utilization

Asset Score
Lowest   Highest
No Value

MITIGATING ASSETS

	District 10 Score	Best Score (District #)	Comparison
School Quality	**82.3**	**82.3** (10)	
Park and Recreation Access	**19.7**	**72.9** (5)	
Fresh Food Access	**26.8**	**73.4** (1)	
SNAP Utilization	**36.2**	**77.9** (7)	
Children's Behavioral Health Services Utilization	**10.5**	**78.4** (7)	

0   25   50   75   100

KEY TAKEAWAY   District 10 has assets to build upon, particularly school quality. That said, there remain risks in the district that should be addressed, including poverty and educational attainment. Given that there are no city health departments or federally qualified health centers, we should make sure that residents have access to health services. Given the above average life expectancy, health centers and other organizations could focus on health promotion.

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METHODS INTRODUCTION

The purpose of this project is to analyze and visualize the risks and assets for children's health and well-being across Philadelphia, by city council district. The primary project outcomes are specific reports for each city council district and an overall city summary report. The following describes the data used and analytics. The data used for this project are from 2014–2015, but this data does not typically change significantly from year to year.

TECHNOLOGIES

- Python; R; Flask; CSS/HTML; Docker

DATA AND TECHNICAL CONSIDERATIONS

In order to make this work transparent and replicable, each aspect of the project, from data analysis. This approach allows other cities or regions to adapt this project to their area. It also allows Scattergood to more easily duplicate this work at a later date to generate temporal comparisons.

The analysis and scripts themselves are tailored to this project and any user seeking to duplicate this work with updated data or in a new geography must follow the Getting Started directions and edit the Python and R scripts to be specific to their data.

GETTING STARTED

- update/build the docker container ./scripts/dockerbuild.sh (this may take a little while if you haven't built it yet)
- enter into docker container ./scripts/container.sh
- enter a census API key into ./src/data/census.py
- run the overlay python -m src.run
- (optional) refresh report copy from csv python -m src.run.generate_json

GENERATING GRAPHICS

The bar charts and maps are generated via an R script which is not run from within the Docker container. Program and package versions that were used during this project are provided below. The script may work with older or newer versions but will require testing.

- R: 3.5.2
- tidyverse: 1.2.1
- tidyr: 0.8.2
- ggthemes: 4.0.1
- sf: 0.7-2
- svglite: 1.2.1
- httr: 1.4.0
- classInt: 0.3-1
- ggsn: 0.5.0

Once appropriate dependencies are installed, insert the correct working directory into the script. Then run R/plotting.R.

Generating Reports

See the [Flask App documentation] (flask-app/README.md)

METHODOLOGY AND DATA

This project generates scores for each risk and asset at the census tract level. Scores are then aggregated to each city council district. Risks are subtracted from assets to compute the final cumulative score. The scores at the census tract level are percentiles. Because the aggregation to city council district takes the mean, the scores at the city council district level will not represent a scale of 0 to 100. This cumulative score is also computed at the census tract level in order to visualize the variance across a more local level.

The methodology for computing scores, as percentiles, is taken from the Place Matters report (available at scattergoodfoundation.org). This allows the risk scores, which now incorporate updated American Community Survey (ACS) data, to be compared to the 2016 study.

AGGREGATING TRACT SCORES TO DISTRICTS

Census tracts were assigned to districts based on the location of each tract's centroid. Scores were then aggregated to districts by taking the mean of the scores for the census tracts, which were assigned to each district.

CREATING RISK AND ASSET SCORES FROM VARIABLES

The Place Matters report converts values for each variable to percentiles and takes the mean of each percentile for each variable to compute the risk scores.

For example, a poverty percentage is found for each census tract. This list of poverty percentages is then converted to percentiles. The highest poverty percentage is the 100th percentile, the lowest poverty percentage is the 1st percentile. All other values are added as percentiles along this rank.

Once all variable scores are converted to percentiles, the mean of those percentiles is taken. Due to this aggregation, this report does not report the percentiles directly at the census tract level, so the scores at the city council district level will not represent a scale of 0 to 100. Risk scores per district and tract are the mean of the percentiles for crime, low education status, poverty, unemployment, and Adverse Childhood Experiences (ACEs). Asset scores per district and tract are the mean of the percentiles for SNAP utilization, behavioral health center utilization, walkable access to healthy food, access to parks, and school quality. Information about how these variables are computed is below.

CREATING CUMULATIVE SCORES

To create the cumulative scores, which took into account how assets might mitigate risks, the risk scores were subtracted from the asset scores at the district level. This generated a cumulative score for each council district in the city, allowing each district to be ranked against one another. The same cumulative score calculation was computed at the census tract level for visualization purposes.

RISK VARIABLES

Crime
- Shooting victims, from 2014 onward, per 10,000 people.

Education
- Percent of the population that is 25 years and over, with less than a 9th grade education.

  Census API variable: S1501_C02_007E

Poverty
- Percent of families in poverty with related children of the householder under 18 years old.

  Census API variable: S1702_C01_002E

Unemployment
- The unemployment rate for the population 16 years and over.

  Census API variable: S2301_C04_001E

Adverse Childhood Experiences (ACEs)
- 2016 Philadelphia Expanded ACE Survey conducted by the Philadelphia Health Management Corporation (PHMC).
- PHMC delivered a weight-adjusted file that was based on age, sex, race, and poverty distribution to get the proper sample size per census tract. This census tract weight adjusted file was used for census tract calculations.
- PHMC provided an additional weight to be applied when ACE data was aggregated to the district level. When aggregating risks from census tracts to districts, this weight was applied.

ASSET VARIABLES

SNAP Utilization
- Households receiving food stamps which, in the past 12 months, have been below the poverty level

  Census API Variable: S2201_C03_021E
- Households not receiving food stamps which, in the past 12 months, have been below the poverty level

  Census API Variable: S2201_C05_021E
- SNAP utilization metric was generated as a percentage of total households below poverty that are receiving food stamps.

Behavioral Health Usage
- This dataset is a behavioral health usage percentage by zip code.
- Usage by zip code was disaggregated to the census tract level by computing an area weighted join. This resulted in a usage metric per census tract.

Walkable Access to Healthy Food
- This dataset provides a block level assessment of access to healthy grocery stores. It was aggregated to the census tract level via centroid.

Park Assets
- Calculated a kernel density for existing and planned Rebuild locations
- Calculated a kernel density for park assets by sites
- Each kernel density was aggregated to each census tract. This provides two scores per census tract, one which represents the density of parks and recreation assets, the other representing the density of Rebuild locations. The average of the two scores was taken, producing one score per census tract.

School Performance
- School performance scores are at the catchment level and were disaggregated to tracts using an area weighted join.
- Averaged scores for all three levels (elementary, middle, high) to get an overall metric, providing one score per census tract.

Social Mobility Data
The data represented as social mobility is obtained from Opportunity Insights, from the All Outcomes by Census Tract, Race, Gender and Parental Income Percentile table. Data is provided at the census tract level. The variable used was kir_pooled_pooled_mean, this is a pool of all races and genders. Kir is a code for the outcome defined as "Mean percentile rank (relative to other children born in the same year) in the national distribution of individual income (i.e. just own earnings) measured as mean earnings in 2014-2015 for the baseline sample". The data was aggregated to districts following the methodology outlined above.

Life Expectancy and Social Mobility Charts
Life expectancy and social mobility data are provided for context for each district and for the city as a whole. Neither of these datasets are incorporated into the risk, asset, or cumulative scores.

Life Expectancy Data
The data is provided as life expectancy, in years, per census tract. The data was aggregated to districts following the methodology outlined above.

DATA SOURCES

American Community Survey, 2016 5-Year Estimates
- SNAP households
- Educational Status
- Poverty
- Unemployment

The Census Bureau Tiger Database
- Census tract boundaries, 2010

City of Philadelphia
- Crime data, 2006-2018
- Park assets, date not available
- Health centers, 2018
- Streets, 2018
- Walkable access to healthy food, 2012-2014
- District boundaries, 2016
- School performance data, 2016-2018
- School locations, 2018
- School catchments, 2017-2018
- Community school locations, 2018
- Rebuild locations, 2018

PASDA
- Park boundaries, 2016
- Libraries, 2012

Public Health Management Corporation's Community Health Database
- Adverse Childhood Experiences (ACEs) data, 2016

Community Behavioral Health, 2015
- Behavioral health usage by zip code, based on unique eligible members. 2015

Opportunity Insights
- Social mobility data (https://opportunityinsights.org/data/) Data is provided for children born between 1978 and 1983. Data gathered by Azavea in 2018.

National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP)
- Life Expectancy Estimates Files (https://www.cdc.gov/nchs/nvss/usaleep/usaleep.html), 2010-2015. National Center for Health Statistics. 2018.