### **Environmental Justice: Allentown - Accessibility to Parks and Greenspaces**

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### Introduction:

Greenspace and park standards have long been the subject of much discussion. How far is the nearest park or greenspace from your home? Is it within your neighborhood? Is it close enough to walk to? Just as standards for school location call for the school to be within walking distance of the homes it serves, so should neighborhood parks and greenspaces be within walking distance of the families in the neighborhood (Moeller). A survey of park officials in the 50 biggest U.S. cities done by The Trust for Public Land found that only 14 cities have a goal for the maximum distance any resident should live from their nearest park. Among the 14 cities, the standard ranges from one-eighth of a mile to a mile (TTPL). One common maximum distance is half a mile which is commonly considered to be a ten-minute walk. Easy access, such as a ten-minute walk, to a park or green space is extremely beneficial in many aspects of a community including mental health, physical, social, occupational, environmental and economic benefits for all population groups, particularly among lower socioeconomic groups. This report will discuss the importance of green spaces, the benefits previously noted and will also assess the walking distance between each school within Allentown and nearby parks and green spaces.

### The Ten-Minute Walk:

The National Recreation and Park Association, Trust for Public Land, The Urban Land Institute and mayors from 268 cities have created a "10-minute walk" effort, seeking to help all people live within a half-mile of a high-quality park or green space (10 Minute Walk). A recent national survey of 1,000 people in the U.S. conducted by PSB Research on behalf of 10 Minute Walk reveals just how crucial these green spaces are. The survey found that two-thirds of Americans agree that their quality of life would improve with better access to a park or green space within a 10-minute walk from their homes. It also found that city dwellers were most likely to value having green space close to home and acknowledge that it would increase their quality of life, including their physical and mental health.

### The Importance of Green Spaces:

Urban green spaces are very important as they fulfill a range of different roles since the intended purpose differs with each user such as social spaces, areas for recreation and cultural purposes or economic and environmental purposes. Parks and greenspaces are often venues for exercise and physical activity either on an individual or group basis. They are also commonly used for relaxation and stress reduction (Chee Keng Lee). One study conducted by Frances Kuo of the University of Illinois details the importance of green spaces as it finds numerous benefits received by people living near green spaces. Kuo studied 28 identical high-rise public housing projects and found that the people living closer to green spaces boasted a stronger sense of community, were less aggressive and violent, coped better with everyday stress and hardship, performed better on tests of concentration, and managed problems more effectively (Barton).

### **Environmental Benefits:**

A key value of urban green spaces are the environmental benefits and ecosystem services they provide. For example, they counteract the urban heat island effect caused by heat being absorbed and trapped by asphalt, concrete, and other building materials, which in turn reduces the energy cost of cooling buildings. Urban greenery minimizes air, water, and noise pollution, and also offsets greenhouse gas emissions through CO2 absorption (Pataki). A Chicago-based study determined that the city's trees filtered 234 tons of particulate pollution and cleansed the air of 98 tons of nitrogen dioxide, 93 tons of sulfur dioxide, and 17 tons of carbon monoxide.

### **Physical Benefits:**

Numerous studies in the past decade have reported the link between contact with green spaces and health benefits both at the individual and population level (Lee). Recent studies in the Netherlands and Japan show that people with easy access to green space boasted better health and lower mortality rates. Even relatively passive contact with nature, such as viewing it from a window, was found to lower blood pressure and anxiety levels (Amano). There is a growing body of evidence indicating that physical activity levels may be influenced by the urban environment. Studies have found associations between the availability of urban green space and physical activity levels and that a significant proportion of vigorous physical activity in childhood takes place in urban parks (Amano). It is also linked to a lower likelihood of being overweight or obese. Access to green spaces ultimately may help promote active lifestyles in the urban setting.

### Mental health and wellbeing:

Interactions with urban greenspaces and parks have positive restorative effects on mental health and wellbeing and may also help to provide a buffer against stressful life events (van den Berg). Benefits may also arise from participation in activities occurring in these spaces, such as social interaction or physical exercise (Chee Keng Lee) and include alleviation of stress and anxiety as well as improved mood and attention. One study found that decreased walking distance to useable green space was associated with decreased anxiety and mood disorder treatment counts in an urban environment (Nutsford).

### **Social contact:**

Urban green spaces provide opportunities for and facilitate social interactions to occur. These interactions could, in turn, help reduce social isolation, generate social capital, and lead to greater personal resilience and wellbeing (Haq). One ethnographic study from Scotland observed that green space had different social meanings and understandings for various user groups. This, in turn, shaped how people utilized green spaces and facilitated different types of social interaction. Regular social interaction by park users, eg, could form the basis of greater community ties, foster a sense of identity and belonging, and generate more social capital (Dinnie).

### **Violence, and Crime Reduction:**

Most people assume that increased vegetation translates to an increase of crime by offering hiding places for criminals and criminal acts. Contrary to this belief, maintained green spaces actually reduce crime. A study of 98 vegetated and unvegetated apartment buildings in Chicago showed that vegetated spaces cut crime by half. In addition, it was found that vegetated areas inspired pride for surroundings which translated into less litter and less graffiti. Vegetated landscapes also invite more people to use them, which ensures more eyes on the watch to prevent crime in outdoor spaces (Shepley).

### **Environmental Justice and how it relates to this report:**

Environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (Schlosberg). Fair treatment means that no population bears a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or from the execution of federal, state, and local laws, regulations, and policies.

# **Allentown Schools:**

Elementary Schools -	Middle Schools -
Brigadier General Anna Mae Hays Elementary School	Harrison-Morton N
Central Elementary	Raub Middle Scho
Hiram W. Dodd Elementary	South Mountain M
Jackson Early Childhood Center	Trexler Middle Sch
Jefferson Elementary	
Lehigh Parkway Elementary	High Schools -
Mosser Elementary	Building 21
Muhlenberg Elementary	Louis E. Dieruff H
Newcomer Academy	William Allen Hig
Ramos Elementary	
Ritter Elementary	
Roosevelt Elementary	
Sheridan Elementary	

Union Terrace Elementary

Washington Elementary

# Morton Middle School

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Dieruff High School

Allen High School

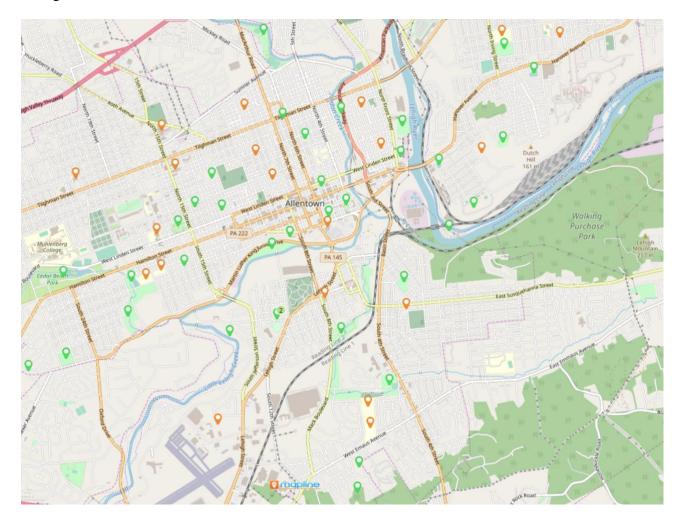
# Allentown Parks and Greenspaces:

5 <sup>th</sup> Street Playground	Keck Park
Alton Park	Keck Triangle
Andre Reed Park	Kimmet's Lock
Arts Park	La Placita
Bicentennial Park	Lil'-Le-Hi Trout Nursery
Bucky Boyle Park	Little Lehigh Parkway
Canal Park	Lumber and Benton Playlot
Cedar Creek Parkway	Percy Ruhe Park
Joseph S. Daddona Lake and Terrace	Roosevelt Park
Dixon Street Dog Park	South Mountain Reservoir
East Side Reservoir	South St. Park
East Side Trail	Stevens Park
Fountain Park	Trexler Memorial Park
Franklin Park	Trout Creek Parkway
Ithaca Park	Valania Park
Ithaca Park Jackson St. Park	Valania Park Walden Terrace Park
Jackson St. Park	Walden Terrace Park

# Map of School and Park Locations:

Green Pin- Parks

Orange Pin- Schools



### Allentown Parks and Greenspaces in Relation to Allentown Schools

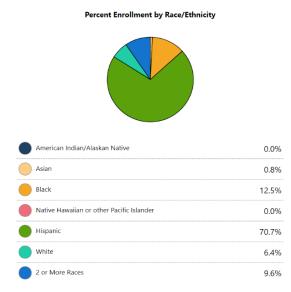
The pink circle in the middle of each map shows the location of the school mentioned and the pink border that is around it shows the area that is within a 10-minute walking distance of that school. Below the map is a chart of the demographic information pertaining to each school.

# **Brigadier Elementary School:**

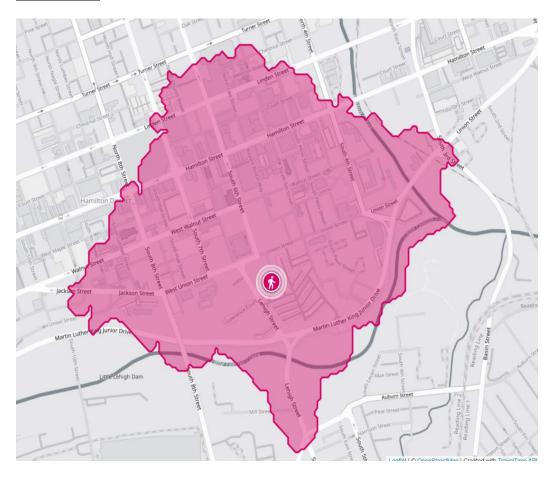


There is one park within a 10-minute walking distance of Brigadier Elementary School: Franklin

Park.

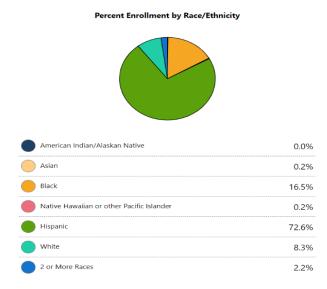


# **Building 21:**

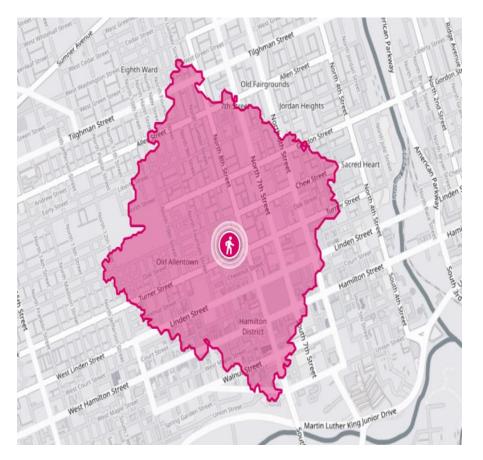


There are five parks within a 10-minute walking distance of Building 21: Arts Park, Valania

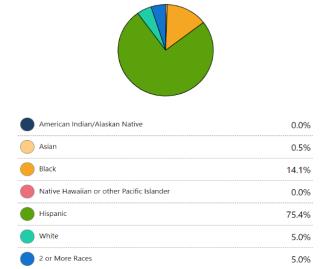
Park, Jackson St Park, and Fountain Park.



# **Central Elementary School:**

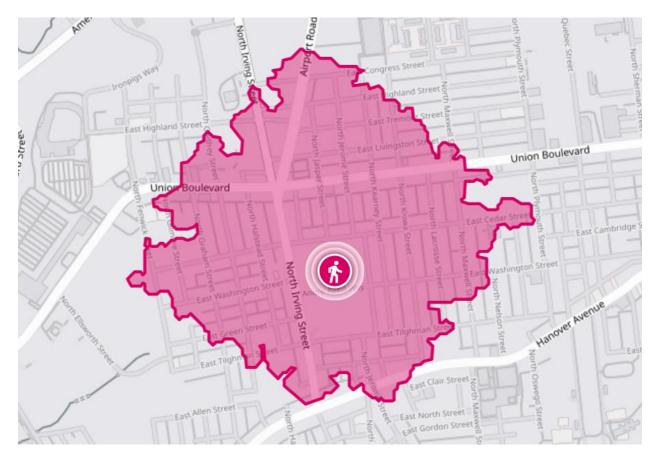


There are **no** parks within a 10-minute walking distance of Central Elementary.

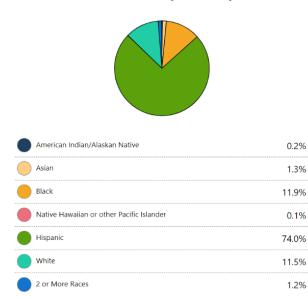


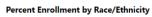
### Percent Enrollment by Race/Ethnicity

# Louis E. Dieruff High School:

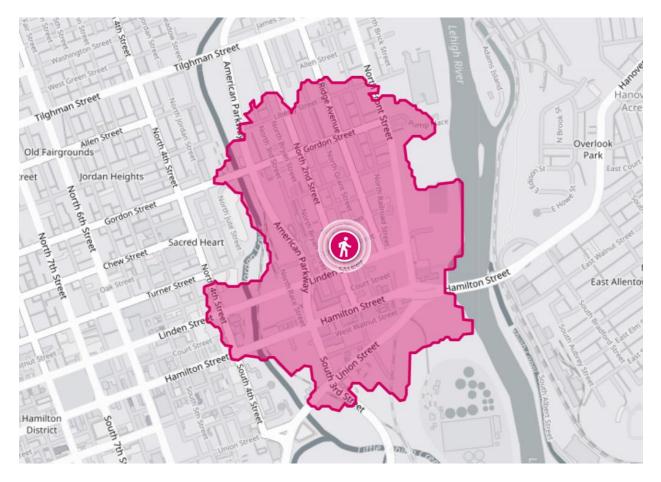


There is one park within a 10-minute walking distance of Dieruff High School: Andre Reed Park





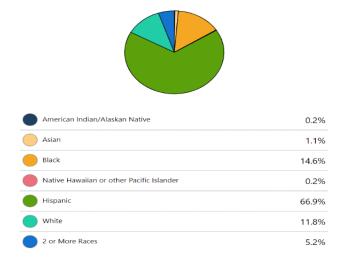
# Harrison-Morton Middle School:



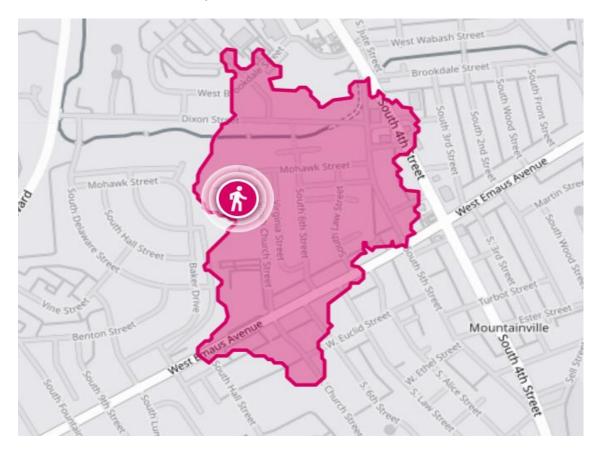
There are two parks within a 10-minute walking distance of Harrison-Morton Middle School:

Jordan Meadows and Bucky Boyle Park.

Percent Enrollment by Race/Ethnicity

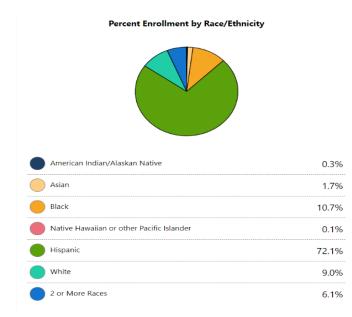


# Hiram W. Dodd Elementary School

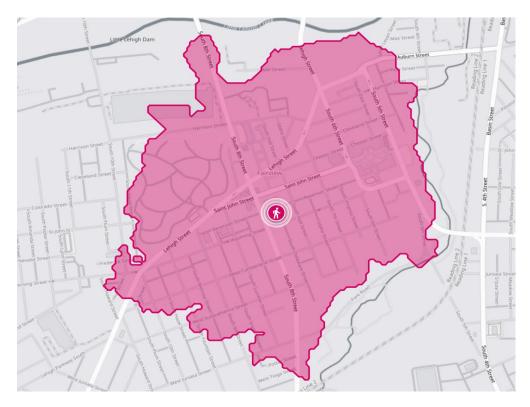


There is one park within a 10-minute walking distance of Hiram Dodd Elementary School: Trout

Creek Parkway.

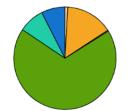


# Jefferson Elementary



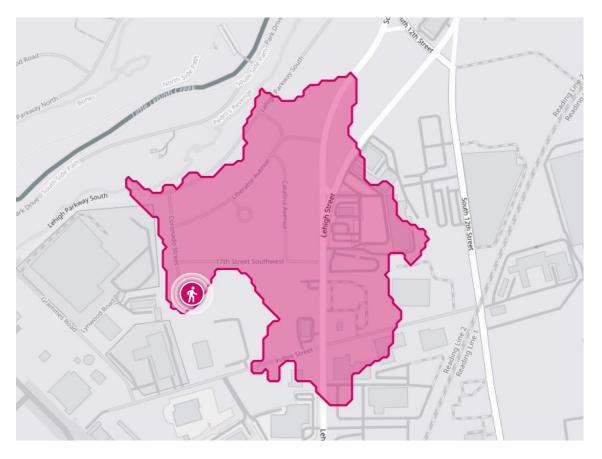
There is one park within a 10-minute walking distance of Jefferson Elementary School: Trout Creek Parkway.

### Percent Enrollment by Race/Ethnicity



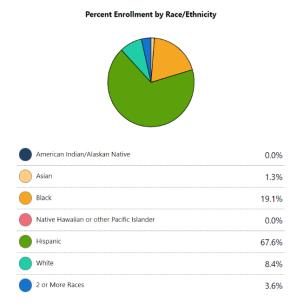
American Indian/Alaskan Native	0.0%
Asian	0.9%
Black	14.9%
Native Hawaiian or other Pacific Islander	0.3%
Hispanic	68.3%
White	8.1%
2 or More Races	7.5%

# Lehigh Parkway Elementary:



There is one park that is within a 10-minute walking distance of Lehigh Parkway Elementary

School: Little Lehigh Parkway.

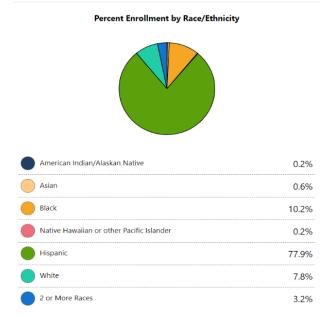


# **Mosser Elementary School:**



There are two greenspaces within a 10-minute walking distance of Mosser Elementary School:

Keck Park and East Side Reservoir (greenspace on site).

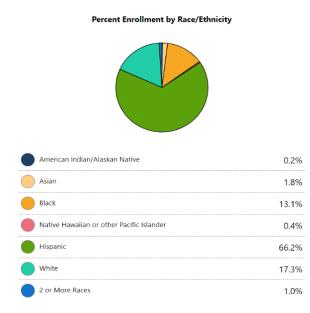


# Muhlenberg Elementary School:

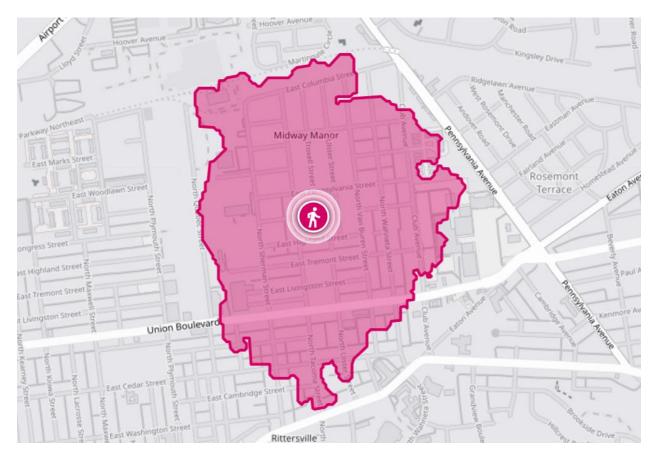


There are no parks within a 10-minute walking distance of Muhlenberg Elementary School

(greenspace on site).



# Newcomer Academy:

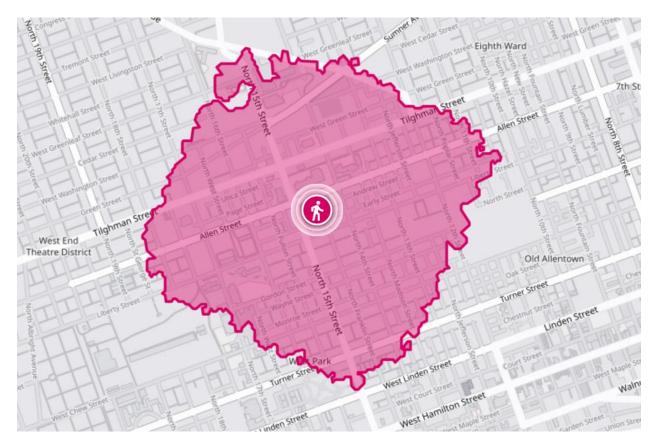


There are no parks within a 10-minute walking distance of Newcomer Academy (greenspace on site).

The demographic data for Newcomer Academy changes depending on how long the students

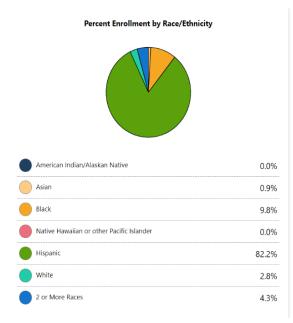
remain in the program before returning to their home school.

# **Ramos Elementary School:**



There is one park within a 10-minute walking distance of Ramos Elementary School: Franklin

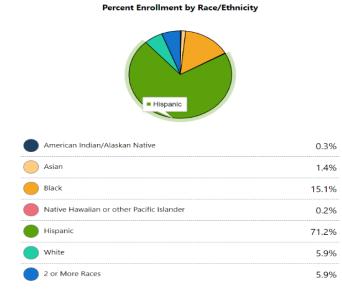
Park (greenspace on site)



### **Raub Middle School:**

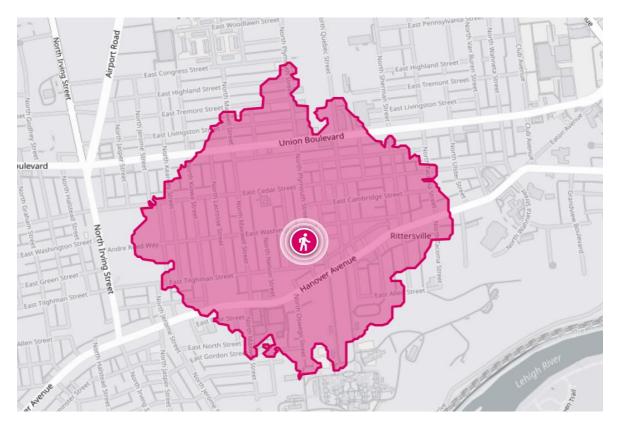


There are four parks within a 10-minute walking distance of Raub Middle School: Cedar Creek Parkway, Joseph S. Daddona Lake and Terrace, Little Lehigh Parkway, and West Park.

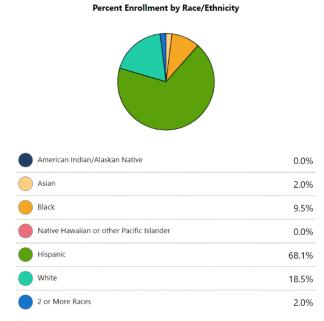


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# **Ritter Elementary School:**



There is one park within a 10-minute walking distance of Ritter Elementary School: Andre Reed Park.

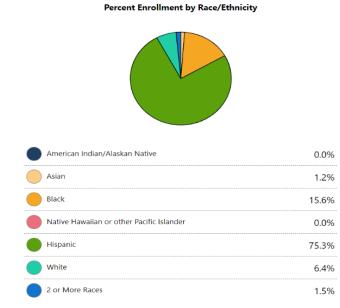


# **Roosevelt Elementary School:**



There are two parks within a 10-minute walking distance of Roosevelt Elementary School:

Roosevelt Park and Trout Creek Parkway.



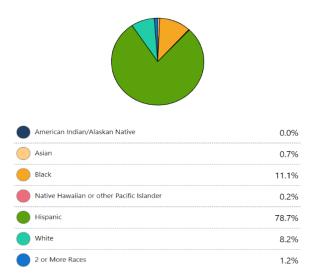
# **Sheridan Elementary School:**



There are two parks within a 10-minute walking distance of Sheridan Elementary School: Bucky

Boyle Park and Jordan Meadows.

### Percent Enrollment by Race/Ethnicity



# South Mountain Middle School:

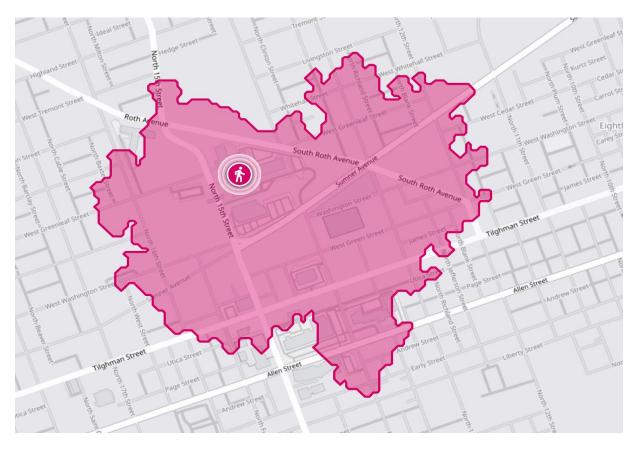


There are two parks within a 10-minute walking distance of South Mountain Middle School: Trout Creek Park and Lumber and Benton Playlot.

# American Indian/Alaskan Native 0.0% Asian 0.9% Black 14.8% Native Hawaiian or other Pacific Islander 0.2% Hispanic 70.4% White 8.4% 2 or More Races 5.4%

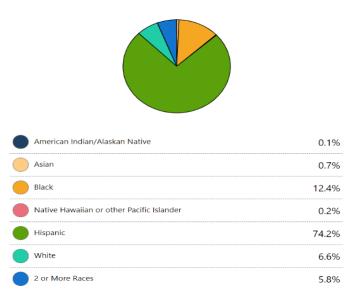
### Percent Enrollment by Race/Ethnicity

# **Trexler Middle School:**



There are no parks within a 10-minute walking distance of Trexler Middle School (greenspace

on site).

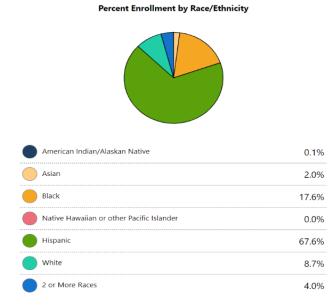




# **Union Terrace Elementary School:**



There are three parks within a 10-minute walking distance of Union Terrace Elementary School: Cedar Creek Parkway, Joseph S. Daddona Lake and Terrace, Little Lehigh Parkway.

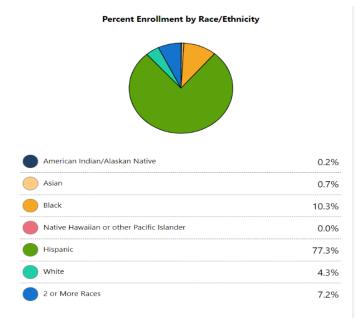


# Washington Elementary:



There are two parks within a 10-minute walking distance of Washington Elementary School:

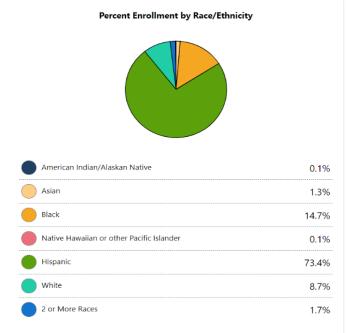
Jordan Park and Stevens Park.



# William Allen High School:



There are two parks within a 10-minute walk of William Allen High School: West Park and Cedar Creek Parkway.



### **Environmental Justice Analysis of Maps:**

Each school within Allentown has at least one park within a 10-minute walking distance with exception of Central Elementary School, Muhlenberg Elementary School, Newcomer Academy, and Trexler Middle School. Muhlenberg Elementary School, Newcomer Academy, and Trexler Middle School all have greenspaces on site. The only school without a park or greenspace within a ten-minute walking distance is Central Elementary School, which has a 75% Hispanic enrollment rate.

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