### Inner-City Children and Environmental Equity: Evidence from Philadelphia

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#### **Ashley Parsons**

#### **ABSTRACT**

Experts agree that children need access to green spaces. Many urban children live in degraded environments unsuitable for outdoor play. Children primarily play in school yards. Low-income and African American children are often the victims of social, economic, and educational inequalities leading to the under-allocation of resources for their public schools. Patterns of wealth, advantage and disadvantage are geographically visible in Philadelphia's urban fabric in the segregation of many black and low-income neighborhoods. This is a direct result of historic urban development. Revitalization has aimed at rejuvenating the inner-city economically, but has lead to the displacement of many poor black families and increased segregation of classes. There is a high population of low-income African American children attending public schools in the inner-city. Philadelphia is known for their public-private funding partnerships for community projects and services. Funding problems resulting from low-tax revenue and disinterest of private investors have lead to a disparity in achievement and curriculum between city public schools, private, and suburban public schools. Federal policies attempt to lessen this gap and provide incentives for environmental education programs, but poorer schools lack the funding to expand curriculum and improve or maintain playgrounds. Philadelphia's parks and recreation programs have tried to provide child playscapes to disadvantaged children and schools additional outdoor resources, but racial tensions and neighborhood segregation act as repressors to this success. Guidelines are needed to help create programs and policies that can mitigate disadvantaged children's environmental equity.

Ashley Parsons Acknowledgements

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### Research Goals

The primary goals of the Literature Reviews are as follows:

- Reveal the importance of Philadelphia's position in the context of childhood education and outdoor play
- Uncover the role that the urban fabric has in both creating and elevating social equity issues relating to education and outdoor creation
- Illustrate the connection between social and environmental equity and the urban fabric
- Uncover the federal and state policies which contribute to equal education and environmental education
- -Make a synthesis of findings of social equity in education opportunities as it relates to achievement, funding, and the urban fabric

The major goal of this research and the intention of this thesis are:

- To develop a set of policy guidelines to mitigate income-disadvantaged children's environmental equity.

### **Thesis Introduction**

The primary purpose of this study is to understand the connections between low-income social structures, urban development patterns, education, and outdoor recreation to answer the following questions:

- What role has culture had on the evolution of the urban fabric, specifically housing and educational opportunities?
- What are the effects of segregation by race and income on education and outdoor recreation, historically and currently?
- What existing educational policies and public recreation opportunities are working to mitigate the disadvantages of low-income and minority districts?
- What suggestions can be drawn to improve lowincome children in Philadelphia's outdoor recreation, education, and environmental equity?

The literature points to the continuing effort of local Philadelphia government, local activist programs, and public schools to elevate the disadvantages that low-income and specifically African American children face in the areas of outdoor recreation and education. A historical approach is used to emphasize the element of gradual change which has been present in Philadelphia, and may perhaps represent a larger trend in other American cities, that has contributed to segregated neighborhoods, schools, and public programs. It is important in this research to consider how the city's fabric has evolved to the point it is today. There are four categories of literature review:

Chapter 1- What role does the evolution of the Philadelphia urban fabric play in social equity, outdoor recreation and educational opportunities?

Chapter 2- What role has the evolution of Philadelphia's green spaces played in creating child landscapes and outdoor play opportunities?

Chapter 3- What is the connection between social equity and education?

Chapter 4- What are the federal, state and local policies and programs which contribute to environmental education?

Generalizations are made to cover both a long period of Philadelphia's development history and a broad spectrum of policy and programs. There are always exceptions to generalizations. The literature reviews create a link between early Philadelphia settlement patterns,

Ashley Parsons Thesis Introduction

# **Notes and Citations**

1 Warner, Sam Bass Jr. *The Private City: Philadelphia in Three Periods of its Growth.* University of Pennsylvania Press: Philadelphia (1968) reprint with Introduction 1987. pg ix

- 2 Warner (1968) pg xii
- 3 Adams, Carolyn et al. *Philadel-phia: Neighborhoods, Division, and Conflict in a Postindustrial City.* Comparative American Cities Series. Temple University Press: Philadelphia (1991) page 4
- 4 Adams et al (1991) pg 4
- 5 Goode, Judith and Schneider, Jo Anne. *Reshaping Ethnic and Racial Relations in Philadelphia: Immigrants in a Divided City.* Temple University Press: Philadelphia (1994) pg 29
- 6 Goode and Schneider (1994) pg 29
- 7 Goode and Schneider (1994) pg 31

historic urban development trends, education and recreation policy and programs.

Low-income, often minority, children and families have a decreased interaction with outdoors due lack of opportunities afforded by public programs. These children and families are often faced with degraded and diminished outdoor spaces through environmental injustice and public policy. In essence, the children and families that need the most public assistance and public amenities are faced with the least amount and lowest quality of public green spaces and education about the environment in which they live. Through recognition of this correlation, new public programs and altered outdoor recreation policies can be developed to help mitigate the disadvantages faced by low-income children. Findings will be used to develop a set of guidelines for improving income disadvantaged children's education and environmental equity.

#### **Industrial History and Economic Position**

The urban fabric of many American cities is greatly influenced by historic industrialization and the movement from a manufacturing industry to service industry. Philadelphia is one of the oldest examples of an industrial city. A balance of the successes and failures of the city government shows that the city sits in the middle of a spectrum of American cities. What makes Philadelphia the ideal city of study is the "extent to which explanations of its development apply to other cities." Particularly, the importance of the historic interplay between industry and diversity and between public and private, places Philadelphia in the perfect position to provide insight into many other United States metropolitan areas.<sup>4</sup>

Philadelphia has a number of unique characteristics which make it ideal for study. One of these characteristics is the "historical dynamic between African American and white ethnics." Specifically, the diverse populations in Philadelphia illustrates an example of how racial and income segregation have given Philadelphia "a disproportionate number of very poor people living in the largest number of highly segregated census tracts in the country." Another reason Philadelphia provides an interesting study is its economic position in the megalopolis of North Eastern cities, including Boston, New York City, Baltimore, and Washington D.C. As an economic competitor, Philadelphia often comes out behind these other cities.

#### A History of Diversity

Philadelphia is now, and historically has been, a progressive city. Called the "City of Brotherly Love" the city has always had a largely diverse population living and working together. Philadelphia was originally

- 8 Adams et al (1991) pg 4
- 9 Adams et al (1991)
- 10 Adams et al (1991)
- 11 Adams et al (1991)
- 12 Dorsey, Bruce. *Reforming Men and Women: Gender in the Antebellum City.* Cornell University Press: London. (2002)
- 13 ed. Davis, Allen F. and Haller, Mark H. *The Peoples of Philadel-phia: A History of Ethnic Groups and Lower-Class Life, 1790-1940.* University of Pennsylvania Press: Philadelphia (1973)
- 14 Davis and Haller (1973) pg 175
- 15 Davis and Haller (1973) pg 180
- 16 Goode and Schneider (1994) pg 43
- 17 Goode and Schneider (1994) pg 43
- 18 Goode and Schneider (1994) pg 167

settled as a Quaker colony as a "quasi-religious utopian experiment." It was William Penn's vision in 1683 to create a colony for Quakers to settle free from religious persecution. While one of the founding principles of the city was freedom of religion, the primary vision for the city was idea of the country-town.

The idea of the country-town was based in cityplanning which allotted a specific amount of land to each landowner to accommodate a large dwelling and private green-space. Penn's grid system reflected his vision as a land developer to allow all men in the city equity of land. 10 In addition, Penn's plan called for shared green spaces. This equity of land division illustrates the social principles which were inherent in the Quaker religion: equity under the eyes of god. It is important to note that at the time of settlement, equity was only a standard for whites, and not shared between races or income levels.<sup>11</sup> Quakerism is one of the first Christian religions which allowed women to become preachers.<sup>12</sup> As a key example of religious progressivism, the treating of women as almost equal creates a microcosm of thought separated from the rest of the Northern colonies during the seventeenth century. But this progressive microcosm for women did not spread to all peoples in the city.

Through the nineteenth century, the expansion of the grid system allowed large houses to be built for people of higher social class and smaller ones for middle class workers. Low-income and social undesirables lived in shacks and shanties hidden in alleyways and in back yards of the well-to-do.<sup>13</sup> While the grid system designed by Penn allowed people access to common green spaces and large yards and homes, it did not account for the social inequities that minority and poor families faced. The modern economic, housing, and social problems faced by the peoples of Philadelphia cannot be separated from early development history<sup>14</sup>, especially for poor inner-city blacks.<sup>15</sup>

In 1994 Philadelphia "three out of every four African Americans…live[d] in neighborhoods that are at least 90 percent" black.<sup>16</sup> In other words, 72 percent of the African American population lived in segregated areas, up from 67 percent in 1980 and compared to 30 percent nationwide.<sup>17</sup> This is particularly important in the "competition over work, space, and government services" such as education and recreation that shape the experiences of poor and minority populations.<sup>18</sup>

#### The Southern Northern City

While Chicago is the stereotypical case study for industrial cities, New York for immigration, and Boston, Cleveland or Detroit as examples political corruption, poor housing or crime, Philadelphia is typically the city

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# **Notes and Citations**

- 19 Davis and Haller (1973) pg 3
- 20 Davis and Haller (1973) pg ix
- 21 Davis and Haller (1973) pg 10
- 22 Davis and Haller (1973) pg 7
- 23 Davis and Haller (1973) pg 8
- 24 Davis and Haller (1973)
- pg 10-11
- 25 Davis and Haller (1973) pg 11
- 26 Warner (1968) pg ix

examined in terms of elite rich and upper-class life. An analysis of poor and lower-class life has been rarely done. <sup>19</sup> This means that there is both an abundance of information left unexplained about poor Philadelphians, but also that there is a lack of synthesis about how being a poor minority impacts life opportunities.

Philadelphia's black population in the nineteenth century was higher than any other city in the Northeast.<sup>20</sup> Philadelphia's position on trade routes directly from the South "affected attitudes" and resulted in unusually high numbers of black population.<sup>21</sup> In addition, due to high spikes in population growth following the Civil War, the French Revolution, revolt in Haiti, and both World Wars "Philadelphia's strength as a center for manufacturing had important implications for immigrants" as well as for the size and walkability of the city.<sup>22</sup> Due to extreme growth, the dense development and easy walkability of inner-city early Philadelphia was quickly replaced by expanding suburbs and the need for public services.<sup>23</sup>

Because of the city's Quaker influence and progressive views of equality and opportunity for women, many people expect that the city was "friendly to free blacks and abolitionists" however, the opposite is true.<sup>24</sup> High populations of poor blacks in close proximity to the rich, white population lead to high crime, violence, and racial tensions which have exposed extreme inequalities between different neighborhoods and communities.<sup>25</sup> It is because of these racial tensions and the interaction of urban development with industry that Philadelphia is a prime example of social and environmental inequality.

Philadelphia serves as a particularly progressive example of a city education system which has historically evolved to offer a mixture of public and private funding sources to schools in an effort to create a more equalitarian system. As one of the oldest industrialized cities in the United States. <sup>26</sup> The city has gone through a number of industrial shifts which have had a significant impact on the city's development. One of the most influential parts of industrialization in Philadelphia, and many other American Cities, is the impact of immigration. The diverse population in Philadelphia is in some ways unique, but in other ways representative of other industrial cities.

- 1 Adams, Carolyn et al. *Restructuring the Philadelphia Region: Metropolitan Divisions and Inequality.* Temple University Press: Philadelphia. (2008)
- 2 "William Penn." (2009) <a href="http://www.wikipedia.org/wiki/William-Penn">http://www.wikipedia.org/wiki/William-Penn</a>
- 3 "William Penn Plans the City" (2009) <a href="http://xroads.virginia.edu/~cap/PENN/pnplan.html">http://xroads.virginia.edu/~cap/PENN/pnplan.html</a>
- 4 "William Penn" (2009)

# Chapter 1: Historic Urban Development

#### **Evolution of the Urban Fabric**

How a city grows and changes physically is an important factor in how its residents interact and the opportunities and challenges that they face. This is especially true in Philadelphia. A combination of the divergence away from William Penn's original plan, the rapid growth in the nineteenth century, industrialization and the growth of a middle class in the twentieth century, and rapid industrial decline in the twentieth century had lead to patterns in employment and housing that have had a lasting impression on racial and class dynamics. Public affording of services in poor communities has also been effected.<sup>1</sup>

#### William Penn's Green Country-Town

William Penn was born in October of 1644 in London, England. As a Pacifist Quaker during the seventeenth century in the middle of European expansion onto the North American continent, Penn was no stranger to religious persecution and financial responsibilities.<sup>2</sup> Penn recognized the importance of property providing financial stability, while also acknowledging the need for social and political change within London in the 1600's. Having lived through the Bubonic Plague in 1665, and London's Great Fire in 1666, Penn saw the North American colonies as an opportunity for creating a new life for many facing hardships in England ("William Penn Plans the City"). The Quakers in the late 1600's were primarily located in the province of West New Jersey, and then later in 1682 all of New Jersey. Penn saw opportunity for expansion and petitioned King Charles II for the land West of New Jersey. The King granted Penn a charter for Pennsylvania, then called "New Wales" then later "Sylvania" after the Latin word for "forest or woods," making Penn the largest private property owner in the world. Penn first order of business was to encourage people to join him in the move to the new Pennsylvania Colony.<sup>3</sup>

Recognized as one of the world's first real-estate marketers, Penn encouraged prospective buyers to come not only for religious freedom, but also for commercial and political freedoms not offered in the Puritan North colonies. Penn also established a legal framework which encouraged "Power to the People" in contrast to monarchial power in England and Puritan power in New York and other Northern colonies. Within this "Charter of Liberties" Penn ensured four main principles: free elections, freedom of religion, trial by jury, and freedom from unjust imprisonment. This charter is one of the bases for

- 5 Lew, Alan A. "Philadelphia: A virtual fieldtrip." (2010) <a href="http://www.geog.nau.edu/courses/alew/ggr346/ft/midatlantic/philadelphia/index.html">http://www.geog.nau.edu/courses/alew/ggr346/ft/midatlantic/philadelphia/index.html</a>
- 6 Adams et al (1991)
- 7 "William Penn Plans the City" (2009)
- 8 "William Penn Plans the City" (2009)
- 9 "William Penn Plans the City" (2009)
- 10 "William Penn" (2009)
- 11 "William Penn Plans the City" (2009)
- 12 "William Penn" (2009)
- 13 "William Penn" (2009)
- 14 Warner (1968) pg xv
- 15 Warner (1968) pg 17
- 16 Davis and Haller (1973) pg 17

the 1776 writing of the Declaration of Independence, and the 1787 U.S Constitution written in Philadelphia.<sup>5</sup>

William Penn's plan for Philadelphia, which was first published in Thomas Holme's "Portrait of the City of Philadelphia" in 1683<sup>6</sup>, set to establish a "green country town" where "individual houses [are] separated from their neighbors by sizeable areas of green" creating a replication of the English gentleman's farm. While encouraging an upper-class atmosphere and quality of life, Penn recognized the primary occupation of future Philadelphians as tradesman. This led Penn to position the heart of the city's commercial area on a rectangular 1200 acres between the Schuylkill and Delaware Rivers in the center of the 10,000 acres which were to be the "great town."

See Map 1.1: William Penn's 1683 Plan for Philadelphia<sup>9</sup> (at the end of this Chapter, pg 22) [Public Domain]

Expecting equal growth along both waterfronts, Penn set a hierarchy of property sizes with the largest manors on waterfront property and smaller lots in the center of the district, ranging from one acre to one-half acre lots. <sup>10</sup> The plan consisted of a rectangular grid with two Main Streets (Broad Street running East-West, and High Street running North South). These main avenues were to divide the city into four quadrants, each with their own green square and the main streets intersecting at the fifth green square. The city, described as an early attempt at "Utopian city planning" was named Philadelphia, meaning "brotherly love." A truly utopian concept at the time, Penn's plan was to encourage harmony and freedoms between English Quaker settlers, neighboring Indian nations (specifically the Lenape Indians) and future Jewish, protestant and Catholic emigrants. <sup>13</sup>

#### Eighteenth Century: Colonial Philadelphia

During the early years of development, city growth mostly followed the street patterns which Penn had laid out.<sup>14</sup> Due to the high cost of construction, housing was often small and in short supply. 15 Development within each city block varied dramatically from Penn's original intention. Penn's utopian city vision of properties with large green space, a colonial mansion home, and ample space to raise family, farm and economic prosperity, simply was not economically possible for anyone but the elite class. Elite homes were often at the center of the city on lots similar to Penn's original vision, but poor housing littered the outskirts of the city. 16 Because Philadelphia was still small and not geographically spread out, this separation of classes was not a constraint to residents. Poor residents were still able to interact with elites both economically and socially due primarily to their close proximity and the walkability of the small colonial town.

- 17 Lew (2010)
- 18 Warner (1968) pg 11
- 19 Warner (1968) pg 16
- 20 Warner (1968)
- 21 Fadden, William."Philadelphia: A Plan of the City and Environs of Philadelphia." Surveyed by N. Scull and G. Heap. London (1777)
- 22 Davis and Haller (1973) pg 15
- 23 Davis and Haller (1973) pg 15

See Map 1.2: Development in 1776<sup>17</sup> (at the end of this Chapter, pg 22) [Public Domain]

In the colonial period, the development of poor districts on the outskirts of the city and a mixture of commercial and residential elite in the center city was characteristic of two tendencies seen elsewhere during that time: specialized neighborhoods characteristic of European cities, and the mixture of residence and work characteristic of English and American small towns. 18 By the mid 1770s the pattern of this socially divided residential and commercial development caused the blocks within Penn's grid to break away from his green country town vision. The subdivision of "blocks with alleys" and the construction of small homes for poor in the backyards of affluent caused a density on each block that Penn did not originally intend.<sup>19</sup> By the mid 1800s this pattern of development had become the norm; elite mansions on the streets designed by Penn with smaller shanty homes in backyards lining alleyways.<sup>20</sup>

See Map 1.3: Philadelphia region in 1777<sup>21</sup> (at the end of this Chapter, pg 23) [Public Domain]

Dense housing development coupled with conflicts between rich and poor classes lead to mistrust and fear. According to the upper class, there were two types of poor: the "deserving" poor who were hard-working sober people and the "vicious" poor whom lacked the desire to work and were often seen as vagabond and lazy.<sup>22</sup> Only the first type of poor were considered worthy of higher-class attention, leading to the separation of the poor class into poor and destitute. It was often only the moderately poor who were afforded housing near elite homes, and the extremely poor were left to deteriorating and blighted conditions on the border of the city.<sup>23</sup>

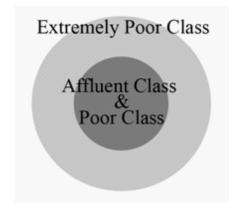


Figure 1.1: Diagram of the typical development pattern in Philadelphia of the eighteenth century

Not only were the extremely poor separated geographically from the elite, but there was also a small

- 24 Warner (1968) pg 11
- 25 Warner (1968) pg 13-14
- 26 Warner (1968) pg 9
- 27 Warner (1968) pg 23
- 28 Warner (1968) pg 30
- 29 Warner (1968) pg 45
- 30 Warner (1968) pg 52
- 31 Davis and Haller (1973) pg v
- 32 Warner (1968) pg 52

population of sailors who were geographically isolated along the shore-lines of the Delaware River and on the Southeast and Northeast sides of the town.<sup>24</sup> Primarily the extremely poor lived alongside the sailor-class in the areas of Southwark in the Southeast and Northern Liberties in the Northeast.<sup>25</sup> The wealthy lived in the central city where government, politics, and commercial prosperity reined. Partially due to the geographic separation between rich and poor the elite didn't have much experience with the needs of the destitute. For this reason, the "town's government advertised a lack of concern for public management of the community" which translated to a lack of funds appointed to public facilities and programs for poor Philadelphians.<sup>26</sup>

With the exception of the geographic separation between rich and poor, political affiliations were one of the primary dividing factors in neighborhoods. These divisions "reflected personal attitudes towards the revolutionary governments" and acted as deterrents for the mingling of people from different political affiliations. Taxes also reflected this political division. The heaviest taxes were upon the poor class. Conflicts between political parties led to the development of private business initiatives and a "municipal cooperation" that encouraged "active participation in transportation, public safety, education, and health" which reflected the "private aspirations" of the elite class. During the eighteenth century political affiliations were a cause for social division.

#### Nineteenth Century: Becoming a City

The nineteenth century saw a dramatic change in housing options for the destitute, poor and emerging middle class in Philadelphia. For the destitute, shacks and shanties or small two bedroom homes in alleyways behind higher-class citizens were the only economical options. This kept the extremely poor population either geographically separated from middle and higher class citizens or hidden from street view behind larger homes.<sup>30</sup> Those poor who could afford better housing lived in three-room row houses or multifamily row houses in working-class districts.<sup>31</sup>

The emerging middle class, such as shopkeepers, managers, and professionals lived in six to eight room row houses often located in the growing suburbs.<sup>32</sup> Sharp contrasts in housing types acted as a way of separating classes and as a method of keeping people with similar employment together, both separating the larger Philadelphian community, but also creating close-knit communities within individual neighborhoods. Housing not only reflected the desire of the middle and upper class citizens to move into suburban areas, it also reflected the beginnings of the changing pattern of employment. Early industrialization led to the clustering of people of

- 33 Warner (1968) pg 67
- 34 Davis and Haller (1973) pg 91
- 35 Davis and Haller (1973) pg 91
- 36 Warner (1968) pg 5
- 37 Warner (1968) pg 5

different professions into neighborhoods. This produced a sharp division between communities of skilled and unskilled workers.<sup>33</sup> The movement of the middle-class into housing away from the elite and poor classes was a result of these housing differences and employment separations.

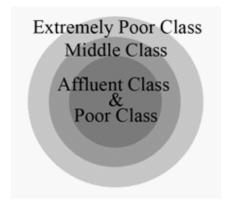


Figure 1.2: Diagram of the typical development pattern in Philadelphia of the nineteenth century

By the 1870s middle class population movement had changed the character of inner-city Philadelphia. In earlier development, the worst housing conditions for the poorest populations were on the outskirts of the city. Now, the newly constructed middle class suburban housing was on the far outskirts.<sup>34</sup> These shifts also lead to the eventual movement of elite classes to suburban areas, creating districts of elite housing, moderate middleincome housing in the suburbs, and destitute slums in the districts directly adjacent to the center of the city. The movement of the middle and upper class also expressed a shift in thinking about suburban life. In the eighteenth century, development on the fringes of the city was considered to be dangerous havens for poor vagabonds, now suburban life was desirable. Interestingly, the illusion of safety was not always factual. Crime patterns show that the movement of thefts and burglaries followed the movement of middle-class residents.35

In contrast to the twentieth and twenty-first centuries, the nineteenth century social divisions were not as severe. Because there was no stock of older housing, a direct result of the young age and rapid expansion of the city, homes for all income and class levels were new construction.<sup>36</sup> In twentieth century, poor are often located in areas of derelict old homes which are either abandoned by middle-income families in their movement to the suburbs or are left to degrade due to a lack of funding for their renewal. While the nineteenth century did have slums and the beginnings of ghettoized neighborhoods, the housing was not in as poor condition as the ghettos and slums of the twentieth century.<sup>37</sup>

- 38 Davis and Haller (1973) pg 114
- 39 Warner (1968) pg 126
- 40 Warner (1968) pg 127
- 41 Davis and Haller (1973) pg 114
- 42 Tanner, H.S. "Map of Philadephia" *The American Traveller; or Guide Through the United States*. New York (1842)
- 43 Daly, John Edward and Weinberg, Allen. "Philadelphia- Map Showing Districts, Boroughs & Townships Incorporated in Consolidation of Philadelphia in 1854." *Genealogy of Philadelphia County Subdivisions: 2nd Edition.* Philadelphia Department of Records (1966)
- 44 Warner (1968) pg 54
- 45 Warner (1968) pg 54
- 46 Warner (1968) pg 99
- 47 Warner (1968) pg 73
- 48 Warner (1968) pg 81
- 49 Warner (1968) pg 99

The most desirable areas to live for white middle and upper-class citizens were Germantown and West and North Philadelphia. As populations of upper and middle class rose in the Northwest portion of the newly suburbanized city, the populations of poor residents increased in Southwark and Northern Liberties. Blacks were among the extremely poor.<sup>38</sup> The majority of the black population in the 1830s lived along the Southern portion of the city in Southwark.<sup>39</sup> While much of crime occurred around middle-income housing, primarily as a result of the goods that were housed in such neighborhoods, there was also a significant amount of crime in Southwark. This was not due to the high concentration of poor blacks but instead the result of poor police protection.<sup>40</sup> High crime and decreasing living conditions made Southwark an increasingly dangerous community; thereby increasing the elites' fear of the poor and especially poor black. Ultimately, fear also increased the amount of segregation throughout the city.<sup>41</sup>

See Map 1.4: Development in Philadelphia in 1842,<sup>42</sup> [Public Domain] and Map 1.5: Districts, Boroughs and Townships in Philadelphia 1854<sup>43</sup> (at the end of this Chapter, pg 24-25) [Public Domain]

Municipal allocation of goods and services also changed as a result of the nineteenth-century housing shifts. Where few services were provided in the eighteenth-century, in the nineteenth-century schools, police stations, fire stations, and public parks were allocated on a piecemeal often random basis.<sup>44</sup> Warner compares this method of resource allocation to salting an egg: the grid of Philadelphia was merely dotted with public facilities. This lead to a largely non-proportional system of services; many districts were left without commercial shops, public buildings, or gathering spaces such as parks.<sup>45</sup> While resources were scantily distributed around the city's increasingly suburban and segregated communities, there was one reform that has proven to have lasting effects on the city's public facilities: free schools.<sup>46</sup>

Partly in response to the demands of the "Working Men's Party," a number of social reforms were initiated during the period of 1828-1831.<sup>47</sup> A system for free universal public school was one of these reforms. As a result of this and other reforms both private and public groups began to pledge money to support municipally funded programs and projects.<sup>48</sup> These reforms were the beginning of a long-lasting tradition of public and private partnerships to plan and complete publicly needed projects, most specifically parks and schools.<sup>49</sup>

#### Early Twentieth Century: Industrialization

In the early twentieth century Philadelphia was the third largest metropolis in the United States. The city

- 50 Warner (1968) pg 161
- 51 Warner (1968) pg 206
- 52 Warner (1968) pg 172
- 53 Warner (1968) pg 197
- 54 "Philadelphia (1898)" Historic Maps of Pennsylvania. PA genealogy.net Resources for the Pennsylvania genealogist. (2011) <a href="http://www.pagenealogy.net/maps%20">http://www.pagenealogy.net/maps%20</a> here.htm>
- 55 Warner (1968) pg 169
- 56 Warner (1968) pg 171
- 57 Warner (1968) pg 171
- 58 Warner (1968) pg 173

and its surrounding region were one of only ten cities with a population of over one million (2.8 million in the metropolis, and over 1.9 million lived within the city of Philadelphia).<sup>50</sup> Even after the beginning of systematic physical planning in 1905, and the establishment of planning commissions in 1919, the metropolis was increasingly segregated.<sup>51</sup> Poor populations could not afford to move into the suburbs with the middle and higher-income residents because they could not afford the rent and costs of newer housing.<sup>52</sup> This resulted in the continuing development of a "district of poverty" in the areas around downtown and central city.<sup>53</sup>

See Map 1.6: Development in Philadelphia in 1898<sup>54</sup> (at the end of this Chapter, pg 26) [Public Domain]

There was a shift during the early twentieth century saw a shift from mild segregation by income and race to obvious segregation by income and ethnicity. Many poor districts began to become ghettoized.<sup>55</sup> Immigrants, blacks, and people of low skill or income became more clustered in areas of cheap housing while skilled workers and white populations moved to the outer districts of the city.<sup>56</sup> The result was a concentration of poverty in the center city "surrounded by a ring of working-class and middle-class homes."<sup>57</sup>

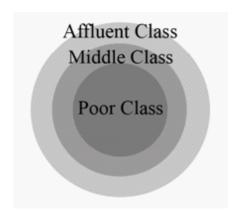


Figure 1.3: Diagram of typical development in Philadelphia during the early twentieth century

While the majority of extremely poor were black in the nineteenth century, in the twentieth century there was an increase in other ethnic group's impoverishment. Italians, Russians, and Polish Jews were often found in old housing and low-cost districts with poor blacks. By 1930, the majority of "disfavored immigrants suffered the same degree of segregation" as blacks had in the nineteenth century. Not only were poor moving into districts of old housing, but those with financial means were moving out of the city into newly developed suburbs.

Northeast and South Philadelphia were still the

- 59 Warner (1968) pg 179
- 60 Warner (1968) pg 182
- 61 Warner (1968) pg 196
- 62 Warner (1968) pg 183
- 63 Warner (1968) pg 183 64 Warner (1968) pg 183
- 65 Warner (1968) pg 194
- 66 Warner (1968) pg 173
- 67 Warner (1968) pg 177
- 68 Warner (1968) pg 184
- 69 Warner (1968) pg 176
- 70 Warner (1968) pg 208-209

primarily locations for poor housing. This was not only due to the cheap stock of older homes, but also the location of heavy industries along the river.<sup>59</sup> Black poverty was more centralized around the Southern districts while white impoverished immigrants were in the Northeast. 60 This is partly due to the industrial roles that each section of the city played. Northeast Philadelphia, specifically the region of Northern Liberties, was largely textile mills and rows of mill-worker housing<sup>61</sup> while South Philadelphia remained in the same industry as it was in the eighteenth and nineteenth centuries: shipping. South Philadelphia served as the "port of entry" for immigrants and refugee blacks. As a result, it became the primary location of those involved in shipping and those with no marketable skills, creating a slum of unemployed and undesired blacks and unfortunate immigrants.<sup>62</sup> Not only was this district the poorest, but it was also the home of the majority of city gambling, prostitution, and speakeasies thereby solidifying its position as the home of the outcast 63

West Philadelphia, in contrast to the northeast and southern districts, remained part of the lively downtown district. By providing row housing for the middle class employed closer to the central city, West Philadelphia acted as an extension of the prosperous parts of the core city. <sup>64</sup> This district played a significant role in allowing those who were able to successfully move out of the industrial Northeast and ghettoized South districts a place that was far enough outside of the city to be considered middle-class, but also close enough to the city to allow for continued work downtown. <sup>65</sup>

One of the few benefits of the segregation seen during this time was the creation of "homogeneity" that "gave a sense of place and community" and that also "held groups in conflict apart." The extremely specialized districts in the North East, South, and Western parts of the city not only segregated classes, racial and ethnic groups, but it also created a cluster of economic activities. While the West and Northeast districts eventually became part of the fully functioning city system creating large communities with similar interests and abilities, the South district remained largely a conglomeration of new immigrants and black residents; creating a series of smaller neighborhoods all of varying ethnic and racial compositions each with unique street life, societies, churches and public facilities.

One of the primary concerns in the nineteenth century was the allocation of cheap services to all neighborhoods in the city. <sup>69</sup> The allocation was often disproportionate to need and left many neighborhoods without essential services. However, it led to projects on a citywide scale. This included water supply, transportation, city parks and <sup>70</sup> through the creation of a Board of

- 71 Warner (1968) pg 218
- 72 Adams et al (1991) pg 73
- 73 Adams et al (1991) pg 75
- 74 Adams et al (1991) pg 79
- 75 Adams et al (1991) pg 79
- 76 Adams et al (1991) pg 85
- 77 Adams et al (1991) pg 81
- 78 Adams et al (1991) pg 83
- 79 Adams et al (1991) pg 84

Education in 1905 the centralized management of city schools in all districts.<sup>71</sup>

#### Mid-to-Late Twentieth Century

The trends of early development, housing segregation, and industrial expansion are important to understand because they set the stage for current conditions within the city. Housing of the 1940s is specifically important because that represents a large portion of the current housing stock in Philadelphia. As of 1980, over fifty-eight percent of Philadelphia's housing was built prior to the 1940s. While the early twentieth century was marked by the ghettoization of Southern Philadelphia, the mid-to-late twentieth century was marked by the development of a new black community following World War II. A significant portion of new blacks moved into what was soon to become the largest ghettoized area in the city: West Philadelphia. The conditions were supported to the condition of the city was moved into the city: West Philadelphia.

World War II brought a large migration of Southern black families into Northern cities. This sudden increase in black population came at the same time that the early nineteenth century middle class that occupied housing in West Philadelphia were looking towards suburban living farther from the city and closer to new employment opportunities.<sup>74</sup> The movement of this middle class farther into the suburbs left a large stock of older, cheaper homes available to the increasing black population. In other words, the new black population was moving into housing adjacent to the central city at the same time that middle class and employment opportunities were moving out into the suburbs. This created industrial, blue-collar neighborhoods in the areas immediately surrounding the central city as well as an increasing number of the black poor class moved into West Philadelphia.75 This movement also marked a shift in Philadelphia's position as one of the largest cities. By the 1960s, less than fifty percent of Philadelphia's metropolitan population actually lived within the boundaries of the city. By the 1990s this figure was only thirty-five percent.<sup>76</sup>

In the twenty year period from 1955 to 1975 "three out of every four industrial jobs were lost" and this decline in employment opportunities "shaped the housing problems that emerged" for the lower-income black population. The frustration that ensued from the changing housing and employment options lead to riots in the summer of 1964. These riots emphasized one simple "bottom line: if you are white, get out of the city if you can." This was not only a "flight toward economic opportunity as it... was a flight from racial conflict." The decline of middle-class white population and increase in poor black population in Philadelphia lead to two major problems in housing: "housing that could not be sold or rented, and that was left to deteriorate by owners who

80 Adams et al (1991) pg 87

81 Adams et al (1991) pg73

82 Adams et al (1991) pg73

saw no viable means of managing it" and the "systematic process of disinvestment by institutions." These two factors lead to the redlining of entire neighborhoods because of "economic, racial and ethnic, or building age."80



Figure 1.4: Diagram of the typical development pattern in Philadelphia of the mid-to-late twentieth century

The industrial neighborhoods in North, South and West Philadelphia have experienced the majority of this downfall. Most of these areas's housing is "some of the oldest and least commodious forms of housing available in the city" and is often used for multiple families. 181 The next level up of housing is the "row house" which "dominates neighborhoods of Philadelphia. These row houses are connected on each side to other row houses by sharing outside walls which "raises very difficult issues when neighborhoods decline in population and livability" due to the need to replace an entire row of houses. 182 This is much of the case in West Philadelphia.



Image 1.1: Typical street in West Philadelphia in 2009.

- 83 Adams et al (1991) pg 87
- 84 Davis and Haller (1973) pg 289
- 85 Adams et al (2008) pg 193
- 86 Adams et al (1991)
- 87 Goode and Schneider (1994) pg 4
- 88 Goode and Schneider (1994) pg 4
- 89 Adams et al (1991) pg 10
- 90 Davis and Haller (1973) pg 279
- 91 Adams et al (1991) pg 9

From the early 1970s housing conditions began to get desperate in the low-income areas of Northeast, South, and West Philadelphia. Outflows of population coupled with disinvestment from both private and public sectors created a cycle of abandonment in declining areas and pressure for services in those areas which saw growth. This trend created almost unlivable neighborhoods for the poorest populations in the city. Many of the tensions caused by increasing ghettoization in predominantly black neighborhoods remain a continuing problem in twentieth century Philadelphia. 4

#### **Neighborhood Segregation and Inequalities**

Inequalities caused by housing, employment opportunities, income, and racial segregation "reinforce each other, creating multiple barriers to households with lower incomes and augmenting the advantages enjoyed by the affluent."85 Much of the low segregation levels in the nineteenth century reflect the density of development and the common need for pedestrian commuting in an industrializing city. In comparison to truly segregated development, the early nineteenth century was largely integrated. 86 According to the Philadelphia Changing Relations Project (which is one of many nation-wide city projects aimed at examining racial relations) Philadelphia is still a largely segregated city.87 While the city is officially integrated and large portions of the population live, work, and play together in shared community spaces, there is still a significant portion of low-income African Americans that live in highly segregated neighborhoods. The 1990 census stated that seventy-two percent of African Americans within the city boundaries live in neighborhoods which "are [ninety] percent or more African American."88

The opportunity structure of the city's urban fabric has a significant impact on the positions of particular groups of people; specifically the poor African American population.<sup>89</sup> In Philadelphia, there has always been a strong hierarchy of social groups. The rich white have always been at the top of this hierarchy and the poor black population at the bottom. 90 This hierarchy has significantly impacted the physical development and movement of people around the city. The concentration patterns of housing have been largely consistent until recently: poor blacks live in the abandoned and neglected housing of the mostly white middle-class. Poor blacks generally have lived in the southern part of the city in the district of Southwark, poor whites and immigrants have largely lived in the north east part of the city in the area of Northern Liberties, and more recently new poor black immigrants have lived in West Philadelphia; meanwhile, the middle and upper-class white population has become increasingly suburbanized.91

- 92 Goode and Schneider (1994) pg 30
- 93 Adams et al (2008) pg 31
- 94 Adams et al (1991) pg 93
- 95 Adams et al (2008) pg 75
- 96 Adams et al (2008) pg 28
- 97 Adams et al (1991) pg 48
- 98 Adams et al (1991) pg 67
- 99 Adams et al (1991) pg 67
- 100 Davis and Haller (1973) pg 175
- 101 Adams et al (1991) pg 70
- 102 Adams et al (1991) pg 70
- 103 Adams et al (2008) pg 75

Recent studies have shown that a large portion of Philadelphia's economic activity takes place in the suburbs. The movement of people out of the city center towards economic prosperity and desirable new housing in the suburbs has left the city largely with a population that is "older, poorer, and more nonwhite than the suburban ring." These separations of class, race, and opportunity have created "strong barriers" for disadvantaged populations in the inner-city. Poor schools, degraded housing, poverty, crime, and unemployment are a few of the barriers that face the residents of inner-city Philadelphia. 93

#### Housing

Philadelphia's housing market is largely segregated. Housing is a key measure of quality of life. Inequalities "are not just caused by socioeconomic differences; they reinforce those differences." Income and wealth distribution are reflected in the housing market. The segregation of housing is both economically and racially driven. Changing economic opportunities in the suburban areas around the city in combination with shifting desires for suburban living have separated large portions of the African American population. Historic urban development has largely influenced housing, especially within the neighborhood context. Political affiliations, economic opportunities, and social differences largely divide the city. Housing patterns reinforce "the larger system of inequality" within the city.

Originally called "The City of Homes" during industrialization, the city is covered in "row after row of neat brick houses." In the 1990s home ownership was sixty-one percent within the city boundary and 66 percent in the suburbs, a fairly large percent for a city of Philadelphia's size and economic position, ranked fourth in American cities. 101 As of 1982, only fifty percent of homeowners had mortgages, meaning that many of the houses in the city have been paid for, mostly because the owners have lived in their homes for an extended period of time. These older homes don't have the appeal that new housing purchasers' desire, and therefore the owners have become stuck in aging and decaying neighborhoods. 102 Uneven housing quality is one of the most important disadvantages faced by low-income families. Housing choice not only reflects preference in dwelling units, but also neighborhood and community environment. Many people pick housing based on amenities such as schools, grocery stores, crime prevention, and parks. 103

Not only is the quality of housing often contrastively different for low income families, the costs paid for housing are also inequitable. In the 1980s, over half of the population with an income of lower than \$10,000 paid over forty-seven percent of their income on housing. In addition over forty percent of the city's population

104 Adams et al (1991) pg 72

105 Adams et al (1991) pg 72

106 Adams et al (1991) pg 66

107 Goode and Scheider (1994)

108 Warner (1968) pg 11

109 Goode and Schneider (1994) pg 4

spent more than forty-five percent of their income on housing. It is clear that proportionately lower-income families pay more of their income on housing. 104 Coupled with the high demand for low income housing and the low supply of available units, this creates significant housing problems for poor residents. 105

The evolution of housing over the past few centuries has lead to a drastic difference in housing opportunities for high, middle, and lower-income groups. These opportunities can be seen graphically in the segregation of low-income populations in specific districts of affordable houses. In the twenty-first century, revitalization of certain districts and the continued neglect of other areas has lead to a stark contrast in the image of housing in Philadelphia: on one hand "gentrified splendor" and on the other "public housing, or abandoned houses and homeless people, and of" an expanding black population in highly segregated neighborhoods. 106

Historically, these patterns have been well exhibited in the districts of Northeast, West and South Philadelphia, most notably in Southwark and Northern Liberties and more recently in West Philadelphia. These neighborhoods have historically housed the majority of the poor immigrant and poor African American populations. 107 In the early 1900's, the city was divided into five main districts: the Northeast, the Northwest, West Philadelphia, South Philadelphia, and the Downtown. The Northwest, West, and Downtown were characterized by middle-class citizens who worked in the Downtown and lived in larger and newer row houses. South and Northeast Philadelphia were characterized by heavy industry and predominantly worker housing; the main difference was the abundance of unskilled workers and a ghettoized district within South Philadelphia. 108 While the areas of Northern Liberties and Southwark have been the focus of large amounts of revitalization in recent years, the inequalities originally seen in these neighborhoods still exist, although in different forms. These neighborhoods are behind other neighborhoods within the city in diversification. Specifically, schools in these areas are not diversified. Many of the public schools in Northern Philadelphia have low numbers of African American students, while those in the inner city near West and South Philadelphia are high in African American enrollment. 109

#### **Mobility Inequalities**

Movement between municipalities in search of better goods and services is a type of mobility which only some can afford. Often the poor cannot afford to move into areas that offer greater amounts and higher qualities of public services. This translates into inner-city residents largely being unable to move into the suburban areas which offer different and better services. The

- 110 Adams et al (2008) pg 32
- 111 Adams et al (2008) pg 35
- 112 Adams et al (1991) pg 30
- 113 Adams et al (1991) pg 30
- 114 Adams et al (2008) pg 37
- 115 Adams et al (2008) pg 52
- 116 Adams et al (1991) pg 48
- 117 Adams et al (1991) pg 48
- 118 Adams et al (1991) pg 55

metropolitan region is separated into a large number of individual municipalities each funded and run by separate public and private entities. The fragmentation of Philadelphia's metropolitan region into smaller self-funded municipalities "establishes incentives that exaggerate social and economic inequalities" especially for those who are not economically able to move from community to community. It is partly the inability to choose that creates inequalities between low-income neighborhoods and higher income areas.

#### **Employment**

When compared to other metropolitan regions, Philadelphia's impoverished population is more concentrated into specific geographic locations than other cities. This concentration is increased by the sprawl of job opportunities into suburban areas which increases the income gap between the inner-city and suburbs. Since the early nineteenth century, industry in Philadelphia has shifted from largely textile and shipping based to more financial and retail based economy leading to a change in work opportunities, and in the location of work. Many of the newer jobs are not located in the city, but instead in increasingly populated suburbs. The shift away from previously prosperous types of industry represents a national shift way from central city manufacturing and towards a suburban service industry.

The movement of jobs away from the central city and into the suburbs illustrates one of the many inequalities faced by Philadelphia's poor population. Much of the new suburban employment opportunities are only accessible by car or mass transportation. Often far away from housing, this raises the commuting costs for workers. The 2000 census shows that the "longest commuting times are often borne by those least able to afford them" and that "rail lines are far more effective at bringing workers to the center city jobs than taking them from center city to distant job sites." As a result the movement of jobs into the suburbs and away from the city is increasing the disparity between the incomes of the largely white suburban middle class and the mostly black and low-income inner-city families.

In the Philadelphia metropolitan region "the distribution of family incomes between whites and blacks favors whites." As of the late 1980s, only four percent of white families lived below the poverty line while over twenty-three percent of black families were impoverished. This leaves the black population disadvantaged. Living in the city, "they face lower wages" and fewer job opportunities, while commuting to the suburbs for employment means that they spend a substantial amount more on commuting costs often making the costs of employment higher than the earnings. 118

119 discussed in Chapter 3: Social and Educational Equity

120 Adams et al (1991) pg 48

121 Adams et al (1991) pg 30

122 Adams et al (1991) pg 49

123 Davis and Haller (1973) pg 115

124 Adams et al (1991) pg 61

125 Adams et al (1991) pg 15

126 Adams et al (1991) pg 8

Many new jobs require "higher educational qualification" which hurts the prospects of employment for blacks more than whites. While public education has made progressive leaps towards greater equity in educational attainment, the level and quality of education for inner-city black children has "not kept up with rising requirements." This is due in part to many reasons. The result is a significant decline in the black labor-force due to "changed skill requirements" and increased racial tensions. 121

#### Family Structure

Family structure also has a significant impact on inequalities experienced by poor families in Philadelphia. Single parent households face a much harder time making a high enough income to support the necessities of life. Specifically this is true for female headed-households. Since the mid 1900s "roughly one family in three was headed by a female." The proportion of African American single-female headed-households has grown significantly in the previous few decades. While white single-female headed households have also grown, the proportion of blacks lead by a single woman has grown substantially faster. <sup>123</sup> In 1988 Philadelphia, forty-eight percent of black families were single-female headedhouseholds. Comparatively, white families were only thirteen percent female headed. In a city with such a high population of black families that are already economically disadvantaged these numbers are staggering and can account for a large portion of poor families. Coupled with the fact that white families generally earn higher wages, this puts single-female headed-households at a far greater disadvantage. 124

#### The City Today

Many of the problems experienced by the poor have "persisted and interacted with newer ones: segregation produced red-lining, which produced further segregation and abandonment" in addition to inequalities in employment opportunities and allocation of public resources. 125 Philadelphia's neighborhoods are the result of shifting social and economic trends. Old industrial neighborhoods full of blocks with high-density row houses and abandoned factories. Mixed within these districts of are larger mansion homes which existed before row houses were built during industrialization and the movement of the lower and middle income population into the heart of the city. Many of these middle-upper class mansions have been subdivided into apartments. This type of development speaks to the "integration of old communities into a new and expanding city."126

Patterns of wealth, advantage and disadvantage are geographically visible in the city's urban fabric. Primarily income and race segregation is visible. These

- 127 Adams et al (2008) pg 5
- 128 Adams et al (2008)
- 129 Adams et al (2008) p 15
- 130 Adams et al (2008) pg 29
- 131 Adams et al (2008) pg 20
- 132 Adams et al (2008) pg 21
- 133 Adams et al (2008) pg 21
- 134 Adams et al (2008) pg 22
- 135 Adams et al (2008) pg 23
- 136 Adams et al (2008) pg 24

patterns also illustrate difference in opportunities within districts, neighborhoods and municipalities. Like most metropolitan areas, Philadelphia is divided into many separately functioning municipalities, each with the power to elect officials and "make decisions about land development, tax rates, local schools...police and fire departments, and docents of other public services." The majority of the metropolitan's African American population resides within the boundaries of the city, and more specifically around the central core of the city. <sup>128</sup>

There are five distinct types of community within the metropolitan region: urban centers, stable working communities, established towns, middle class suburbs, and affluent suburbs. <sup>129</sup> Each of these community types has different access to housing, education, and employment opportunities. Similar to historic development patterns, people of different incomes and races cluster within certain community types. <sup>130</sup>

Urban centers typically have "populations with lower incomes and lower education levels than the rest of the region, with as many as one-fourth of residents not having completed high school" and also have much higher levels of female-only headed households. In addition, the steadily declining population in urban centers lives in housing mostly built before 1940 with few being built in the past decade. Stable working communities typically "have greater proportions" of single-family detached homes than urban centers and also have higher levels of home ownership. Working communities also typically have less than one-fifth population with college degrees and half as many female headed households compared to urban centers but more than other community types. 133

Established towns typically are the most educated in the area and more affluent but have home ownership levels at similar levels to the urban center. Much of the housing-stock is also pre-1940s but doesn't show the same degradation as in urban centers.<sup>134</sup> Middle-class suburbs have the highest levels of single-family detached housing and have seen the highest levels of population increases since the 1960s. Compared to affluent suburbs, twice as many people have only a high school degree or less, and there are smaller percentages of families with children. 135 Affluent suburbs are located in the "middle ring of the region" which provides better access to the city center compared to middle-class suburbs. In addition, the majority of people in affluent suburbs are well educated and college graduates. Housing stock is primarily built within the past decade and far fewer families are female headed.<sup>136</sup> The difference in each of these community types translates to different educational, housing, and employment opportunities.

By examining the geographic distribution on

137 Adams et al (1991) pg 15

138 Adams et al (1991) pg 105

139 Adams et al (1991) pg 105

140 Adams et al (1991) pg 105

141 Adams et al (1991) pg 119

142 Adams et al (2008) pg 63

143 Adams et al (2008) pg 85

144 Adams et al (2008) pg 86

community types, it is clear that the majority of Philadelphia's inner-city is classified as an urban center and has the lowest income and education levels as well as the lowest housing values. This further emphasizes the inequalities faced by the poor black populations living in the inner city.

#### Revitalization

Similar to many other American industrial cities, Philadelphia has begun a massive revitalization campaign for physical renewal of the inner-city. 137 The redevelopment of central Philadelphia has been dominated by "three types of activities [which] "have claimed the bulk of public and private money." These are housing, transportation, and economic development. In the 1940s and 1950s, redevelopment was focused on the "removal of slum housing" but by the 1960s the focus shifted to a redeveloped of the center city into a tourist hub, and revitalization of Society Hill, directly south of central city in the same district as the former low-income industrial neighborhood Southwark, for white middle-class business people. 139 Unfortunately, this revitalization project has lead to the destruction of many historical buildings and low-income housing. 140 Unevenly distributed revitalization has lead to increased burden on poor and nonwhite residents.141

The Philadelphia Commercial Development Corporation (PCDP) focuses on revitalizing the city's retail corridors. One of the most dramatic projects that the PCDP has completed is in West Philadelphia near the University of Philadelphia which is located very close to a number of blighted neighborhoods. With the creation of the University City District the PCDP was able to reinvigorate economic and employment opportunities for West Philadelphia. Another prime example of revitalization within the city is in the district of Northern Liberties. As a direct result of the downtown renewal plan and the increased tourist interest in the central city, the housing market in the Northern areas of the city have seen significant appreciation. 143

A group called New Kensington Community Development Corporation is working on rehabilitating the Kensington and Fishtown communities (slightly north of Northern Liberties) by working to "clean and green vacant lots, stimulate individual and community gardens, paint murals, rehabilitate abandoned houses, and promote small business" in the creation of an Arts Corridor which will assist the people who are being "priced-out" of living in Northern Liberties after rehabilitation. <sup>144</sup>

One of the problems with revitalization plans is the sheer number of organizations that participate. The number of agencies and groups creating plans for revitalization means that there is a significant amount of overlap

145 Adams et al (2008) pg 84

146 Adams et al (1991) pg 119

147 Adams et al (1991) pg 119

148 Adams et al (1991) pg 88

149 Adams et al (1991) pg 90

150 Adams et al (2008) pg 86

151 Adams et al (2008) pg 86

in plans for specific districts and a lack of plans for other areas. While these revitalization projects have helped to increase the value and character of the innercity districts, as well as bring populations of the white middle class and upper class back into the city, they have also eroded the original populations which historically have inhabited these areas causing a mass outflow of poor black populations into other areas of the city. He This displaces and destroys community connections for poor African Americans creating gentrified districts and further increasing the polarization between the rich, the middle class, and the poor populations in housing, education, and income opportunities. He

Currently, Philadelphia is undergoing mass gentrification (the dislocation of lower-income residents due to the influx of middle and upper-middle income households). In the case of Philadelphia, these gentrified populations are predominantly white and well educated while the displaced low-income populations are predominantly black. While gentrification often leads to the renovation and reinvestment in degraded property in inner-city areas, it also causes the displacement of low-income inhabitants from these areas into areas immediately surrounding the inner-city. Low-income families face the brunt of displacement. Critics of Philadelphia's revitalization efforts have pointed to the plan's goal of encouraging higher-income households to move into rebuilt areas, which thereby changes the demographics of the city.

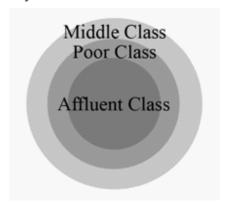


Figure 1.5: Diagram of the typical results of revitalization pattern in Philadelphia of the late twentieth and early twenty-first century

Due to this mass shift of people into and out of the city, markets in some areas of the city have seen rapid appreciation, while others have seen an equally rapid depreciation. In essence, the revitalization has lead not only to the increase in value and investment in the immediate downtown district and adjacent university, Society Hills, and Northern Liberties areas, but it has also seen a downturn in value and investment in the areas which

152 Warner (1968) pg xiii

153 Warner (1968) pg xi

154 Adams et al (1991) pg 113

155 Adams et al(1991) pg 122

156 Goode and Schneider (1994) pg 31

157 Goode and Schneider (1994) pg 32

158 Adams et al (1991) pg 15

159 Adams et al (1991) pg 63-64

160 Adams et al (2008) pg 8

have not seen revitalization but have acted as haven for those misplaced.

#### **Funding**

Philadelphia has a long standing history of utilizing public and private funding sources to achieve municipal goals. Revitalization has greatly depended on both public and private funds. The cooperation between businesses and government has lead to a number of public-private partnerships which have become the "normal way of doing business in the city." Without such cooperation, very few redevelopment projects would have been completed due to the public sectors shortage of funding. While Philadelphia has depended on local public-private alliances for investment, the combined financial effort hasn't been sufficient to mitigate the continuing funding problems for the city's neediest neighborhoods. Section 2015.

Many neighborhoods feel the thrust of economic decline more brutally than others. Residents are unable to afford movement away from declining areas due to lack of employment opportunities, increased education requirements, and increasing costs of commuting and housing. Inner-city neighborhoods are hurt by lack of funding and revitalization. This has lead to the gradual disinvestment and lack of new government policies to help support these failing neighborhoods. Is 158

Reduced tax revenues in areas of disinvestment and declining value "force the city to choose between needed social services and maintenance" of "physical infrastructure." 159 While many municipalities have the resources and funding to assist these declining neighborhoods within the city, inter-municipality cooperation is often difficult due to the democratic process which requires voting on the merging of services. In addition, inter-municipality politics involving race also cause cooperation issues due to the differing demands of African American and white communities. These cooperation problems are increased by federal policies which have cut back on funding opportunities and federally sponsored programs which force "local governments to compete against each other for the tax revenues needed to pay for services." Due lack of private funding in poorer districts, and decreasing amounts of public funding because of decreases in tax revenue and lessened federal assistance, the disparities between suburban areas and innercity districts is continuing to be a problem.

#### Conclusion

While the early plans for Philadelphia's development by William Penn called for an equalitarian society where green space and spacious housing were afforded to every "man," the product of this plan in the face of

161 Goode and Schneider (1994) pg 43

162 Adams et al (1991) pg 27

racial conflicts, housing demands, and shifts of industry is highly inequitable. In the eighteenth century, fear of the lower-class coupled with dense development led to class conflicts. The nineteenth century saw the development of a new social group: the middle class. Movement of the middle class into the newly suburban areas outside the city led to a change in composition of housing in within the inner-city. Continuing changes in housing and job opportunities during industrialization in the twentieth century led to increased segregation and inequalities in housing quality, access to shifting jobs, and education. These trends were only exacerbated in the late twentieth and early twenty-first century due to revitalization efforts and inadequate funding for some public services.

As a direct result of historic urban development, poor black families have been economically, educationally, socially and politically disadvantaged. The degrading condition of much of the low-income housing stock combined with decreasing opportunities for employment within the city and an education system which fails to keep up with the changing needs of employers has created disparities between rich white and poor black populations in the metropolitan region. Housing, family status, employment, and mobility inequalities all affect these disparities. Wealthy white populations are "increasingly isolated in the suburbs or in gentrifying areas" and poor black populations are continually pushed out of their traditional neighborhoods into more crowed undersupported districts as a result of revitalization. <sup>161</sup> Many of Philadelphia's inner-city neighborhoods have simply been separated from "the structures of opportunity" which are afforded to most suburban neighborhoods. 162

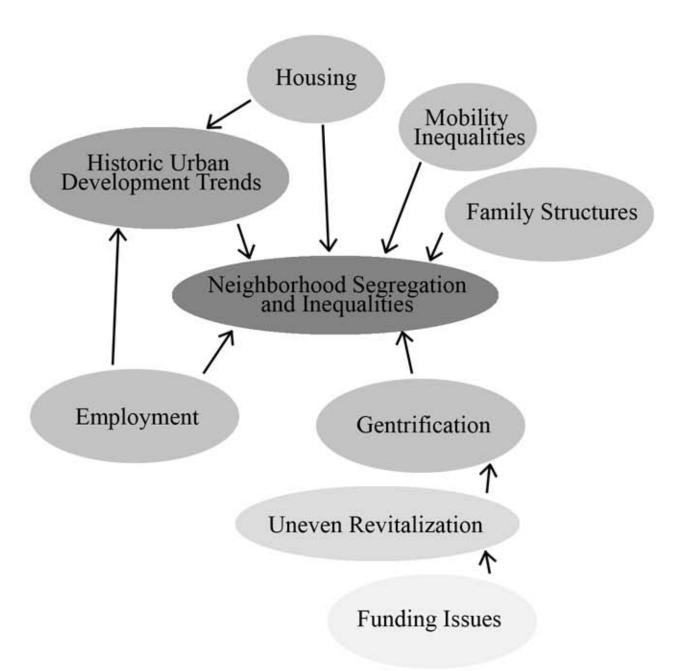
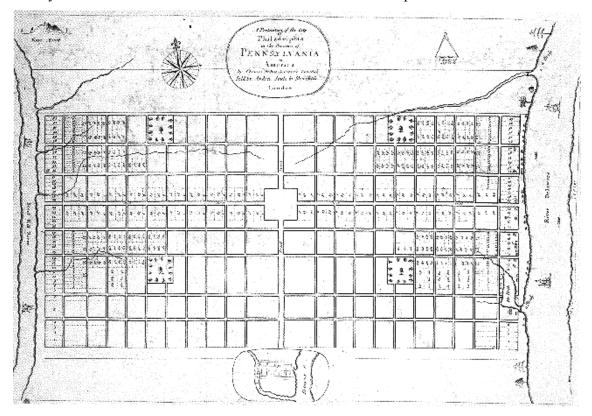
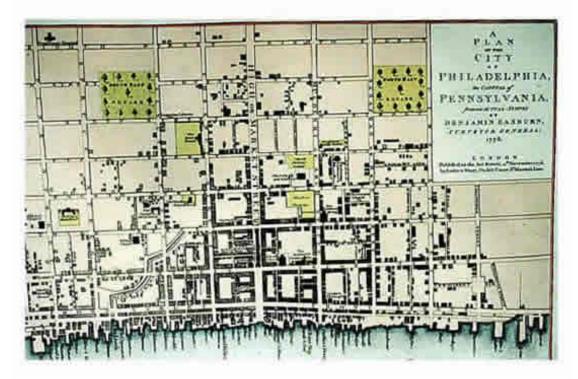


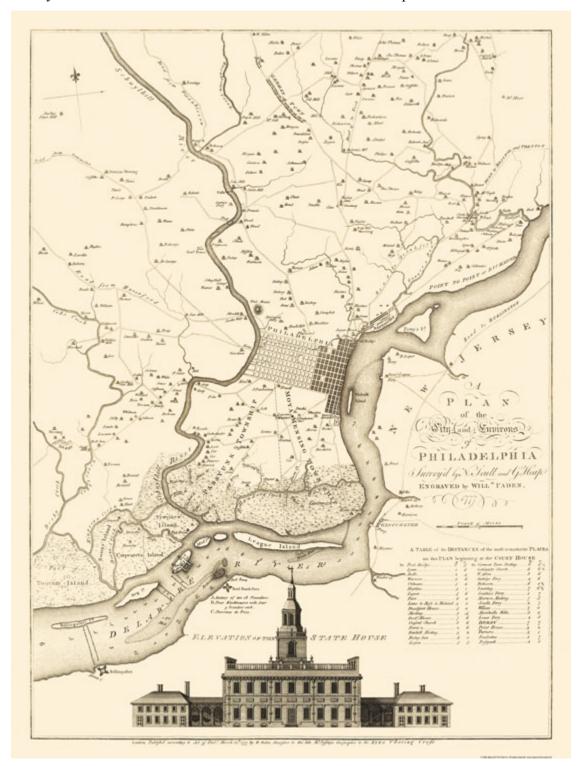
Figure 1.6: Flow chart illustrating the causes of neighborhood segregation and inequalities in Philadelphia.



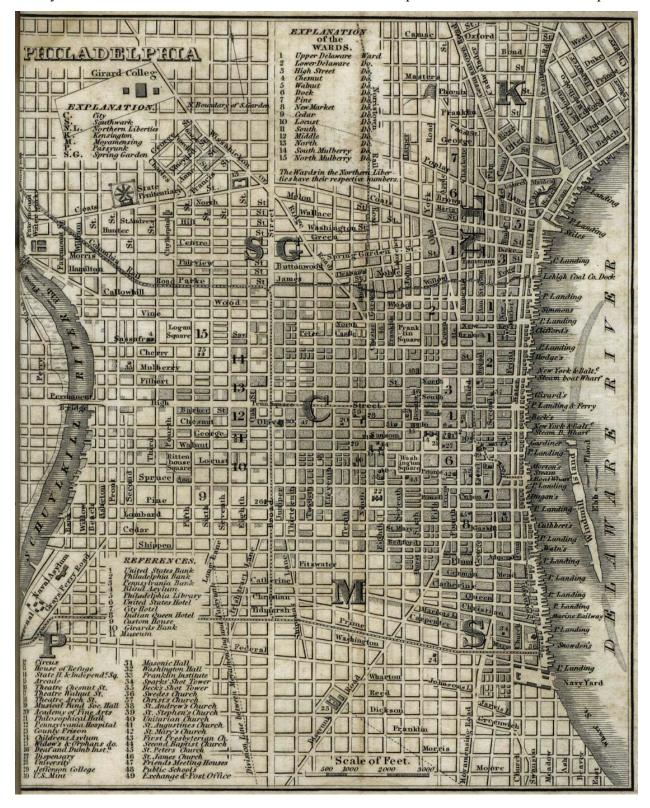
Map 1.1: William Penn's 1683 Plan for Philadelphia [Public Domain]



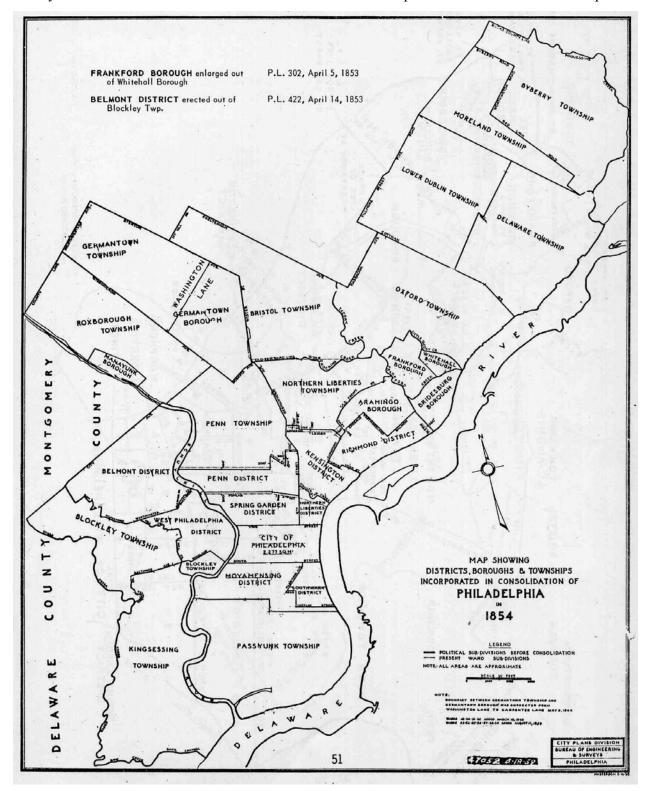
Map 1.2: Development in 1776 [Public Domain]



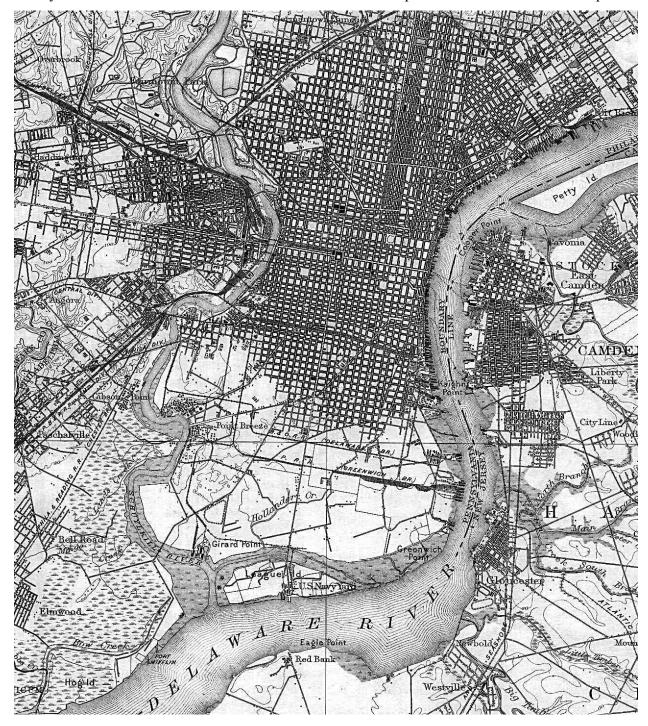
Map 1.3: Philadelphia region in 1777 [Public Domain]



Map 1.4: Development in Philadelphia in 1842 [Public Domain]



Map 1.5: Districts, Boroughs and Townships in Philadelphia 1854 [Public Domain]



Map 1.6: Development in Philadelphia in 1898 [Public Domain]

- 1 Adams et al (1991)
- 2 Adams et al (1991)
- 3 Crawford, Robert W. "The Philadelphia Experience." *Annals* of the American Academy of Political and Social Sciences (1959) pg 132
- 4 Crawford (1959) pg 132
- 5 Crawford (1959)
- 6 Crawford (1959) pg 132
- 7 Crawford (1959) pg 132
- 8 Crawford (1959) pg 133
- 9 Crawford (1959) pg 133

## **Chapter 2: Parks and Recreation**

## The Evolution of the Park System: Funding and Management

Public open space has always been an important part of Philadelphian life. Open space has a significant impact on the daily opportunities of lower-class and minority populations daily life. As part of William Penn's vision for the City of Philadelphia large squares of public green space were supposed to act as a portrayal of the standards of the green country town that Penn envisioned.<sup>1</sup> Penn designed large rectangular plots with country style mansions separated by public green squares which would serve as a stark contrast to the dense, smoggy, congestion in many industrial European cities.<sup>2</sup> Care for these public green spaces extended past Penn to the people who came to know Philadelphia as home. Not only were the five main parks in Philadelphia's downtown historic district the focus of recreation funding, but so were efforts to create and improve opportunities for children's landscapes.

In 1889, the Cultural Extension League worked with the interests of children play environments.<sup>3</sup> It is a common view of social reformists that the best policy to avoid crime is prevention. In the late 1800s playgrounds were seen as one of the possible prevention methods.<sup>4</sup> During the summer of 1894 the Playground Recreation Association was formed as a private society to commission the building and supervision of playgrounds throughout what was then the heart of Philadelphia, now the downtown historic district.<sup>5</sup> The PRA's first accomplishment was the opening of the first playground operated by the City Parks Association, which at the time was in charge of the city park system.<sup>6</sup> In 1895, the development of the trolley system hurt children's access to using streets as playgrounds. As a direct result of increased injuries to children by trolleys, a playground commission was formed with members of a wide range of institutions, including religious and public education groups, to open a number of school yards as playgrounds with city funded adult supervision. In addition, the playground commission worked on a "slum clearance project" which cleared a large area of slum housing and turned the property into a park.7 This commission was disbanded in 1902 due to a lack of private funds to continue their work.8

It wasn't until five years later, in 1907, that the Children's Playground Association of Philadelphia was organized and began work on opening and providing supervision for an additional eight playgrounds, "some on city and some on private property." In 1911, the

- 10 Crawford (1959)
- 11 Crawford (1959) pg 132
- 12 Crawford (1959)
- 13 Crawford (1959) pg 134
- 14 Crawford (1959) pg 134
- 15 Crawford (1959) pg 134
- 16 Crawford (1959) pg 135
- 17 Crawford (1959)

Playground Association transformed with the help of federal legislation into the Philadelphia Department of Recreation which became in charge of previously established playgrounds and the development of future playground sites. Through its inception until 1919, the Department of Recreation established many new playgrounds through the appropriation of city property. It was not until 1919 that the Department of Recreation was absorbed by the Department of Public Welfare, later becoming the Bureau of Recreation, where it remained until 1952.

In the 1950's Philadelphia's city administrators felt it was necessary to create a separate department of recreation which would work in coordination with other municipal services. <sup>11</sup> In 1952, the Recreation Department was established as an independent entity reporting to the city commissioner. The Recreation Department was chartered with determining new locations for recreation opportunities, preserving, managing, and operating the city's historical sites, and forming a comprehensive plan for recreation. <sup>12</sup> The new Recreation Department functioned as part of a "comprehensive and coordinated program of cultural and physical recreation activities; to manage and operate all city recreation facilities." <sup>13</sup>

One of the most important elements of this separation was that the newly re-established Recreation Department was tasked with the ability to manage historical sites as part of the public parks system, which in turn meant that all community recreation was now under "one management."14 The new Recreation Department worked under the assumption that "the good neighborhood depends upon the adequacy of certain basic facilities: modern playgrounds, parks, camps, community centers, playfields, and facilities for specialized purposes" meaning that there needed to be a variety of specialized recreation facilities in order to service a neighborhood well. According to Robert Crawford, the "recreation program in Philadelphia" became "a recognized force in preventing racial and religious tension." As part of a larger public participation effort, the Recreation Department (renamed the Department of Recreation shortly after its establishment) divided the city into eight recreation districts based on "population density, location of recreation facilities, and natural neighborhoods."16 Programs were developed with schools within each district to facilitate a cooperation between recreation and education.

Not only did the Recreation Department create a comprehensive set of recreation goals and programs for the entire city, they also established programs in schools which corroborated access to public parks within a school district.<sup>17</sup> In terms of the interaction between recreation and public education, the Recreation Department helped to initiate a method of public facility funding which has aided in making Philadelphia one of the most

- 18 Crawford (1959) pg 139
- 19 Crawford (1959) pg 138
- 20 Crawford (1959) pg 138
- 21 Crawford (1959) pg 139
- 22 Crawford (1959) pg 139

progressive cities in both education and public green spaces: the mixture of private and public funds to create a "community dollar." Specifically, the concept of the "community dollar" blended the public tax funds with voluntary private funds into one, making a substantially larger amount available for project funding. This has lead to the development of a rich network of urban parks and playgrounds.

Philadelphia's Department of Recreation serves as an example of how recreational facilities and educational cooperation can serve as community unifier. Because the main goal of this department was to provide opportunities and services to every person to create a "balanced program serving all ages, interests, and abilities regardless of race, creed, or sex" the amount of public and private interests in established and new programs is high. The "acceptance of a concept of the community dollar which blends the tax dollar and the voluntary dollar into one" has been the driving funding factor in the success of the city of Philadelphia's Department of Recreation programs. Without the blending of private and public money, many programs may not have been as successful as they are. 20

The mixture of private and public funding to create recreation programs which were integrated with public schools helped to achieve a fairly stable base for program expansion and improvement. Another goal of the Recreation Department was to provide services not only for the "normal person" but also for those who were disadvantaged.<sup>21</sup> By mixing public and private funds and making a point to serve disadvantaged groups, Philadelphia was able to provide adequate funding for recreation and education programs which served both high-income and low-income residents. While the development of the "community dollar" and the establishment of the Recreation Department (and its predecessors) aided in making Philadelphia a progressive community in terms of recreation and public school's access to outdoors, other problems in Philadelphia have limited this success. These factors include racial tensions and historical neighborhood segregation.<sup>22</sup>

23 Holmes, Robyn M. and Procaccino, Jill K. "Preschool children's outdoor play area preferences." *Early Childhood Development and Care*. vol 179 no 8. (2009) pg 1103

24 Platt, Anthony. "The Rise of the Child-Saving Movement: A Study in Social Policy and Correctional Reform." *Annals of the American Academy of Political and Social Sciences*. (1968)

Date	Event
1889	Cultural Extension League worked with inter-
	ests of children play environments
	Key method of crime prevention was children's
	playgrounds
1894	Playground Recreation Association formed as a
	private society
	Establishment of playgrounds under the City
	Parks Association
1895	Trolley system increased need of playgrounds
	due to injuries to children playing in the street
	Playground commission began to open play-
	grounds at schools and religious institutions
1902	Playground commission disbanded due to lack
	of funding
1907	Children's Playground Association of Philadel-
	phia began work on opening eight playgrounds
1911	Children's Playground Association transformed
	into the Philadelphia Department of Recreation
1919	Department of Recreation became a part of the
	Department of Public Welfare and became the
	Bureau of Recreation
1952	Recreation Department separated from the De-
	partment of Public Welfare with the purposes
	of charting potential new sites for public parks,
	managing historic sites, and forming a compre-
	hensive recreation plan for the city
	Recreation Department renamed the Depart-
	ment of Recreation
	Establishment of the Community Dollar to as-
	sist in funding public park system

Figure 2.1: Time line of important events in the history of recreation planning in Philadelphia

#### **Child-Saving Movement**

Historically, the building of playgrounds was "motivated in part by the need to corral disorderly children into designated areas, assimilate new immigrants into American culture." The Child-Saving Movement in Philadelphia reflected a romantic and highly conservative program to "impose sanctions on conduct unbecoming of youth." During the late nineteenth century and early twentieth century, many Philadelphian elites were

- 25 Davis and Haller (1973)
- 26 Davis and Haller (1973) pg 97
- 27 Davis and Haller (1973) pg 97
- 28 Davis and Haller (1973) pg 19
- 29 Platt (1968)
- 30 "William Penn Plans the City." (2009)
- 31 Cooperman, Emily. "William Penn's Squares: Town Planning History." PhD Architectural Historian. Lecture: ASLA National Convention. October 3 (2008)
- 32 Romenesko, Marilyn. "Philadelphia Green." Pennsylvania Horticultural Society. Lecture: ASLA National Convention. October 3 (2008)
- 33 "William Penn Plans the City" (2009)

noticing child behavior problems in lower-class children what they believed were negatively influencing the behavior of upper-class and higher-income children.<sup>25</sup> Teens in some neighborhoods were seen gathering on street corners due to a lack of other opportunities for gathering.<sup>26</sup> Known as "Corner Loungers" these teens were especially prominent in areas near Southwark in South Philadelphia, where a number of lower-income and black working-class families lived.<sup>27</sup> The area of Southwark was of particular importance in this movement. Southwark was known for its high number of poor and black population and gatherings of such a population scared white upper-class society. Citing issues with morality, the Society for the Suppression of Vice and Immorality was established to help control childhood morality in this and similar areas of Philadelphia.<sup>28</sup>

As a result, restrictions on where children could gather were implemented. While this movement was focused primarily on the ideas of a social order and maintaining the hierarchical composition of family, it points to the environmental causes for delinquency. The development of this type of movement in Philadelphia sets the stage for future public space programs, especially the policies which influences socioeconomically disadvantaged groups. As a result of this Child-Saving movement, the people of Philadelphia began to understand the social disparities and recognize the need for spaces for children.<sup>29</sup>

#### William Penn's Green Squares

Philadelphia grew quickly, reaching 18,000 people in 1760- passing Boston as the largest city in the English colonies, and becoming the second largest English speaking city- second to London, in 1774. As Penn had forseen, the city became the home for many upper-class colonists, due in part to its function as the primary port until the 1820s when New York City took the first position.<sup>30</sup> As a part of encouraging the green country town and gentleman's farm feeling, Penn planned four urban park squares to be used by the public. These squares, while not used until later for recreation, were to provide the city with open space not existent in the over-crowded London.<sup>31</sup> Specifically, the spaces were meant to alleviate pollution, decrease over-crowding, and encourage public interaction of residents.<sup>32</sup> As one of the few visions of Penn's that is still represented in the twenty-first century plan for Philadelphia, the public park system shows both the potential of the cooperation of public and private funding, but also the inability of the city to adequately foresee the needs of certain populations within the city.<sup>33</sup>

The 1683 plan centers around a primary square,

- 34 "Pennsylvania State History: The Quaker Province, 1681-1776." Pennsylvania Historical and Museum Commission.(2010) < http://www.phmc.state.pa.us/bah/pahist/quaker.asp>
- 35 "William Penn Plans the City" (2009); labels and highlights added to emphasize specific elements
- 36 Cooperman (2008)
- 37 Romenesko (2008)
- 38 "Independence National Historical Park." (2010) <a href="http://www.nps.gov/history/history/online\_books/hh/17/hh17g.htm">http://www.nps.gov/history/history/online\_books/hh/17/hh17g.htm</a>
- 39 Lew (2010)
- 40 MacLeod, Cynthia. "Washington Square." Superintendent of Independence Historic National Park. Site Visit: Washington Square, ASLA National Convention. October 3, (2008)
- 41 Carroll, Winchell S. "Washington Square." Director of the Friends of Independence. National Historical Park, President of Washington-Rochambeau Route in the Commonwealth of Pennsylvania. Site visit: Washington Square, ASLA National Convention. October 3, (2008)

later named Center Square, which was to house the majority of civic and commercial activities in the colony. Penn's plan was detailed to the extent of establishing schools, churches, and other primary civic activities in this square. In the mid-1700's Center Square became the home of Philadelphia's Water Works, which provided a water source for the entire city. Later, the courthouse and other primary government functions were moved from Independence Hall (located next to Washington Square) into a central building occupying most of Center Square.<sup>34</sup>

See Map 2.1: William Penn's five Green Squares<sup>35</sup> (at the end of this Chapter, pg 38) [Public Domain]

Washington Square and Franklin Squares, formerly known as South East Square and North East Square respectively, became the first squares reached by development primarily due to concentration of settlements along the Delaware River.<sup>36</sup> It was not until the early 1800s that development reached the most westerly squares, Logan and Rittenhouse Squares, known as North West and South West Squares respectively.<sup>37</sup> Not until the 1930s was Logan Square developed into the Benjamin Franklin Parkway and the 1940s and 50s that Independence Hall became a part of the Independence National Historical Park or Independence Mall.<sup>38</sup> These developments have played a primary role in the revitalization of downtown Philadelphia.

#### Washington Square

Washington Square, originally called South East Square, was the first of William Penn's green squares to face the progression of development coming from the settlement of colonists on the Delaware River side of Philadelphia.<sup>39</sup> Originally used as burial grounds, the site is home to the dead of the Revolutionary war and yellow fever victims. Named in the 1820's after George Washington, and surrounded by Society Hill, one of the oldest and most prestigious neighborhoods in Philadelphia dating back over 300 years, the square represents an earlier history than any other square. In 1842, the path system was designed by George Bridport in the hopes of creating promenades for the upper-class users.<sup>40</sup> While these paths were later regulated by Frederick Law Olmstead, the primary structure survives today.

Washington Square is currently owned and maintained by the National Parks System as one of many National Historic Parks.<sup>41</sup> While being the only one of the four green squares operated by the National Parks System, the park has maintained much of the original design and atmosphere of its colonial days. Bodies buried in the square are still in existence. Nothing has been exhumed,

- 42 Mcleod (2008)
- 43 Carroll (2008)
- 44 Mcleod (2008)
- 45 Dasgupta, Kalyan. "Rittenhouse Square Park." (2009) <a href="http://www.pps.org/great\_public\_spaces/one?public\_place">http://www.pps.org/great\_public\_spaces/one?public\_place\_id=393></a>
- 46 "Welcome to Rittenhouse Square." (2009) <a href="http://www.ush-istory.org/districts/rittenhouse/">http://www.ush-istory.org/districts/rittenhouse/</a>
- 47 "History of Rittenhouse Square..." Friends of Rittenhouse Square. (2009) <a href="http://www.friendsofrittenhouse.org/history.php">http://www.friendsofrittenhouse.org/history.php</a>
- 48 "Welcome to Rittenhouse Square" (2009)

and the park stands as a memorial to those buried during the Revolution. One of the primary elements within the park is the memorial to the Revolutionary Soldier.<sup>42</sup> This square is characterized by an eternal flame and a statue of George Washington.<sup>43</sup> The central fountain, newly rejuvenated with the addition of frogs and lily pads, provides a focus and central point to the park. Due to the lack of funding and support for this park, very little has been done to change the atmosphere of the park and its surrounding neighborhood. 44 This can be seen as either a positive outcome (in the fact that the square remains true to its original conception), or as a negative (that due to inactivity and lack of community ownership over the park there is an increasing population of homeless that congregate and funds are used primarily for maintenance instead of improvements).

#### Rittenhouse Square

Founded in 1683, the square originally served as a pasture for livestock. Later in the 1700s, the square became the clay pit for local brick yards. Rittenhouse is the only square not to have been used for executions and burials. However, the square did serves as the dumping grounds for "night-soil," which is the sewage and other wastes generated by colonial homes.<sup>45</sup> The South West Square became the last square to be reached by development and it was not until 1811 that the first estate home was build adjacent to the park by James Harper. This home is one of few still standing. However, as with many earlier homes, has been converted into public space serving as the headquarters for The Friends of Rittenhouse Square. 46 The present design was done in 1913 by Architect Thomas Holme and Paul Crete, who were coincidentally pivotal members in the planning of the city. It was shortly after development began around the square (specifically in 1825) that it was renamed after David Rittenhouse, who was a descendent of the first page-maker in Philadelphia.<sup>47</sup> The Friends of Rittenhouse Square are currently in charge of upkeep and improvements to the park, providing landscaping, lighting, fountains, and fences.

Also in 1913, Paul Crete designed the main entrances, central plaza, stone railings, and central fountain. As can be seen from the current site aerial, much has remained from Holme and Crete's original plan. While many of the homes around the square have been converted from private residences to multi-family units, the surrounding area remains in high demand due in part to the popularity of the park. This popularity from the renewed community involvement and ownership over the park itself after revitalization of housing surrounding the park. Groups such as the Friends of Rittenhouse Square are designed to help not only maintain the physical structures of the park, but also provide a governing body to

49 "Logan Square History." (2009) <a href="http://en.wikipedia.org/wiki/Logan\_Circle\_(Philadelphia)">http://en.wikipedia.org/wiki/Logan\_Circle\_(Philadelphia)</a>; "Logan Circle (Logan Square), Philadelphia." (2009) <a href="http://www.aviewoncities.com/philadelphia/logancircle.htm">http://www.aviewoncities.com/philadelphia/logancircle.htm</a>>

50 "Great Central Fair: Philadelphia, Pennsylvania, 1864." (2009) The Library Company of Philadelphia. <a href="http://www.lcpgraphics.org/inventories/sanitaryfair/">http://www.lcpgraphics.org/inventories/sanitaryfair/</a>

51 "Logan Square History" (2009)

52 "Logan Circle (Logan Square), Philadelphia." A view on cities: Sights & Attractions in some of the world's greatest cities. (2009) <a href="http://www.aviewoncities.com/">http://www.aviewoncities.com/</a> philadelphia/logancircle.htm>

53 Weiler, Susan. "Logan Square." Olin Partnership. Site Visit: Logan Square, ASLA National Convention. October 3, (2008) regulate development.

#### Logan Square

Logan Square, formerly the North West Square, was used for public executions and burial during the early 1800s. The final public hanging occurred just two years before the square's renaming in 1825 after James Logan, a Philadelphia statesman. 49 In 1861 the U.S. Sanitary Commission asked Philadelphia to collect funds to supply Union Soldiers with food and clothing necessities, as well as medical supplies.<sup>50</sup> Although the city acquired over \$135,000 in funds in the subsequent two years, the Union Soldiers required more. The "Great Central Fair" was conceived of in 1867 in an effort to attract business people to donate products to the U.S. Sanitation cause. Similar to fairs thrown in Boston, Cincinnati, and Chicago, the event needed a large venue to accommodate the 200,000 square foot main building as well as additional structures. William Strickland and Samuel Honeyman Kneass designed the symmetrical structures in the Gothic Style ("Great Central Fair: Philadelphia, Pennsylvania"). Although this was a temporary design and structure, the methodology of layout was maintained in the official 1930's plan as a part of the construction for the Benjamin Franklin Parkway. The design was based on a traffic circle which responded to previous geometries established during the Great Central Fair.<sup>51</sup>

The Benjamin Franklin Parkway was developed during the City Beautiful era of planning in response to the needed connection between Center Square and the North West of downtown Philadelphia. Jacques Greber designed the parkway based on Paris' Place de la Concorde, specifically with the use of a central fountain. The Swann Memorial Fountain of the Three Rivers, more commonly known as the Swann Fountain, was designed by the Philadelphia Fountain Society in honor of their late president Dr. Wilson Swann. Erected in 1924, by Wilson Eyre Jr. and Alexander Stirling Calder, the fountain represents the three principle waterways in Philadelphia: the mature woman as the Schuylkill River, the young girl as the Wissahickon Creek, and the man representing the Delaware River.<sup>52</sup>

While very little structural changes have occurred past the continued nature of the round-about traffic system- due primarily to the automobile, much of the original structure of the 1930's Logan Circle and Benjamin Franklin Parkway remain.<sup>53</sup> In 2005, a clean-up and redevelopment for the park was geared towards better pedestrian accessibility. Completed in 2008, by the Olin Partnership, a local Landscape Architectural firm, the changes included the removal of the park's characteristic Paulownia trees (due to their age), the raising of a burm around the exterior of the circle as a special and noise

54 Olin, Laurie. "Urban Civic Spaces." Olin Partnership. Site visit: Independence Mall, ASLA National Convention. Philadelphia, PA. October 3, (2008)

55 Weiler (2008)

56 Lew (2010)

57 MacLeod, Cynthia. "Independence Mall." Superintendent of Independence Historical National Park. Site Visit: Independence Mall, ASLA National Convention. October 3, (2008)

58 "Independence National Historical Park." (2010) <a href="http://www.nps.gov/history/history/online\_books/hh/17/hh17g.htm">http://www.nps.gov/history/history/online\_books/hh/17/hh17g.htm</a>

59 "Independence National Historical Park" (2010)

60 Larson, Roy F. "1937 Plan for Redevelopment of Historic Area." Philadelphia City Planning Commission: Pennsylvania (1962) barrior, and increased vegetation.<sup>54</sup> Plans for the rejuvenation of other parts of the square are being discussed with the Olin Partnership. This is an example of how city funds can be used to improve and encourage use of the squares (in contrast to the use of National Funds in Washington Square, and private-public partnership funds in Rittenhouse Square).<sup>55</sup>

### Independence Mall

Independence Hall is said to be the "hotbed of revolutionary activity in the late 1700s."56 It was the site of historical events such as the meeting of the First Continental Congress in 1774, the 1776 writing of the Declaration of Independence, and the 1787 writing and signing of the U.S. Constitution. While Liberty Hall was not recognized as a Nationally Historic site until the 1820s, a great deal occurred as a result of early interest in the structure. Originally cast in 1751, the Liberty Bell is the symbol for freedom in the United States. The original bell was rung every year on the fourth of July from the year 1778 until its removal in 1853.<sup>57</sup> Interest in the hall was facilitated by the visit of Marquis de Lafayette who used the building (specifically the Assembly Room as a leeve). Continued use of the facility by dignitaries (including in 1865 by Abraham Lincoln, in 1848 by John Quincy Adams), encouraged the city to create funds to restore the interior of the building.<sup>58</sup>

It wasn't until 1872, when the Centennial Restoration Project was first conceived that a new bell and clock were designed by Henry Seybert. The 1890's brought a new wave of restoration to Independence Hall in an effort to restore the appearance to one more similar to its Revolutionary appearance. In 1896, the Daughters of the American Revolution oversaw these renovations. It was almost 50 years later, in 1946 that the Independence Hall Association led the campaign to establish the Independence National Historic Park. The project was approved in 1948 with the design by Roy F. Larson and city approval for the project to acquire three blocks to the North of Independence Hall to begin construction. The city also approved the complete demolition of all structures within those blocks to provide room for a great lawn to display Independence Hall.<sup>59</sup> In 1952, only four years after city approval, an entire square had been demolished.

See Map 2.2: Ray F. Larson's 1937 plan for the historic area now called the Independence National Historic Park.<sup>60</sup> (at the end of this Chapter, pg 39) [Public Domain]

Following a period of disinterest, the city developed a design competition geared towards improving and expanding the plan for Independence Mall. Olin Partnership was decided the winning team in 2003 and

61 Olin (2008)

62 Olin (2008)

63 Olin (2008)

64 "The Fairmount Park System Map." Fairmount Park Commission: City of Philadelphia. (2011)

construction began immediately.<sup>61</sup> The main elements of the design include the Constitution Center (designed to accommodate large groups in an educational forum, the Visitors Center) which includes a small museum, help desks, and is the starting point for historical tours, the Liberty Bell Center (where the original Liberty Bell resides and Independence Hall) has been fully restored.<sup>62</sup> Other design elements include: rally court (where speeches, protests, and rallies can occur; designed to provide media with Independence Hall as a backdrop), a sculpture depicting the interior footprint of the President's Home which used to exist in the three blocks used for the Independence National Historical Park, the Quaker church (an original from early colonial Quakers), paths bisecting the park in reference to colonial roads previously running through the park, and a large green mall providing views from the Constitution Center to Independence Hall.<sup>63</sup>

#### The Larger Network of Parks

While Penn's original plan for the city only included five green squares, the rapid growth, geographical expansion, and high population on the city have given rise to the need for a richer network of park infrastructure. The Department of Recreation now handles not only the original five green squares, but also seventy-five neighborhood parks and playgrounds, and all the parks in the Fairmount Park System. Th Fairmount Park System includes fifty-three small parks, boulevards, plazas, canals and woods, and five larger main parks: Fairmount Park in the Northwest, Cobbs Creek Park in West Philadelphia, Franklin D. Roosevelt Park in South Philadelphia, and Taconey Creek Park and Pennypack Park in the Northeast. The Philadelphia park system also includes public and private school grounds, trails, recreation centers, tennis courts, golf courses, and a variety of outdoor and indoor facilities.

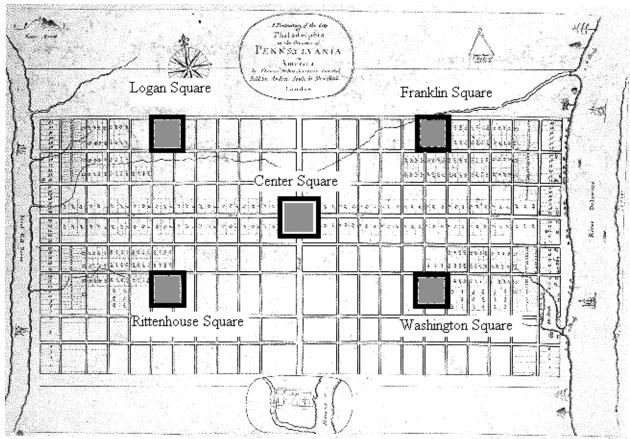
See Map 2.3: The Fairmount Park System.<sup>64</sup> (at the end of this Chapter, pg 40) [Public Domain]

#### Conclusion

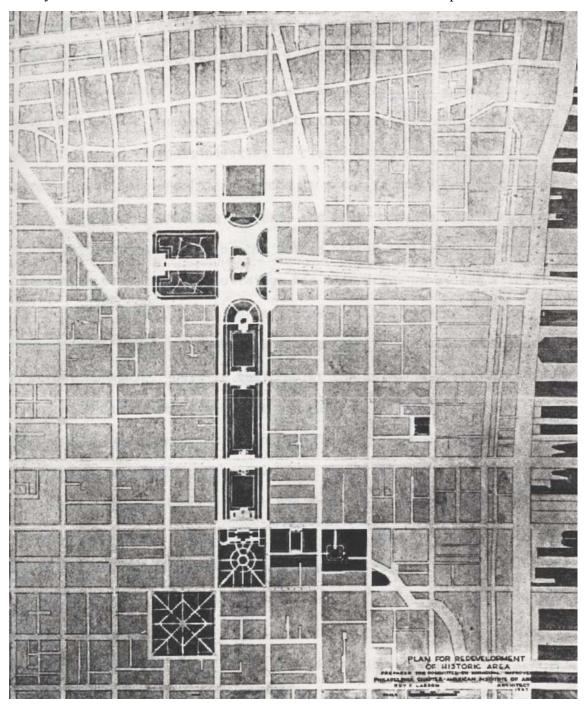
William Penn's vision of Philadelphia as both the "City of Brotherly Love" and the "green country town" has significantly contributed to the progressiveness of Philadelphia's funding and recreation system. In addition to this, early concern about the moral development of children exacerbated resident concern for the creation of children's outdoor spaces. Taken together, this recreation system funding and public concern for children's spaces has lead Philadelphia to offer numerous privately and publicly funded environmental education programs through Environmental Learning Centers and through public primary school interaction with the Philadelphia

parks.

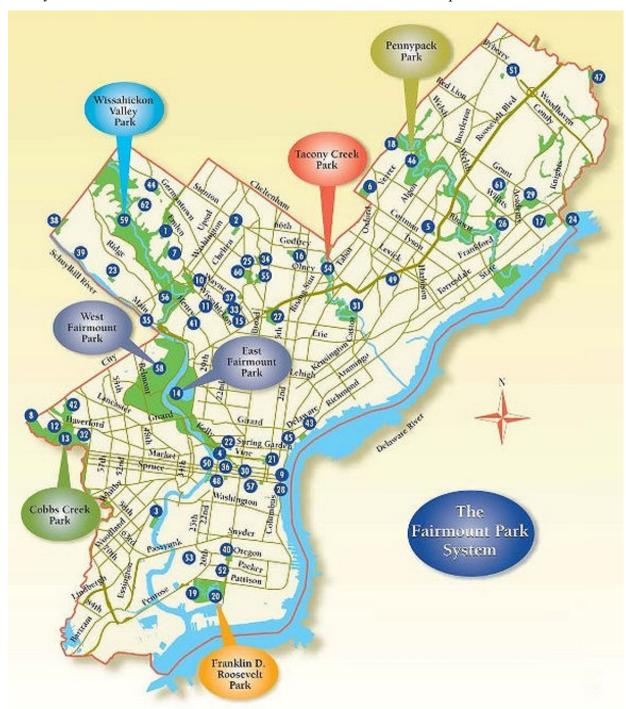
One of the most important elements of Philadelphian history is the evolution of the public parks system. Early Philadelphians were concerned with child play spaces due to increased race and class conflicts and fear. This concern led to the development of a number of child recreation opportunities and cooperation between public and private funding. As the most well-funded set public of amenities, the public parks system represents an opportunity for racial and class integration. This is partly the result of federal interest in the parks as historically important landscapes, but also because of the potential of these parks to serve a wide range of purposes. While the park system has undergone extreme changes over the course of the history of the city in an effort to provide outdoor recreation, economic benefits, and social connections, there is still room for improvements within individual parks and in the expansion into a larger citywide park system. Revitalization of Independence Mall and the National Historic Park has greatly increased the vitality of the inner-city, but contributes to the increasing gentrification of the central city.



Map 2.1: William Penn's five Green Squares [Public Domain] ; labels and highlights added to emphasize specific elements



Map 2.2: Ray F. Larson's 1937 plan for the historic area now called the Independence National Historic Park [Public Domain]



Map 2.3: The Fairmount Park System [Public Domain]

- 1 Adams et al (1991) pg 100
- 2 Goode and Schneier (1994) pg 17
- 3 Goode and Schneider (1994)
- 4 Keller, Bill. *Class Matters*. Times Books. Henry Holt and Company: New York. (2005) (2005) pg xi
- 5 Adams et al (2008)
- 6 Adams et al (1991)
- 7 Kaplan, George A. "The Poor Pay More- Poverty's High Cost to Health." Robert Wood Johnson Foundation. (2009) pg 4

# **Chapter 3: Social and Educational Equity**

#### Introduction

Economic and social change in the past half century has increased the gap between the "haves and havenots" in terms of housing, income, and education. While some of these inequalities are a result of the urban development patterns within Philadelphia, much of the economic structures within U.S. society favor "the control of a white minority" which means that "people of color are... at the bottom of the social an economic hierarchy." This structure of power is called "Institutional racism." Which can be defined as a society which is dominated by one race where members of another race are not afforded the same institutional advantages as the race with dominant power.

Race and class play a large role in inequality, especially in terms of education. Class and race play a significant part in how and where people choose, or are forced due to economic pressures, to live. This means that housing districts are segregated by income.<sup>4</sup> Housing districts are speared not only by income and race, but also distance. In the case of Philadelphia, there is a substantial number of low-income districts clustered around the inner-city, and a large number of higher-income neighborhoods in the suburbs. This means that an abundant amount of low-income children go to school within the city's public school system which is funded separately from middle to upper-class children who largely attend schools in the suburbs.<sup>5</sup> Because public education is allocated by neighborhoods district, children within one area tend to go to school together. In other words, children who all live in a low-income housing district will typically go to school in one location, while children in a higher income district will likely go to a different school.

Income levels indirectly affect the health of a neighborhood. Typically, low-income neighborhoods are located in districts which have become degraded either due to a lack of economic resources for improvement or because the residents lack the time and resources to maintain their properties. Another outcome of degraded neighborhoods is health. According to Kaplan (a researcher in childhood equity in access to outdoor spaces), poverty has a large impact on health specifically due to "neighborhood safety, work hazards, housing quality, the availability of social and economic supports... and access to nutritious food" and physical activity. Furthermore, studies have shown that "the longer a child remains in poverty, the poorer his or her memory function, which involves the same region of the brain, due to the

- 8 Kaplan (2009) pg 13
- 9 Kaplan (2009) pg 13
- 10 Adams et al (2008) pg 139
- 11 Obermayer, Leon J. "For Every Child: The Story of Integration in the Philadelphia Public Schools." The Board of Public Education. US Department of Health, Education & Welfare, Office of Education. (1960) pg 16
- 12 Johnson, Susan Moore et al. "The Support Gap: New Teachers' Early Experiences in High-Income and Low-Income Schools." *Education Policy Analysis Archives* (2004). vol 12 no 61.
- 13 Adams et al (2008)
- 14 Kaplan (2009)
- 15 Warner (1968) pg 112
- 16 Warner (1968) pg 112; Adams et al (2008) pg 127
- 17 Warner (1968) pg 115; Adams et al (2008) pg 127

physiological effects of chronic stress over extended periods." In addition to higher stress levels, social environment plays a large role in the opportunities for learning for impoverished children. One of the most affected areas of poverty for children is school performance largely because impoverished children live among adults with low "educational attainment" and go to schools where either low attainment is standard or public and private funding does not adequately allow for additional teaching and learning resources.

Since the mid-1900s Philadelphia has maintained a policy of equality. The Board of Education in Philadelphia stated in 1960 that the primary goal of the city's public schools were to encourage cooperative learning in an effort to achieve "education success, and happiness FOR EVERY CHILD." Unfortunately for lowerincome black students living within the city's boundaries, this policy has not yet translated to equal education. Continuing inequality in education for low-income black students is due to a number of reasons. Economic hardships experienced by many inner-city schools leads to poor funding for resources which are needed to raise educational attainment levels. 12 Housing segregation also plays a role due to the division of public school districts which often traps low-income children at low-performing schools.<sup>13</sup> And also neighborhood quality and demographics of the community population play a significant role in inequitable education.<sup>14</sup>

These inequalities are especially pronounced which it comes to education which is outside the range of the standardized testing used to determine federal funding. Schools which perform below standards must use already scarce resources to improve scores, while schools that have achieved high-enough scoring can use additional funds on expanded curriculum, such as environmental education. This policy creates an even greater gap between students learning at different school.

#### **Evolution of Education in Philadelphia**

Education in Philadelphia has been an issue of community debate since the late 1700s. <sup>15</sup> While public outcries for free education for the poor living in the city began in 1776, prejudice and "selfish outlook of taxpayers" stalled the establishment of these schools until 1818. <sup>16</sup> Until that time, private schools were only available to higher-income white children.

Legislation in 1818 "form[ed] one school district under a Board of Governors" which had the "power to use taxation to build school houses, train teachers, furnish textbooks, and give free education to indigent orphans or children of indigent parents."<sup>17</sup> In 1819, this public school district had ten schools and over 2,800 students.

- 18 Warner (1968) pg 116
- 19 Warner (1968) pg 118
- 20 Warner (1968) pg 118
- 21 Warner (1968) pg 11
- 22 Warner (1968) pg 11
- 23 Davis and Haller (1973) pg 20
- 24 Warner (1968) pg 66
- 25 Warner (1968) pg 66
- 26 Warner (1968) pg 120
- 27 Warner (1968) pg 123
- 28 Davis and Haller (1973)
- 29 Warner (1968) pg 113

In 1834, the number of schools had doubled and was now serving over 6,700 students. This number increased exponentially by 1843 with over 214 schools, 499 teachers, and over 33,000 students. Even with these staggering increases in the early years of public schooling, children still sparsely went to public schools because education was not compulsory. On the school school

The motive for public education was not to increase equity between rich and poor populations, instead it was derived out of fear of the lower-classes immorality and as a method of teaching poor children the virtues and skills necessary to lead moral lives.<sup>21</sup> Growth of the public schools came primarily out of the inability of private schools to service the majority of the city's children.<sup>22</sup> Benjamin Rush was one of the primary leaders in advocating for the public education of poor children stating that education would raise these children into "higher ranks of society" and would reduce both the crime rate and the numbers of poor citizens.<sup>23</sup> Unfortunately for school reformers and leaders, poor children typically did not attend school. Until the time that public schools were made compulsory, only a minority of poor children attended school. This was primarily because these children needed to work to help support their families.<sup>24</sup> Only middle-class children who did not need to work could "take full advantage of new public grammar school education."25

Historically, Philadelphia's public schools were designed to offer cheap education to a large mass of children. Low-cost education was a pivotal selling point for tax payers in the early years. Higher-class citizens never accepted this form of education as a viable option for their own children. It is because of this fact that private schools have excelled in the city. Many of these private schools were able to explore alternate methods of teaching and offer different curriculum compared to public schools. Traditional segregation and different educational opportunities for the rich has played a significant role in the current trends in segregation and disbursement of educational opportunities.

A unique aspect of Philadelphia's school history is its long standing acceptance of "alternative" schools, many in the form of private schools catered to specific higher-income populations. One of the first private schools to offer "alternative" methods of teaching and learning was opened by Joseph Neef in 1809. This school is historically important because Neef "stressed nature study, open-air classes, music, and oral instruction as devices to liberate the natural talent and interests of each child." In contrast to Neef's methodology, many schools at that time, and later the first public schools as well, worked towards "the cheapest form of education practiced" in an effort to reach the largest number of

- 30 Warner (1968) pg 113
- 31 Warner (1968) pg 114
- 32 Davis and Haller (1973) pg 21
- 33 Davis and Haller (1973) pg 122
- 34 Franklin, Vincent P. *The Education of Black Philadelphia: The Social and Educational History of a Minority Community, 1900-1950.* University of Pennsylvania Press (1979) pg 28
- 35 Franklin (1979) pg 30
- 36 Franklin (1979) pg 32
- 37 Franklin (1979) pg 39
- 38 Kaplan (2009) pg 13
- 39 researchers in the educational support for teachers
- 40 Johnson (2004) pg

students at the most economical level.<sup>7</sup> These other schools typically had large numbers of children and low funding<sup>30</sup> contrasted from Neef's low numbers of students which lended itself to more individualistic learning, and high amounts of private funding.

#### Black Education

For black children, public education did not come until much later. Primarily, education for poor blacks came in the form of religious schools like The Society of Friends and The Sunday School Society. Religious charities were specifically designed to keep black children "orderly." In this way, education of black children was seen as a means to maintain social order. Until public schools began to integrate black children, poor blacks had very little education. Only one in four households of free blacks sent their children to school. 32

Philadelphia was one of the first cities in the United States to offer traditional public schooling to black children. This is one of the reasons so many black families moved into the city in the early 1900s. Amazingly, education for blacks came before public education to poor whites. The first black school was opened in 1790 and served only free blacks. While this school was privately funded by religious organizations, it more closely resembled public education.<sup>33</sup>

The first official public school for black children opened in 1822. By 1850 there were eight public schools for black children.<sup>34</sup> Between the period of 1850 and 1908 nine all-black public schools were in existence. However, the majority of black students attended schools with majority poor white children.<sup>35</sup> By 1925 the increasing number of black students in mostly white schools concerned parents and school administrators.<sup>36</sup> While it was illegal to force black children to attend black-only schools at the time, it was possible to segregate black children in other ways. Primarily, segregation came in the form of housing and employment.<sup>37</sup> These methods of segregation have had lasting effects on the distribution of black students in public schools and have created entire districts which are predominately black.

#### **School Funding and Spending**

Funding plays a significant role in school learning. Poor children typically have poorer learning due to lack of adequate funding for textbooks and supplies in addition to inadequate funding for teacher's salaries and facility maintenance.<sup>38</sup> Susan Johnson et al<sup>39</sup> discuss the "broad patterns of inequality" between schools of higher-income and lower-income.<sup>40</sup> They found that the comparative lack of support afforded to teachers in low-income schools can have negative effects on the education opportunities and achievement of children in said

- 41 Johnson (2004) pg 3
- 42 Johnson (2004) pg 15
- 43 Robert Wood Johnson Foundation. "Designing for Active Living Among Children." Active Living Research (2007) pg 3
- 44 Kaplan (2009) pg 15
- 45 Adams et al (2008) pg 135
- 46 Goode and Schneider (1994) pg 31
- 47 Goode and Schneider (1994) pg 31
- 48 Adams et al (1991) pg 18
- 49 Adams et al (2008) pg 130

schools. According to this analysis:

schools serving students from low-income communities tend to employ teachers who, when compared to those who work in high-income schools, are less qualified on a number of measures. Schools with high concentrations of low-income students have higher percentages of new teachers... higher proportions of uncertfied teachers... and higher percentages of teachers working outside their subject area... Teachers in such schools also, on average, score lower on various standardized tests... and have graduated from less competitive colleges<sup>41</sup>

In addition, teachers at lower-income schools have noted that their curriculum requirements force them to spend great amount of instructional time on standardized test preparation, and less on other academic activities. <sup>42</sup> It has also been found that low-income students often have less Physical Education in school "due to lack of teacher training, large class sizes and inadequate facilities." <sup>43</sup> A National Center for Education Statistics study found that schools with high rates of poverty were more than four times less likely to offer recess to children than schools with low poverty rates." <sup>44</sup> In other words, not only are schools with high low-income populations less likely to receive high quality teachers, due in most part to the lack of support for new teachers, but also are more likely to be "taught to the test" due to curriculum restrictions and academic time constraints.

Because Philadelphia is both a county and city government, funding resources are stretched extremely thin due to the "burden of paying for county services as well as city services" in a municipality which contains a large portion of poor citizens.<sup>45</sup> The small tax base coupled with reductions in federal funding for public schools places Philadelphia's public schools in a hard economic situation.<sup>46</sup> Philadelphia historically has relied heavily on taxes and private funds for the allocation of public services. In 1980, seventy-two percent of the city's budget was supported by taxes. This figure is double what comparative cities like Boston, Chicago and New York rely upon.<sup>47</sup> Decrease in economic prosperity and increase in impoverished families has lead to much fewer tax dollars available to the city in order to fund its programs.

Compared to the suburban areas in Philadelphia's metropolis, the city spent on average about \$300 less per student in 1985.<sup>48</sup> In the school year 2003-2004 that number increased dramatically to almost \$2,000 less per student.<sup>49</sup> Considering a student body in a typical public school can range anywhere from 150 to over 1000 student this amount can have significant impacts on resources provided to each student. Similar to

- 51 Adams et al (2008) pg 137
- 52 Adams et al (2008) pg 137
- 53 Adams et al (2008) pg 137
- 54 Adams et al (2008) pg 138
- 55 Adams et al (2008) pg 137
- 56 Adams et al (2008) pg 116
- 57 Adams et al (2008) pg 117
- 58 Adams et al (2008) pg 138

Philadelphia's other public services, private funds are often used to compensate for lack of public ones. 50 Public funding got so low in the early twenty-first century that the Philadelphia school district had to contract out a large portion of their work to private entities, including nonprofit and for-profit organizations. This includes the running of some schools and the project of creating a standardized curriculum.<sup>51</sup> The Philadelphia superintendent stated that "we're a public school system that has learned to play the market" implying that the school system is to be run like a business.<sup>52</sup> This private-public partnership represents the largest urban cooperation for education funding and has national implications. The No Child Left Behind Act of 2001, which has substantial implications on public school funding, states that "when a school fails to show improved test scores for three consecutive years, the school district may take 'corrective actions' which could include" making schools privately managed.53

Ironically, higher spending and higher funding do not necessarily mean higher test scores for children. While it may have a significant impact on student learning because the increased funds can be used to pay for better teachers, more books and resources, and better maintained schools, higher spending does not necessarily mean that children will achieve better results. This is especially true in Philadelphia's city public schools.<sup>54</sup> In 2007, the Rand Corporation found that even with additional private funding for some public schools there was no real difference between privately funded and publically funded schools average test scores.<sup>55</sup>

Additional studies have found that spending per student does not significantly impact SAT scores for high school age students. While some higher spending schools provide additional resources, programs, higher salaries, and have higher SAT scores, other high spending schools use extra funding for maintaining degrading grounds, providing special education and increased security.<sup>56</sup> Because some schools are new, don't have high populations of special needs students, and are not in neighborhoods where additional security is needed those schools can spend their additional funds to improve education whereas schools that do have those issues have to spend additional funding on those things.<sup>57</sup> In other words, schools in poorer communities must spend more per student on maintenance and security compared to schools in middle and higher income areas.<sup>58</sup> Because the majority of Philadelphia's public schools service lowincome students, the increased need for funding on maintenance and security takes away from the already lowerspending capabilities for the school per student, doubly disadvantaging low-income schools with low-funding.

59 NAEP. "The Nations Report Card: Reading 1971-2008, Mathematics 1973-2008." *NAEP 2008: trends in Academic Progress.* National Center for Education Statistics: Institute of Education Services. (2009)pg 10

60 NAEP (2009)

61 Carey, Kevin. "Education Funding and Low-Income Children: A Review of Current Research." The Center on Budget and Policy Priorities. (2002); NAEP (2009)

62 Carey (2002)

#### The Achievement Gap

Nationally, education trends show that this is not an isolated problem. Scores in both reading and math are typically lower for black students than white students. Achievement gaps in both reading and mathematics between White and Black students have not significantly changed from 2004 to 2008, but have narrowed significantly since 1971 for reading and 1973 for mathematics; the same is true for White and Hispanic students. This is a reflection on the education inequalities experienced by low-income minority schools.

It's non-disputable that schools are rarely created equally, even after federal policy has aimed at correcting the "gap" between schools. Generally, poor and highly minority public primary schools fall academically below predominantly white upper to middle class schools and the gap can primarily be attributed to a disparity in resources. This is especially true for education which falls outside of standardized testing curriculum, such as environmental education. <sup>60</sup>

Federal policies have been both successful at encouraging environmental education and academic equality; however, they have come short on a number of issues. While policy has been enacted to help mitigate the gap between schools of differing socioeconomic status' the problem remains: children of low-income minority schools are generally not achieving the same level of academic success as those in higher income white schools.<sup>61</sup> This gap can primarily be attributed to a disparity in resources.<sup>62</sup> Federal policies such as the Environmental Education Act, Goals 2000: Educate America Act, and the No Child Left Behind Act have aimed at both closing the gap between children of different socioeconomic backgrounds and encouraging an environmental awareness curriculum. These policies have made steps forward but still fall short.

Schools are funded at different levels privately and publicly. Public funding is provided either by the Federal Government or by individual municipalities. It is the ability for schools to acquire private funding in addition to the basic funding provided federally that allows learning to go above and beyond federal learning standards. Unfortunately, schools in low-income districts often are unable to attain private funding or have financial requirements far exceeding the funding they do obtain. The perpetual cycle of academic failure and lack of funding for low-income schools remains a problem. This is particularly true in schools with a high-minority and high low-income population.

Studies have proven that "an individual student's chances of succeeding are significantly higher when she

- 63 Adams et al (2008) pg 111
- 64 Kaplan (2009) pg 13
- 65 Adams et al (1991) pg 59
- 66 Adams et al (2008)
- 67 Adams et al (2008) pg 113
- 68 Adams et al (2008) pg 113
- 69 Adams et al (2008) page 112
- 70 Adams et al (2008) pg 114
- 71 Adams et al (1991) pg 17
- 72 Adams et al (1991) pg 17
- 73 Adams et al (2008) pg 117
- 74 Adams et al (2008) pg 117

or he is surrounded by high-performing students" showing that students achievement is directly related to their school-mates. Achievement is greatly affected by learning that takes place outside of school. Poor children "tend to enter school with poorer reading and math skills" than children of middle and higher income families. The combination of national testing trends, poor funding, lack of curriculum options, peer-achievement, and pre-school learning effectively place students in lowincome and minority schools at a disadvantage.

#### Achievement Gap in Philadelphia

The achievement gap which is seen nationally is even more pronounced in cities such as Philadelphia where racial conflicts and housing segregation play a significant role in education. In the city, over thirty-five percent of African Americans have less than a high school degree. This is compared to only twenty percent of whites in the city. 65 Because local demographics play a critical role in student achievement, this means that children in areas with low academic achievement typically have low academic achievement themselves. 66

Philadelphia's public schools average scores on SATs are in the low 800's which is considerably lower than SAT scores in districts surrounding the city.<sup>67</sup> This can in part be due to the large number of students who attend private schools within the city's boarders in comparison to in the suburbs.<sup>68</sup> Typically, students at private schools in the city perform much better on SATs than those students that attend public schools. When SAT scores are reported from both public and private school, Philadelphia has both the highest and lowest scores with the largest difference between compared to the surrounding districts.<sup>69</sup>

In lower-level schools there is similar performance in public schools. Philadelphia has one of the highest failure rates on reading tests compared to suburban public schools. In 1980 the city was behind the suburbs in level of education by almost fifteen percent. This gap us unlikely to lessen because of the inability of many city schools to provide adequate resources to their students compared to suburban schools.

In addition, the test scores of minority students tend to be lower than that of white students; twenty percent of African American high school aged students scored "Below Basic" on reading tests compared to whites in the same district.<sup>73</sup> This can in part be due to achievement levels in primary and secondary schools. High schools often serve multiple primary school districts, meaning that children from multiple primary schools attend the same high school. Even within the same school district, many elementary schools contain very different demographics.<sup>74</sup> Because primary schools

- 75 Adams et al (2008) pg 117
- 76 Adams et al (2008) pg 122
- 77 Adams et al (2008) pg 122
- 78 Adams et al (2008) pg 122
- 79 Adams et al (2008) pg 122
- 80 Adams et al (2008) pg 126
- 82 Adams et al (2008) pg 129
- 82 Adams et al (2008) pg 123

often serve individual or small groupings of neighborhoods, student populations can be highly segregated according to race and income. This leaves some children within a district at a disadvantage, a disadvantage which becomes even more apparent in higher levels of learning.<sup>75</sup>

#### Mitigating the Achievement Gap

There are a few ways to mitigate the gap between African American low-income city students and their majority white middle- and higher-income suburban counterparts. The No Child Left Behind Act of 2001 (NCLB) offers one of these options. According to NCLB, parents of children in consistently failing schools to be eligible for transfer to other schools. For Philadelphia in 2004, over 142,000 students "were eligible to be transferred from under-performing schools within the city."<sup>76</sup> This means that over two-thirds of the city's public schools "failed to meet their targets for yearly improvement for at least two years in a row" leaving only one-third of the city's passing schools eligible to accept transfer students from failing schools.<sup>77</sup> Unfortunately, only 135 students were actually able to transfer due primarily to a lack of space in eligible schools to accept transfer students. This inevitably traps poorer performing students in poorer performing schools.78

There are only two options for transfers outside of the public school system for children wishing to transfer from a failing school: first, enrollment in a private school- which many low-income students cannot afford, and second, organization of a charter school.<sup>79</sup> Comparatively, Philadelphia has a "substantially larger portion of families" that send their children to private schools.80 Unfortunately, private schools systematically attract only specific students. Private schools typically contain only those students whose families are able to afford tuition, meaning that low-income students are often unable to consider private schooling an alternative to public school. Because much of the African American population living in the city is at or below the poverty line, this largely leaves black low-income out of children attending private schools, further contributing to the gap between schools.81

Charter schools are the other option for students wishing to transfer out of failing public schools. These schools "are new public schools created by groups of interested parents, teachers, college professors, and others who commit themselves to certain educational goals and results in exchange for a waiver from most state and local regulations." In other words, Charter Schools do not have to meet the same regulations as regular public schools and are comprised of only those students whose families choose to input extra effort and time into the

- 83 Adams et al (2008) pg 123
- 84 Adams et al (2008) pg 123
- 85 Adams et al (2008) pg 123
- 86 Adams et al (2008) pg 123
- 87 Bauer, Catherine. "Housing Policy and the Educational System." *Annals of the American Academy of Political and Social Science*. (1955) pg 17
- 88 Bauer (1955) pg 18
- 89 Bauer (1955) pg 22

schools creation.<sup>83</sup> The downfall of Charter Schools is that they are funded by the same sources as public schools. In this way the local district pays not only the maintaining a Charter School, but also the costs of public schools thereby "diverting funds that would otherwise support existing public schools" into the Charter Schools.<sup>84</sup>

In Philadelphia in the "2005-2006 school year, fifty-five charter schools served 26,000 pupils" and typically "the largest number of charter schools can be found in older school districts with lower student performance." Philadelphia has the highest number of charter schools than "anyplace else in Pennsylvania" and serves ten percent of students who otherwise would go to public schools. This means that the education budget is split between charter schools and public schools, cutting the amount of funding available to improve failing schools. 86

While transferring to another school, enrollment in a private school, or creation of a Charter School are all viable options for students attending perpetually under scoring public schools, the options are not equally viable for all students. Transfer into another public school is often inhibited by lack of additional space in eligible schools, enrollment in a private school is often difficult for low-income students due to the economic hardships of tuition, and Charter Schools only serve students whose families are able to give the extra time and effort into their creation. In addition, Charter Schools serve to further deplete the funding options for failing schools and increase the gap between public schools and other schools.

#### Relationship to the Urban Fabric

Bauer compares the development patterns of early community development with current development trends. Bauer notes that until the early-20th century construction of any services tended to be on an "piecemeal basis over a period of years" which allowed for schools and community support facilities to be developed in an as-needed basis. Since then, development has taken on a larger scale forcing community planners to anticipate and pre-establish support facilities before actual development even occurs. This means that developers and planners must also act as education, utility and recreation experts, anticipating any and all future needs near and within a development. This can be devastating if the needs are not adequately anticipated.

More specifically, there are two results to this type of development which need addressing within the context of education equity. First, school programming "must be integrated with over-all community planning well in advance of actual housing development."<sup>89</sup>

- 90 Bauer (1955) pg 22
- 91 Bauer (1955) pg 22
- 92 Bauer (1955) pg 23
- 93 Bauer (1955) pg 25
- 94 Bauer (1955) pg 25
- 95 Obermayer 1960) pg 3
- 96 Adams et al (2008) pg 1397 Adams et al (2008) pg 118
- 98 Adams et al (2008) pg 110; "Fact Sheet: Parents' Low Education Leads to Low Income, Despite Full-Time Employment." National Center for Children in Poverty. Columbia University, Mailman School of Public Health: New York. (2006) pg 1
- 99 Adams et al (2008) pg 109
- 100 Adams et al (2008) pg 122
- 101 Adams et al (2008) pg 121
- 102 Goode and Schneider (1994) pg 205
- 103 Kaplan (2009) pg 14

Second, this type of development "tends to promote a much greater degree of social segregation at the neighborhood level by income, age, and racial groups than has been traditional in the United States." These two elements have major racial and educational implications. Bauer notes that "since school structure and the educational system are directly affected by neighborhood social structure" the resulting school system to become segregated according to the demographic of the neighborhood it resides within, creating mostly low-income black pockets which creates a racial ghetto. School integration depends heavily on neighborhood integration. In this case, housing policy relates directly to school diversity.

In the 1960's Philadelphia's Board of Education attempted to better integrate schools by adjusting district lines, but unfortunately this effort lead to little change. Most students attend schools close to their neighborhoods. The segregation of many neighborhoods explains why many schools in Philadelphia remain segregated. Housing districts with higher value and newer homes are associated with higher SAT scores and an increase in spending of nearly \$4,000 per student. Income and race significantly affect the composition of both the neighborhood and its schools.

One of the most direct measures of education are income differences. Typically people with higher education levels earn higher incomes. Living in a higher-income district does not necessarily mean that public services such as transit, child-care, and medical centers will be affordable, but it does typically mean that children will have access to better funded schools. Choice in neighborhood and school district is an advantage that only middle and upper-income families can afford. Unfortunately for low-income families, affordable housing is usually coupled with poor schools. Limited mobility caused by economic disadvantages and racial segregation often inhibits low-income and minority families from attending better public schools.

In addition to housing affordability playing a significant role in educational opportunities, the health and safety of a neighborhood play a role in additional educational resources within the community. According to a Presidential Executive Order in 1994 "the poor are more likely to live in places with hazardous waste and large industrial facilities and have greater exposure to pesticides, lead, and outdoor air pollution." Many times, the only safe and healthy opportunity for children to play outside in these areas is at school Unfortunately, many public schools in these areas are unable to afford play areas which adequately address the need for childhood outdoor play.

104 Robert Wood Johnson Foundation (2007) pg 5

105 Robert Wood Johnson Foundation (2007) pg 5

106 Kaplan (2009) pg 115

107 Kaplan (2009) pg 15

108 Kaplan (2001) pg 115

109 Kaplan (2009) pg 13

110 Kaplan (2009) pg 13

111 Adams et al (1991) pg 100

There is a strong correlation between outdoor facilities within a community, such as playgrounds, parks, and recreation programs, and physical activity. Lowincome and minority neighborhoods often have fewer opportunities for outdoor recreation. 104 In addition, children living in low-income communities, which are predominantly non-white and minorities, have "low percentage of physically active youth and are especially vulnerable to obesity." Due to the lack of funding for such facilities, poor areas typically have "fewer physical fitness facilities, membership sports and recreation clubs, dance studios, clubs and halls, and public golf courses." This means that there are fewer places for children to play outdoors. Coupled with the inability for schools to offer adequate recess facilities this puts children in low-income districts at a disadvantage. 107

Black communities are the most affected by this trend. In the United States, African Americans are more likely to live in areas of environmental hazards and pollution. This can partially be attributed to the higher occurrence of poor families living in degraded environments. Not only does this degraded environment effect children's opportunities for outdoor recreation and play learning, but it also effects schools within the district's ability to provide children with outdoor recreation and hands on learning outside. 110

#### Conclusion

Economic and social change in the past half century has increased the gap between the "haves and have-nots" in terms of housing, income, and education. Many of these inequalities are a result of the urban development patterns within Philadelphia and the result of historic education trends. Race and income specifically play an important role in inequalities in education opportunities. The significant number of low-income African Americans living in the city has translated to a large number of black impoverished children attending the same schools. These schools often perform lower on standardized test and face funding problems.

Even though Philadelphia has maintained a policy of equality the city has been largely unable to mitigate discrepancies between suburban middle and upperincome schools and poorer city schools. Continuing inequality in education for low-income black students is due to a number of reasons. Many poor students who attend schools that perpetually fail to improve on standardized testing do not have the economic resources to transfer to private schools and other public schools are already over-populated with transfer students. In addition, Charter Schools largely take funding away from traditional public schools.

These inequalities are especially pronounced

when it comes to education which is outside the range of the standardized testing used to determine federal funding. Schools which perform below standards must use already scarce resources to improve scores while schools that have achieved high-enough scoring can use additional funds on extra curriculum, such as environmental education. Thus creating an even greater gap between students learning at different school.

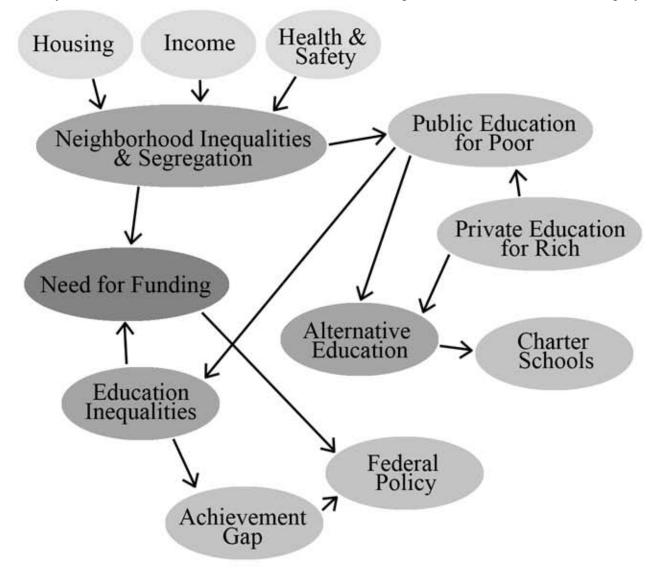


Figure 3.1: Flow chart illustrating the relationships between elements of social and educational inequalities in Philadelphia and nationally

1 Primarily this act refers to the expansion of science and engineering curriculum in primary and secondary schools.

2 The Goals 2000: Educate America Act was set forth as a series of objectives which were meant to provide a foundation for measuring student success in the classroom.

3 As one of President George W. Bush's only Education Acts, The No Child Left Behind Act established standardized testing to determine which schools qualified for federal funding and which schools were falling behind national education standards and would no longer be provided federal funding. In Virginia, the result was the establishment of SOL testing- or "Standards of Learning" tests- administered to children at numerous levels throughout their public education.

# **Chapter 4: Education and Environment Policy**

#### Introduction

Federal Policies such as the Environmental Education Act<sup>1</sup>, Goals 2000: Educate America Act<sup>2</sup>, and the No Child Left Behind Act<sup>3</sup> have aimed at both closing the gap between children of different socioeconomic backgrounds and encouraging an environmental awareness curriculum. These policies help to correct the gap, but the problems still exist- the policies serve broad environmental education but fail to address specific environmental education needs.

This literature review will address the major points of federal policy which affect public primary schools and their outdoor resources. Philadelphia serves as an outstanding example of how some city public schools are utilizing privately funded resources to supplement their lack of funding for specialized environmental education programs.

#### **Federal Policy**

Federal education policy acts to create a baseline for education creating standards by which school's teach to, initiating incentives for schools who don't show adequate success, and generally implementing regulations for the health, safety and welfare of the children in our public schools. Most importantly, Federal Education policy establishes standards for providing funding resources to schools. Three acts stand out as important to schools with predominantly low-income students: the Elementary and Primary Education Act of 1965, the Improving America's Schools Act of 1994, and the No Child Left Behind Act of 2001. As the most current iteration of U.S. Education policy, the No Child Left Behind Act of 2001 serves as a reenactment of the Elementary and Primary Education Act and the Improving America's Schools Act. As a sequence of policies these three, in combination with the Environmental Education Act of 1970 and the Goals 2000: Educate America Act begins to address the two-pronged problem of environmental education and the socioeconomic gap in public education.

## Elementary and Primary Education Act of 1965

The Elementary and Primary Education Act (EPEA) was originally enacted on April 11th, 1965 to fund primary and secondary education. In addition, this act forbids the creation of a national curriculum. The EPEA originally contained six titles to address school resources, teacher training, and state education departments. It perhaps speaks to the importance of socioeconomic status of students that Title I addresses financial

- 4 The Elementary and Primary Education Act of 1965. Public Law 89-313. The Department of Education
- 5 U.S. Department of Education. "Improving Basic Programs Op—erated by Local Educational Agen—cies: Title I, Part A." (IBP) (2010) <a href="http://www2.ed.gov/programs/titleiparta/index.html">http://www2.ed.gov/programs/titleiparta/index.html</a>
- 6 aimed at expanding the funding resources of schools in lowincome areas
- 7 which limits funding based on performance, thereby decreasing the availability to schools in lowincome areas
- 8 The Elementary and Primary Education Act Amendments of 1968. Public Law 89-313. The Department of Education

concerns for the education of low-income children and families was the first element of the EPEA.<sup>4</sup> As the first federal education policy to address the educational gaps between children of low-income and high-income schools, the EPEA seeks to adjust funding to promote increased assistance to poor children and families through public schools. According to Title I of the act a school qualifies for additional funding if 40% or more of its students are defined by the U.S. Census as low-income.<sup>5</sup>

As part of the EPEA, national curriculums were forbidden. This is interesting considering the most recent efforts by Former-President George W. Bush to establish standards for achievement which boarder on the establishment of a federal dictation on education curriculum through the No Child Left Behind Act. The shift from devote appose to federal curriculum standards to the standards set forth by the No Child Left Behind Act is intriguing. Whether this shift occurred as a result of need for better education or the need to better regulate funding cannot be seen, but what can be derived is a distinction between early policy<sup>6</sup> and current educational policy.<sup>7</sup>

While the earliest enactment of the EPEA didn't address racial distinctions in school's financial needs, the 1968 amendments introduced the need for bilingual education programs. With the establishment of Title VII the need for additional education resources for students of immigrant and minority populations was brought into national focus. The introduction of bilingual education acted as a mitigating factor in the then expanding gap between low-income predominantly minority schools and higher-income majority white schools.<sup>8</sup>

#### Improving America's Schools Act of 1994

As a reenactment of the EPEA, the Improving America's School Act of 1994 (IASA) achieved a number of goals; first, it established standards for safe and drugfree schools; second, it created education technology programs; third, it increased funding for the 1968 amendment creation of bilingual programs; and finally, aimed at improving the Title I program, called Title I: Helping Disadvantaged Children Meet High Standards.<sup>8</sup> This portion of IASA provided additional funding for schools with large numbers of disadvantaged students and held these additionally funded schools accountable for the equal academic treatment of these students. As a program meant to not only increase funding, the primary aim of the title amendment was to seek equal performance of all students, regardless of income-level. Seven years later this title was transformed into parts of the No Child Left Behind Act.

As part of IASA funding increased an additional \$750,000,000 in an effort to increase the percentage of

- 9 The Improving America's Schools Act of 1994. Public Law 103-382. The Department of Education
- 10 The Improving America's Schools Act of 1994
- 11 The Improving America's Schools Act of 1994
- 12 Baker (2000)
- 13 Baker (2000)
- 14 The Environmental Education Act of 1970. Public Law 101-619. The Department of Education
- 15 Baker (2000)

eligible children and schools who were able to be covered in this program.<sup>9</sup> While this funding increase did supply more resources to schools in need, it remained insufficient to fund all children characterized by the U.S. Census as low-income. In addition, the act made it explicitly clear that such programs needed to become more effective.<sup>10</sup> The Goals 2000: Educate America Act addresses this issue.

#### **Federal Policy Influencing Environmental Education**

One of the primary methods for regulating and monitoring public school systems is through federal policy. While democracy calls for equality and representation, our public policy does not reflect the needs and disparities between many socioeconomically disadvantaged groups, poor minority children being one of these. We are not a welfare society.

This is not a new problem, nor is it one that goes largely unnoticed. In recent policy this gap between "haves" and "have-nots" has be addressed- although to arguable success. Federal Public School policy is one of the areas where economic and educational disparities are being challenged. Building on the fundamental education principles in federal policies addressed earlier are those which establish both an environmental education initiative and a lessoning of educational disparities for disadvantaged groups.

#### Environmental Education Act of 1970 and 1990

The Environmental Education Act (EEA) was first enacted into law on October 30th, 1970 by President Richard Nixon.<sup>12</sup> The act was only funded through 1975, and was further repealed in 1981 due to budget constraints. However, in 1990, the act was reexamined under the President Bush Sr. Administration and reenacted on November 16th, 1990.<sup>13</sup>

The EEA of 1970 established the Office of Environmental Education, which later became known as the Department of Education. It provided grants for teachers and administrators to develop environmental education curricula.14 Where the EEA focused on science as the means to environmental education, the NEEA's primary goal was to increase public understanding of environmental issues. The fundamental shift here is in a focus on education by the Department of Education to a focus on the environment by the EPA. The EPA's broad environment focus doesn't address the specific needs of environmental education.<sup>15</sup> While the EEA established the federal body which was put in charge of national education standards, the 1990 reenactment, renamed the National Environmental Education Act (NEEA) moved control of environmental education to the Environmental Protection Agency (EPA). The primary policy within

16 The National Environmental Education Act of 1990. Public Law 1001-619. Environmental Protection Agency

17 the EEA in 1975 and the NEEA in 1996

18 Baker (2000)

19 Paris. "Goals 2000: Educate America Act" PL 103-227. A leadership model for planning and implementing change for schoolto-work transition. Madison, WI: University of Wisconsin, Center on Education and Work (1994); Text has been cut to emphasize grade level of standardized testing and those subjects which are emphasized by testing. The word "[in]" has been inserted for grammatical reasons

20 Paris (1994) pg 1 21 Paris (1994) the NEEA is stated as follows:

It is the policy of the United States to establish and support a program of education on the environment for student and personnel working with students, through activities in schools, institutions of higher education, and related educational activities, and to encourage postsecondary students to pursue careers related to the environment.<sup>16</sup>

The socioeconomic gap in learning is perhaps exacerbated by this shift in focus from the Environmental Education Act of 1970 to the EPA's management of the National Environmental Education Act of 1990. One wonders what environmental education would be like had the focus remained on education. Even though both the EEA and NEEA have both expired<sup>17</sup> the programs developed by the Department of Education and the EPA continue to be funded by annual appropriations bills.<sup>18</sup>

#### Goals 2000: Educate America Act

The Goals 2000: Educate America Act (EAA) was signed as law in 1994 with an approved \$105 million in the first year alone. Primarily, the EAA set up a framework which created academic standards, measured student progress, and provided support for students that failed to meet standards. 19 EAA sought to achieve eight main goals, two of which are important within the context of socioeconomic equality and environmental education: first, that "all children in America will start school ready to learn"; and second, that "all students will leave grades 4, 8, and 12 having demonstrated competency... [in] English, mathematics, science, foreign languages, civics and government, economics, the arts, history, and geography."20 In reality, this meant the creation of prekindergarten programs, such as Head-Start, standardized testing to measure individual student achievements, and focus on technical learning in math and science. While environmental education is partially covered by the science focus of Goals 2000, earth sciences are not explicitly addressed. While the goals were not completely met by the 2000 dead-line, the Act set a framework for future Acts like the No Child Left Behind Act of 2001.

Within the context of socioeconomic equality and environmental education, the EAA's academic testing created factual support which emphasized the disparity between schools in low-income minority areas and higher income predominantly white schools. Programs such as Head-Start, which were primarily funded though efforts such as the EAA, were used to prepare children who historically did poorest in school (namely minority low-income students- before they even entered the public school environment).<sup>21</sup> In addition, testing for individual academic progress was used to uncover areas where

22 The No Child Left Behind Act of 2001. Public Law 107-110. The Department of Education

23 The No Child Left Behind Act of 2001

24 Schools must only report 95% of student test scores. This means that 5% of each school's student body are not required to be assessed at all. This means that in a school of 500 students, 25 can be exempt from testing. Often it is children with learning difficulties who are excluded: primarily this refers to children with special needs, but can include any number of subgroups of students (including low-income minority children who would typically do worse than average on the tests)

25 The No Child Left Behind Act of 2001

sufficient academic progress was not being met. The Goals 2000: Educate America Act is fundamentally important to this study for three reasons: first, it set a framework for the No Child Left Behind Act of 2001; second, it established that there was factual disparities between children's education from different income-groups; and third, it aimed at partially correcting the disparity before children reached Kindergarten.

#### No Child Left Behind Act of 2001

The No Child Left Behind Act (NCLBA, commonly called "Nickle-bee"), enacted by President George W. Bush in January 2001, is a policy aimed at "close[ing] the achievement gap with accountability, flexibility, and choice, so that no child is left behind." The NCLBA is one of the most controversial education policies. While the act aims to lessen the gap of achievement between socioeconomically different schools, and primarily to achieve a common standard of learning for every public school in the U.S. the methods of documentation have been drawn into question. Although not the purpose of this literature review, it is important to understand that this piece of legislation is fraught with controversy, both as a piece of education law and as a means of social equity.

The NCLBA has three main areas which should be addressed in the context of the Goals 2000: Education for America Act and the Environmental Education Act: firstly, the issue of academic curriculum. The NCLBA requires standardized testing of each child within a school district. These standardized tests are then used to decide which schools continue to be eligible for federal funding under the NCLBA.<sup>23</sup> While state's set standards for material covered by testing, it is the individual schools that are often in charge of determining which children will be included in the school's test scores.<sup>24</sup> Here arises the first criticism of NCLBA's accuracy in creating a more equitable learning environment.

Secondly, the NCLBA's focus is on standardized learning within the areas of English, Math, and Science (more specifically technical sciences such as pre-engineering). Here there is a disparity between the diversified curriculums sought by the Goals 2000: Educate America Act, the earth sciences encouraged by the Environmental Education Act, and the technically driven sciences of the No Child Left Behind Act. This has many implications: first, technical sciences don't serve environmental education; secondly, a diversified curriculum is not met by technical sciences; and thirdly, emphasis on standards of learning takes the ability of teachers to see student's as individuals and the ability to teach to each student's strengths.

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## **Notes and Citations**

26 Carey (2002) 27 Carey (2002)

#### Chapter 4: Education and Environment Policy

And finally, the third area is the issue of funding. While NCLBA ideally sets up a program of reward for academically successful schools, its funding has become increasingly drained as more schools require federal assistance to maintain high test scores. Often, it is the schools that lose funding due to inadequate test scores whom need funding for academic support programs the most.<sup>26</sup> This is counter-productive; without funding how can these schools improve?

#### Conclusion

There are three important conclusions which can be drawn from this research. First, that the federal policy on education sets the standard for public education. This standard not only establish an education curriculum, but also determines funding opportunities. The primary problem with federal policy on primary and secondary education is the lack of sufficient funding to provide additional resources to schools with predominantly low-income students. While funding is provided under these policies, the federal budget isn't sufficient to cover all students in need. It has been recommended by The Center on Budget and Policy Priorities that children with low-income should receive two-and-a-half-times the amount of additional funding as children with higherincomes. Unfortunately, this isn't possible due to the insufficient funds.<sup>27</sup>

Secondly, federal education policy on the environment offers little additional help towards closing the two-pronged gap. Policies such as the Environmental Education Act of 1970 and the Goals 2000: Educate America Act draw attention to the need for Environmental Education and lessoning the achievement gap between income groups, but do little to effectively distribute additional support to those schools and children whom they seek to help. The No Child Left Behind act on the other hand goes farther in terms of funding and standardization of the curriculum, but it still falls short of providing measurable change in these issues. If anything, the funding restrictions set in place by the No Child Left Behind Act increase further the disparity seen on resources for students with additional economic needs and creates a cycle of failure which is often difficult for schools with little funding resources to overcome.

Third, each of these federal regulations act separately to address individual issues of socioeconomically disadvantaged schools and students. Because of funding problems, gaps in cooperation between federal departments, and a lack of understanding of the specific needs of impoverished children and the schools they attend these acts don't impact funding and achievement gaps. This is largely because of their piecemeal nature. A more holistic set of programs which overlap to address

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Chapter 4: Education and Environment Policy inequalities between schools and students is needed.

# **Notes and Citations**

1 Place-focused policy to encourage revitalization is discussed in the next subsection

# **Chapter 5: Policy, Education and Program Guidelines**

#### Introduction

Using the information gathered about historic urban development, parks and recreation, social and educational equity, and education and environmental policy this set of guidelines has been developed to improve the environmental equity of low-income and minority children in Philadelphia. This chapter concludes with a table outlining the relationship between each guideline and the literature reviews in Chapters 1-4. A table defining each guideline is also included at the end of this chapter.

#### **Urban Development**

There are two areas where policy and programs can be developed to influence urban development patterns: segregation and revitalization. While each set of policies work together to create a holistic set of changes, each policy or program effects a specific area of urban development. Through these changes it is believed that small changes can be combined to create large change. In this way, individual projects work together to improve the lives of low-income residents as well as promote changes to low-income districts.

#### Segregation

Unfortunately, due to the complexity of housing markets and the historic trends which have embedded segregation into many neighborhoods, addressing segregation through planning solutions is difficult. In addition, constitutional barriers to creating race-based housing policies make attempting to reverse segregation impossible in the United States. Targeting desegregation by income is much more viable and in the case of Philadelphia is likely to affect a large number of predominantly black inner-city neighborhoods without explicitly targeting race. There are three types of policy which can be effective here: people-focused policy, place-focused policy, and indirect policy.

People-focused policy targets residents and home buyers directly instead of changing housing stock and neighborhood characteristics. These policies encourage low-income people to borrow money for home purchase through increased loans. This allows renters in lower-income districts the ability to purchase homes in middle-income areas.

Place-focused policy in low-income districts can come in two forms: to encourage desegregation and to encourage revitalization. Place-focused policy to encourage desegregation provides incentives or

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requirements for middle-income neighborhoods to offer affordable housing options to attract low-income residents. This can be achieved through the following methods:

- Increase affordable housing in middle-income neighborhoods: Zoning can require the building of a certain number of affordable housing for low-income residents for every number of middle-income dwellings. This is one method of Inclusionary Zoning, which ties the creation of affordable housing to housing at or above market-rate.
- Provide tax incentives to developers: Also achieved through zoning, providing incentives to developers to provide affordable housing can assist in the integration of low-income housing into middle-income areas. This can be done through offering options for increased density if affordable housing is provided.

Indirect policy attempts to address the problems of segregation instead of directly addressing the causes. These approaches typically take the form of increasing the mobility, thereby better tieing work-place to workforce. Some examples of possible approaches are:

- Car-share programs: Programs such as this are typically run by for-profit organizations which allow members to pay monthly fees in order to have access to a car on a scheduled basis. This allows members the low-cost option to have partial ownership of a car without the large expense of actually owning the car. Members in car-share programs reserve a car based on their need and then pay a monthly payment based on the amount of time a car is used. In this way, low-income members can reasonably commute to and from work without the hassle and expense of purchasing their own car.
- Increased public transit: Mass transportation options such as buses, trains, subways, and rail-cars offer mobility to residents in areas where work is not available. In the case of Philadelphia, increased train-lines which bring inner-city residents to major employment venues in the suburbs needed to make commuting from the innercity a viable option.
- Frequent rider programs: These programs allow discounts to public transit riders who travel on a specific route more than a certain number of days a week. This not only encourages the use of public transit, but offers low-income users the ability to travel frequently to job sites away from their neighborhoods.

The clustering of commercial and industrial services can go a long way to providing employment to low-income people. More specifically, clusters of industrial and commercial jobs need to be located near affordable housing. Tax incentives can be given to companies

seeking relocation to attract businesses to build ware-houses, factories, commercial districts, and distribution centers in close proximity to low-income districts. Because property tends to be cheaper near affordable housing, and because these areas provide a large stock of employees, industrial and commercial businesses need only a few incentives to encourage specific development.

Indirect policies can also take the approach of increasing access of low-income residents to public facilities such as parks and recreation. Methods of achieving this are through the creation of smaller pocket-parks within low-income districts, providing more affordable and available mass transit to existing parks and recreation infrastructure, and expanding existing programs into community centers within low-income districts.

#### Revitalization

Revitalization efforts are critical in infusing economic prosperity, social equality, and opportunity back into a distressed community. While groups such as New Kensington Community Development Corporation and The Philadelphia Commercial Development Corporation (PCDP) are working within specific districts to revitalize neighborhoods there is a disconnection between what causes the need for revitalization and the actual effects of revitalization. Additional programs are needed in neighborhoods with have not been addressed by recent revitalization near the city center. Not only is revitalization needed elsewhere, but planning is needed to address the gentrification problems that many neighborhoods currently face as well as the problems resulting from the mass movement of low-income residents into other districts. Below are suggested revitalization efforts to be used as guidelines for individual neighborhood revitalization projects:

There are two areas of policy and programs that can address revitalization: place-focused policies and additional funding opportunities. Place-focused policy in low-income districts can be as simple as aesthetic changes. Through small revitalization efforts neighborhoods that have been largely neglected and abandoned can become more appealing to middle-income populations. In essence, these small changes work together to improve the appeal of low-income districts to middle-income home buyers (thereby raising the value of homes and increasing diversity within a neighborhood). Some such programs are as follows:

- Rebuilding Centers: These facilities are non-profit or for-profit run organizations which collect housing supplies through donation from middle to higher-income residence owners (often for tax deductions)- such as toilets, sinks, lighting fixtures, windows, siding, etc and re-sell these products for the remodeling or renovation

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of lower-income homes. The success of these organizations requires the cooperation of a large community of homeowners of all income levels, both to ensure a steady stream of usable parts from middle to higher-income homes and the purchasing of these parts by lower-income home owners. A very successful Rebuilding Center is located in Portland, Oregon. At this center, programs are offered through the funding of private and public entities that teach homeowners the values of revitalization of their homes as well as basic skills to do home-maintenance work themselves. Habitat for Humanity also runs similar Rebuilding Centers all over the country.

- Community sponsored street greening: In a program such as this, residents of a neighborhood are asked to volunteer an afternoon or series of afternoons to plant trees, weed flower beds, plant flowers and clean-up trash on their neighborhood streets. Planting materials and equipment are provided by a private organization that sponsors the event. Incentives for investment in such a program can include tax-based incentives for businesses, awards for community involvement, or the gratification of "giving-back". Residents can be encouraged to participate by offering refreshments, free plant samples, discounts at the sponsors business, or the promise of a fun and free afternoon of activities. Community sponsored greening is especially ideal for communities with children.
- Demolition of abandoned houses: In this case, abandoned homes can be seized by the municipality and either demolished for the creation of new housing or can be turned into small neighborhood parks. In either scenario, homes which are often seen as "eye-sores" to middle-income purchasers are removed. Replacement and revitalization can both result in gentrification. It is essential to maintain the character of a neighborhood and not completely replace affordable lower-income housing with more expensive homes. Gentrification is a serious side-effect of demolition and rebuilding if a balance is not achieved.
- Community building improvements: This type of program uses private and public funds to improve or help in the maintenance of school buildings, public parks, and other municipal buildings such as post offices, libraries, or recreation centers. Unfortunately, gentrification is a common side effect of building improvements because often home values are raised and lower-income residents are priced-out of the neighborhood.
- Vacant lot cleaning and greening: Simple clearing of brush and trash can go a long way towards making a community look more hospitable. Service groups, residents, school groups, and community groups can adopt vacant lots to clean every month to every other month.

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This is a great way for volunteers to get together and help out their community. Another option is having neighborhood members participate in a vacant lot potluckdinner. At an event such as this a sponsoring business or association would provide tables, utensils, and trash receptacles and advertise to residents to come out for a community dinner and cleaning. Greening can be done in lots which are already cleaned. In this case, sponsors or groups of community members can get together and plant trees, shrubs, vegetables, etc in vacant lots. This type of involvement helps to create a since of ownership over vacant lots which encourages residents to keep their neighborhood looking good.

- Community gardens: The establishment of community gardens can happen on existing shared neighborhood land or on vacant lots. This is a very popular revitalization and economic stimulation option in Philadelphia, which already has a number of community gardens. One of the most successful is the Mill Creek Project community gardens in West Philadelphia. This community garden is run by a non-profit using government grants and allows members of the low-income population in West Philadelphia to work together in a large garden and composting site within their neighborhood. Residents have the option of buying produce from this garden at a minimal expense.
- Painted murals: The use of building and retaining walls as a canvas for community art helps to give a since of ownership not only to those who participate in the painting of these murals, but also the larger community that experiences art daily. Murals in high-traffic areas can be stripped seasonally or yearly and painting events can be set-up so that a great number of community members can participate in the painting.
- Farmers markets: A good way to encourage independent marketers to sell their goods, farmers markets allow residents to sell produce, food products, arts and crafts, or other goods. These markets can either fluctuate at different locations throughout the city, allowing different goods to be sold to different markets on different days, or can happen weekly at the same venue. This not only is a good opportunity for low-income residents to interact socially, but also a chance for getting extra income. Farmers markets would also attract people from neighboring communities increasing cooperation between districts.

Funding is often an issue in revitalization, especially if the goal of a revitalization project is not to attract higher-income residents and businesses. Much of place-based programs can be funded through redirection of tax dollars, private investment, and the requirement of community-improvement fees placed on new

Chapter 5: Policy, Education and Program Guidelines construction projects. Funding can be obtained through a number of sources:

- Municipality cooperation: While it is often difficult for municipalities to cooperate, this still remains a viable option for struggling communities. Through partnerships with neighboring municipalities resources can be shared and exchanged to increase the vitality of all those participating.
- Community service projects: Many community service organizations provide volunteers to work on community improvement projects. High school students, church groups, sports teams, and activist groups actively seek projects to gain community service hours. These groups should be utilized to provide free labor for projects.
- Private investment: Offering tax incentives to businesses to invest in community improvement projects allows businesses to not only give back to their community, but also provides financial incentives for their cooperation. Businesses can be given savings on property taxes or use fees for assistance in making neighborhood improvements.
- Reallocation of tax funds: Many times improvement efforts are single events which only require a limited amount of funding. Tax dollars can be set aside during years which experience additional revenue for improvement projects. In this way, specific small revitalization projects to poor neighborhoods do not fall under the same funding umbrella as other larger projects. This creates pools of money which can fluctuate to different projects yearly or quarterly.
- Federal grants: There are numerous federal grants offered to projects that seek to revitalize distressed areas. Projects like Mill Creek Farm are solely funded by federal grants and volunteer groups from local universities and agencies. Grants for education initiatives, rebuilding projects, greening, and art districts are among a few of the many possibilities for federal funding.

#### **Parks and Recreation**

Philadelphia, unlike many other urban United States school districts, has the bonus of a well defined public parks system. Because the city has always maintained an interest in their parks and recreation programs, and has implemented a number of education and recreation cooperative programs, there are stepping-stones for environmental education expansion. The mixture of private and public funding to create recreation programs which were integrated with public schools helped to achieve a fairly stable base for program expansion and improvement.

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### **Notes and Citations**

- 2 Whyte, Barry. "Kids Tech University: Shaping the Future of Science." Virginia Tech Magazine. (Winter 2009-2010). pg 18
- 3 Whyte (2009-2010) pg 18
- 4 Whyte (2009-2010) pg 18
- 5 Whyte (2009-2010) pg 19
- 6 Federal policy changes are discussed in the next subsection

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Some city school systems have also made efforts to decrease the education and achievement gap between children of low-income and children of high-income (specifically in the area of additional resources). Environmental Education Centers, interactions with public park systems, and cooperation with higher education have allowed public primary schools to expand their outdoor resources to include a variety of programs. Philadelphia has a long standing history of this type of cooperation. While there is still a disparity between schools (due to access to resources and funding) programs such as these are lessening the academic burden that these schools and children face. Philadelphia's reactionary approach has improved the disparity, but still has room for improvement.

The Virginia Bioinformatics Institute has been working in conjunction with the Virginia Cooperative Extensions 4-H Youth Development Program to develop a U.S. similar to a German project which has proved beneficial for child education in Science.<sup>2</sup> This program is called Kids Tech University (or KTU) and is focused on teaching children between 9 and 12 science fundamentals which are often neglected in public school curriculum.<sup>3</sup> Specifically, this program offers lectures, hands-on activities, and online components for children enrolled<sup>4</sup> in addition to training and equitation of Continuing Education Units for teacher's professional development.<sup>5</sup>

Changes in parks and recreation programs to improve environmental equity is a multi-faceted approach which requires cooperation between multiple agencies and constituencies. Rather than a piecemeal approach, improving access to parks and recreation as well as improving cooperation between higher education and public facilities requires both neighborhood and municipality involvement.

#### Social and Educational Equity

There are three areas where social and educational equity can be addressed in policy creation: school spending, school funding, and achievement. School spending can be addressed by providing additional resources to schools which have higher security and special education spending needs. Changes in school funding should take a number of different approaches. Changes on the federal level are needed as well as changes on the local level.<sup>6</sup> Individual municipalities can assist disadvantaged schools in the creation of additional funding by encouraging schools to "think outside the funding box" and to experiment with funding opportunities. School fund-raisers such as cookie sales, t-shirt sales, spirit days, car washes, box-tops-for-education, and wrapping paper sales are but a few fund raising options. In addition, school events that outreach to the community can

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## **Notes and Citations**

7 Kahn (2001) pg 225

8 Kahn 2001, 213-214

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encourage additional donations to the school. "Donationsuggested" events such as dances, arts and crafts nights, reading days, music nights, and club meetings can bring parents and community members to the school.

#### Achievement

Changes in student achievement can also take a variety of approaches. It is the combination of these programs and policies which will create noticeable change to low-income student achievement. Changes in how schools teach and how children learn are also solutions to mitigating the disadvantages faced by low-income minority schools compared to higher-income mostly white schools. Kahn suggests strategies for improvement in education:<sup>7</sup>

- Teach according to Constructivist Theory: This type of education relies on transformation of knowledge as opposed to the replacement of incorrect knowledge. In this way, teachers build upon what children already know and how children already understand concepts in order to make connections to new knowledge. Constructivist Theory relies on children exploring and understanding concepts with guidance by teachers through their own experimentation. This allows children to find their own path to knowledge instead of being lead through teacher-constructed knowledge.<sup>8</sup>
- Teacher-created curriculum: By allowing teachers to individually create curriculum, based off standards set locally, by state, or federally, teachers can grow and develop lessons based on the strengths and weaknesses of their entire class or of individual children. This allows teachers the flexibility to teach children based on their own strengths and the interests of the class.
- Rely on community interests and values: Different communities have different educational interests. Communities with high populations of African Americans students may have interests different than communities with high populations of white students. For this reason, understanding the surrounding community interests can play a pivotal role in creating curriculum which encourages public participation in learning. If a community is largely agrarian than teaching children about the importance of soil management may be of interest. Similarly, if a community is largely technology based, teaching children computer science skills may be more viable.
- Build on student interests and values: Students have different interests. Boys and girls interests may vary. Interests by age may vary. Building on student interests means understanding that one child may have no interest in a particular topic while another child may excel in that topic. While students need to learn about a

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broad range of topics, specific learning should focus on the interests of a particular child.

- School recognition and fund-creation: Schools which excel in certain areas (such as music, art, a particular sport, or a club) can advertise those interests to the community. This will entice students with similar interests to attend that school, and encourage families to move into the district. In addition, school created funding (such as the topic addressed earlier) can be used to offset additional financial needs.
- Small consistent changes: Schools and school districts need to be proud of small accomplishments and build upon the strengths of the school and student body. Giant leaps in achievement cannot be expected every year, but smaller accomplishments should be commended. Small changes such as mulching of a flower bed or the purchasing of school computers can be considered movement in the right direction.

Education can also be helped by policies which support parents and community members around public schools. Policy implications for community members include the following:

- Financial aid to low-income students: Many communities offer academic support to failing students through cooperative extension programs. Students of low-income families often cannot utilize these programs due to financial constraints. One way to mitigate this is to allow for sponsorships or scholarships for children of poor families. Asking middle and higher income participants for donations is one way to do this.
- Child care for parents enrolled in higher education: To encourage adults to enroll in higher education provide child care services during classes. This allows parents the opportunity to further their own education and improve their earnings and employment potential without the added financial and time burden of finding child care.
- Head Start and public pre-school programs: Preprimary school learning has a significant impact on learning that happens in school. Children who do not have adequate pre-school learning often have a difficult time catching up to peers who do have adequate pre-school learning. Head Start and public pre-school programs can give disadvantaged children the extra boost needed to start kindergarten on an equal footing with other children. These programs typically cater to lower-income, minority, English-as-a-second-language, and disabled students.

To encourage the development of environmental education approaches used for increased access to parks and recreation programs and facilities is not enough to encourage environmental education. Below are suggestions for developing environmental education programs:

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- Integration in public school curriculum: Environmental education can be integrated into public school curriculum by expanding science classes to include lessons life sciences, local flora and fauna, and field trips to locally important ecological sites. Children can use science class to grow plants, learn about life-cycles, explore weather patterns, and interact with animal life.
- Creation of environmental education centers in local parks: Nature centers located in local parks can offer children access to environmental education outside of the regular school day. These centers can illustrate important ecological aspects of the park in which they are located and if staffed with knowledgeable instructors can offer lectures and tours.

#### **Education and Environment Policy**

There are two areas where federal education policies can be improved: funding resources and utilization of existing infrastructure. Funding opportunities are highly limited and rely on changes in federal legislation on education which allocates funds. Certainly policies such as The No Child Left Behind Act of 2001 should be amended to better account for the growing disparities between higher-income white students and lower-income mostly black students.

Standardized tests are developed on a state-by-state basis, meaning that state standards vary. In the case of Philadelphia and its metropolitan region this is very important. The suburbs of Philadelphia lay in two different states: Pennsylvania and New Jersey. Because standardized tests vary, there could be a noticeable difference in curriculum for children who live within the city in the state of Pennsylvania, and those that live in the suburbs that fall under New Jersey jurisdiction. This can be mitigated through the creation of federal standards which outline the minimum levels of learning for each grade and for each standardized test, and therefore would greatly level the playing field between schools in different states.

Another way to mitigate funding downfalls in federal policy is to create alternative options for funding for schools which continually fail standardized tests. Instead of linking funding to generalized test scores (passing or failing), funding can be linked to individual student improvement within those schools. Utilization of existing infrastructure is also critical. Schools in need of additional resources should use the federal programs on environmental education and primary and secondary education which have already been established in order to increase funding and increase opportunities for curriculum expansion.

Ashley Parsons	Chapter 5: Policy, Education and Program Guideline		
Guideline	Definition	Examples	
People-Focused	Increase loans to low-income home-		
Policy	buyers so that renters can move out of		
	rental districts and into middle-income		
	districts		
Place-Focused Policy	Provide incentives or requirements for		
	middle-income neighborhoods to offer	development permits,	
	affordable housing options to attract	through developer tax	
	low-income residents	incentives	
	Programs to create aesthetic changes in	l	
	low-income neighborhoods to	street greening,	
	encourage middle-income residents to	demolition of abandoned	
	purchase homes	homes, community	
		building improvements,	
		vacant lot greening, community gardens,	
		murals, farmers markets	
Indirect Policy	Addresses problems caused by	Car-share programs,	
	segregation instead of addressing	public transit, frequent-	
	causes (specifically through increased	rider programs	
	mobility)		
Adult Education	Targets adults who didn't graduate high	1 0 , 0	
Programs	school or those who need additional	school, online classes,	
	training and job-skills	financial wellness	
		seminars	
Industrial and	Provides incentives to businesses to	tax incentives,	
Commercial	reallocate into areas near low-income	employment incentives,	
Clustering	workers residence	property benefits	
Additional Funding	Increased funding opportunities for un-	Municipality	
for Revitalization	revitalized areas and low-income	cooperation, community	
	districts	service projects, private	
		investment, tax funds,	
		federal grants	
Restructuring Federal	Creating over-laps in policies to	Changes in standardized	
Education Policy	address issues holistically instead of in	testing, changes in	
	a piece-meal way	allocation of federal	
		funding, opportunities for	
		failing schools, options	
		for schools with special	
		needs	

Figure 5.1: Guidelines with their definition and examples

Ashley Parsons	Chapter 5: Policy, Education and Program Guidelines				
Guideline	Definition	Examples			
School Funding	Individual Schools or districts can	Fund-raisers, box-tops-			
Changes	implement fund-raisers to increase	for-education, e-learning,			
	monetary resources for their schools	community events			
Changes in Teaching and Learning	Changes in how teachers develop curriculum based on students' needs and previous learning	Constructivist theory, teacher-created curriculum, reliance on community interests, build on student interests, school recognition, small consistent changes			
Community	Policies which support parents and	Financial aid, child care,			
Supported Education	community members	head-start and preschools			
Utilize Existing	Use of existing facilities to assist in	Cooperation between			
Infrastructure	Environmental Education curriculum	schools and Parks and			
	expansion and outdoor learning and	Recreation Departments			
	play opportunities				
Cooperative	Use of existing resources or potential	Environmental Education			
Programs with	resources to expand opportunities for	Centers and higher-			
Higher Education	Environmental Education	education facilities			

Figure 5.1 (continued): Guidelines with their definition and examples

Ashley Parsons  Literature  Review Chapter	Section	Chapter 5: Policy, Education, Guideline	Implementation Scale
Urban Development	Segregation	People-focused policy	Federal
		Place-focused policy	District/ Neighborhood
		Industrial and commercial clustering	City-wide
	Revitalization	Place-focused policy	District/ Neighborhood
		Additional Funding	Federal/ City- wide/ District/ Neighborhood
Parks and Recreation		Utilize Existing Infrastructure	City-wide/ District/
		Cooperative Programs with Higher Education	Neighborhood State/ City-wide/ District
Social and Educational Equity	School Spending		Federal/ City- wide/ District
	School Funding	Re-structuring Federal Policies	Federal/ State
		Local Funding Changes	District/ Neighborhood/ Individual
	Achievement	Changes in Teaching and Learning	State/ City-wide/ District/ Neighborhood/ Individual
		Community Supported Education	District/ Neighborhood/ Individual
Education and Environment Policy	Federal Policy	Re-structuring Federal Policies	Federal/ State
		Utilize Existing Infrastructure	City-wide/ District/ Neighborhood

Figure 5.2: Guidelines and their relationship to Literature Review topics

## **Thesis Conclusion**

Our environment is crumbling; peak oil, ozone depletion, over population, pandemics, and ocean warming are but a few of our global crises. As our resources become scarcer, our pockets become emptier and our prospects become dimmer. In the coming decade the world will find itself faced with a major dilemma: how can we not only survive, but how can we thrive on a shrinking planet? The future here looks bleak, but there is light at the end of our environmental tunnel. Our children offer hope; a means to start over; a reason to find a solution. I've heard it said that "children are our future." If this is indeed true, then we need to recognize the importance of preserving and protecting our children. Preserving their innocence; protecting their experience. Children are our most precious, our most vital, and our most delicate resource.

It has been the debate within the scholarship of many disciplines the effect that our growing dependence on technology has had on our children and as a direct consequence our shrinking relationship with the natural world. Children feel the consequences of this loss most deeply. My parents are always telling my sisters and I stories about "when I was young..." or "back when..." that seem to always directly link childhood play with nature. Even I have those stories to share with my daughter: the time my sisters and I made mud pies in a clogged drainage ditch near my childhood home; the time my best friend and I dug tunnels under the snow and pretended we were on expeditions in the arctic; the time it rained for days and we went swimming in the culvert behind my dad's house; and the time we found a rattlesnake in a river in West Virginia. My parents always emphasized the importance of spending time outside: camping, hiking, nature walks, picking bark off trees, admiring the beauty of the changing leaves, feeling the freezing cold on our fingers in the winter- it all sounds now like the subject of fairy tales; a happy childhood which could be directly linked with experiences outdoors.

Inner-city and minority children face this disconnection most deeply. Inequalities in opportunities afforded by segregation and green-infrastructure make low-income minority children less likely to have experiences outdoors which will encourage them to be environmentally conscious adults. In addition to this, educational inequalities decrease the amount of environmental education low-income schools can offer to students. This is a doubling disadvantage for low-income children. Some urban areas have made efforts to greaten the opportunities for low-income children and schools to utilize existing green infrastructure. Philadelphia is a wonderful

## **Notes and Citations**

- 1 "William Penn Plans the City" (2009)
- 2 "William Penn" (2009)
- 3 Davis and Haller (1973) pg 17
- 4 Davis and Haller (1973) pg 15
- 5 Davis and Haller (1973); pg 151 Warner (1968) pg 9
- 6 Davis and Haller (1973) pg 114
- 7 Warner (1968) pg 81
- 8 Warner (1968) pg 99

example of these efforts.

The historic interplay between industry and diversity and between public and private, places Philadelphia as a case study with significant insight into the problems facing other United States metropolitan areas. Philadelphia's diverse population illustrates how race and income segregation affect poor populations public services, specifically housing, employment and education.

Philadelphia was meant to be a prosperous and utopian vision of green country living. William Penn's original vision for the "City of Brotherly Love" was social harmony and freedom from religious persecution. Penn's grid system was designed to allow all members of the colonial town enough property to allow for estate-like manors and ample green space. Unfortunately, Penn's dream for equality did not translate well. By the eighteenth century elite homes were scattered throughout the center city and poor housing littered the outskirts. Even through this geographic separation, poor residents interacted with elitists economically and socially due primarily to their close proximity and the easy walkability of the small colonial town.

By the middle of the eighteenth century subdivision of lots led to high density and the building of poor housing in alleyways behind affluent homes. This dense development coupled with class conflicts between rich and poor lead to mistrust and fear.<sup>4</sup> Much of the extremely poor population was left to live in deteriorating slums on the boarder of the city.<sup>5</sup> tensions, and the disadvantages faced by lower-income black children in public schools. An all-inclusive approach must be taken to both improve the environmental education opportunities for inner-city children but must also address the underlying inequalities that these children face. Very few public services were afforded to the poor population.

The nineteenth century brought the beginnings of industrialization and with it the clustering of people of different professions into neighborhoods. High crime and deteriorating living conditions in the Southern part of the city which housed a large population of poor blacks increased the amount of fear of the elite of the poor and especially poor blacks. This fear served to further increase segregation by both income and race. 6 Unfortunately, schools, police stations, fire stations, and public parks were allocated on a piecemeal basis creating a largely non-proportional system of services. Reforms of the nineteenth century lead to the cooperation between private and public agencies in the funding of programs and projects.<sup>7</sup> This period marked the beginning of a long-lasting public and private partnership in funding publicly needed projects, most specifically parks and schools.8

## **Notes and Citations**

- 9 Warner (1968) pg 172
- 10 Warner (1968) pg 197
- 11 Warner (1968) pg 177
- 12 Warner (1968) pg 208-209
- 13 Warner (1968) pg 218
- 14 Adams et al (1991) pg 75
- 15 Adams et al (1991) pg 87
- 16 Goode and Schneider (1994) pg 4

With the turning of the twentieth century a new middle class emerged. This new class assisted in creating a housing shift which has had significant implications for the city. Further industrialization and specialized job creation propelled suburbanization. Middle and higherincome Philadelphians began to move out of the innercity and into suburban neighborhoods. Poor populations could not afford to move into the suburbs with the middle and higher-income residents because they could not afford the rent and costs of newer housing. This created districts of high poverty in the areas around downtown and central city and with these districts came high levels of segregation by income and race.

Immigrants, blacks, and people of low-skill or income became more clustered in areas of cheap housing while skilled workers and white populations moved to the outer districts of the city. The extremely specialized districts in the Northeast, South, and Western parts of the city not only segregated classes, racial and ethnic groups, but also created clusters of industrial activities. The secretary special control of the city not only segregated classes, racial and ethnic groups, but also created clusters of industrial activities.

One of the primary concerns in the nineteenth century was the allocation of cheap services to all neighborhoods in the city. Much like allocation in earlier centuries, twentieth century services were often disproportionate to need and left many neighborhoods without essential services. One of the few progressive moves in the early twentieth century was the development of the Board of Education in 1905 and the centralized management of city schools in all districts. <sup>13</sup>

The trends of early development, housing segregation, and industrial expansion are important to understand because they set the stage for current conditions within the city. While the early twentieth century was marked by the ghettoization of Southern Philadelphia, the mid-to-late twentieth century is marked by the development of a new black community following World War II. A significant portion of new blacks moved into what was soon to become the largest ghettoized area in the city: West Philadelphia.<sup>14</sup> This new black population was moving into housing adjacent to the central city at the same time that middle class and employment opportunities were moving out into the suburbs. Outflows of middle-class population coupled with disinvestment from both private and public sectors created a cycle of abandonment in declining areas and pressure for services in those areas which saw growth. This trend created almost unlivable neighborhoods for the poorest populations in the city.15

Philadelphia is still a largely segregated city. <sup>16</sup> While the city is officially integrated and large portions of the population live, work, and play together in shared community spaces, there is still a significant portion of

## **Notes and Citations**

- 17 Adams et al (1991) pg 9
- 18 Adams et al (2008) pg 31
- 19 Adams et al (1991) pg 48
- 20 Adams et al (2008) pg 86
- 21 Goode and Schneider (1994) pg 43
- 22 Adams et al (1991) pg 27

highly segregated neighborhoods. The concentration patterns of housing have been largely consistent until recently: poor blacks live in the abandoned and neglected housing of the mostly white middle-class. Poor blacks generally have lived in the southern part of the city in the district of Southwark, poor whites and immigrants have largely lived in the north east part of the city in the area of Northern Liberties, and more recently new poor black immigrants have lived in West Philadelphia; meanwhile, the middle and upper-class white population has become increasingly suburbanized.<sup>17</sup>

Poor schools, degraded housing, poverty, crime, and unemployment are a few of the barriers that face the residents of inner-city Philadelphia. <sup>18</sup> As a result of the inability to afford large commuting costs to retain employment, the movement of jobs into the suburbs and away from the city is increasing the disparity between the incomes of the largely white suburban middle class and the mostly black and low-income inner-city families. <sup>19</sup>

Revitalization within the city center and some of the neighboring districts has aimed at creating economic growth and drawing middle and high-income residents back into the heart of the city. Unfortunately this causes a lot of residential displacement. Low-income families face the brunt of displacement. <sup>20</sup> In essence, the revitalization has lead not only to the increase in value and investment in the immediate downtown district and adjacent university, Society Hills, and Northern Liberties areas, but it has also seen a downturn in value and investment in the areas which have not seen revitalization but have acted as haven for those misplaced.

The disparities between suburban middle and upper-class mostly white districts and inner-city poor and mostly black districts is continuing to be a problem. The degrading condition of much of the stock of low-income housing combined with decreasing opportunities for employment within the city and an education system which fails to keep up with the changing needs of employers has created disparities between rich white and poor black populations in the metropolitan region. Housing, family status, employment, and mobility inequalities all affect these disparities. Poor black populations are continually pushed out of their traditional neighborhoods into more crowed under-supported districts as a result of revitalization.<sup>21</sup> Many of Philadelphia's inner-city neighborhoods have simply been separated from employment and education opportunities which are afforded to most suburban neighborhoods.<sup>22</sup>

One of the few mitigating factors between racial and class conflicts is Philadelphia's public parks and recreation programs. William Penn's original plan for the

## **Notes and Citations**

- 23 Crawford (1959) pg 132
- 24 Crawford (1959) pg 134
- 25 Crawford (1959) pg 135
- 26 Johnson (2004)
- 27 Adams et al (2008)
- 28 Kaplan (2009)

city called for shared green spaces. Policy and funding for public open space has had a significant impact on the daily opportunities of lower-class and minority populations, especially children. City reformers considered the best policy to avoid crime was prevention; playgrounds were one of the possible prevention methods.<sup>23</sup> This lead to the creation of a city-wide Recreation Department which worked under the assumption that good neighborhoods depended on public green spaces such as playgrounds, community centers, and playfields.<sup>24</sup> Programs were developed with schools within each district to facilitate a cooperation between recreation and education.<sup>25</sup>

Class and race play a significant part in how and where people choose, or are forced due to economic pressures, to live. There is a substantial number of low-income districts clustered around the inner-city, and a large number of higher-income neighborhoods in the suburbs. Because public education is allocated by neighborhoods district, children within one area tend to go to school together. In other words, children who all live in a low-income housing district will typically go to school in one location, while children in a higher income district will likely go to a different school.

Continuing inequality in education for low-income black students is due to a number of reasons. Economic hardships experienced by many inner-city schools leads to poor funding for resources which are needed to raise educational attainment levels. Housing segregation also plays a role due to the division of public school districts which often traps low-income children at low-performing schools. And also neighborhood quality and demographics of the community population play a significant role in inequitable education.

These inequalities are especially pronounced which it comes to education which is outside the range of the standardized testing used to determine federal funding. Schools which perform below standards must use already scarce resources to improve scores while schools that have achieved high-enough scoring can use additional funds on extra curriculum, such as environmental education; thereby creating an even greater gap between students learning at different school.

Traditional segregation and different educational opportunities for the rich has played a significant role in the current trends in segregation and disbursement of educational opportunities. Segregation has had lasting effects on the distribution of black students in public schools and have created entire districts which are predominately black.

Not only does neighborhood demographics play a roll in education, but funding plays a significant role in

## **Notes and Citations**

- 29 Kaplan (2009) pg 13
- 30 Active Living Research (2007) pg 3
- 31 Kaplan (2009) pg 15
- 32 Bauer (1955) pg 25
- 33 Adams et al (2008) pg 121
- 34 Goode and Schneider (1994) pg 205

the learning that children have access to at school. Poor children typically have poorer learning due to lack of adequate funding for textbooks and supplies in addition to inadequate funding for teacher's salaries and facility maintenance.<sup>29</sup> In addition, low-income students often have less Physical Education due to lack of funds, teacher training, and increased pushing for academic learning over physical activity. 30 Schools with high rates of poverty are also less likely to offer children recess time.<sup>31</sup> Unfortunately, many public schools in these areas are also unable to afford play areas which adequately address the need for childhood outdoor play. Not only does this degraded environment effect children's opportunities for outdoor recreation and play learning, but it also effects schools within the district's ability to provide children with outdoor recreation and hands on learning outside.

School integration depends heavily on neighborhood integration.<sup>32</sup> In this case, housing policy relates directly to school diversity. Unfortunately for low-income families, affordable housing is usually coupled with poor schools.<sup>33</sup> Limited mobility caused by economic disadvantages and racial segregation often inhibits low-income and minority families from attending better public schools.<sup>34</sup> This essentially traps low-income children in schools which offer comparatively less physical activity time as well as poorer learning.

Federal policies such as The No Child Left Behind Act of 2001 aim at mitigating gaps between middle and higher-income schools and poor, mostly African American schools. The primary problem with federal policy on primary and secondary education is the lack of sufficient funding to provide additional resources to schools with predominantly low-income students. While funding is provided under these policies, the federal budget isn't sufficient to cover all students in need. In addition, federal education policy on the environment offers little additional help towards providing equal education opportunities. Policies such as the Environmental Education Act of 1970 and the Goals 2000: Educate America Act draw attention to the need for Environmental Education and lessoning the achievement gap between income groups, but do little to effectively distribute additional support to those schools and children whom they seek to help. This lack of additional funding furthers the disparity for students and creates a cycle of failure which is often difficult to overcome.

One of the most effective ways of encouraging environmental education is through the utilization of existing infrastructure and programs. Philadelphia is a perfect example of setting a good base for such program expansions. The city's history of caring for public green space and cooperation between recreation and education

positions the city well. Environmental education can either be integrated into existing science curriculum or new programs can be developed off school sites.

Through the implementation of specific policy guidelines the racial and class created educational disadvantages experienced by Philadelphian inner-city children can be mitigated. Philadelphia can serve as both an example of success and an example of failure. The creation of a successful public green space and childlandscape friendly city, as well as the integration of public and private money to fund public services places Philadelphia in a prime position to set an example to other U.S. cities. These successes however are stifled by continuing issues of housing segregation, racial and class tensions, and the disadvantages faced by lower-income black children in public schools. An all-inclusive approach must be taken to both improve the environmental education opportunities for inner-city children but must also address the underlying inequalities that these children face.

Children are our future. Equity in social, educational and environmental opportunities is critical in allowing children in impoverished urban areas the ability to contribute to the larger community. How can we expect these children to be our future, when their future looks so bleak in comparison to other children? The greater equity we can give these children the higher our chances as a society to fight environmental problems and create a more sustainable and promising future.

## **Annotated Bibliography**

Adams, Carolyn et al. *Philadelphia: Neighborhoods, Division, and Conflict in a Postindustrial City.* Comparative American Cities Series. Temple University Press: Philadelphia (1991)

Adams et al explores the economic and social dynamics between Philadelphia's core city and the larger metropolitan area. Primarily they find that both educational, housing, and employment opportunities have shifted out of the core city and into the suburban areas creating a gap between residents in the inner-city and those living in the suburbs.

Adams, Carolyn et al. Restructuring the Philadelphia Region: Metropolitan Divisions and Inequality. Temple University Press: Philadelphia. (2008)

Adams et al examines the trends of the 1990s metropolitan region of Philadelphia in terms of the "growing differentiation among its many communities" and the "structure of opportunity for residents" (10). Particularly, there is a focus on the inequalities of opportunity for low-income communities. There are two policy offerings: first, an increase in investment in disadvantaged neighborhoods and second, assisting in the creation of greater mobility for disadvantaged residents to seek employment opportunities at the metropolitan scale (11).

Baker, Margaret. "Update on the National Environmental Education Act of 1990." AGI Government Affairs. (2000)

Baker outlines the transition from the Environmental Education Act of 1970 to the National Environmental Education Act of 1990. In addition, she provides information on the current position of the act, progress and implementation of the act, and potential amendments to the act being looked at by congressional bodies.

Bauer, Catherine. "Housing Policy and the Educational System." *Annals of the American Academy of Political and Social Science*. (1955) pg 17-27

Catherine Bauer's article "Housing Policy and the Educational System" compares the development patterns of early community development with current development trends. Bauer notes that until the early-20th century construction of any are tended to be on an "piecemeal basis over a period of years" which allowed for schools and community support facilities to be developed in an as-needed basis (17). Since then, development has taken on a larger scale forcing community planners to anticipate and pre-establish support facilities before actual development even occurs (18). The results of this shift in development means that developers and planners must also act as education, utility and recreation experts- anticipating any and all future needs near and within a development; this can be devastating if the needs are not adequately anticipated. More specifically, there are two results to this type of development which need addressing within the context of this research: first, school programming "must be integrated with over-all community planning well in advance of actual housing development" (22); and secondly, this type of development "tends to promote a much greater degree of social segregation at the neighborhood level by income, age, and racial groups than has been traditional in the United States" (22). These two elements have major racial and educational implications. Bauer notes that "since school structure and the educational system are directly affected by neighborhood social structure" (22) the resulting school system to become segregated according to the demographic of the neighborhood it resides within; creating mostly low-income black (or Hispanic) pockets which in-turn creates a racial ghetto (23). To Bauer the real problem here lies with the schools duty "to train children to live successfully in a highly variable world" (24). School integration depends heavily on neighborhood integration (25). In this case, housing policy relates directly to school diversity (25).

Carey, Kevin. "Education Funding and Low-Income Children: A Review of Current Research." Center on Budget and Policy Priorities: Washington DC. (2002)

Carey examines student achievement in the context of funding opportunities and socioeconomic status of students. He suggests that low-income children often have lower test scores than their peers, lower graduation rates, and college enrollment (1). Specifically, he points to funding levels as a primary source of the difference in achievement in low-income children and higher-income children (1). Schools with a large portion of low-income students need additional funds targeted at specific educational strategies to supply resources to students in need of additional academic help (3).

Carroll, Winchell S. "Washington Square." Director of the Friends of Independence. National Historical Park, President of Washington-Rochambeau Route in the Commonwealth of Pennsylvania. Site visit: Washington Square, ASLA National Convention. October 3, (2008)

Site visit included a tour and brief discussion of the history and planning of Washington Square. Carroll emphasized the importance of the National Historic Parks role in redesigning the park to commemorate the use of the park as a burial ground during the Revolutionary War.

Cooperman, Emily PhD Architectural Historian. "William Penn's Squares: Town Planning History." Lecture: ASLA National Convention. October 3, (2008)

This lecture at the American Society of Landscape Architects National Convention was based primarily on giving the general history of William Penn's early planning of Philadelphia. A specific importance was placed on the integration of green squares in the urban grid system.

Crawford, Robert W. "The Philadelphia Experience." *Annals of the American Academy of Political and Social Sciences* (1959)

Crawford outlines the evolution of the parks and recreation department and their projects from the nineteenth through twenty-first centuries. In the summer of 1894 the Playground Recreation Association was formed as a private society to commission the building and supervision of playgrounds throughout what was then the heart of Philadelphia- now the downtown historic district. In 1911, this Playground Association transformed with the help of federal legislation into the Philadelphia Department of Recreation. Through its inception until 1919, the Department of Recreation established many new playgrounds through the appropriation of city property. In 1919, the Department of Recreation became the Bureau of Recreation and reported directly to the Department of Welfare where it remained until 1952. In 1952, the Recreation Department was established as an independent entity reporting to the commissioner himself. In specific the Recreation Department was chartered with determining new locations for recreation opportunities, preserving, managing, and operating the city's historical sites, and form a comprehensive plan for recreation. Not only did the Recreation Department create a comprehensive set of recreation goals and programs, they also established programs in schools which corroborated access to public parks within a school district

In terms of the interaction between recreation and public education, the Recreation Department helped to initiate a method of public facility funding which has aided in making Philadelphia one of the most progressive cities in funding for both education and public green spaces: the mixture of private and public funds to create a "community dollar." Specifically, the concept of the "community dollar" blended the public tax funds with voluntary private funds into one, making a substantially larger amount available for project funding. The mixture of private and public funding to create recreation programs which were integrated with public schools helped to achieve a fairly stable base for program expansion and improvement.

Daly, John Edward and Weinberg, Allen. "Philadelphia- Map Showing Districts, Boroughs & Townships Incorporated in Consolidation of Philadelphia in 1854." *Genealogy of Philadelphia County Subdivisions: 2nd Edition.* Philadelphia Department of Records (1966)

Daly's map shows the districts, boroughs and townships of Philadelphia in 1854. Specifically, this map illustrates the districts at the center of the city (City of Philadelphia, Southwark District, Northern Liberties District, and West Philadelphia District) which are emphasized as being the primary districts where impoverished and black Philadelphians have historically lived.

Dasgupta, Kalyan. "Rittenhouse Square Park." Project for Public Spaces PPS (2009) <a href="http://www.pps.org/great\_public\_spaces/one?public\_place\_id=393">http://www.pps.org/great\_public\_spaces/one?public\_place\_id=393</a>>

This online blog is designed by the Project for Public Spaces, a non-profit planning and educational organization aimed at helping communities to preserve their public spaces. Dasgupta discusses the current importance of Rittenhouse Square in terms of residential and commercial access as well as the importance of funding for the park's preservation. Park aesthetic and social meaning are emphasized as positive attributes of Rittenhouse Square while use and activities are displayed as a potential downfall.

ed. Davis, Allen F. and Haller, Mark H. *The Peoples of Philadelphia: A History of Ethnic Groups and Lower-Class Life*, 1790-1940. University of Pennsylvania Press: Philadelphia (1973)

Davis and Haller suggest that an analysis of lower-class life needs examining in Philadelphia (3). They note that racial and class tensions during early development in the city have led to many segregation related problems today (pg 289). Because poor blacks were the lowest groups socially and economically historically they have faced housing, employment, and educational disadvantages (282). There were three main themes which marked the period of growth between 1790 and 1940 in Philadelphia. The first was the tensions between crime and racial conflicts with the larger societal search for social order (ix-x). Second, racial and ethnic conflicts were a constant struggle for new residents within the city. And third, neighborhoods created a since of community which were both diverse and often segregated (x). Poor blacks and Italians were the lowest groups both socially and economically within the city social hierarchy. They were concentrated in the slum areas of Southwark and have historically had the least educational opportunities.

Dorsey, Bruce. *Reforming Men and Women: Gender in the Antebellum City*. Cornell University Press: London. (2002)

Dorsey examines the shared and separate experience of men and women in the context of understanding sexual significance in search of a holistic gender history. This is done through a religious reform filter, which illustrates a rare instance where there is an intersection between men and women social and political views. Specifically, Dorsey aims to accomplish this task by looking at definitions of manhood/womanhood, women's new public arenas, and the problems faced by society which influenced reform. The areas which are focused on are poverty, drink, slavery, and Irish Catholic immigration. Choosing Philadelphia as the epitome of Northern thought, Dorsey highlights the juxtaposition of male and female, working-class and middle-class, and white and black.

"Fact Sheet: Parents' Low Education Leads to Low Income, Despite Full-Time Employment." *National Center for Children in Poverty.* Columbia University, Mailman School of Public Health: New York. (2006)

This research shows that high educational achievement is associated with higher income

levels and parental higher education levels. Specifically this study suggests three policy changes to mitigate the disadvantages of low income: increase financial aid, assist low-income parents who attend higher education, and encourage low-income children to attend Head Start programs.

Fadden, William. "Philadelphia: A Plan of the City and Environs of Philadelphia." Surveyed by N. Scull and G. Heap. London (1777)

Fadden's map of Philadelphia in 1777 shows the extent of development along William Penn's original design. In addition, the map pin-points settlements outside of the colonial city and shows the expansion of the city into the Northern Liberties and Southwark shipping districts.

Franklin, Vincent P. The Education of Black Philadelphia: The Social and Educational History of a Minority Community, 1900-1950. University of Pennsylvania Press (1979)

Franklin emphasized that public education in Philadelphia has historically not been equal for blacks and whites. The book outlines the history of education for blacks in the city and places and emphasis on the transition from segregation to integration. Franklin notes the resistance of many black and white families during integration and stresses the use of neighborhood segregation to maintain mostly segregated school districts.

Goode, Judith and Schneider, Jo Anne. *Reshaping Ethnic and Racial Relations in Philadelphia: Immigrants in a Divided City.* Temple University Press: Philadel¬phia (1994)

Goode and Schneider explore the dynamics of racial, social and economic diversity come together to both create separations and connections between communities and neighborhoods in Philadelphia. They find that the degree of segregation within the city creates neighborhood districts which have varying resources and opportunities for residents. Often it is the poor black populations which have the fewest resources and economic opportunities.

"Great Central Fair: Philadelphia, Pennsylvania, 1864." (2009) The Library Company of Philadelphia. <a href="http://www.lcpgraphics.org/inventories/sanitaryfair/">http://www.lcpgraphics.org/inventories/sanitaryfair/</a>

This article describes the history of Logan Square's use as the grounds of the United States Sanitary Commission's attempt to supply Union soldiers with medical and sanitary supplies. The article includes images and descriptions of the physical layout of the square as well as references to the physical structures.

"History of Rittenhouse Square..." Friends of Rittenhouse Square. (2009) <a href="http://www.friend-sofrittenhouse.org/about/square-history/">http://www.friend-sofrittenhouse.org/about/square-history/>

This website was designed to give a brief history of Rittenhouse Square as well as emphasize the work of the Friends of Rittenhouse Square to preserve its character. Early planning during the 1600s through the early twentieth century is emphasized as the park transitioned from a field for livestock to use of Rittenhouse Square as a residential public park.

Holmes, Robyn M. and Procaccino, Jill K. "Preschool children's outdoor play area preferences." *Early Childhood Development and Care*. vol 179 no 8. (2009)

Holmes and Procaccino's study included a sample of forty European-American three and four year old children. These children were observed and data was collected based on gender and play space. The primary findings showed that the child's sex had a significant impact on

play space choice. Boys preferred jungle-gyms and swings while girls preferred the sandbox. Holmes and Procaccino suggest that future research should examine children's preferences for mico-spaces.

U.S. Department of Education. "Improving Basic Programs Operated by Local Educational Agencies: Title I, Part A." (IBP) (2010) <a href="http://www2.ed.gov/programs/titleiparta/index.html">http://www2.ed.gov/programs/titleiparta/index.html</a>

This program assists in providing financial assistance to schools with high numbers of impoverished children to aid in mitigating the achievement gap between low-and-high-income schools. Specifically the program creates grants which schools can apply for these grants and must apply the allotted funds to specific failing students improved achievement or to a school-wide system of assistance for failing students. Private schools can also apply for these grants if their population of impoverished children is high enough.

"Independence National Historical Park." Historical Handbook (2010) <a href="http://www.nps.gov/history/online">http://www.nps.gov/history/online</a> books/hh/17/hh17g.htm >

This article describes the changes made to the area around Independence National Historic Park from the early 1800s until its current design. An emphasis is placed on describing the importance of historical structures and events that have taken place in proximity to the park. Early photographs and drawings of the squares which were demolished and turned into the park are also included.

Johnson, Susan Moore et al. "The Support Gap: New Teachers' Early Experiences in High-Income and Low-Income Schools." *Education Policy Analysis Archives* (2004). vol 12 no 61.

Susan Johnson et al discusses the "broad patterns of inequality" between schools of higher-income and lower-income (2). Specifically, the article focuses on the comparative lack of support afforded to teachers in low-income schools which has the ability to have negative effects on the education opportunities and achievement of children in said schools. In addition, teachers at lower-income schools have noted that their curriculum requirements force them to spend great amount of instructional time on standardized test preparation, and less on other academic activities (15). In other words, not only are schools with high low-income populations less likely to receive high quality teachers (due in most part to the lack of support for new teachers) but also are more likely to be "taught to the test" due to curriculum restrictions and academic time constraints.

Kahn, Peter H. Jr. *The Human Relationship with Nature: Development and Culture*. MIT Press: Cambridge, MA. (2001)

Kahn suggests that even the most minimal experience with nature has the ability to impact health and productivity. Biophilia suggests that there is an evolutionary affiliation between people and nature, but there is evidence which suggests that there is also an evolutionary biophobia for some peoples. Developmental theory offers a methodology to understand the development of the human/nature relationship. Children develop understandings based on existing knowledge of other things in order to understand the world and make decisions on how to act accordingly. Children in lower income neighborhoods (specifically black children) are more likely to have inadequate experiences. A constructivist approach to Environmental Education is needed.

Kaplan, George A. "The Poor Pay More-Poverty's High Cost to Health." Robert Wood Johnson Foundation. (2009) pg 1-39

George Kaplan's article suggests that health is "powerfully affected by a range of... factors such as neighborhood safety, work hazards, housing quality, the availability of social and economic supports during times of need, and access to nutritious food, physical activity, quality education, and jobs that pay livable wages" (4). Kaplan's study also suggests that the effects of poverty begin in early life citing that poor children have higher chances of having low birthweights (9), and higher occurrences of asthma (10). Kaplan attributes this partially to the higher occurrence of poor children's degraded environments (13). Not only does this degraded environment effect children's opportunities for outdoor recreation and play learning, but also recent studies have shown that children in impoverished areas between the ages 7 and 12 prefrontal cortex develops differently than those of children with higher family incomes (13). Furthermore, studies have shown that "the longer a child remains in poverty, the poorer is his or her memory function, which involves the same region of the brain- due to the physiological effects of chronic stress over extended periods" (13).

Keller, Bill. Class Matters. Times Books. Henry Holt and Company: New York. (2005)

In general, the majority of respondents across income groups believed that "hard work" was the primary essential way to "get ahead in life", except for the lowest income group (under 30,000) whom said that "education" was the primary needed element (thirty-eight percent education vs thirty-five percent hard work) (20). Comparing where people's income actually lies within the income/education level class chart and their perceived location: more people consider themselves in the "working class" or "bottom fifth" income level and education level then actually are. Most people consider themselves "middle class". People with college degrees considered themselves middle class even if their income ranged in the bottom fifth. Very few considered themselves to be "lower class" or "upper class" seven percent and one percent, while being more likely to call themselves "upper middle" or "working class" (24-25).

Larson, Roy F. "1937 Plan for Redevelopment of Historic Area." Philadelphia City Planning Commission: Pennsylvania (1962)

This map is the original redevelopment plan drawn by Roy F. Larson in 1937 for the historic district now called the Independence National Historic Park. The plan was approved in 1946 and demolition began.

Lew, Alan A. "Philadelphia: A virtual fieldtrip." (2010) <a href="http://www.geog.nau.edu/courses/alew/ggr346/ft/midatlantic/philadelphia/index.html">http://www.geog.nau.edu/courses/alew/ggr346/ft/midatlantic/philadelphia/index.html</a>

Lew describes the early planning history of Philadelphia as well as providing images and descriptions of the city's main historic sites. These include Independence Hal, the Liberty Bell, and Benjamin Franklin's home. In addition, Lew discusses the current revitalization plans and gentrification in the city's historic center.

"Logan Square History." (2009) Wikipedia <a href="http://en.wikipedia.org/wiki/Logan\_Circle\_(Philadelphia)">http://en.wikipedia.org/wiki/Logan\_Circle\_(Philadelphia)</a>

Wikipedia describes the general location and characteristics of the neighborhood surrounding Logan Square as well as its transition from a square to a circle and integration into the Benjamin Franklin Parkway.

"Logan Circle (Logan Square), Philadelphia." A view on cities: Sights & Atrractions in some of the world's greatest cities. (2009) <a href="http://www.aviewoncities.com/philadelphia/logancircle.htm">http://www.aviewoncities.com/philadelphia/logancircle.htm</a>

This article gives a brief description of the main elements in the circle throughout its history. Specifically, the Swann Memorial Fountain's design and integration into the park is discussed. In addition, the use of Logan square as a traffic circle is also discussed in terms of pedestrian access and traffic hazards.

MacLeod, Cynthia. "Independence Mall." Superintendent of Independence Historical National Park. Site Visit: Independence Mall, ASLA National Convention. October 3, (2008)

MacLeod led a site to Independence Mall and led a discussion on the history and current funding for the continuing renovation of the project. She emphasized the importance of the integration of Independence Mall as a National Historic Park as one of the primary reasons the park receives adequate funding for revitalization.

MacLeod, Cynthia. "Washington Square." Superintendent of Independence Historic National Park. Site Visit: Washington Square, ASLA National Convention. October 3, (2008)

MacLeod led a site visit to Washington Square and led a discussion of the primary elements within the park. She emphasized the importance of Washington Square as one of the earliest public parks in the city used for animal grazing and burial sites during the city's yellow fever epidemics.

Obermayer, Leon J. "For Every Child: The Story of Integration in the Philadelphia Public Schools." The Board of Public Education. US Department of Health, Education & Welfare, Office of Education. (1960)

The aim of Philadelphia's public schools in the 1960's was to have equal education for "every child" no matter their income level (1). The Board of Public Education attempted to artificially integrate schools by adjusting district lines, but segregation continued to be a problem. This report points to community changes as the primary cause of segregation in schools and clustering of low-income minority children into specific schools.

Olin, Laurie. "Urban Civic Spaces." Olin Partnership. Site visit: Independence Mall, ASLA National Convention. Philadelphia, PA. October 3, (2008)

Laurie Olin, a well-known Landscape Architect, led a site tour of Independence National Historic Park and the Independence Mall designed by his Landscape Architecture firm in the early twenty-first century. Olin explained the methodology of designing the park based off historic road ways and important historical buildings.

Paris. "Goals 2000: Educate America Act" PL 103-227. A leadership model for planning and implementing change for school-to-work transition. Madison, WI: University of Wisconsin, Center on Education and Work (1994)

Paris describes the major sections of the Goals 2000: Educate America Act. The following are the main emphasized points: all children will start school on equal footing, high school graduation rates will increase, standardized testing in grades 4, 8, and 12 in English, math, science, and history, drug and violence prevention in schools, teachers will be given access to continued education programs, and schools will encourage parents to partner in their children's education. While the act attempted to have these goals met by the year 2000, many of these goals have still not been accomplished in 2011.

"Pennsylvania State History: The Quaker Province, 1681-1776." Pennsylvania Historical and Museum Commission.(2010) <a href="http://www.portal.state.pa.us/portal/server.pt?open=512&objID=4281&&PageID=478727&level=4&css=L4&mode">http://www.portal.state.pa.us/portal/server.pt?open=512&objID=4281&&mode>

The Pennsylvania Historical and Museum Commission outlines the major historical events in the development of Philadelphia from 1681-1776 beginning with William Penn and ending with the Revolutionary War. Specifically the role of Quakers in economics, culture, and politics is emphasized.

"Philadelphia (1898)" Historic Maps of Pennsylvania. PA genealogy.net Resources for the Pennsylvania genealogist. (2011) <a href="http://www.pagenealogy.net/maps%20here.htm">http://www.pagenealogy.net/maps%20here.htm</a>

This map illustrates the development of Philadelphia in 1898. What is specifically important about this map is that it shows the expansion of the city beyond the original plan for the city specifically across the Delaware River into New Jersey and into North and West Philadelphia.

Platt, Anthony. "The Rise of the Child-Saving Movement: A Study in Social Policy and Correctional Reform." *Annals of the American Academy of Political and Social Sciences.* (1968)

The Child-Saving Movement in Philadelphia reflected a romantic and highly conservative program to "impose sanctions on conduct unbecoming of youth" during the end of the nineteenth century and reignited in the mid-1960's (21). Restrictions on where children could gather were considered important to reduce the numbers of teens gathering on street corners. While this movement was focused primarily on the ideas of a social order, deterring undesirable behavior, and maintaining the hierarchical composition of family, it points to the environmental causes for delinquency. While this may seem outside the scope of academic outdoor access policy, the development of this type of movement in Philadelphia sets the stage for future public space programs- especially the social policy which influences socioeconomically disadvantaged groups. As a result of this Child-Saving movement the peoples of Philadelphia began to understand the social disparities and recognize the need for spaces specifically designated for children. The Child-Saving Movement was developed in a time in US history when conservative criticism of the free-spirited family structure of the 1960's reached its peak. Traditional values of family structure were being looked at with increasing intensity by women interested in reinstating the "Republican Motherhood" mentality. Republican Motherhood primarily was a set of beliefs about the roles and purposes of mothers within the family and the public arena during the earlymid 19th century. Primarily, these ideas included women's service to the family and the public as the moral and virtuous examples of the ideal citizen. It was not until the late 1960's that this ideal was re-invigorated by a shift in thinking by many Feminists. The Child-Saving Movement is a direct result of this shift which is set in contrast to the free-love ideas of the hippie movements, and as a result Philadelphians became more aware of the need for separate spaces for children.

Robert Wood Johnson Foundation. "Designing for Active Living Among Children." Active Living Research (2007)

According to the Active Living Research national program under the Robert Wood Johnson Foundation, physical activity levels are a contributing factor in the occurrence of obesity in children (pg 1). According to the U.S. Surgeon General, children should participate in at least 60 minutes of moderate physical activity most days of the week (pg 1). Research shows that children who live in communities which are considered "walkable" and have parks, trails and recreation programs tend to be more physically active than those living in communities with fewer opportunities for outdoor activity (pg 2). One of the most important environments to influence physical activity is schools (pg 3). In 2007, researchers observed K-12 students in the state of California as part of an evaluation of Physical Education courses. This study found that "Low

income and minority students received poorer quality PE due to lack of teacher training, large class sizes and inadequate facilities" (pg 3).

Romenesko, Marilyn. "Philadelphia Green." Pennsylvania Horticultural Society. Lecture: ASLA National Convention. October 3, (2008).

Romenesko discussed the importance of Philadelphia's green spaces in the context of the urban fabric. Her emphasis was placed on the historical significance of these spaces as public use outdoor recreation spaces for people of all income levels and races.

Tanner, H.S. "Map of Philadephia" *The American Traveller; or Guide Through the United States*. New York (1842)

This map illustrates the density of development along the Delaware River side of central Philadelphia during the mid 1800s. Specifically important is the sprawling of this dense development into the Northern Liberties and Southwark districts.

The Elementary and Primary Education Act Amendments of 1968. Public Law 89-313. The Department of Education

This act modified the programs established in The Elementary and Primary Education Act of 1965 by adding additional funding resources to low-income schools and expanding the opportunities for schools to work with handicap students and support bilingual programs.

The Elementary and Primary Education Act of 1965. Public Law 89-313. The Department of Education

The Elementary and Primary Education Act of 1965 authorized the use of federal grants for schools with forty percent or higher low-income families. In addition, this act established areas of other funding and curriculum development for primary and secondary schools.

The Environmental Education Act of 1970. Public Law 101-619. The Department of Education

The Environmental Education Act of 1970 established an Office of Environmental Education to assist in development of Environmental Education curriculum and programs at primary and secondary schools.

"The Fairmount Park System Map." Fairmount Park Commission: City of Philadelphia. (2011)

This map points out the five main large parks (The Fairmount Park System) in Philadelphia as well as the fifty-three smaller neighborhood parks, plazas, farms, and woodland areas. Primarily important in this map is the geographical distribution of these parks which shows fewer parks in the South and West parts of the city.

The National Environmental Education Act of 1990. Public Law 1001-619. Environmental Protection Agency

The National Environmental Education Act of 1990 (NEEA) reenacted some aspects of The Environmental Education Act of 1970 with modifications. Specifically, the placed environmental education in the hands of the Environmental Protection Agency instead of an education agency and made the focus of environmental education on technological science and community awareness instead of earth science and primary school education.

The Improving America's Schools Act of 1994. Public Law 103-382. The Department of Education

The Improving America's Schools Act of 1994 (IASA) reauthorized elements of The Elementary and Secondary Education Act. Specifically, IASA included additional assistance for low-income schools and disadvantaged students and provided provisions for increasing school equity.

NAEP. "The Nations Report Card: Reading 1971-2008, Mathematics 1973-2008." *NAEP 2008: trends in Academic Progress.* National Center for Education Statistics: Institute of Education Services. (2009)

Achievement gaps in both reading and mathematics between white and black students have not significantly changed from 2004 to 2008, but have narrowed significantly since 1971 for reading and 1973 for mathematics; the same is true for white and Hispanic students. In addition, male students tend to score lower then female students.

The No Child Left Behind Act of 2001. Public Law 107-110. The Department of Education

The No Child Left Behind Act of 2001 was developed by the George W. Bush administration to address the issues of public education standards and allocation of federal funding to public schools. This act established a link between state set standardized curriculum, standardized test scores, and federal funds.

Warner, Sam Bass Jr. *The Private City: Philadelphia in Three Periods of its Growth*. University of Pennsylvania Press: Philadelphia (1968) reprint with Introduction 1987

The eighteenth century Colonial Town is marked by subdivision of lots into small homes, concentration of sailors along the southern shore, public administration by committee and a general since of community through close proximity of work and residence and a highly integrated neighborhood (mostly divided by political affiliation not race/ethnicity/class). The nineteenth century Big City began to see development of a larger middle class (through the changing of labor markets and transition from specialized labor to industrialized labor) which utilized public education, the breakdown of overall community ties (through the development of private associations), the development of public schools under the low-cost/high-production methodology, the increasing disparity in educational opportunities between rich and poor, and the increase of racial tensions and crime in neighborhoods dominated by poor minorities. The late nineteenth century and early twentieth century were marked by the creation of an Industrial Metropolis characterized by increasing segregation of ethnic groups, income levels, and races. In addition, the development of public education lead to an increased disparity between education levels for rich (who relied heavily on innovative private schools) and the poor (who relied on public low-cost mass education). At this time, the city was divided into five main districts: the Northeast, the Northwest, West Philadelphia, South Philadelphia, and the Downtown. The Northwest, West, and Downtown were characterized by middle-class citizens who worked in the Downtown and lived in larger and newer row houses. South and Northeast Philadelphia were characterized by heavy industry and predominantly worker housing; the main difference was the abundance of unskilled workers and a ghettoized district within South Philadelphia.

Weiler, Susan. "Logan Square." Olin Partnership. Site Visit: Logan Square, ASLA National Convention. October 3, (2008)

Weiler led a site visit and discussion on the main elements of the current design for Logan Square done by Olin Partnership. She emphasized the use of specific design elements to block

the surrounding traffic from Logan Circle from pedestrians within the park. In addition, there was a brief discussion on the historical importance of the park in the context of the Benjamin Franklin Parkway and the city's public green spaces.

"Welcome to Rittenhouse Square" (2009) <a href="http://www.ushistory.org/districts/rittenhouse/">http://www.ushistory.org/districts/rittenhouse/</a>

This website outlines the history of Rittenhouse Square including a brief history of David Rittenhouse whom the park was named for. In addition, the major changes in the park and surrounding residential areas are outlined.

"William Penn" (2009) <a href="http://www.wikipedia.org/wiki/William-Penn">http://www.wikipedia.org/wiki/William-Penn</a>

Wikipedia outlines the history of William Penn's life from his yearly years in London, England and Ireland, to his search for religious freedoms, and finally to his work planning Philadelphia.

"William Penn Plans the City." (2009) <a href="http://xroads.virginia.edu/~cap/PENN/pnplan.html">http://xroads.virginia.edu/~cap/PENN/pnplan.html</a>
This website provides a brief history of William Penn's process and visions while planning Philadelphia. It also provides a map of Penn's original 1683 plan for the city.

Whyte, Barry. "Kids Tech University: Shaping the Future of Science." *Virginia Tech Magazine*. (Winter 2009-2010). pg 18-19

The Virginia Bioinformatics Institute has been working in conjunction with the Virginia Cooperative Extensions 4-H Youth Development Program to develop a U.S. similar to a German project which has proved beneficial for child education in Science (18). This program is called Kids Tech University (or KTU) and is focused on teaching children between 9 and 12 science fundamentals which is often neglected in public school curriculum (18). Specifically, this program offers lectures, hands-on activities, and online components for children enrolled (18) in addition to training and equitation of Continuing Education Units for teacher's professional development (19).