Planning and Design Strategies for Healthy Living, Parks, and Recreation in the Pottstown Area

PREPARING FOR IMPLEMENTATION: STRATEGIES AND GUIDELINES
PHASE II REPORT 2010

PENNSTATE
COLLEGE OF ARTS AND ARCHITECTURE

PLANNING AND DESIGN STRATEGIES FOR HEALTHY LIVING, PARKS, AND RECREATION IN THE POTTSTOWN AREA

PREPARING FOR IMPLEMENTATION: STRATEGIES AND GUIDELINES

POTTSTOWN PHASE II REPORT 2010

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TABLE OF CONTENTS

PARKS AND RECREATION | INTRODUCTION

PARKS AND RECREATION | PLANNING OBJECTIVES

PARKS AND RECREATION | MODELS FOR PARKS SYSTEMS

SHUYLKILL RIVER CORRIDOR CASE STUDY

PLANNING AND DESIGN CONSIDERATIONS

CONCLUSIONS

LIST OF FIGURES

BUILT ENVIRONMENT

PARKS AND RECREATION | INTRODUCTION

PARKS AND RECREATION | PLANNING OBJECTIVES

PARKS AND RECREATION | MODELS FOR PARKS SYSTEMS

SCHUYLKILL RIVER CORRIDOR CASE STUDY

PLANNING AND DESIGN CONSIDERATIONS

LIST OF TABLES

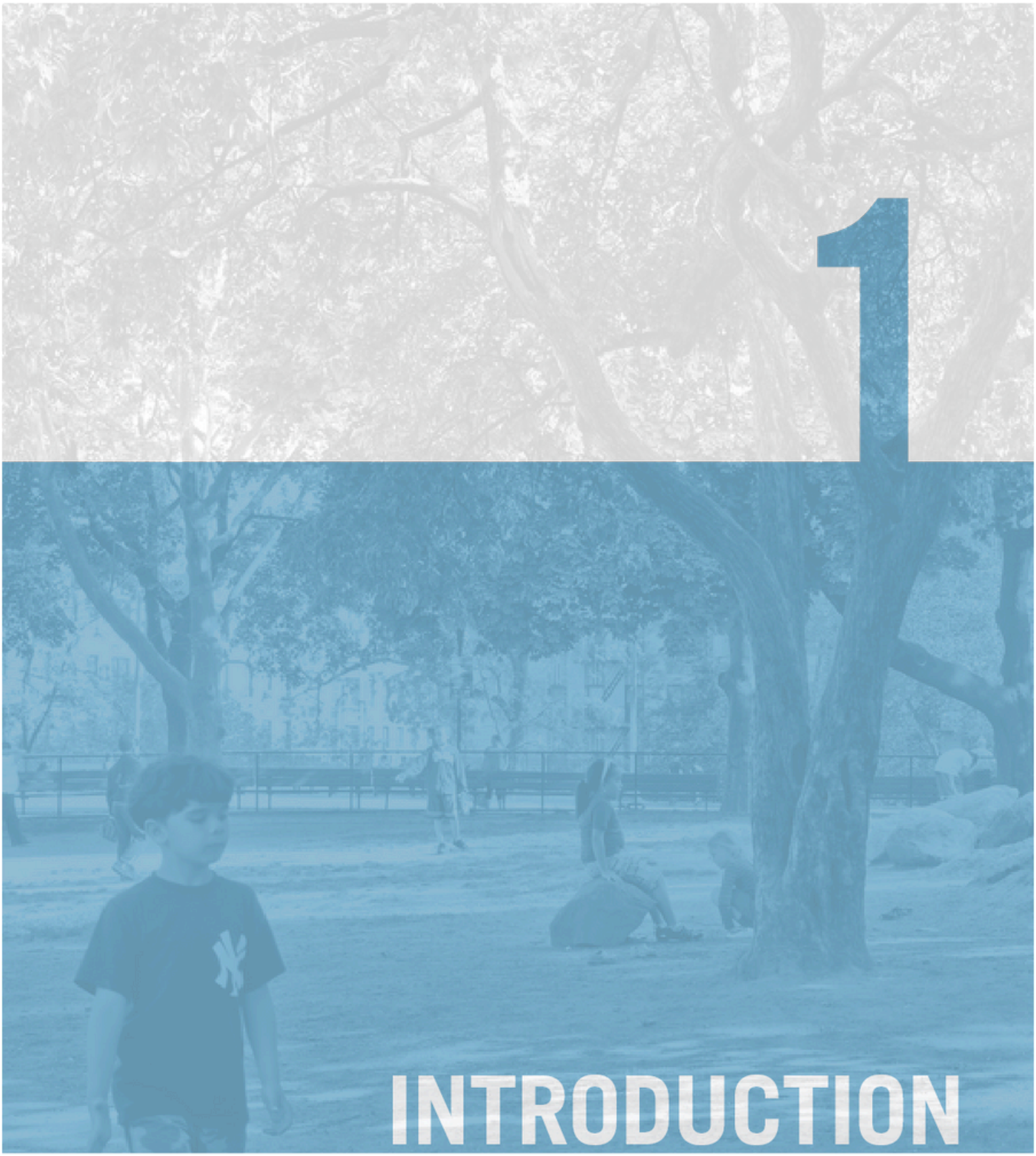
INTRODUCTION

BUILT ENVIRONMENT

PARKS AND RECREATION | INTRODUCTION

PARKS AND RECREATION | PLANNING OBJECTIVES

PLANNING AND DESIGN CONSIDERATIONS



1

INTRODUCTION

PREPARING FOR IMPLEMENTATION
STRATEGIES & GUIDELINES FOR HEALTHY LIVING, PARKS, AND RECREATION

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1 Preface

□is study focuses on how design, planning, and development strategies for Parks and Recreation can encourage active living in the Pottstown Area. Phase I identified critical issues the area is currently facing, in terms of growth, sprawl, land loss, access to oppor- tunities at parks and recreation facilities, and programs that affect active living. Based on data collected from stakeholders and end users, this Phase II Report of the study culmi- nates in the identification of planning objectives, recommendations, and guidelines. More specifically, this phase consisted of the following interrelated steps:

- Analysis of a telephone survey of 500 Focus Area residents
- Review of focus group discussions with four different groups of stakeholders (planners, parks and recreation professionals, community leaders, and young adults)
- Critical appraisal of the built environment
- Inventory and assessment of parks and recreation system
- Development of planning objectives, recommendations, and guidelines
- Review with stakeholders
- Revision of strategies and final deliverables

□e outcomes of Phase II are compiled in this comprehensive report titled “Preparing for Implementation: Strategies and Guidelines.” □is document links findings and conclusions from Phase I to planning and design objectives, recommendations, designguidelines, and implementation strategies. A second outcome of Phase II will be the creation of an information commons and the marketing of available parks and recreational facilities, programs, and other related activities throughout the region. □is will be achieved through the publication of a monograph, the launching of an interactive website, and a public exhibition.

1.1 GuidetoPhaseIIReport

□e intent of Phase II of this study was to identify planning and design goals to be achieved and formulate viable strategies to attain them. □is study has the following constituent parts:

Planning Objectives

Planning objectives can be defined as the most fundamental tools underlying all planning, design, and strategic activities. To this end, a set of “planning objectives” or guiding urban design principles is articulated, which guide strategies for promoting active living through parks and recreation systems.

Issues and Characteristics

□ispart is essentially a detailed explanation of the planning objective and its significance. □e section comprises a brief discussion of the problems to be resolved in order to provide a broad context for the planning objective. A clear and concise description of the essential qualities and characteristics the environment should possess to resolve the identified prob- lems. □e description is broadand evocative, but has a certain degree of specificity.

Recommendations

□esearestatementsthat suggest planning or design strategies for resolving or alleviating the identified problem(s) to achieve a desirable environmental outcome.

Implementation Strategies

□is sectionconsists of descriptions of opportunities for improvement that provide actionable strategies for implementation if applicable. □is part is more relevant to the parks section.

Related Planning Objectives

Other planning objectives that relate to this particular objective or share some attributes, such as issues, qualities and characteristics, orsolutions to identified problems.

1.2 UseofParksandRecreationFacilities: Resident Survey Findings

A resident telephone survey was conducted by the Center for Survey Research at □e Pennsylvania State University to examine park use and recreationpatterns of 500 adults living in the Focus Area of this study . □e resident survey aimed to answer the following: How do the residents of the Focus Area utilize parks and recreational facilities?

What factors could encourage residents to use parks and recreational facilities more frequently? Whatrole do parks and recreational facilities play in helping residents lead an active life?

□e survey collected information on the following topics: the physical activity status of the respondent, location of the physical activity of the respondent and children in the household, contextual characteristicsof the respondent's residence, details of park use, details of recreational facility use, demographic factors including household composition.

TABLE 1: Distribution of respondents by borough or township

County	Frequency	Percent of participation	Percentage of total population
Pottstown Borough	83	16.5	21.75
New Hanover Township	56	11.1	7.33
Lower Pottsgrove Township	53	10.5	11.16
Amity Township	50	9.9	8.82
North Coventry Township	46	9.1	7.35
Douglass Township - Montgomery	37	7.4	9.06
East Vincent Township	36	7.2	5.47
Upper Pottsgrove Township	29	5.8	4.08
East Coventry Township	28	5.6	4.54
West Pottsgrove Township	23	4.6	3.80
Douglass Township - Berks	19	3.8	3.31
South Coventry Township	17	3.4	1.89
Boyertown Borough	15	3.0	3.92
Spring City Borough	11	2.2	3.29
Total	503	100	100

A listed household sampling (LHS) frame, tailored to the 14 townships and boroughs of interest, was used for the survey. Using computer-assisted telephone interviewing software, the surveys were conducted within a two-week time frame in July 2009. A total of 503 respondents completed the survey, including respondents from all 14 municipalities in the Focus Area. Table 1 indicates, for the most part, the sampling frame was proportional to the population of each respective borough or township.

1.2.1 Physical Activity Status of Respondents

One of the main components of the survey was to obtain information on the physical activity status of residents in the Greater Pottstown Area. □e survey contained questions regarding the frequency of light, moderate, and vigorous physical activity that allowed for the determination of the physical activity status of thesurvey respondents .Based on the answers to the questions, respondents were categorized as Sedentary, Underactive regular—light activities, Underactiveregular, or Active. Table 2 lists the characteristics of each of the four Physical Activity Status categories.

TABLE 2: Physical activity characteristics of survey respondents

Physical Activity (PA) Status	Characteristics of PA Status
Sedentary	Someone who rarely or never does any physical activities.
Underactive regular – light activities	Someone who does some light physical activity every week.
Underactive regular	Someone who does moderate physical activities every week, but less than 30 minutes a day or 5 days a week, OR Someone who does vigorous physical activities every week, but less than 20 minutes a day or 3 days a week.
Active	Someone who does 30 minutes or more a day of moderate physical activities, 5 or more days a week, OR Someone who does 20 minutes or more a day of vigorous physical activities, 3 or more days a week.

More than half (58%) of the survey participants were underactive (Table 3). When the activity status was examined with respect to the demographic features of the participants, gender was the only feature across which the activity status of the survey participants differed significantly. Women were more likely to be underactive than men. Interestingly, there were no significant differences in activity status of survey participants when disaggregated by annual household income or education level. □is could be due to several reasons. First, thesample size (500) may not have been large enough to be able to detect the relationship. Second, in this study Physical Activity Status was derived from response to self-reported measures of physical activity and resulted in broad categories of physical activity levels (Active and Underactive) that did not lend themselves to the detection of a linear relationship between Physical Activity Status and Education Level/Annual Household Income. □ird, the relationship between Physical Activity Status and Education/ Annual Household Income may be mediated or moderated by other factors. However, it shouldbe pointed out that partial correlation between Physical Activity Status and Annual Household Income andEducation Level while controlling for gender also did not yield a significant correlation. □us for this sample, there isno significant relationship between Annual Household Income/Education Level and Physical Activity Status.

TABLE 3: Physical activity status of survey participants

Status	Male		Female		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Underactive (regular activities)	97	51.1	193	62.5	290	58.1
Active	93	48.9	116	37.5	209	41.9
Total	190	100	309	100	499	100

1.2.2 Location of Physical Activity

Other than activehousehold chores, walkingand/or biking in the neighborhood or elsewhere is themost common way in which the survey respondents engage in physical activity. Almost an equal number of respondentsget physical activity at home with exercise equipment (52.1%) asin parks (50.3%). Since parks are not the most popular location for physical activ- ity, it can be argued that removal of barriers (perceived or actual) may lead to increased use of parks for exercise. Table 4 shows the location of physical activity of adults in the Focus Area.

TABLE 4: Location and frequency of physical Activity

Location	Frequency	Percent
Active household chores	440	88.5
Walking or bicycling in the area or elsewhere	398	80.1
At home with exercise equipment	259	52.1
In parks	250	50.3
At the gym	137	27.6
At work	164	33.0
Total	497	

Examination of the location of physical activity with respect to the activity status (Underactive Regular versus Active) of the survey participants indicates that there is no significant overall relationship. In other words, thelocation of physical activity does not differ between those that are physically active and thosethat are physically underactive. People who are active in terms of their physical activity status use parks for exercise more than those who are underactive in terms of their physical activity status. □isis potentially important since none of the other categories (exercise at home/walking/biking inthe neighborhood/exercise at work) are significantly different. So we could argue that if we make it easier for people to get to parks for fulfilling their exercise needs—they would be more active.

1.2.3 Neighborhood and Geographical Context

Animportant premiseofthis study isthatplacematters. Webelieve that the built environment at the neighborhood scale can either facilitate or detract people from

engaging in a physically active lifestyle. To allow examination of this aspect of active living we wanted to explore the neighborhood context of the survey respondents.In our conceptualization of the built environment at the neighborhood scale, we differentiated between urban/suburban and exurban/rural contexts. In the survey we used distance to shopping/service destinations (stores, post office, library, grocery store, dry cleaners, coffee shops, and restaurants) as a proxy measure of urban/suburban or exurban/ruralcontexts. We named this variable Neighborhood Context. Specifically, those who livedwithin a 10-minute walking distance of such destinations were classified as living in urban/suburban areas, while those who did not live within a 10-minute walking distance to such amenities were classified as living in an exurban/rural environment. □e Neighborhood Context was then combined with the townships/borough of the residence information to develop a second contextual variable, termed Geographical Context. □e Geographical Context variable consisted of sevencategories that aredetailed in Table 5. □ese two contextual measures were then used to study different elements of active living and are presented later in the report.

TABLE 5: Geographical context of survey respondents

Neighborhood Context	Geographical Context	Borough/Township	Explanation of Geographical Context
Exurban/Rural	A m ity	A m ity	Respondents NOT living in within 10-minute walking distance to stores
	Northern Area	New Hanover Douglass (M) Douglass (B)	All respondents
	Southern Area	North Coventry East Coventry South Coventry East Vincent	All respondents NOT living within 10-minute walking distance to stores.
Urban/Suburban	A m ity	A m ity	Respondents living within 10-minute walking distance to stores
	Boyertown	Boyertown Borough	All respondents*
	Spring City	Spring City Borough	All respondents*
	Greater Pottstown	Pottstown Borough Lower Pottsgrove Upper Pottsgrove West Pottsgrove	All respondents living within 10-minute walking distance to shopping

Cross tabulation of Location of Physical Activity with Geographical Context does not reveal any significant differences. □e pattern is similar to the overall pattern described in Table 4 (that is, active household chores and walking/biking are the most popularactivities followed by exercising at home and exercising in parks). At the level of the Neighborhood Context (urban/suburban and exurban/rural), again there are no significant differences inthe location ofthe physical activity.

1.3 FocusGroups

In addition to the resident telephone survey, Pottstown Area Parks and Recreation focus groups were conducted by the Center for Survey Research (CSR) at Penn State Harrisburg. □e purpose of the groups was to gather thoughts and experiences on parks and recreation and their role in encouraging active living. A total of four focus groups, which included separate groups of community leaders, planners, parks and recreation officials, and young adults, were conducted in June and July 2009. All of the groups were held at the Pottstown Area Health and Wellness Foundation in Pottstown, Pennsylvania. □oughts and ideas from the four focus groups in four critical areas—People, Built Environment, Parks and Recreation, and Partnerships—have been incorporated in this Phase IIReport wherever appropriate.

1.4 BuiltEnvironment

□issection isessentiallyacriticalassessment of the built environment related to active living and creates an understanding ofthe following issues that impinge on parks and recreation systems:

- Settlement morphology: land loss, sprawl and land use, density, growth patterns, and the case or need for increased densities and infill strategies
- Context (historical, physical, cultural): parks as destinations oradjacent to significant destinations to enhance walkability and create an integrated network that encourages active living, such as public spaces, trails, bike paths, etc.
- Environmental Issues: perceptions of environmental pollution, brownfields, and nowsprawl point to the need to review zoning approaches and plans (such as single-use zoning)
- Future Growth Strategies based on density and infill and presence of parks by neighborhood context

1.5 AssessmentofParksandRecreationSystem

□is section provides a background and thecontext for planning objectives,recommendations, and guidelines for the parks and recreation system. □e planning objectives provide a tool kit to be applied to any municipality within the Focus Area. Immediate actioncan be taken on any or all issues. □e sectioncovers the following key topics:

- A review of the literature onparks and physical activity, including adiscussion of the importance of well-rounded parks.
- An overview of four key behavioral factors, which describe the choices people make related to park visitation and physical activity.

- An explanation of the parks assessment tool developed duringthe course of this study. □is tool assesses well roundedness in parks according to four primary categories of opportunities: physicalactivity; contact with nature; social connections; and connections with history, culture,and sense of place.
- □ree models for parks systems: the walkable network; well-rounded destinations; and a blended approach. Each model is appropriate for different densities of the built environment, and takes into account people's behavioral choices. □is part also provides information on specific actions and parks to beimproved.
- Guidelines for planning at the system leveland design guidelines applicable to individual parks. □ese guidelines are intended to be taken into consideration during the planning and design phases of implementing the models for parks systems.

1.6 ReviewsWithStakeholders

□e planning objectives, recommendations, and implementation strategies developed in this study have been presented to various stakeholders, many of whom participated in interviews and the focus groups conducted earlier. □eir feedback has been carefully reviewed and incorporated in the Phase II Report.

2

BUILT ENVIRONMENT

PREPARING FOR IMPLEMENTATION
STRATEGIES & GUIDELINES FOR HEALTHY LIVING, PARKS, AND RECREATION

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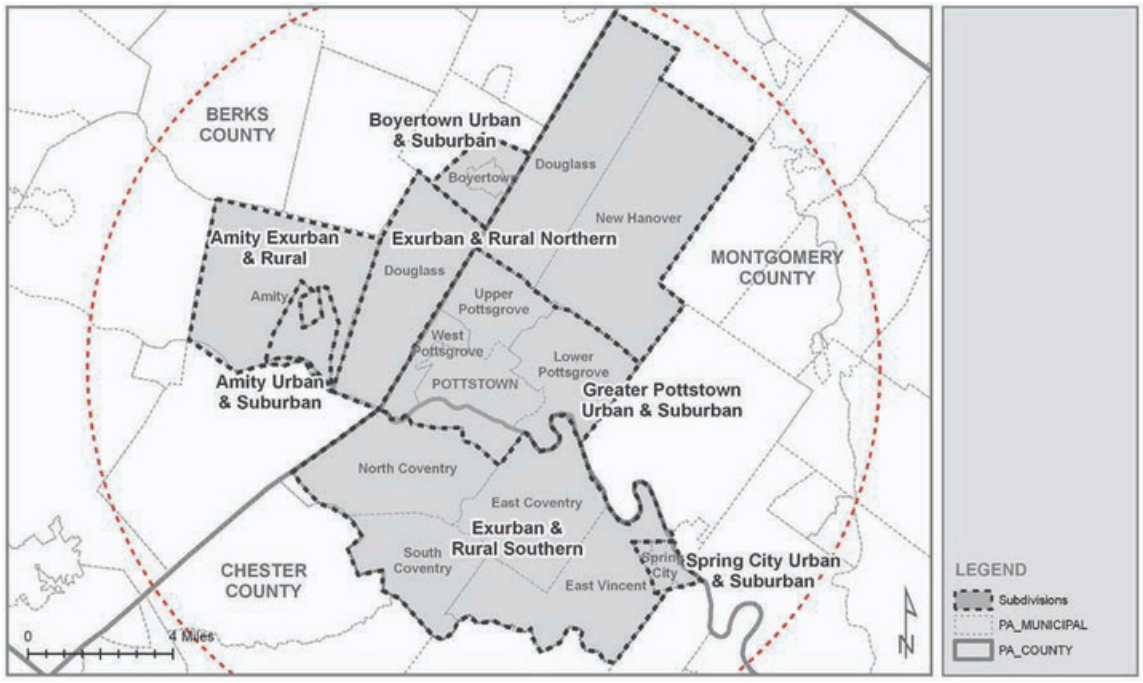


FIG. 1: Focus Area geographical and neighborhood context

1 Introduction

□e Pottstown Area's proximity to Philadelphia, King of Prussia, and the Schuylkill River accords ita high degree of importance in the region. Funded by the Pottstown Area Health and Wellness Foundation, this research is intended to identify planning and design components of the parks and recreation system to encourage healthy lifestyles. □rough an assessment of various factors critical to active living, such as the quality of the built environment and the residents'perceptions, needs, and aspirations, this section culminates in broad guidelines. □ese include planning objectives, issues, recommendations,and strategies that could help shape the development of the communities in theareaand contribute to healthy living and prosperity.

□e core of building density in the Focus Area is found in three major urban environments: Pottstown Boyertown, and Spring City. □ese areas arehome to commercial centers that support the surrounding suburban residential areas through employment and the supply of goods andservices. Many of the outer parts of the Focus Area have been traditionally rural and consist of agricultural land. However, as prime farmland is consumed, giving way to exurban and suburban development, these classifications manifest a sprawling manner moving outward from the urban cores. □ese new suburbs lack vital qualities seen in traditional, pre-warsuburban development, including dense land use,walkable neighborhoods, and multi-use zoning. □e diversity provided by traditional suburban and urbanareas supports active living lifestyles and encourages interaction between residents.

□e context map(Figure 1) highlights the FocusArea within the study area, grouping portions of municipalities based on their current stages of development. Urban and suburban places share characteristics, including the density of settlement patterns. Exurban and rural areas have different connotations, many of which deal with land consumption and sprawl-related issues.

2 Land Loss

Prime farmland is an important natural resource that needs to be conserved to help preserve the natural environment and enhance thequality of life. □e tragic loss of farmland within the Tri-County Area (Figure 2) indicates the exploitive character of development tech- niques. Currently, conservation efforts to preserve farmland, both through land use plans and purchasing efforts to guarantee preserved open space, have had some impact within the region. Figure 3 shows improvements in Berks County where farmland loss has been reversed, and in Chester County, where land loss has been substantially slowed. However, alarming numbers of land losses in Montgomery County remain, where conservation efforts need to address issues related to considerable farmland lost since 2002.

Improvements in Chester and Berks County can be attributed to zoning, managed growth, and land purchasing efforts. □ese areas have begun to actively combat sprawl, which has tremendous implications for the fight against reducing pollution and preserving the natural environment. Continued efforts to address sprawl-related land consumption and environmental issues are of paramount importance. □is is particularly significant in Montgomery County, where Pottstown Borough provides a unique urban contextin which infill strategies can be implemented to increase population density and ease the imposition on the land.

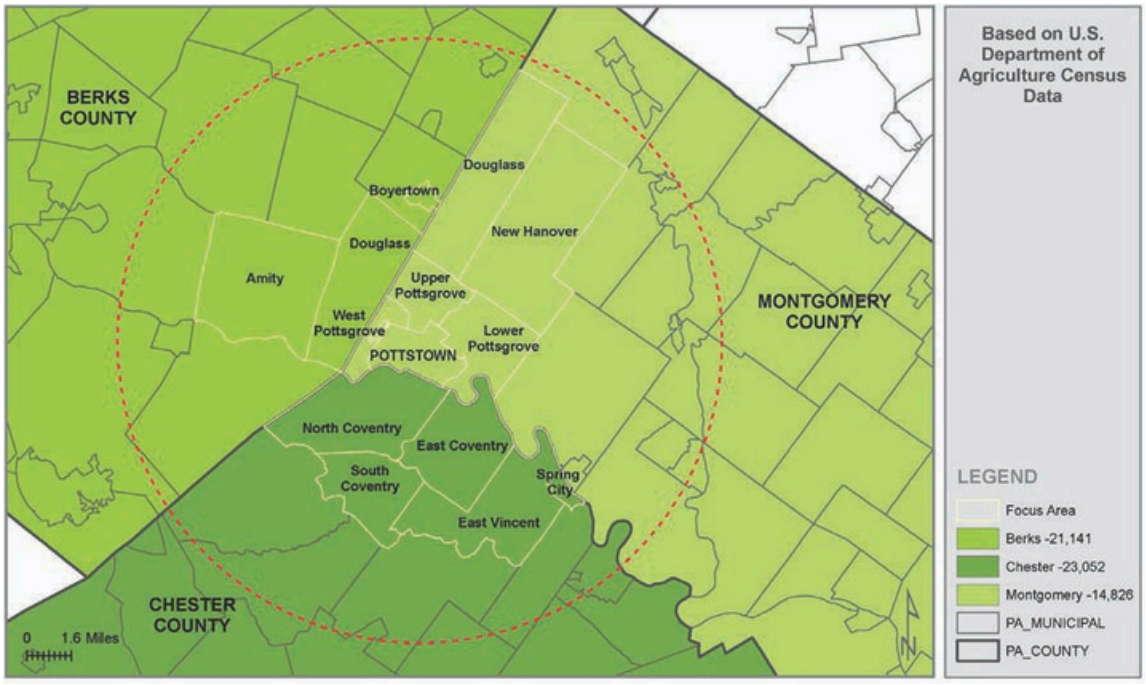
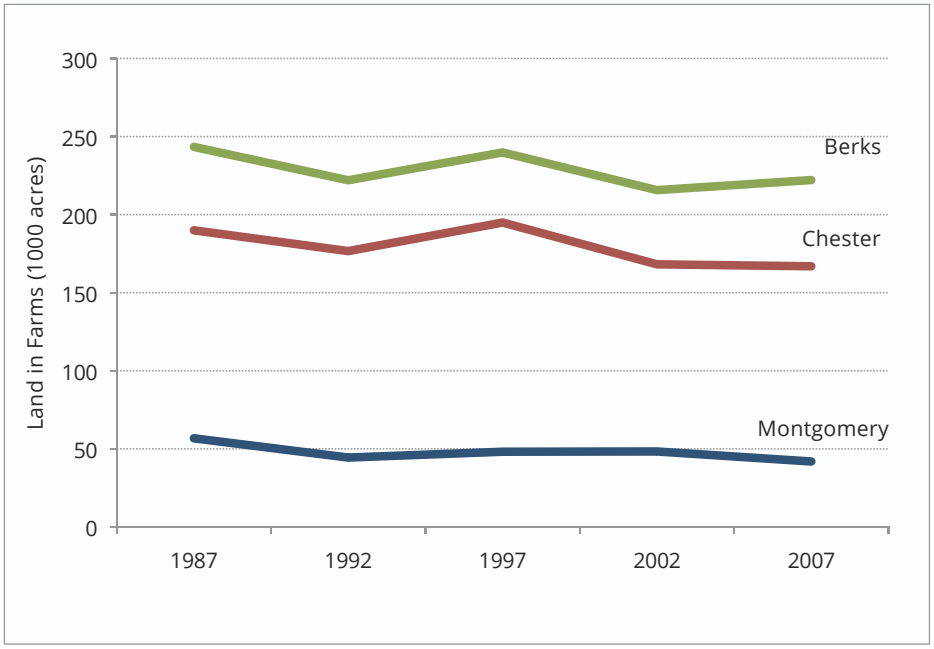


FIG. 2: Prime farmland lost from 1987~2007

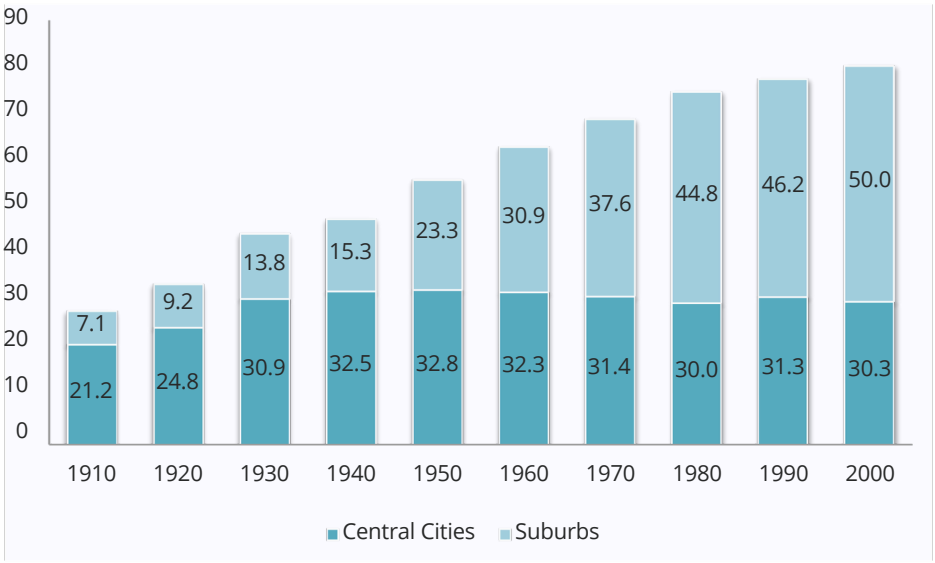


Source: eCensusofAgriculture, (n.d.).

FIG. 3: Farmland change in the tri-county region from 1987-2007

2.1 SprawlandLandUse: Urban, Suburban, Exurban, and Rural

Sprawl is a concern notonly dueto the fast pace agricultural land is being lost at the fringe of new urban and suburban areas, but also due to a host of other problems, such as pollution and traffic congestion. Sprawl that has resulted from rapid post-war suburban development is not conducive to active living. Interestingly, as Figure 4 shows, growth in the central cities was actually larger than growth in the suburbs from 1910 to 1950. But 1940, as it turned out, was the beginning of the end of the era when cities outgrew the



Adapted from Frank Hobbs and Nicole Stoops, Demographic Trends in the 20th Century, US Census Bureau

FIG. 4: Percent of population in metropolitan areas and in their central cities and suburbs

suburbs. □ereafter, suburban growth typically far-outpaced city growth (Teixeira, 2006), giving way to more suburban and exurban growth.

First coined by Spectorsky in 1955, the term “exurbia” refers to the new form and function of residential settlement seen growing from the New York metropolitan area. □e current conceptualization of exurbia is “a place of transition between urban and rural, located somewhere between the suburbs and truly rural areas within the commuting zone of a large, urbanized area,” but because “exurbia transcends the traditional dichotomy of urban versus rural and metropolitan versus nonmetropolitan,” the density which distinguishes exurban settlement from rural and suburban has presented little agreement among researchers (Clark et al., 2009).

A study to characterize exurbandevelopmentwas completed for New Politics Institute, a think tank for politics. Teixeira (2006) has looked at the demographics of exurbia to determine the potential for political accessibility, but this same information is helpful in defining exurbia as a place. He argues that “true exurbs” are borderline rural and “emerging suburbs” are borderline suburban. □e type of exurbia Teixeira refers to as emerging suburbia is the fastest growing area in the United States andis rapidly becoming more diverse. □e majority of theworkers in these areas do not have a four-year college degree, do not hold professional or managerial jobs, and 70% have incomes under $75,000per household (Teixeira 2006).As these areas matureinto suburbs, they are rich withpotential toencourage physical activity of the residents. □ edemographicstell us that theseinhabitants have the ability to increase the amount of physical activity in which they participate.

□e suburban and exurban development following World War II occurred because it was inexpensive, spacious, and clean compared to the polluted urban environments of the industrial age. Furthermore, the real estate industry saw rural development as an opportunity to exploit thedesires of Americansociety, increasing land value by building on it, and in turn, benefiting from large profits. □is outward expansion created automobile dependence and resulted in people livingin more sprawling regions (Figure 5) and having to “drive greater distances, own more cars, breathe more polluted air,face a greater risk of traffic fatalities, and walk and use transit less” (Tregoning, 2006).

FIG. 5: As suburbs and exurbs in East Vincent grow, prime farmland is being lost to sprawling development

As seen in Figure 6, the Route 422 Corridor has brought a substantial amount of development into the Focus Area. This development is currently expanding outward along the Route 100 Corridor. While more traditional suburban development has beencontained in the area directly surrounding Pottstown Borough and along theSchuylkill River, post-war suburban and exurban development is isolated and massively consuming land previously used as prime farmland. Additionally, the new style of development is attracting those from traditional suburbs to move outwardonce again, exacerbating the problems of sprawl and consumption. These trends, clearly represented in Figure 7 and Figure 8, havereduced the population in traditional communities such as Pottstown. This phenomenon needs to be reversed to raise populations in traditional communities and to create healthy living environments, rich withactive living opportunities. Increasing land usedensities and infill strategies is the action that should be taken.

Despite the recent emphasis on land preservation in Berks and Chester Counties, the projected population growths for the counties within the area necessitate zoning policies that increase densities and utilize infill strategies.

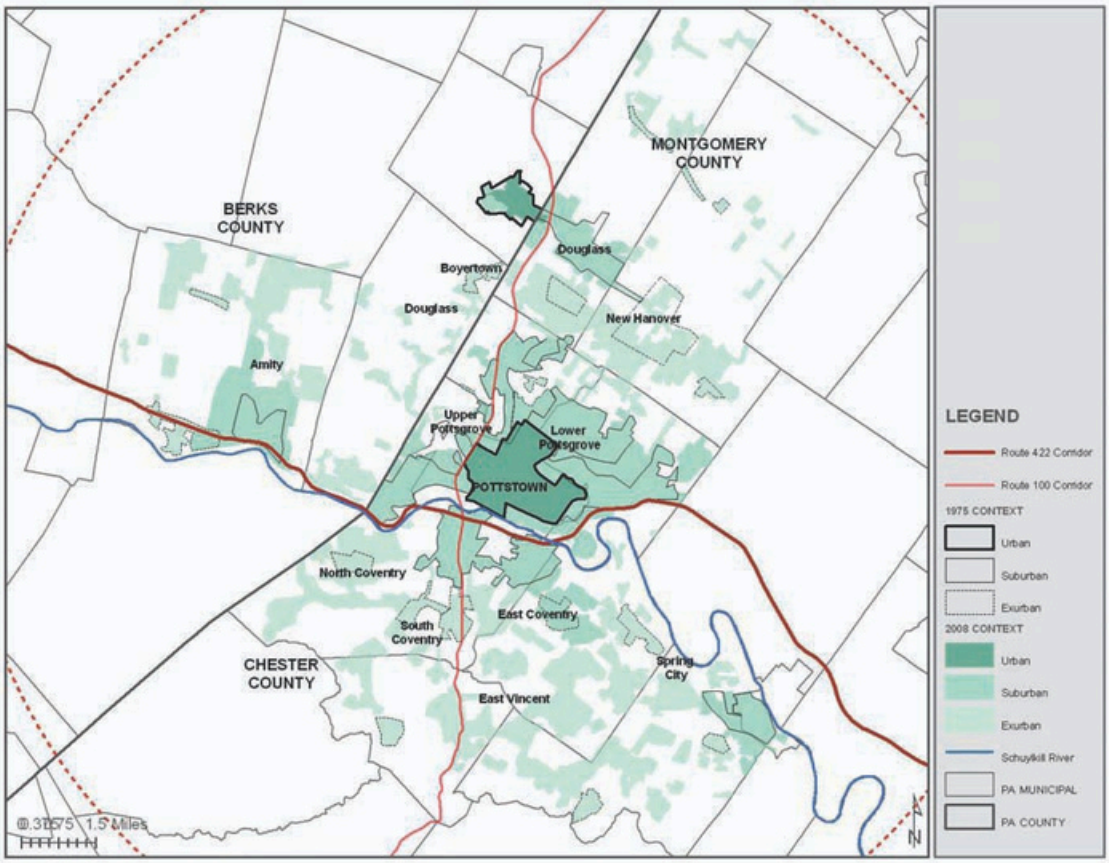


FIG. 6: Development along Route 422 Corridor

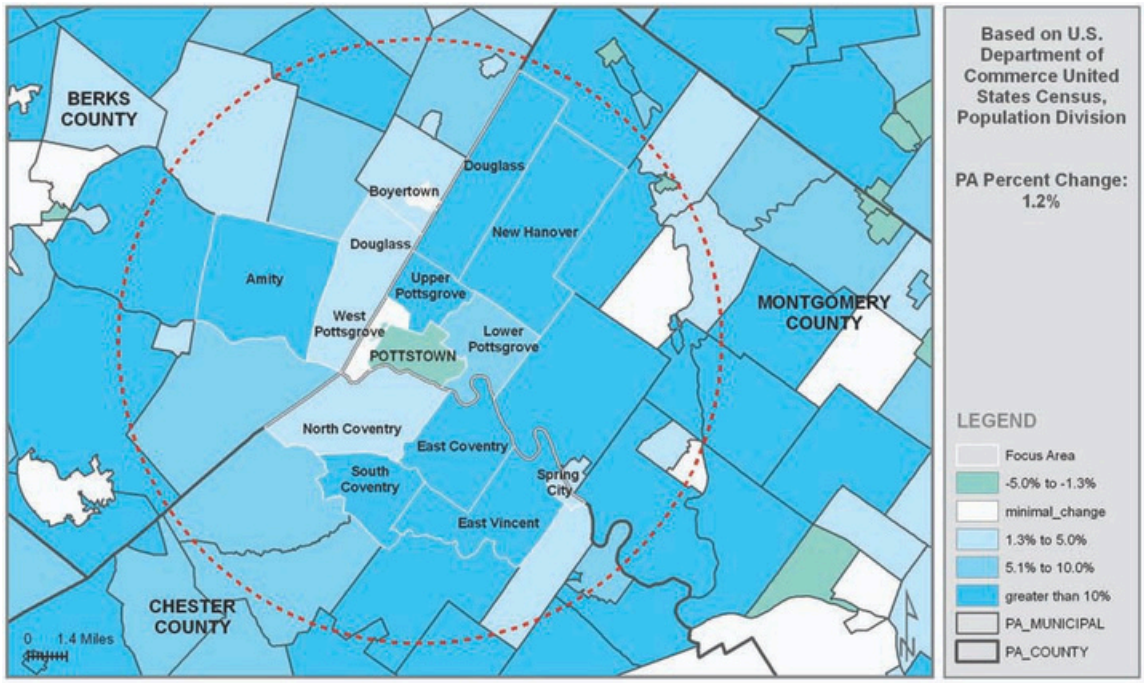


FIG. 7: 2000~2007 estimated population change

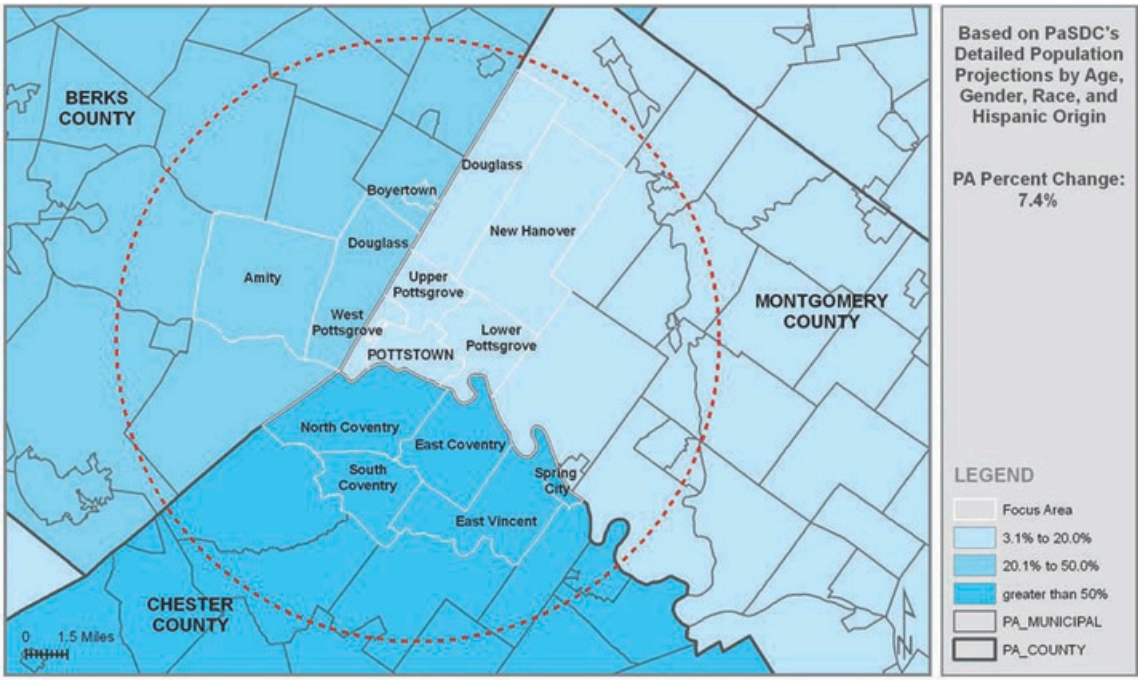


FIG. 8: 2000~2030 total projected population percent change

2.2 &UTURE 'ROWTH 3TRATEGIES $ENSITY AND)NILL

Utilizing mixed-use and infill development can increase density and shapethe relationship between commercial activity and community. Having residential and retail environments layered together creates commercial activity that supports active lifestyles due to the accessible and safe walking conditions between these destinations. The urban realm is ideal for this to occur. Figure 10 shows the development of townhouses on the previous site of the Mrs. Smith's Pie Factory at the corner of Hanover Street and Industrial Highway. This type of infill strategy, ideally located near High Street in Pottstown, is a prime example of how the urban realm can become more dynamic and walkable. Conversely, suburbs and exurbs discourage walkability because, by definition, they consist of sparse densities that encourage automobile use to reach destinations—often big-box type retailers that provide vast parking lots.These types of suburbs create the problems associated with sprawl and consume prime farmland. Figure 12 shows a comparison of a portion of Amity Townshipwhere farmland was given up to suburban development between 1995 and 2005.

FIG. 9: $Q LQ¿OO DSSURDFK HQVXUHV GHQVL¿FDWLRQ DQG FRQWULEXWHV WR SUHYHQWLQJ ODQG ORVV

FIG. 10: New development on Mrs. Smith's Pie factory site, can help densify the area and prevent land loss

2.3 PresenceofParksbyNeighborhoodContext

It would be useful to examine the effect of land loss on the parks and recreation system in the Focus Area.Rapid suburban and exurban development has significant implications for the parks system because the geographical context and neighborhood context are closely interrelated.

Specific to the use of parks, the resident survey revealed that respondents are likely to visit parks to be with nature, to engage in active recreation, to socialize, and to connect with the local culture and history. All four needs are strongly correlated with each other, illustrating that all four requirements are important for park visitation and must be considered when designing or planning parks.

There is no significant difference in the reasonsfor visiting parks based on neighborhood or geographical context, implying that the reason for visiting parks is not impacted by thegeographical or neighborhood context. In addition, the resident survey also revealed that a large number of respondents (77.1%) strongly agree or agree that they would visit parks for active recreation like brisk walking, jogging, or playing basketball. Only 3.8% strongly disagree and 15.7% disagree, while 3.1% neither agree nor disagree.

Programs that would encourage park use varied by neighborhood context. Specifically, more respondents living in exurban/rural neighborhoods expressed the opinion that environmental/nature oriented programs and historical programs would encourage them to visit and use parks more often. On the other hand, those living in urban/suburban environments are more likely to visit parks if there were festivals/carnivals and cultural programs (Table 1).

TABLE 1: Programs and/or facilities that would encourage park visits

Program/Facility	Urban/Suburban		Exurban/Rural	
	Frequency	Percent	Frequency	Percent
Arts and Crafts	10	11.1	12	11.3
Children's Programs	22	24.4	33	31.1
Community Programs	10	11.1	6	5.7
Environmental/Nature/ Wildlife Programs	12	13.3	28	26.4
Exercise/Sports Program	30	33.3	26	24.5
Festivities/Carnivals/ Cultural Programs	16	17.8	6	5.7
Historical Programs	3	3.3	13	12.3
Informational/Educational Programs	5	5.6	10	9.4
Musical/Concert Programs	18	20.0	17	16.0
Senior Programs	5	5.6	4	3.8
Total	90	100.0	106	100.0

There are no significant differences in the barriers to park visitation by activity status of respondents. However, there are some differences in how barriers to park use are perceived by survey respondents when separated by neighborhood context (urban/suburban or rural/exurban). A significantly larger proportion of urban/suburban residentsstrongly disagreed with the statement "there are few or no parks in my neighborhood" in contrast to exurban/rural residents (see Table 2). Atthe same time, significantly more exurban/rural residents strongly agreed withthe same statement. Thus, it seems that urban/suburban residents perceive they have more parks at the neighborhood level, which might translate to a barrier to park visitationfor exurban/rural residents.

TABLE 2: Perception of presence of parks by neighborhood context

	Urban/Suburban		Exurban/Rural	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	31	13.4	17	6.5
Disagree	113	48.9	124	47.1
Neither agree nor disagree	5	2.2	10	3.8
Agree	67	29.0	80	30.4
Strongly Agree	15	6.5	32	12.2

There is considerable difference regarding the perception of the presence of parks in easy walking distance. Residents of exurban/rural areas perceived that there were fewer parks in their neighborhoods relative to residents in urban/suburban areas (Table 3). This outcome corroborates the finding reported in the previous paragraph: since there are fewer parks in the neighborhood of exurban/rural residents, it follows that there are fewer parks within easy walking distance.

The lack of parks within walking distance in the new suburbs is related to the rapid consumptionof land—a phenomenon that prevents the benefit of active transportation to parks, which could contribute substantially to active living in the Focus Area.

TABLE 3: Parks not within easy distance of home by location

	Urban/Suburban		Exurban/Rural	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	31	13.4	17	6.5
Disagree	113	48.9	124	47.1
Neither agree nor disagree	5	2.2	10	3.8
Agree	67	29.0	80	30.4
Strongly Agree	15	6.5	32	12.2

2.4 PLANNING OBJECTIVE
Prevent Land Loss

Planning efforts mustrecognize the impact of the built environment on natural resources, which goes beyond jurisdictional boundaries. Parks and recreation strategies play a critical role in the management and protection of openspace to maintain community character.

2.4.1 Issues and Characteristics

- Land loss
- New growth and land use: Urban, suburban, exurban, rural
- Future growth strategies: Density and infill
- Presence of parks by neighborhood context

Revitalization approaches that rely on infill and existing infrastructure avoid the need for unnecessary growth, keep sprawl incheck, and provide stability and security for neighborhoods (Figure 11). Planning efforts for new growth should be directed to regions serviced by sufficient roads, water, sewers, and utilities to check continuing land consumption and sprawl (Figure 12). This principle encourages active living through recreational activities in public spaces, as citizens generally appreciatecivic participation. Parks and recreation systems can make valuable contributions by maintaining existing parks and recreation facilities at a high level, as well as simultaneously establishing planning priorities for new efforts in existing but well-used areas within the community.

FIG. 11: Adaptive reuse of the Bard Complex, a vacant factory in Spring City

FIG. 12: Example of how suburban sprawl consumes prime farmland, before (1995) and after (2005) aerial images of a portion of Amity Township

2.4.2 RECOMMENDATIONS

Preserve and protect the Focus Area's heritage and natural environments, open space, and natural landscape.
%MBRACE INILL STRATEGIES AND SUBSTANTIALLY MINIMIZE LOW DENSITY AND NON CONTIGUOUS GROWTH TO MITIGATE LAND

loss in new development.

2.4.3 Related Planning Objectives

- Create integrated networks.

3 Integrated Networks

Developing public spaces and destinations intoanetwork andcreatingconnectivity to the parks and recreation system arenecessary forsuccessful planningstrategies.Many municipalities are cognizant of the regional developmentof trailportionsastheypass through their jurisdictions. □e cooperation of municipalitiesintheFocusAreaisproving to be successful in the creation of an interconnected regional networkofrecreationaltrails and open spaces that contribute effectively to active living.

3.1 DestinationNetworks

Defining destinations becomes important when determining new development and strategies for the connection and placement of future amenities (Figures 13 and 14). For example, local agriculture is encouraged throughout the Focus Area with farmer's markets where vendors can sell their goods to the public. □ese simple commercial systems aid the community in many ways. Pollution is reduced significantly through a cutback of imports and exports as transportation activities are greatly reduced. At the same time a physical connection between residents and the awareness of the importance of the surrounding natural resources in farmlandsis created. A farmer's market becomes a destination that shouldbe easily accessible by local residents and provides a location from which additional amenities, such as parks, can work together to amplify pedestrian and community activity.

FIG. 13: A well planned integrated network promotes multiple activities

FIG. 14: Daniel Boone Optimist Club Field is a destination along the existing trail network

As addressed through the context maps of the three urban areas within the Focus Area (Figure 15, Figure 16, and Figure 17), the interconnection between destinationsand transportation networks is integral for effective planning. In addition to farmer's markets and parks, libraries, museums, and historic building sites (both eligible and existing) should be situated in a setting that allows for access through sidewalks and trails.

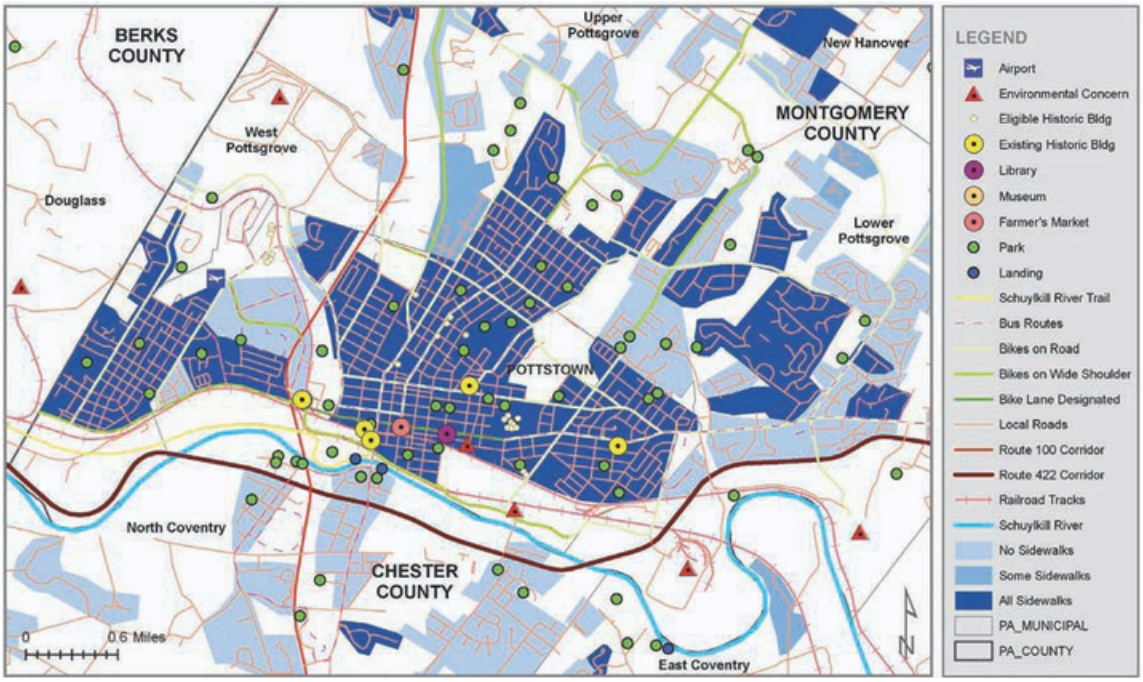


FIG. 15: Pottstown built environment context

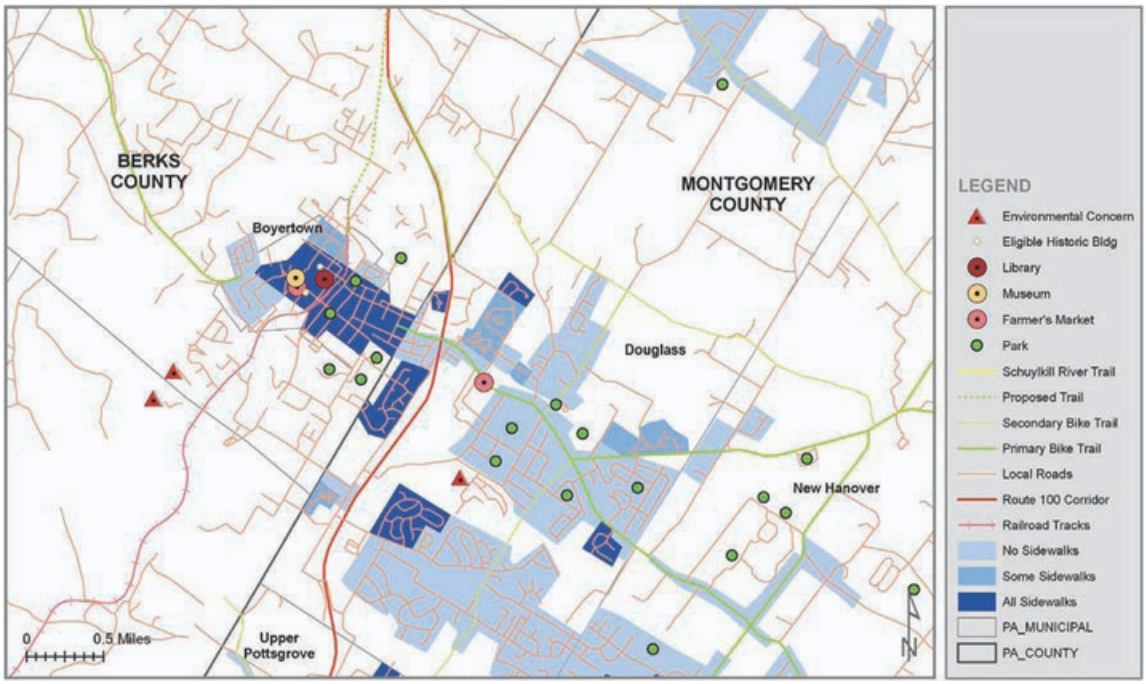


FIG. 16: Boyertown built environment context

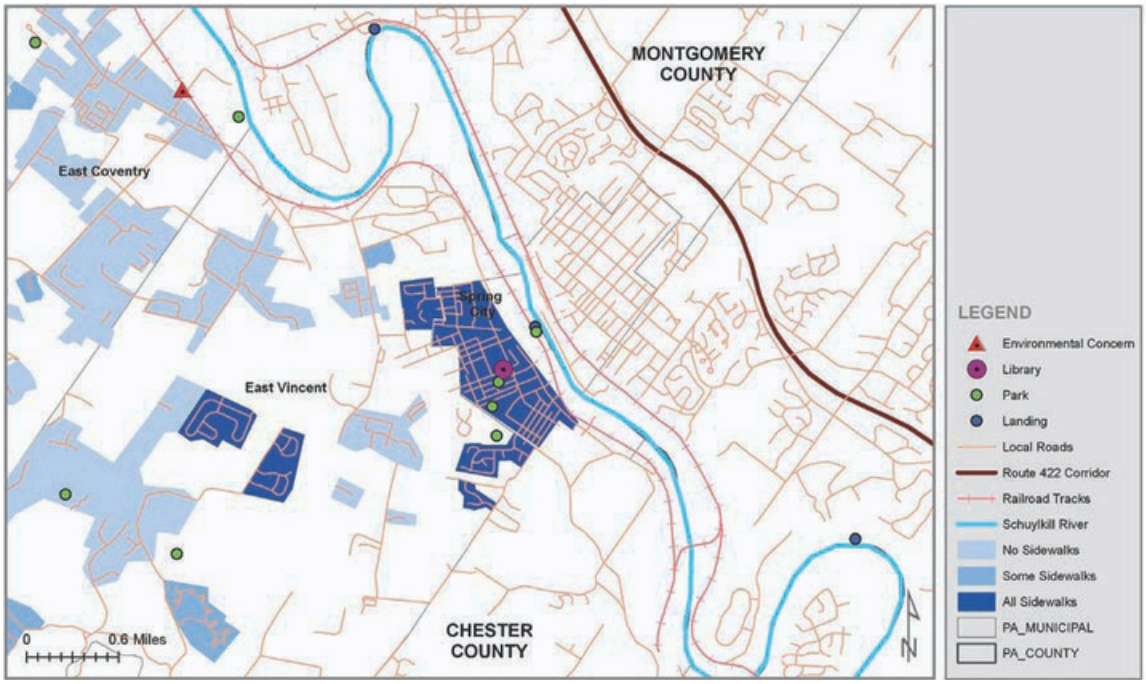


FIG. 17: Spring City built environment context

FIG. 18: Memorial Park's BMX bike course

Other destinations canbe created to meet public desires while encouraging active living. The resident survey, as seen in Table 4, identifies facilities that would encouragethe use of parks. These include trails, restroom facilities, sports facilities, waterfeatures/water sports facilities, and children's playgrounds or amenities (Figure 18). The survey indicates water sportsfacilities, such as a swimming pool, as the fourth most desirable among several facilities that respondents want to have in parks. Community leaders and planners also recognize the need for a public pool. Private swimming clubsrequire costly membership fees that are not affordable for everyone in the Focus Area. However, a public amenity such as a pool can be added to the builtenvironment, effectively bringing community members together around recreational activities. Again, before any supporting destination is added, an analysis to find the best location among the accessibility networks is necessary.

TABLE 4: Facilities that would encourage park usage

Facilities	Total		Female		Male	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Trails	78	15.5	50	36.5	28	37.8
Restroom Facilities	53	10.5	34	24.8	19	25.7
Sports Facilities/Exercise Equipments	39	7.8	15	10.9	24	32.4
Children's/Playground Facilities	31	6.2	20	14.6	11	14.9
Water Feature/Water Sports Feature	31	6.2	22	16.1	9	12.2
Safety Features	14	2.8	13	9.5	1	1.4
Pet Facilities	11	2.2	10	7.3	1	1.4
Picnic Facilities	11	2.2	6	4.4	5	6.8
Seating Facilities	10	2.0	9	6.6	1	1.4
Nature/Nature Watch Facilities	9	1.8	3	2.2	6	8.1
Cultural Facilities	9	1.8	7	5.1	2	2.7

Likewise, when asked how they encourage local residents to visit parks facilities, the Parks and Recreation leaders were unanimous in stating the importance of good amenities and location. For them, the good amenities were those that met the needs of local resi- dents. Manderach Park in Limerick Township was often cited as a park with good ame- nities. It contains a large wooden play set that spans a couple of acres, long recreational trails, and concession stands with food services (Figure 22). These amenities have attracted thousands to the park during the summer. Proximity to food and public institutions was also emphasized; a poor location does not attract residents, despite the appropriateness of its amenities.

Given the appropriate revitalization strategies, vacant lots and remnant spaces (Figure 19) can be transformed into destinations of their own, which improve the community and contribute to active living through appropriately scaled interventions, such as pocket parks. As the focus groups revealed, pocket parks can be intimate instances where rec- reation occurs on a regularbasis. Supported by the Young Adults focus group, the most important aspect of attractingvisitors to parks is their geographic location. The Young Adults argued that types of amenities or size of park were not as important as the proxim- ity in attracting users of their demographic. Pocket parks also provide another layer to the intricacy and density of built environment available to the pedestrian.

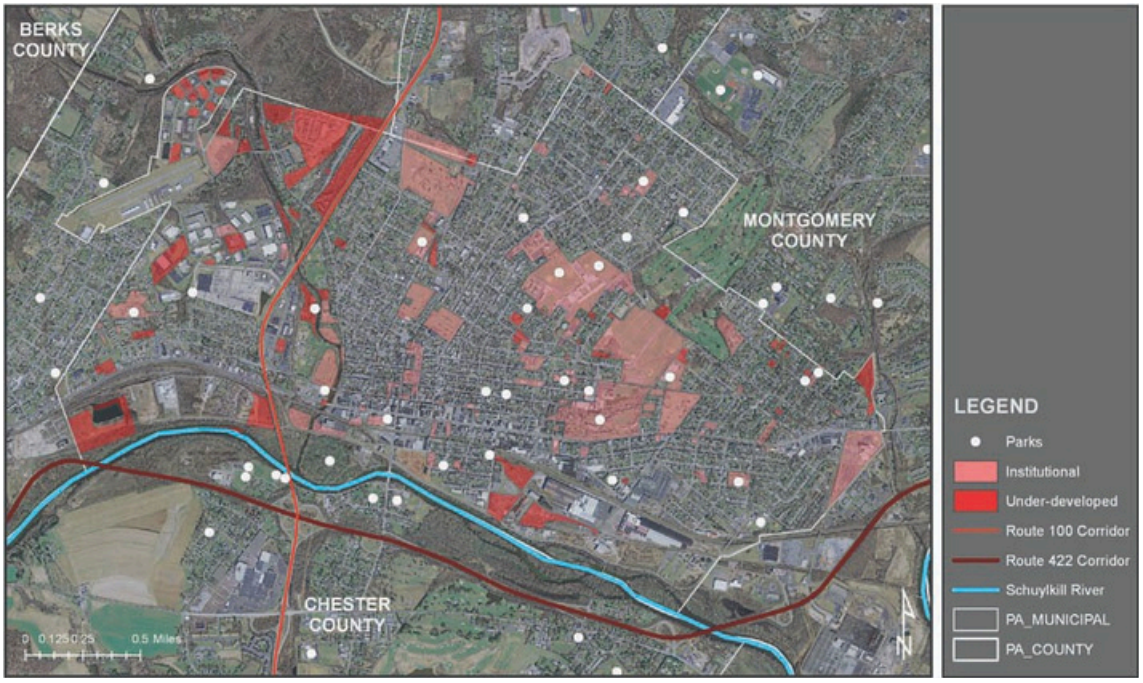


FIG. 19: Vacant lots in Pottstown Borough

3.1.4 Modes of Transportation to Parks

 e creation of integrated networks, particularly in low-income suburban settings, where residents lack access to private automobiles, takes on added importance. While the location of parks and recreation facilities in conjunction with other destinations should be an integral part of any planning strategy, the mode of transportation to parks by visitors should also be considered. Responses to the resident survey illustrate that very few people bike to parks, and no one uses public transportation to visit parks. Figure 20 shows parks that can be accessedby existing bike paths or the existing recreational network. It is interesting to note that more than a third (37%) of the survey respondents do not visit parks.

Analysis indicates that the mode of transportation to parks is related to education level. Examination of the column proportions reveals that those with a College degree are more likely to drive to parks than those with a High School education or some level of college education (Table 5). is is probably related to car ownership, since it could be argued that those with higher levels of education are likely to have greater access to private transportation (cars) and so more likely to drive to parks.

When disaggregated by neighborhood context (urban/suburban or exurban/rural), we find thatmode of transportation and contexts are interrelated. People who live in urban/suburban areas or more compact built environments are significantly more likely to walk to parks than drive relative to those who live in exurban/rural areas (Table 6).

FIG. 20: Bike paths with local parks in the Pottstown Area

TABLE 5: Mode of transportation to parks by education level

Mode of Transport	Overall		Education Level					
			High School Graduated/ GED		Some College		College Graduate	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Walk	50	15.7	15	21.1	22	25.0	11	8.0
Drive	17	5.3	56	78.9	66	75.0	126	92.0

Based on national and state (Pennsylvania) trends in Phase I of this study, we hypothesized that lower educational achievement would be a proxy for socio-economic status; and people of lower socio-economic status having fewer means would be more dependent on walking for activities like access to parks. We now use the survey data to test this by examining the mode of transportation to parks of two specific places: Pottstown (lowest education level) and South Coventry (highest education level); and indeedthe differences in mode of transportation were significant. Tat is, significantly more people walked to parks in Pottstown than in South Coventry (Table 6). Tis could be due totwo factors—the fact that people do not have easy access to cars in Pottstown and that Pottstown has a larger number of parks relative to South Coventry (that is, it is easier and more practical to walk to parks in Pottstown). Whatever the underlying factor, there seems to be evidence that walking to parks is more prevalent in lower socio-economic areas.

TABLE 6: Mode of transportation to parks by neighborhood and geographical context

Mode of Transport	Urban/Suburban		Exurban/Rural		Pottstown Borough		South Coventry Township	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Walk	36	26.5	14	8.4	24	44.4	1	7.7
Drive	100	73.5	152	91.6	30	55.6	12	92.3

Proximity is not the only issue with walkability; the perceived safety of the pedestrians as they commute will influence the degree to which people participate in active living. Sidewalks and other infrastructural amenities, such as lighting, drainage, and landscap- ing, augment safety conditions and promote walkability. If transportation systems and infrastructure were better developed and people lived within walking or biking distance of work, the environment would be much less polluted (Gillham, 2001).

3.1.5 Barriers to Parks

T e resident survey indicates there are no significant differences in barriers to park visitation when disaggregated by gender, except with regard to concern about crime at parks. Women are significantly more worried about crime at parks, which may pose a significant barrier to park usage by females (Table 7). Tis finding is consistent with research on gender and fear of crime in parks and public spaces (Koskela & Pain, 1998; Lee & Graefe, 2004).

TABLE 7: Concern about crime at parks by gender

	Male		Female	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	33	17.4	22	7.1
Disagree	109	57.4	134	43.1
Neither agree nor disagree	16	8.4	41	13.2
Agree	20	10.5	95	30.5
Strongly Agree	12	6.3	19	6.1

Analysis of the response to questions regarding barriers to park visitation reveals that the three most frequent barriers are: 1) the fact that parks are not within easy walking dis- tance (64% or almost two-thirds of respondents),2) residents have inadequate knowledge about parks programs/facilities (46.4%), and 3) there are few or no parks in the neighbor- hood (39.1%). Te first and third barriers are linked and relate to the spatialdimension of parks in the Greater Pottstown Area. Fear of crime at parks (29.2%), environmental pol- lution at or near parks (24.3%), and the lack of preferred facilities for physical activity at parks (20.8%) are also barriers for a significant proportion of the survey participants.

TABLE 8: Barriers to park use

Barrier	Strongly Agree or Agree	Strongly Disagree or Disagree
Few or no parks in the neighborhood	38.6	57.1
Inadequate facilities for preferred types of physical activities	20.3	68.0
Inconvenient hours of park operation and park facilities	10.5	78.3
Parks not within easy walking distance to home	63.6	31.4
No knowledge of programs and facilities available in neighborhood	45.9	44.7
Worried about traffic on way to the parks	13.1	81.3
Concerned about crime at parks	29.0	59.2
Environmental pollution or contamination near parks	24.1	68.0

T e correlation matrix of the eight barriers to park visitation illustrates that with the exception of the barrier—I am concerned about environmental pollution or contamination near the parks—all other barriers are significantly correlated with one another (Table 8). Te fact that respondents who were concerned about environmental pollution were also concerned about crime in parks and traffic on the way to parks suggests that respondents in this category are more sensitive to perceived detractors to park use.

3.2 PLANNINGOBJECTIVE
Create Integrated Networks

Destinations can have a signi cant e ect on thebuilt environment and can reinforce active lifestylesif effectively connected to an integrated transportation network. If these destinations contain adjacencies to open public spaces, then they can be utilized to encourageparticipation inrecreational activities. It is important for development strategies to consider the context and its relationship to local parks, greenways, and open spaces.

Accessibility to multiple sites is crucial to municipal or regional success. It is not only the ease of external access, but also a heavyreliance on the ease and clarity of internal circulation thatbecomes vital for desired transportation. An integrated network that connects destinations, such as parks, markets, local institutions, and historical sites, becomes a viable option to improve accessibility while encouraging active living (Figure 21). Trails and bike paths are not only greatly desired by community members and planners as revealed by the variousfocus groups conducted for this study, but they also present opportunities to enhance community walkability.

3.2.6 Issues and Characteristics

- Destination networks
- Modes of transportation to parks

Increasing density and adopting infill strategies facilitate the development of sidewalks, paths, and trails. Tis creates a network of connected destinations and helps to eliminate barriers when visiting parks. Te survey indicates that exercise and sports facilities and children's programs would encouragevisitation toparks in urban/suburban and exurban/rural neighborhoods (Figure 22).

FIG. 21: Riverfront Park's Schuylkill River Trailhead in Pottstown, destinations and towns can be interconnected through recreational networks

FIG. 22: Manderach Playground in Limerick Community Park, amenities can attract residents to parks and potentially create a recreational network of destinations

T e Focus Area manifests potential local destinations such as shopping areas, museums, markets, etc., that could have implications for the planning and management of parks. Tese locations have a significant effect on the builtenvironment and people as they aid and reinforce active lifestyles. Many of these destinations contain large and open spaces that are often public. It is important to consider this context and how it corresponds to local parks, greenways, and open spaces (Phase I, Report, p. 73). Tis strategy also applies to remnant public spaces thatcan potentially contribute to active living through appropriatelyscaled interventions, such as low-maintenance pocket parks and playgrounds. Increasingthe building density or creating parks or planned areas will promote healthy living through a series of destinations that become available to pedestrians.

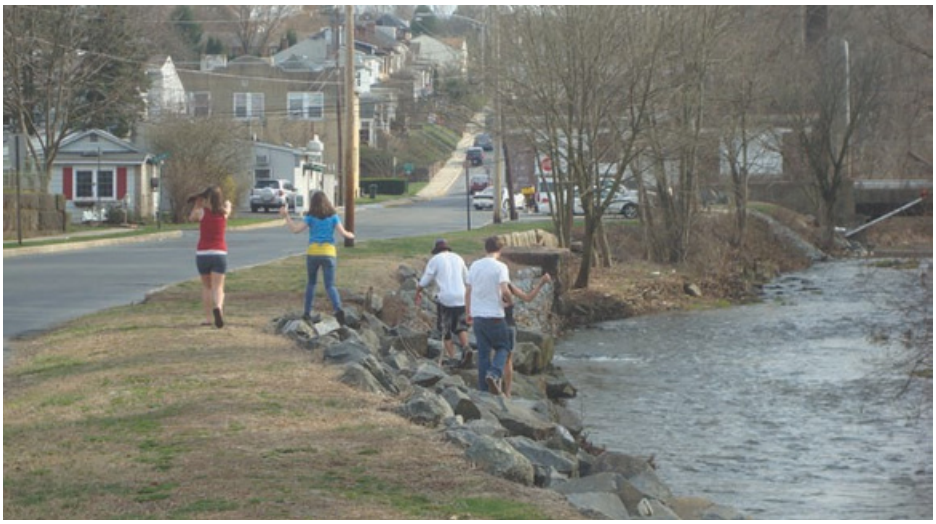


FIG. 23: The lack of sidewalks hinders the safety and mobility for residents, especially children

As the Pottstown Bike Path and Parks Study indicates (Figure 20), offering people the option of walking or biking, as well as using public transit, in addition to driving, reduces traffic congestion and pollution, protects the environment, and encourages active living. Te idea of walkable neighborhoods is critical to the success of any parks and rec- reation system (Figure 25). Te community design strategy should encourage people to walk to important destinations, such as churches, public spaces, play sites, parks, schools, shopping, and work. In this context, creating an integrated network of systems enhances walkability. For instance, the trail system in Pottstown can be developed to serve as a major corridor for walkable neighborhoods, while simultaneously promotingactive living by providing walking and biking trails, as well as offering a host of recreational activities. Means of active transportation (non-motorized) should be accommodated in new road corridors and strategically retrofitted into existing roads' greenway connections. A viable transportation plan should be consistent with an area's long-term vision of future development and land use.

3.2.7 RECOMMENDATIONS

Vary transport options and promote active transportation by creating a system of integrated networks that estab lish walkable neighborhoods.

Design new parks as destinations in exurban and rural AREAS OR ADJACENT TO SIGNIICANT PUBLIC DESTINATIONS IN urban/suburban areas, to promote active living.

3.2.8 Related Planning Objectives

- Prevent landloss.
- Alleviate environmental concern.

4 Environmental Issues

Sprawl and its environmentalconsequencesfor all small towns inPennsylvaniaare crucial and the Focus Area is no exception. Polluted land and sites, includingmunicipal waste locations, landfill, and superfund sites, need to be carefully examinedinlightof actual or perceived risks as these factors can affect the use of parks and recreation amenities (Figure 24).

FIG. 24: Storm water runoff in Riverfront Park illustrates how environmental conditions deter park usage

4.1 New Growth and Sprawl

Environmental issues have created a cyclical progression through regional development. As pointed out in the Land Loss section, sprawl causes urban decline, where populations in urban areas move to suburban, exurban, and rural settings. As a result, strictly zoned environments, such as single-use zoning, have created a heavy reliance on the automobile, which dissuades active living and negatively impacts health and wellness. Furthermore, automobiles and the supporting infrastructure are major sources ofpollution and contribute to sprawl in order to meet people's desire to live in suburbia. Without transforming people's lifestyles, the dependence on motor vehicleswill continue to grow and invariably promote further urban sprawl.

4.1.9 Health Effects

Growing awareness of the relationship between obesity and the built environment is inspiring extensive research, reports, and conferences on the subject. However, the complexity of the issues has yet to bedelineated in a clear and concise manner; many factors contribute to the causes of obesity. Tere have beennumerous findings that show a relationship between the two issues: obesity and sprawl. Table 9 attempts to quantify health effects as correlated with sprawl, specifically obesity and hypertension. Both indicate a lack of active living. Tere seems to be a relationship between these chronic ailments and sprawl; therefore, it is likely that more people will become obese or develop hypertension because of the lifestyle that sprawl encourages (Smart Growth America, 2003).

TABLE 9: Impact of sprawl on the health of an average person

County	Sprawl Index	Expected Probability of Obesity	Difference in Odds of Obesity from Average(%)
Philadelphia	187.78	15.5%	-16.98%
Delaware	125.34	17.3%	-5.23%
Allegheny	120.99	17.4%	-4.35%
Lehigh	119.67	17.5%	-4.08%
Montgomery	107.06	17.9%	-1.49%
Chester	89.94	18.4%	2.18%

Source: McCannandEwing(2003)

Another highlight in the campaign to fight obesity through the built environment include the 2004 conference organized by the National Institute of Environmental Health Sciences of the National Institute of Health (NIH) called “Obesity and the Built Environment: Improving Health Trough Community Design.” It was stated multiple times that “the likelihood of obesity declines withincreases in mixed land use, but rises with increases in time spent in a car per day,” and that some of the measures to combat this shouldtake the form of residential density, land use mix, and commuting time (Tigpen, 2004). Furthermore, “Relationships between communitydesign, patterns of social interaction, and participation in community cooperation are all factors, as are aspects of safety and security, air and water quality” (Tigpen).

Although sprawl’simpact on obesity and hypertension are the most publicized forms of its health risks, other health issues are being seen inrelation to sprawl. Te Sierra Club’s report, Highway Health Hazards, haslinked air pollution caused by rising traffic and automobile use to asthma, cancer, premature birth, low birth weight, andan overall higher risk of death for residents located near busy roadways. Furthermore, areas of highest air pollution include being in a car, where commuters spend hours each day because of the nature of sprawl (Hulsey et al., 2004). Te pollution that many people think they are escaping by moving out of urban areas is actually a misconception (Figure25). “High-density areaswere found to have ozone levels that averaged 51 parts per billion less than low-density areas” (Schmidt, 2004). Tis is because people are forced to drive much more in sprawling development areas so that the benefits of moving out of urban realms are offset (Schmidt).

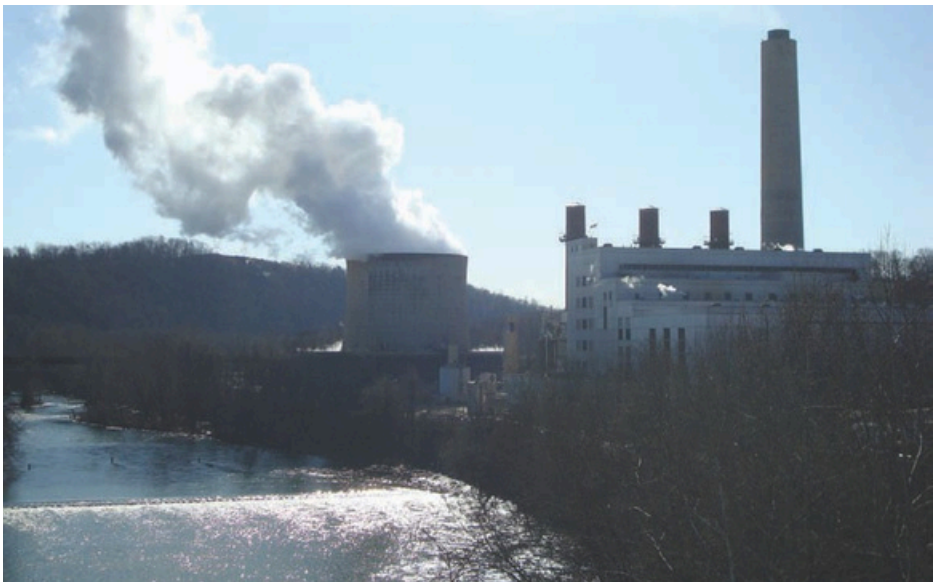


FIG. 25: Titus Station and wing dam

T e research on sprawl in Phase I indicates that the health statistics arestill undesirable, as there is a likelihood of a higher incidence of obesity or hypertension becauseof sprawl. In this case, within the Focus Area, both Chester and Montgomery Counties have a lower county sprawl score (lower score indicates more sprawl) of 89.84 and 107.06, respectively, with a high expected probability of obesity of 18.4%and 17.9% and a high expected probability of having hypertension of 24.1% and 23.7%, respectively (Phase I Report, p. 97). Tis is compared with Philadelphia, which has a much higher sprawl score of 187.78, a significantly lower expected probability for obesity at 15.5%, and expected probability of having hypertension of 22.1%.

Based on the resident survey, it may also be argued that if we make it easier for people to get to parks to fulfill their exercise needs, they would be more active. While examination of the location of physical activity with respect to theactivity status of survey participants indicates that there isno significant overall relationship (Table 10), examination of the column proportions for the subgroups reveals that people who are active in terms of their physical activity status use parks for exercise more frequently than those who are underactive.

TABLE 10: location of physical activity by physical activity status of survey respondent

Location of Physical Activity	Underactive Regular		Active	
	Frequency	Percent	Frequency	Percent
At home with exercise equipment	181	53.1	77	49.7
Walking or bicycling in the area or elsewhere	274	80.4	124	80.0
Active household chores	305	89.4	134	86.5
At the gym	92	27.0	45	29.0
In parks	161	47.2	89	57.4
At work	110	32.3	54	34.8

4.1.10 Physical Activity

Environments thatsupport rather than hinder physical activity can help combat obesity and other adverse health effects related to sprawl. Lee & Moudon (2004) assert that "physical activity is associated with objective and subjective measures of accessibility to recreational facilities and local destinations, as well as with neighborhood safety and visual quality" (p. 147). Teir approach concentrates on the issue of active transportation by splitting it into three areas: destination, route, and area. Tey argue that"destinations must be relatively proximate to origins in orderto allow for the option to walk or bike. It is thenthe route that becomes important; the space between destinations is measured physically and qualitatively. Sidewalks and trails are measured subjectively based on the perception of safety, convenience, and visual quality" (p. 151). Lee and Moudon further elaborate on this concept: "Because neighborhood streets are found to be the most frequently used places for physical activity, interventions involving maintenance, comfort, connectivity, continuity, and safety ... will likelyserve as effective facilitators of walking and biking" (p. 163). Finally, they believe that an understanding of areas around the destinations must include social and behavioral aspects. Although any area can be measured objectivelybased on density, street block size, etc., it is often judged subjectively based on perceptions of quality and safety. Increasing physical activity will be most enticing for people when destination/origin, route, and area work together to create a quality environment.

T e resident survey indicates that active recreation, which includes the availability of walking or bicycling infrastructure in the area, is one of the most important reasons for park visits. However, any effort to do so must consider the impediments to such activity causedby the post-war reliance on the automobile, particularly in thesuburbs. Te survey found that walking is the most common type of physical activity and is therefore the most effective way of promoting healthy living. Furthermore, the "lack of time" that is the leading factor in preventing physical activity "suggests that supporting walking for the dual purpose of exercise and transportation may help increase levels of physical activity" (Lee & Moudon, 2004, p.156).

4.1.11 Zoning

While many reports call for smart growth alternatives, such as infill development, increasing population and building densities, and multi-use zoning to combat sprawl and its health affects, local zoning codes often conflict with the projects proposed and the ideas that generate them. Currently, the most prevalent zoning system in the Focus Area (Figure 26) is based on the Euclidean system that is essentially single zoning where most of the lands in the region are classified as single-family residential, multi-family residential, commercial, institutional, industrial, or recreational (Phase I, Final Report, p. 86). Zoning regulations can have an immense impacton the built environment as they can provide a framework for growthif they are well updated and adapted to the changing needs of the communities. For example, through intelligent zoning agendas, conservation of farmland can be achieved while concurrently increasing building densities that provide incentives for planning parks and recreation

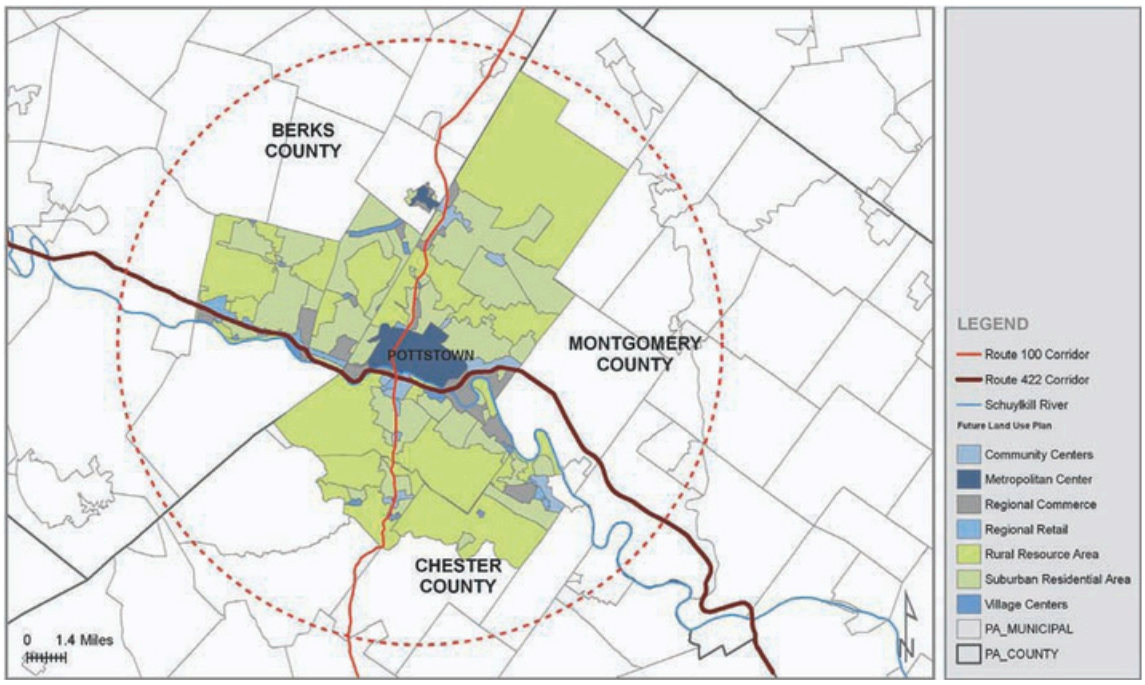


FIG. 26: Future land use and zoning plan

activities. Te Community Leaders focus group praised current efforts at regional cooperation to address these issues such as the Metropolitan Regional Planning Commission. Unfortunately, out-of-date policies are not only hindering progress, but also discouraging what would be most beneficial to communities (Schmidt, 2004).

4.1.12 Contaminated Sites

Another apparent tendency toward better land use is a shift in the direction of the Schuylkill River (Figure27). Current zoning regulations provide a buffer betweenthe built environment and the natural resource by allocating a green way that is to stretch along the river and provide areas of recreation. Te Schuylkill RiverTrail is included in this plan. However, industrialization has left many waterfront sites contaminated that are now consideredbrownfields and superfund sites. Althoughthere is a potential for public liability and health hazards (Wilson, 2005), proper renewal techniques can overcome perceived risks and recreate a healthy riverfront. Input from the focus groups shows some concern for possible hazards. Residents seem to accept the current con- ditions and recognize the economic benefits they present to the municipality.

Te benefits of riverfront property are valuable to communities, which prompts planners to resurrect abandoned and polluted sites by reinterpreting and rehabilitating them as parks or other amenities. However, the Planners focus group communicated elected officials' ignorance of the problems and possibilities these sites afford to the community. Better communication is required at all levels for a concerted effort at revitalization and cooperation between government levels and jurisdictions. Te aspiration for an increase in collaborations by the focus groups is a positive first step to combating regional issues and development.

Unfortunately, sprawl continues to have an effect on deterring residents from accessing the Schuylkill River and commercial centers, creating unwalkable communities rather than fertile and prosperous situations for active living. However, among the survey respondents who said they are

FIG. 27: Schuylkill River Trail in Birdsboro

concerned about environmental pollution, a large majority live in the Greater Pottstown Area, and according to theresident surveys summarized in Table 11, litter/trash/inappropriate waste disposal, water contamination, and industrialactivity/pollution discourage them from using the parks.

Figure 28 acts as an index that highlights five of the most visited parks in the Focus Area and their relationship to sites of environmental concern or contamination (Table 12). Locations adjacent to the Schuylkill River are of paramount importance as the river acts as a means by which potential pollutants can be spread to and affect a greater area. Furthermore, the greenway along the river, which could potentially house the Schuylkill River Trail and an interconnected network of parks and recreation spaces, should seek to obtain its value as a clean natural resource. As seen in Table 11, residents have expressed concern about pollution and contamination, which may have an impact on park visits and usage. e level of concern expressed by the residents and the focus groups to change the cur-
T

rent status of contaminated sites indicates the need to further explore the issue. Te mere locations of sites with environmental safety issues along the Schuylkill River should raise

TABLE 11: Environmental concerns expressed by survey respondents

Environmental Concern			Percent
Litter/Trash/Inappropriate Disposal	40		47.0
Water Contamination	20		34.2
Industrial Activity/Pollution	8		17.1
Animal Waste	7		6.8
Air Pollution	6		6.0
Drugs/Alcohol	4		5.1
General Pollution and Contamination	2		3.4
River/Creek Overflow	1		1.7
All Human Activity	6		0.9
Other			5.4

/THER INCLUDES ONE MENTION EACH OF THE FOLLOWING $EER DESTROYING WILDLIFE AT 6ALLEY &ORGE MOSQUITO BUG CONTROL A WASTE management facility and a sanitation area near the parks, noise pollution, spraying of crops, and loss of habitat.

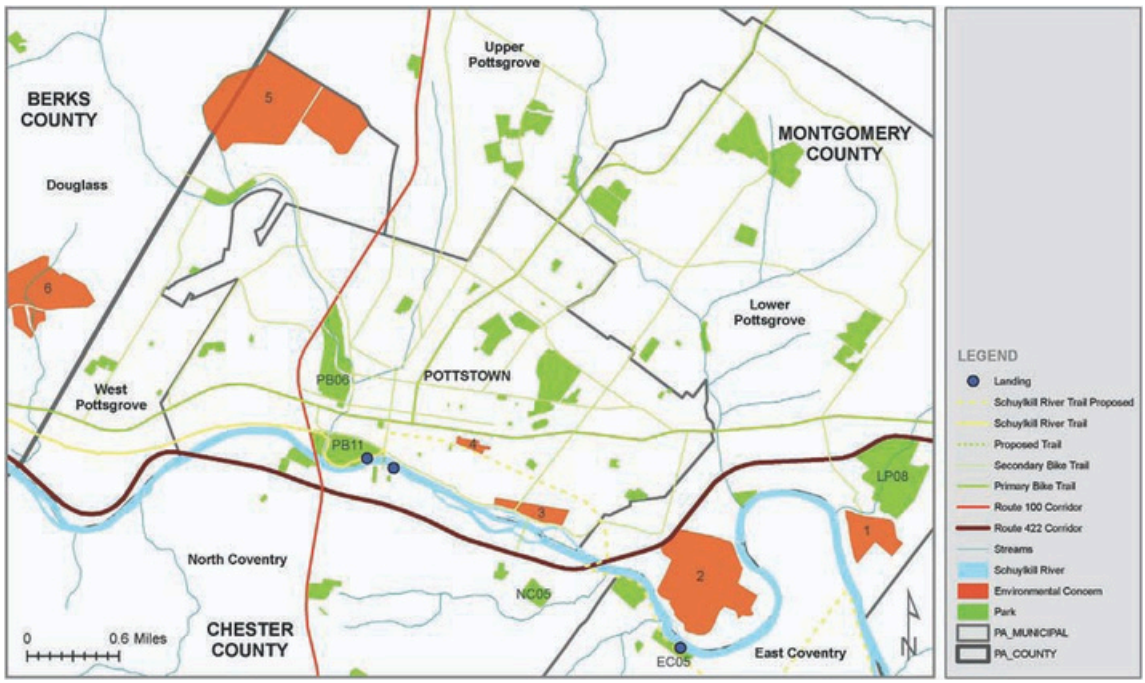


FIG. 28: Riverfront sites of environmental concern

a desire to correct contamination levels to prevent pollution and preserve the integrity of this natural asset. Additionally, planners and local officials could begin to develop a network of recreational destinations and parks were these environmental issues rectified. For example, Figure 28 shows two popular parks, TowpathPark and Kenilworth Park, in close proximity to the Occidental Chemical Corporation / Firestone Tire and Rubber Company superfund site (Figure 29) and Buckman's scrap yard (Figure 31).Te existing conditions should not deter their future potential as desirable destinations, which interconnect with existing park networks.

Another potential siteis located on the now closed Pottstown Landfill (Figure 30). T is large piece of land could be usedto provide a means of densification and sprawl prevention. While potential uses for the formerlandfill are being explored bya committee of representatives and stakeholders (Montgomery County Planning Commission, 2005), the future use of other contaminated sites as possible resources should also be conducted.

TABLE 12: Riverfront sites of environmental concern

Number	Municipal Waste Landfills	M unicipality	Status	Type
1	Pottstown Trap Rock – Sanatoga Quarry / Asphalt	Lower Pottsgrove	Active	Quarry
2	Occidental Chemical Corp. / Firestone Tire & Rubber Co.	Lower Pottsgrove	NPL-Final	Superfund
3	Buckman's, Inc.	Pottstown		Scrap Yard
4	Pottstown Drum	Pottstown	NPL-Non	Superfund
5	Pottstown Landfill	West Pottsgrove & Douglass (B)	Closed	Landfill & Superfund
6	Pottstown Trap Rock – Douglassville Quarry	Douglass (B)	Active	Quarry

4.2 PLANNINGOBJECTIVE
Alleviate Environmental Concerns

Zoning regulations have considerable impact on thebuilt environment and single-use zoning, based on the Euclidean System, encourages sprawl. Healthy strategies fornew development must be conceived at the policy level where zoning regulations are determined. Conserving natural resource areas, such as farmlands and open space that characterize the landscape, is essential for establishing a community character.

Active living is also impacted by zoning and its ability to segment or connect open spaces (Montgomery County Planning Commission, 2005). Linking open spaces via a pedestrian and bike friendly transportation network will encourage residents to recreate. Neighborhoods will be joined to open spaces that wouldotherwise be out of reach; people will occupy the built environment in a more environmentally based and consciously active living manner.

While the perceived dangers of contaminated sites have been partly alleviated, the shift toward viable recreational land use along the Schuylkill River is apparent in most planning studies. However, the current green buffer between the built environment and the river still has vestiges of industrialization, which has left many waterfront sites contaminated, known as brownfields and superfund sites. Tus, the resident survey, as well as input from the focus groups, still indicates a degree of concern for possible hazards. Residents seem toaccept the current conditions and recognize the economic benefits they present to the municipality.

FIG. 29: Occidental Chemical Corp. / Firestone Tire & Rubber Co. superfund site

FIG. 30: 3RWWVWRZQ/DQG¿OO

4.2.13 Issues and Characteristics

- Sprawl
- Health effects
- Physical activity
- Zoning
- Contaminated sites

Altering the cyclical nature of development can be accomplished at the policy level where zoning regulations are determined; these regulations provide the framework for growth and the potential for rejuvenation of the built environment. At the same time, strategic development density offsets sprawl and other corresponding negative issues. Te Community Leaders focus group praised current efforts at regional cooperation to address these issues, such as the Metropolitan Regional Planning Commission.

Encouragement to walk for the dual purpose of exercise and transportation translates into infrastructure improvements that integrate walkingand biking into public transportation systems and services, mixed land use to create short distances between destinations, and increased ease and perceived safety to residents. Reducing the reliance on and use of the automobile and increasingwalking and biking in daily routines will help combat some of the negative aspects of sprawl and its adverseeffects on human health.

FIG. 31: Buckman's Inc. Scrapyard affects the built environment context in Pottstown

4.2.14 RECOMMENDATIONS

Alleviate environmental concerns for future parks and recreation strategies as INDUSTRIALIZATION HAS LEFT SOME AREAS AND MANY WATERFRONT SITES CONTAMINATED %NCOURAGE MIXED LAND USES AND DISCOURAGE SINGLE USE ZONING TO COMPLEMENT INILL STRATEGIES TO CHECK SPRAWL AND CONSERVE VALUABLE FARMLAND

4.2.15 Related Planning Objectives

- $ SFBUF JOUFHSBUFE OFUXPSLT

5 Partnerships

Pennsylvania's fragmentation of governing bodies is manifestlyvisible in the Pottstown Area. As aconsequence, jurisdictions compete with each other rather than work together to address contemporary challenges related to land use planning and economic development,resulting in the deterioration of the built environment and the well-being of the citizens. Additionally, fragmentation often results in the unnecessary duplication of efforts and inefficient use of resources, which could be better utilized to benefit communi- ties of various municipalities. Tese conditions create implications for long-term strategic planning and detract from region-wide prosperity.

5.1 Collaboration

Active living promotion is tied to the relations between the large number of townships and boroughs that interact in the Focus Area. It becomes imperative for the success and effectiveness of active living to require the thoughtful creation of viable multi-jurisdictional planning and land use initiatives. Partnerships can be manifested in projects or events. As the backbone to regional trail strategies, the Schuylkill River Trail connects a series of local and regional parks; this type of thoughtful trail development isthe result of

FIG. 32: Participants enjoy the 2008 Schuylkill River Sojourn

cooperation and collaboration between various community organizations. Te Schuylkill River Sojourn is a model of how powerful partnerships can work, having over 1,500 participants and over 70 public and privatepartners since 1999 (Figure 32). While current parks and recreation partnerships are forming to encourage healthy lifestyles, a higher level of effort is needed to maintain andgrow partnerships that enable physical and recreational activities. Te existing partnerships should be nurtured by the municipalities and community, as well as by the Parks and Recreation organizations.

As it becomes increasingly understood that parks can potentially contribute to urban revitalization and help public or private organizations to generate investments in infrastructure, there is agrowth in partnership participation, and recognition in planning and development strategies (Walker, 1999). Despite the lack of incentives, resource constraints, and budgetary limitations that force managers and officials to tend to their own municipal priorities, working collaborations with surrounding townships and boroughs are vital. Te management of community-wide resources must extend beyond the limits of municipal boundaries. Trough creative collaborations and partnerships, public demand for greater quantities and qualities of parks that support parks and recreation activities in the Focus Area can begin to be met.

5.1.16 PLANNING OBJECTIVE
Encourage Partnerships

It is obvious that the Focus Area has a number of active educational, environmental, planning, parks and recreation, professional, health, senior, and youth organizations. Many of these contribute substantially to thecommunity. It has also become obvious that there are impediments to collaborations and establishment of partnerships among municipalities, as well as community organizations. Te issues identified during the exploratory interviews in this study havebeen further pursued with the focus groups. Tese focus groups have been conducted with representatives from target groups, along with decision makers, such as parks and recreation management people, planning professionals, and stakeholders. Although partnerships and concerted efforts to create regional zoning plans are greatly desired by the selected focus groups, the election process encourages officials to manipulate their priorities in a way that most effectively resultsin reelection. Even if a particular governing body facilitates cooperation and coordination between municipali- ties, the short-termed and frequently changing officers cannot follow projects to fruition.

5.1.17 Issues and Characteristics

- t Fragmentation and collaboration
- t Promotion

Plans to connect open spaces vary greatly between various municipalities and ju- risdictions. Terefore, a region-wide visioning process with an emphasis on building cross-municipal and multi-sector alliances should be implemented. Te process would result in a regional identity and framework for parks and recreation with an emphasis on connectivity between three scales (neighborhood, municipality, and region). Te results of this effort would also address governance and policy, programming, communication, and outreach and management. In this context, bringing together agencies that award grants and fund projects in the Focus Area could help shape the future development and forma- tion of cross-municipal partnerships. Tis Grantmakers Forum would be the initial group to solicit input during a project-scoping phase before the public process begins.

Community planning should recognize that regions are composed of urban/suburban and exurban/rural areas, farmlands, water features, and natural open spaces that contrib- ute to the rich diverse character of the Focus Area. Parks and recreation planning should involve a broad-based citizenry, including public and private sector leaders, community interest groups, and interdisciplinary professionals. Intergovernmental cooperation beyond jurisdictional boundaries is necessary for achieving a viable and sustainable region (MAP 2010). Local planning decisions that impact neighboring communities should study multi-jurisdictional effects of development to enhance parks and recreation strategies for attracting inactive and underactive populations. Parks and recreation systems are critical

FIG. 33: Schuylkill Banks Project in Philadelphia has been a joint effort of partnerships

in creating a sense of community within a mix of housing options. Parks serve a variety of citizen needs, such asyoung families, children, teenagers and young adults, empty nesters, singles, and senior citizens. Involving organizationsthat serve these groups would benefit parks and recreation planning efforts.

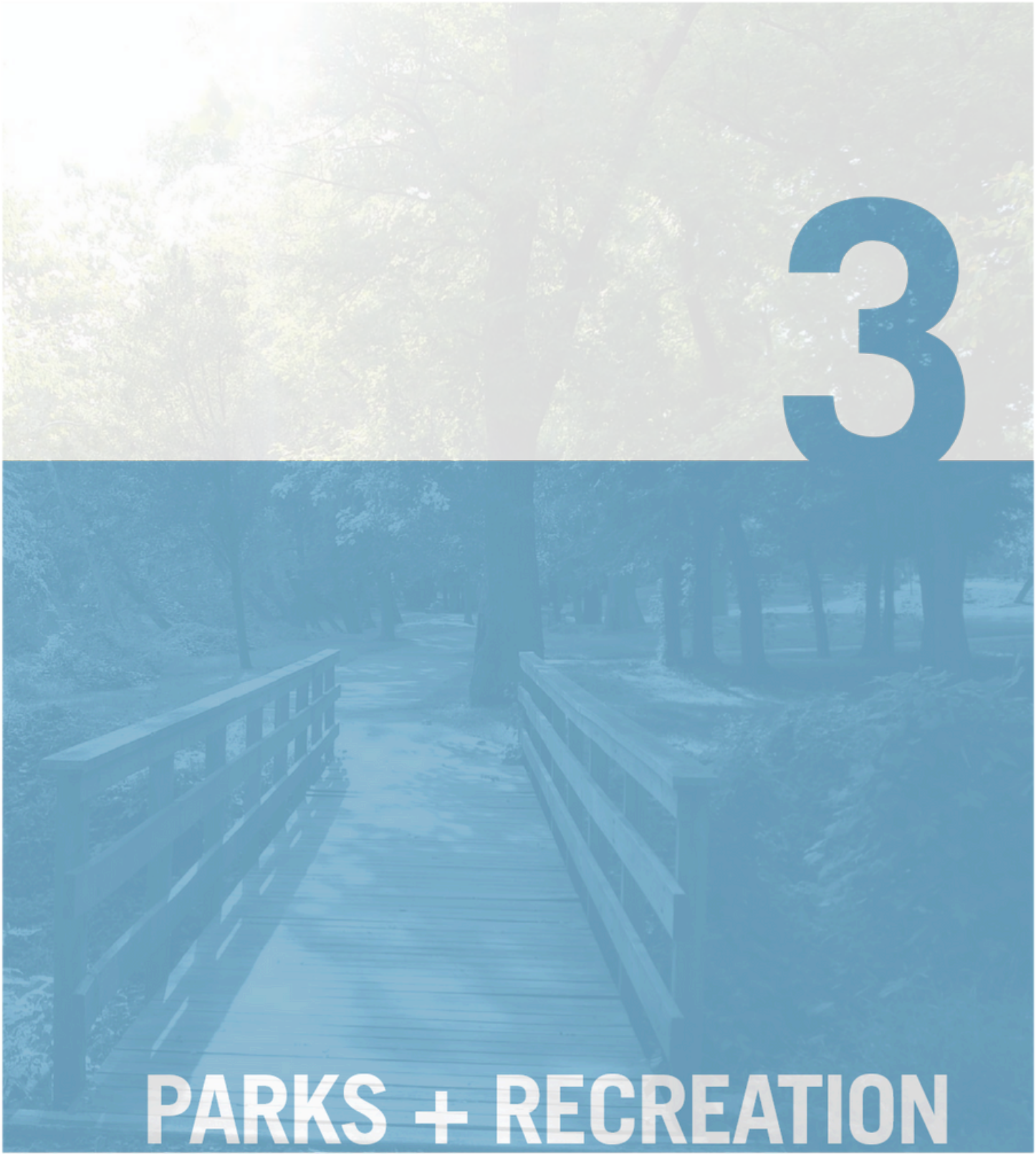
5.1.18 RECOMMENDATIONS

Promote cooperation between various municipalities and encourage partnerships with other agencies for a more effective parks and recreation system.

Establish a “Grantmakers Forum” to encourage co operation, partnerships, and alliances among various municipalities.

5.1.19 Related Planning Objectives

- Prevent land loss.
- Create integrated networks.
- Alleviate environmental concern.

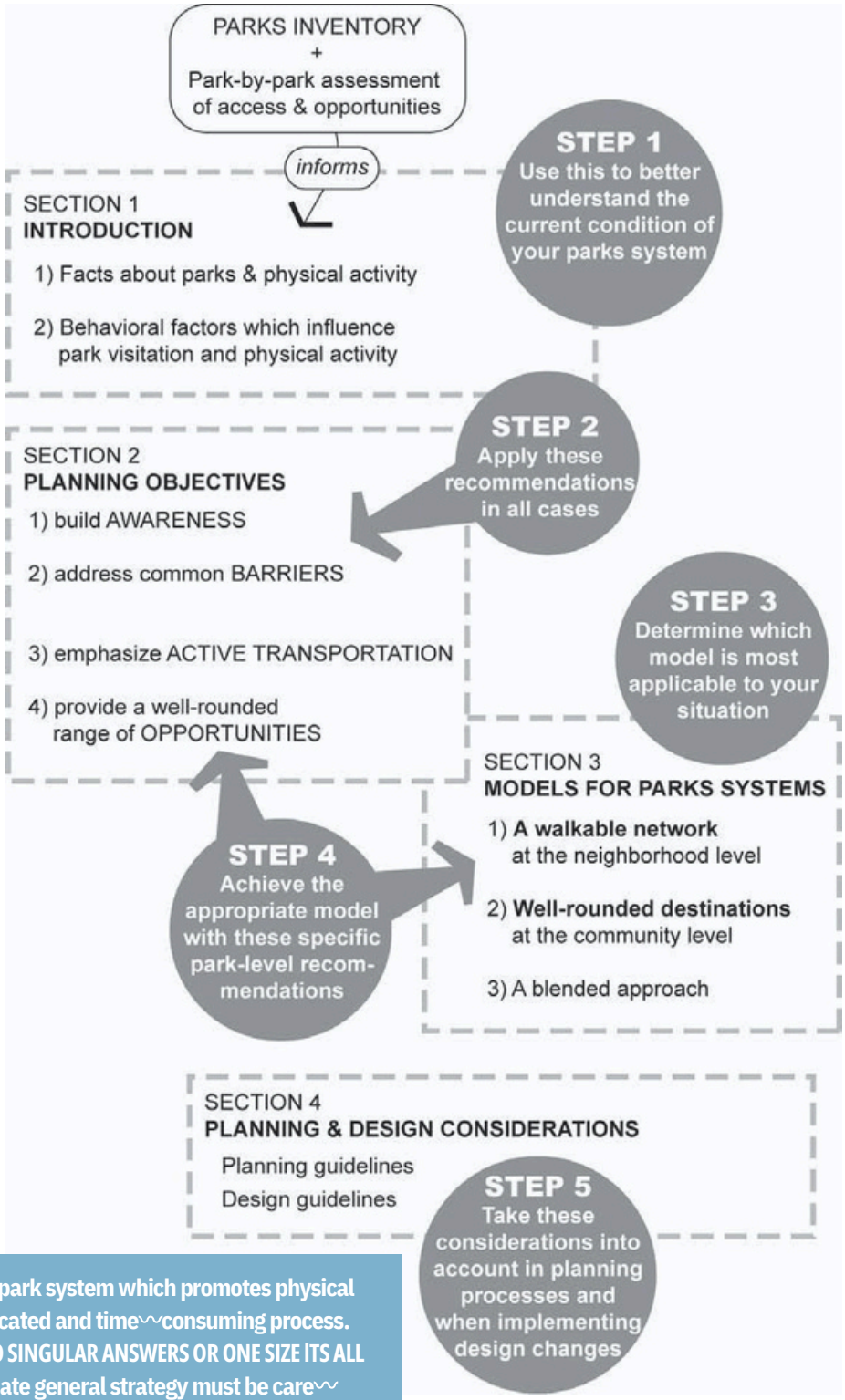


3

PARKS + RECREATION

PREPARING FOR IMPLEMENTATION
STRATEGIES & GUIDELINES FOR HEALTHY LIVING, PARKS, AND RECREATION

PENNSTATE



Planning a well-considered park system which promotes physical activity for visitors is a complicated and time-consuming process. UNFORTUNATELY THERE ARE NO SINGULAR ANSWERS OR ONE SIZE FITS ALL solutions. Rather, an appropriate general strategy must be carefully and deliberately crafted to the particulars of each municipality. The following chapters provide the tools, strategies, and SPECIFIC PARK LEVEL INFORMATION FOR CRAFTING SUCH SOLUTIONS

FIG. 1: A step-by-step overview of the Parks & Recreation sections

SECTION 1
INTRODUCTION

The introduction to the parks section provides the context for the recommendations and guidelines that follow in later chapters. Topics include:

- A review of the literature on parks and physical activity, including a discussion of the importance of well-rounded parks.
- An overview of four key behavioral factors which describe the choices people make related to park visitation and physical activity.
- An explanation of the parks assessment tool developed during the course of this study. This tool assesses well-roundedness in parks according to four primary categories of opportunities: physical activity; contact with nature; social connections; and connections with history, culture, and sense of place.
- Three models for parks systems: The Walkable Network Model; The Well-Rounded Destinations Model; and The Blended Approach. Each model is appropriate for different densities of the built environment and takes into account people's behavioral choices.

1 Parks and Physical Activity

Parks and recreation spaces are the primarysites of opportunities for physical activities that municipalities can provide. Because parks are public spaces, they present equal opportunities for a full range of residents. Tis is significant because research has shown that four out of five people visit parks each year (Godbey, Graefe, & James, 1991). Parks provide direct opportunities for active recreation, but they also providea breadth of other experiences which enhance residents' quality of life. Tese experiences include contact with nature, opportunities to be around and meet others, and to connect with an area's history, culture, and sense of place. Parks are both sites and destinations for physical activity. In an active living lifestyle, this distinction is important: recreating at a park adds to an individual's overall level of physical activity, and travel to and from the park enhances active transportation.

1.1 TheRoleofMunicipalities

Public parks and recreation spaces are key components of an activity-friendly community environment. An'activity-friendly environment' makes it easy for individuals to choose to be physically active through planned exercise and routine daily activities (Active Living, 2005). Meeting recommended levels of physical activity is the primary vehicle by which public health experts suggest that problems such asobesity canbe addressed. Municipalities play a key role in promoting an activity-friendly environment through choices in planning and design of streets, neighborhoods, and the parks system. A 2005 survey by the Interna- tional City/County Management Association found that 89% of city managers believe that parks and recreation departments are the primary city agency responsible for helping to ad- dress the problem of obesity (International City/County Management Association, 2005).

1.2 0ARKS 2ELATED 2ESEARCH %MPHASIZES Individual Parks, Not Park Systems

Researchon active living and physical activity has only recently begun to address the links between parks and the larger scale of the builtenvironment. Te academic lit- erature on parks and physical activity focuses primarily on individual level behaviors by people visiting parks, or onspecific characteristics of parks which encourage or discourage physical activity. Te literature on park design, meanwhile, is oriented to those designing parks and providesinformation on best practices and design features. Almost none of the design-oriented literature takes physical activity into account as a primary subject.

Overall, the literature focuses on research at the park level, with very little work addressing collections of parks in municipal park and recreation systems. System-level assessments are provided primarily by the guidelines fromthe National Parks and Recreation Association. Tese guidelines are the ones commonly used in preparing openspace planning documents for municipalities. However, the NRPA methodology provides an overview of the general characteristics of the park system—the number of parks, their locations, a classification system of types, and a rough estimate of walkable access—but it doesnot directly emphasize physical activity.

1.3 Parks,PhysicalActivity,and THE)MPORTANCE OF 7ELL 2OUNDEDNESS

T e US Department of Health andHuman Services' Healthy People 2010 report (US Department of Health and Human Services, 2000) presents researchwhich emphasizes that the design of communities and the presence of parks, trails, and other recreational facilities affects people's ability to meet recommended levels of physical exercise. Te resident survey conducted during this study of active living in the Pottstown Area found that exercising is the most popular physical activity engaged in at parks (87% of respondents who visit parks). Te next popular activity wasplaying with children (51%). In addition to these two physical activities, however, a number of other activities—some active and some passive—were noted which people engage in when visiting parks. Tese included contact with nature (76%), seeing or meeting people (46%), reading or relaxing (41%), and activities of cultural or historical interest (39%). When taken in conjunction withthe survey findings on people's values in parks, a picture of the well-roundedness of park offerings emerges. Tis is important for achieving increased levels of physicalactivity because it shows that there are a number of features related to park visitation which must be considered in addition to simply providing more facilities for physical activity.

Why do People Visit Parks?

Percentages from the survey of people who agree or strongly agree that they visit parks for the following reasons:

77%

physical activity

93%

contact with nature

46%

be with or around others

59%

connecting with

FIG. 2: Why people visit parks

Te resident survey revealed that both active and underactive peoplevalue a well-rounded range of opportunities at parks. Tese values are independent of one another, meaning that each of them is valued distinctly, rather than for example, having physical activity directly influence a visitor'sdesire to have contact with nature. Te need to be in nature and to connect with history and culture are important for people regardless of whether or not they are active. However, the importance of social connections (being with or around others) varies. Two groups emerged from the findings: those who value being around or seeing others while engaging in physical activity, and those who do not.

Tese findings are significant because they show that well-roundedness directly influences the decision to visit parks. Visitation is an issue because if people do not visit parks, they cannot benefit from the opportunities for physical activity at the parks. Te next section describes four factors that are important when considering issues of park visitation.

2 Behavioral Factors Related to Park Visitation and Physical Activity

2.1 VisitingParksIncreasesPhysicalActivity

Adults who visit parks on at least a monthlybasis have been found to be four times more likely to meet recommended levels of physical activity (Deshpande, Baker, Lovegreen, & Brownson, 2005). Studies have also shown a positive correlation between access to open spaces andincreased levels of physical activity for residents in general (Giles-Corti et aI., 2005) as wellas specifically for children (Roemmich et al., 2006). In one innovative study, when sedentary behaviors in children were restricted, the increases in physical activity were foundto be significantly higher in areas with neighborhood parks (Epstein et al., 2006). Te body of research in active living related areas clearly establishes that visiting parks can increase levels of physical activity among the general population. Te general summary of findings across a number of studies reveals that many park users engage in primarily passive activities at parks, with limited periods of moderate or high intensity activity (Mowen, Kaczynski, & Cohen, 2008). Tese findings are important because they reveal that physical activity alone is not theonly reason people visit parks.

2.2 PeopleVisitParksformorethan Physical Activity

Parksoffbenets beyond physical activity. Te resident surveyshowed that along with physical activity, people also value contact with nature, seeing and meeting others, and opportunities to connect with history, culture, and a sense of place. In addition to active recreation, parks offer other health benefits such as stress reduction and improved mental health (Godbey & Blazey, 1983), as well asthe restorative benefit of getting away from daily environments (Kaplan, 1995). Parks are one choice among many for physical activity. Te resident survey revealed that an almost equal number of respondents undertake physical activity at home (52%) as in parks (50%). Interestingly, there was little difference in these numbers across residents in higher andlower-density areas.

2.3 PeopleChooseParksBasedonFacilities

Research has shownthat the features available in a park are more important than park size or proximity when predicting physical activity levels in parks (Kaczynski, Potwarka, & Saelens, 2008). Considering facilities as a key component of visitation decision-making is a common sense proposition. Without desired facilities, there is no reason to visit a park. However, combined with the observation that people visitparks for more than just physical activity, it is reasonable to conclude that providing other features people value—nature, social connections, opportunities for connecting with history, culture, and sense of place—in nearby parks can lead indirectly to gains in physical activity levels by encouraging active transportation choices. Young adults participating in the study focus groups noted that the location and presence of desired amenities affected their likelihood to exerciseat parks, whereas park size and the overall number of amenities did not have as strong an impact.

TABLE 1: Comparison of respondent's home municipality with municipality of parks visited.

Respondents' Borough or Township	Where People Visit Parks	
	WithinOwn Municipalities	TraveltoOther Municipalities
Amity Township	53%	47%
Boyertown Borough	20%	80%
Douglass Township - Berks	11%	89%
Douglass Township - Montgomery	0%	100%
East Coventry Township	31%	69%
East Vincent Township	30%	70%
Lower Pottsgrove Township	0%	100%
New Hanover Township	33%	67%
North Coventry Township	33%	67%
Pottstown Borough	78%	22%
South Coventry Township	20%	80%
Spring City Borough	25%	75%
Upper Pottsgrove Township	21%	79%
West Pottsgrove Township	38%	63%

2.4 PeopleWillTraveltoParksthatProvide the Opportunities They Desire

T e one park which cameup time after time in meetings and discussions as an exemplar was Manderach Playground in Limerick Township, which is outside of the Focus Area. Parks and recreation leaders participating in the focus group cited Manderach Playground as a well-rounded facility that attracted a high number of visitors. Research on parks visitation confirms that park features outweigh proximity. Te implication of these findingsis that people will travel to parks that provide the opportunities they de- sire. In a study which examined parents' decision-makingabout parks visitation, fewer than half of those surveyed visited theirlocal parks most frequently (Tucker, Gilliland, & Irwin, 2007). Instead, they traveled—in some cases significant distances—tovisit parks that provided characteristics they desired, including water features, shade, play equipment, and cleanliness. Parks and recreation leaders emphasized the attraction of desirable features, noting proximity to food and public institutions, though they felt that opportunities for physical activity such as tennis courts and soccer fields were im- portant at the parks themselves.

In the resident survey, just over 50% of respondents said they drove to parks, whereas only 10% walked and 3% bicycled toparks. One implication of the high driving rate is that people, once in their cars, will not distinguish too closely between a park that is within a half mile or those farther away. Te survey found that in mostcases, people travelto parks outside their own municipalities. Only the municipalitiesof Amity and Pottstown had more than 50% of respondents reporting that they primarily use parks within their home municipality.

3

!SSESSING THE 7ELL 2OUNDEDNESS of a Parks System

Existingassessment tools for parks and physical activity fallinto three categories: parksystem-levelassessments, tools for assessing individual sites,and tools for recording physical activitylevels by individuals and groups at individualparks. T e most commonly used system-level tool is the NRPA Level of Service assessment; this methodology allows planners to inventory open spaces, assign a type classification, and conduct a rough evaluation of walkable coverage. Park-level assessment methods such asEARPS (Environmental Assessment of Public Recreation Spaces) assist in evaluating the physical conditions or the experiential qualities of parks. Tese assessments are helpful in assessing the quality of a place in order to aid action in making parks safer and more attractive with the ultimate goal of increasing visitation and use. Assessment tools for gauging physical activity are often used by researchers interested in individual-level behaviors. Tools in this category include BRAT-DO (Direct Observation), SOPLAY (System for Observing Play and Leisure Activity in Youth), and SOPARC (System for Observing Play and Recreation in Communities).

T e goal of this study is to provide recommendations and guidelines for increasing physical activity in parks and recreation spaces within the service area of the Pottstown Health and Wellness Foundation. In order to provide general recommendations and specific implementation strategies, several categories of information must be combined: an inventory of sites and opportunities for physical activity with an assessment of factors affecting park visitation, including access and barriers. Te three categories of assessment tools described above are useful for any single aspect, but do not connect across scales.

FIG. 3: Four elements of the well-rounded park

A new method for system-level assessment was developed during the course of this study. Tis method brings togetherinformation about specificsites based on the facilities available with a system-level park type classification (neighborhood, community, or regional). Te facilities assessment is integrated into a park-level assessment across four categories of opportunities found to be important to park visitation: opportunities for physical activity; contact with nature; social connections; and connections with history, culture, and sense of place. Physical activity is broken into four subgroups by age—children, teens, young adults and adults, and seniors—resulting in a total of seven assessment categories. e physical activity subgroups were created because of differences in recommendations for physical T

activity levels for each group, and the fact that while any visitor will fall into only one group, the park itself must be assessed for all groups (Table 2).

TABLE 2: Categories for park~level well~roundedness assessment

	Opportunities for Physical Activity				Opportunities for Contact with Nature	Opportunities for Social Connections	Opportunities to Connect with History, Culture, and Sense of Place
	Children	Teens	Young Adults & Adults	Seniors			
Numerous Facilities	C	T	A	S	N	P	H
Some Facilities	c	t	a	s	n	p	h
No Facilities	–	–	–	–	–	–	–

Each of the seven categories receives a score based on the number of facilities available in each category. For ease of use, the facilities count is coded with easily identifiable letters (for example: “T” for Teens) and the number of facilities is shown with the use of upper and lower case. Tree options exist for each category: no facilities, indicated by a blank; some facilities,indicated by a lower case letter; and numerous facilities, indicated by an upper case letter. Te scoring system is adjustable to match the conditions available in any given area; in the study area, the facilities count options are calibrated to reflect the findings of the survey (Table 3).

TABLE 3: 3DUN OHYHO VFRUHV UHODWHG WR V\VWHP OHYHO FODVVL¿FDWLRQ

Example Score		Park-Level Assessment	System-Level Classification
C T A S N P S H	all upper-case	Exceptionally well-rounded	Regional
C t A s N P H	some upper-case	W ell-rounded	
c t a s n p h	all lower-case	Moderately well-rounded	Community
c _ t a n _ h	some blanks	Somewhat underperforming	Neighborhood
_ _ a _ n _ h	many blanks	Underperforming	

T e seven-letter scorefor each park is useful in two ways: it determines the park's type classification within the larger system, and it provides an indication ofwhich facilities should be addedor upgraded. Te classification type is a reflection of its draw or relative popularity within the larger park system as reflected by visitation. Tepark's classification is rated by three scales: neighborhood, a park known, and used primarily locally;community, a park known and used by a group of neighborhoods; and regional, parks which are known and used by people across a larger area. In the study area, the classification types are substantiated by the findings from the survey which correlate the well-roundedness with its visitation popularity (Table 4).

T e second benefit of the assessment tool is the tabulation of the existing facilities at each park. Gaps or improvements are visible at a glance, and upgrades or additions may be made according to the recommendations for each group presented earlier in this document.

TABLE 4: 6XUYH\ ¿QGLQJV FRPSDUHG WR ZHOO URXQGHGQHVV SUHGLFWLRQV

Survey Rankings	Well-Roundedness Assessment
Rank of most-visited parks	Likely Most Popular Regional-level in alphabetical order
10. Boyertown Community Park 7. Kenilworth Park 1. Memorial Park 5. New Hanover Community Park 8. Sanatoga Park 4. Towpath Park	Boyertown Community Park Kenilworth Park Lake Drive Park & Recreation Area Memorial Park New Hanover Community Park Sanatoga Park Swamp Creek Park Towpath Park
	Likely Somewhat Popular Community-level in alphabetical order
3. Manatawny Park	Anderson Field Coventry Woods Deep Creek Park Hill Road Recreation Area Manatawny Park Middle Creek Athletic Fields Monocacy Hill Recreation Area Myron S. Wheeler Recreation Area (Township Fields) Optimist Club Fields Ringing Rocks Lower Nature Park
2. Riverfront Park 6. Schuylkill River Trail	Riverfront Park Schuylkill River Trail Schuylkill River Park Smith Family Plaza
9. Community Park on the Ridge	*Assessed as underperforming*

4
Three Models for Parks Systems

For any resident of a place with a system of parks, there are two kinds of parks available: those within walking distance of home, and those farther away which require driving or extended travel time on foot or bicycle. Some residents will be fortunate enough to have a nearby park with a variety of activities to enjoy, while others must travel to get to these parks. For these others, their local park—modest as it may be—hopefully provides at least one activity that makes visiting worthwhile. In fact, it may be that there are several parks nearby, each with a specific opportunity, and so by combining the parks to which one has convenient proximity, a broader range of opportunities is available.

This quick sketch frames two models for parks systems: a network of neighborhood parks that, when the parks are taken together, affords a range of opportunities; and, parks as destinations, wherein each park provides a range of opportunities. The key factors to consider regarding park visitation and improving visitors' physical activity levels are access and opportunity. Access includes the measure of distance to parks from one's home, but is not limited to simply proximity. Other factors influence access, including the quality of the built environment, perceptions of safety and convenience, awareness of nearby parks, and available forms of transportation. Opportunities are afforded by facilities for specific kinds of activity, ranging from exercise to enjoyment of nature or other people, to connecting with history, culture, or a sense of place.

From the park user's perspective, a conveniently accessible local park without desirable facilities is not worth the visit, and people will travel to a park that has the opportunities they seek. Considering the collection of parks in a system as a network emphasizes the park user's total set of opportunities—across a number of parks—rather than evaluating each park in isolation. If parks are evaluated individually, a modest park may be seen as deficient, even though its missing facilities are provided just down the street at another park. Not all parks can easily provide all functions. It is not possible to situate a soccer field in a mini-park, for example, or desirable to have soccer played in a nature preserve.

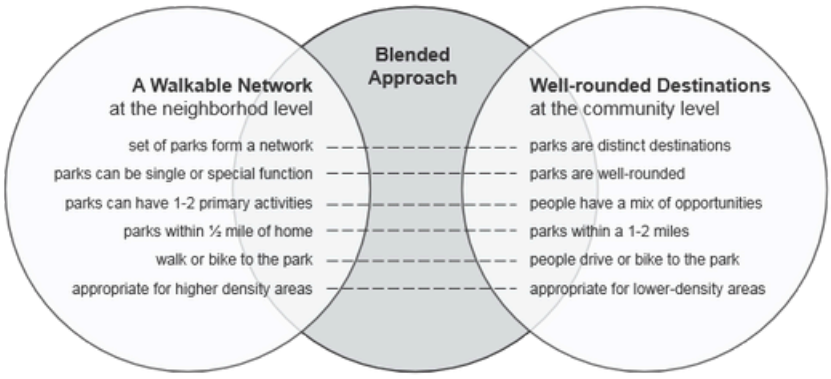


FIG. 4: The three models for parks systems

T e difference between high- and low-density areas is important to park system planning for improvingphysical activity levels.If parks are conveniently available nearby, active transportation choices such as walking or bicycling contribute to increased overall levels of physical activity. Ifaccessto parks depends on driving, as is often the case in lower-density areas, the active transportation bonus is not available. Population counts in lower-density areas may not make it financially feasible to provide parks within walking distance of all residents. Te larger lot sizes in lower-density areas are often the reason people move there in the first place, and their larger yards allow them many of the opportunities for physical activity, social connections, and contact with nature that residents of higher-density areas enjoy in their parks.

Finally,the actual conditions in any park system matter greatly: the availability of funding for improvements as well as land acquisition; the presence of attractive features in certain places; park users' opinions; and the preferences and orientation of decision-makers. In many cases, a blended approach is appropriate: some parksare designated as destinations and improved with facilities to make them a draw across a community, while others serve a local audience with singular opportunities.

4.1 TheWalkableNetworkModel

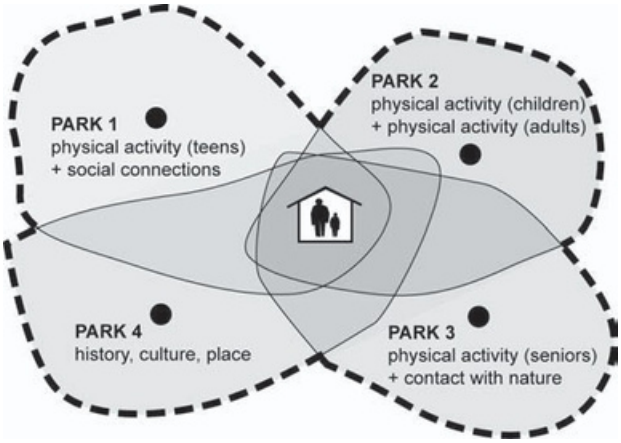


FIG.5: Thewalkablenetworkcombinesmultipleparks

T e idea underlying the Walkable Network Model is that a given individual's range of opportunities may be satisfied by a collection of nearby parks. Considering single parks as part of an overlapping network of walkable areas releases parks evaluation from focusing on parks in isolation. Te accompanying conceptual diagram illustrates how the model works. Te park user's home is literally and figuratively at the center of the model; each park's walkable buffer overlaps their home. Because the model emphasizes active transportation choices such as walking, it is most appropriate for higher-density areas. A primary reason for this is that higher-density areas provide enough population numbers to make it feasible to provide a highernumber of parks and facilities.

In the diagram, there are sufficient parks with enough facilities to provide a full range of opportunities within convenient access. In practice, this may not be the case, and parks will need to be added to provide full walkable coverage, or facilities at parks added or upgraded. Te remainder of thissection provides specific implementation strategies for municipalities with higher-density areas. Implementation in each municipality may require up to three actions: upgradingor adding facilities at existing parks; improving sites currently owned by the municipalities; or acquiring new properties and developing parks.

T e specific tasks for each municipality are derived from the parks inventory and the walkable buffer analysis conducted for this study. Recommendations on adding or upgrading facilities are based on the facilities assessment, which provides a score for opportunities across four areas: physical activity (by age groups); contact with nature; social connections; and connections with history, culture, and sense of place. Te number of additional parks required is estimated from the gaps in walkable coverage and the typical half-mile buffer area for parks in the individual municipality.

4.2 4HE 7ELL 2OUNDED $ESTINATIONS -ODEL

Under the Well-Rounded Destinations Model,each park provides a full range of opportunities—physical activity across the age groups; contact with nature; social connections; and connections with history, culture, and sense of place. A park visitor can therefore enjoy a breadth of activities and opportunities ranging from active to passive recreation. Because the model prioritizes opportunities, acareful provision offacilities is most important. Access is given a lower priority because the assumption is that the quantity and breadth of opportunities at the particular park gives the park a larger draw area for visitors. Tis is important when considering how to improve physical activity levels. While not everyone will be ableto walk or bike to the park, once they are init, they may undertake more or varied forms of activity. For visitors beyond the walkable buffer range, active transportation to and from the park will not count. Te assumption is that the increased number of visitors due to the park's breadth will offset the lack of locally available parks.

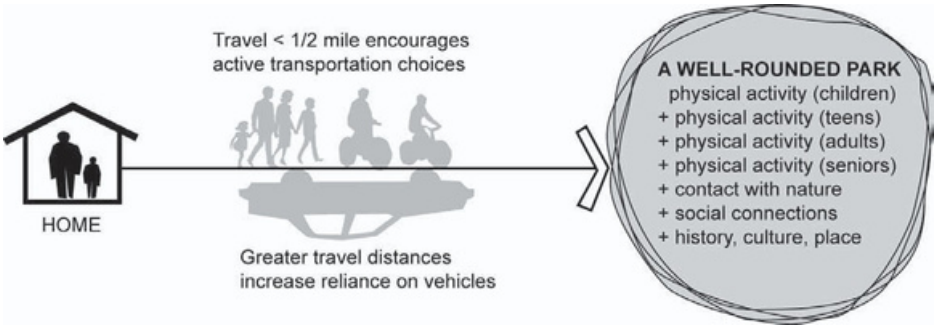


FIG. 6: Well⁓rounded destinations provide a full range at each park

T is model is grounded in the observation that well-rounded parks are more attractive destinations because people choose to visit parks based on available facilities (opportunities). Individual parks have the potential to be dynamic, integrated spaces for multiple users and uses. Recent trends in park design and management have often favored active recreation, resulting in single-use programs and predominance of sports uses. In order to promote active living, parks must serve a breadth of users and uses, from the young to the old, and from passive to active forms of activity.

T e well-roundedness evaluation developed as part of this study scores each park according to four areas of opportunity: physical activity; contact with nature; social connections; and connections with history, culture, and sense of place. Each category is scored according to the number of facilities available for that group. Te cumulative seven-letter score then allows the parks tobe sorted according to their estimated popularity.Te seven-letter scores also allow parks to be sorted into system-level classifications ofneighborhood, community, and regional draws. In the resident survey, the 10 most popular parks were all found within the projected range. As the accompanying table shows, all 10 are either community or regional level draws, and they all share a high degree of well-roundedness. Some parks are special function types such as sports-oriented ornature preserves; these specialties are accounted for in the projected rankings.

While proximity is of lesser importance in the Well-Rounded Destination Model, location is not.Tis strategy is appropriate in both high- and low-density areas, but due to the realities of funding and parks-per-population ratios, the Well-Rounded Destination Model is particularly appropriate for lower density areas. Te larger lots and availability of backyard spaces for people to improve according to their desires provide an interesting result: people's improvements to their property tend towards the same four areas of opportunity, and do so at a levelwhich would qualify them as neighborhood parks.

TABLE 5: Comparison of survey rankings with projections from the assessment

Survey Findings	Well~~Roundedness Assessment							
Rank of Most~~Visited Parks	Park~~Level Assessment	System~~ Level	Well~~Roundness Score						
1. Memorial Park	a well□rounded large park	Classification Regional	C	T	A	s	N	P	h
2. Riverfront Park	a moderately well□rounded, large nature□oriented park	Community	_	_	a	s	N	P	H
3. Manatawny Park	a moderately well□rounded, small nature□oriented park	Community	_	_	a	s	N	p	h
4. Towpath Park	a well□rounded medium park	Regional	c	t	A	S	N	p	H
5. New Hanover Community Park	a well□rounded medium park	Regional	C	t	A	s	n	P	h
6. Schuylkill River Trail	a moderately well□rounded, nature□oriented greenway	Community	_	_	a	s	N	_	H
7. Kenilworth Park	a well□rounded large park	Regional	c	t	A	s	N	p	h
8. Sanatoga Park	a well□rounded large park	Regional	c	t	A	S	N	P	H
9. Community Park on the Ridge	a somewhat under□ performing medium park	Community	C	T	A	s	n	p	_
10. Boyertown Community Park	a well□rounded extra large park	Regional	C	T	A	s	n	p	h

A final note on regional destinations: parks that are well-rounded emerge as regional destinations. Tese parks are likely to be visited by residents across a much broader area than community or neighborhood level parks. Te increased use by these park tourists may be of concern to municipal decision-makers, who should carefully consider the appropriate level they assign to parks within their system.

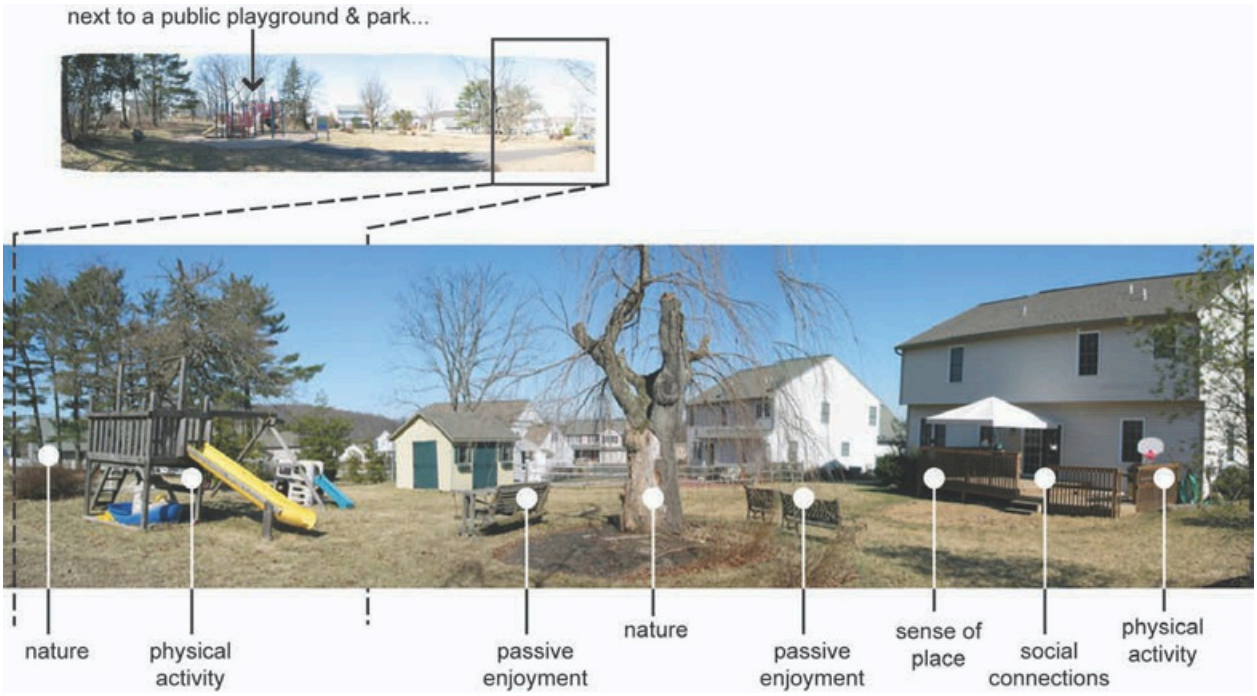


FIG. 7: People furnish their backyards along the same four areas of opportunity as parks

4.3 The Blended Approach

T e parks inventory and assessment conducted as part of this study show that the existing park systems within the study area are a blend of neighborhood-level local parks and destinations ranging from community to regional sale. Limitations of funding, avail- able land, and planning direction can prevent either model from being implemented.
T e density of thebuilt environment is also very important in making planning decisions. Built environment density often track directly to the age and location of residential development.Suburban neighborhoods added to towns in the post-war period tended to follow densities and patterns similar to those of the towns themselves. After the 1970s, development occurred more often as pockets in exurban and rural areas, and tended to be lower-density. However, not all parks in primarily exurban and rural sitesare in low-density areas. Some new developments actually have enoughdensity of population to enable an active park to be developed. It is critical that guidelines for these parks be included in municipal agreementswith developers so that the parks actually appear. Planners participating in the focus groups stated that each of participating municipalities required developers to either setaside a specified amount of land for open space or to contribute to the municipality's overall open space inventory. Including requirements about proximity and facilities available would help to secure well visited parks that encourage physical activity.

It is reasonable to expect that a blend of the two models will be appropriate in the municipalities included in the study area. Particularly unique sites or features such as historical landmarks or natural features, along with proximity to amenities such as the Schuylkill River, and preferences for specific uses such as team sports, all influence decision-making.Planning for a well-functioning parks system that encourages physical activity requires careful and deliberate action. Any action towards to implementing a blended approach should take the following factors into account: An over-relianceon well-rounded destinations limits walkable access. An over-reliance on a walkable network promotes active transportation but limits the draw of individual parks within the system. An awareness of the park visitor's perspective on what makes parks worth visiting—a mix of convenient access and available opportunities—should guide planning.

SECTION 2
PLANNING OBJECTIVES

This section provides specific recommendations and strategies for:

- building awareness of parks
- addressing common barriers such as cleanliness, safety, and personal barriers
- emphasizing active transportation choices
- providing a well-rounded range of opportunities throughout the park system.

The planning objectives provide a tool kit to be applied to any municipality within the study area. Immediate action can be taken on any or all issues.

1 Introduction

T e ultimate beneficiaries of this study and its recommendationsare the residents in and beyondthe serviceareaof the Pottstown Area Health and Wellness Foundation. T erefore, it is reasonable to examine the decision-making process which an individual undertakes when considering use of parks. Te accompanying graphic illustrates four questions in a hypothetical internalmonologue: What parks are available to visit? Is it worth the hassle or risk to visit these parks? Are the parks conveniently accessible? Do the parks have features I desire? Working through the steps in the decision-making process also enables each question to be addressed in detail. Te following sections of this report provide recommendations and implementation strategies corresponding to the issues raised by the four question topics: awareness, barriers, access, and opportunities. Four planning objectives directly address the issues raised:

- Build awareness of nearby parks or park which provide desired amenities.
- Address common barriersto park visitation such as cleanliness and safety.
- Emphasize active transportation choices for access to local parks to increase overall rates of physical activity.
- Provide a well-rounded range of opportunities at parks through a breadth of facilities and programming.

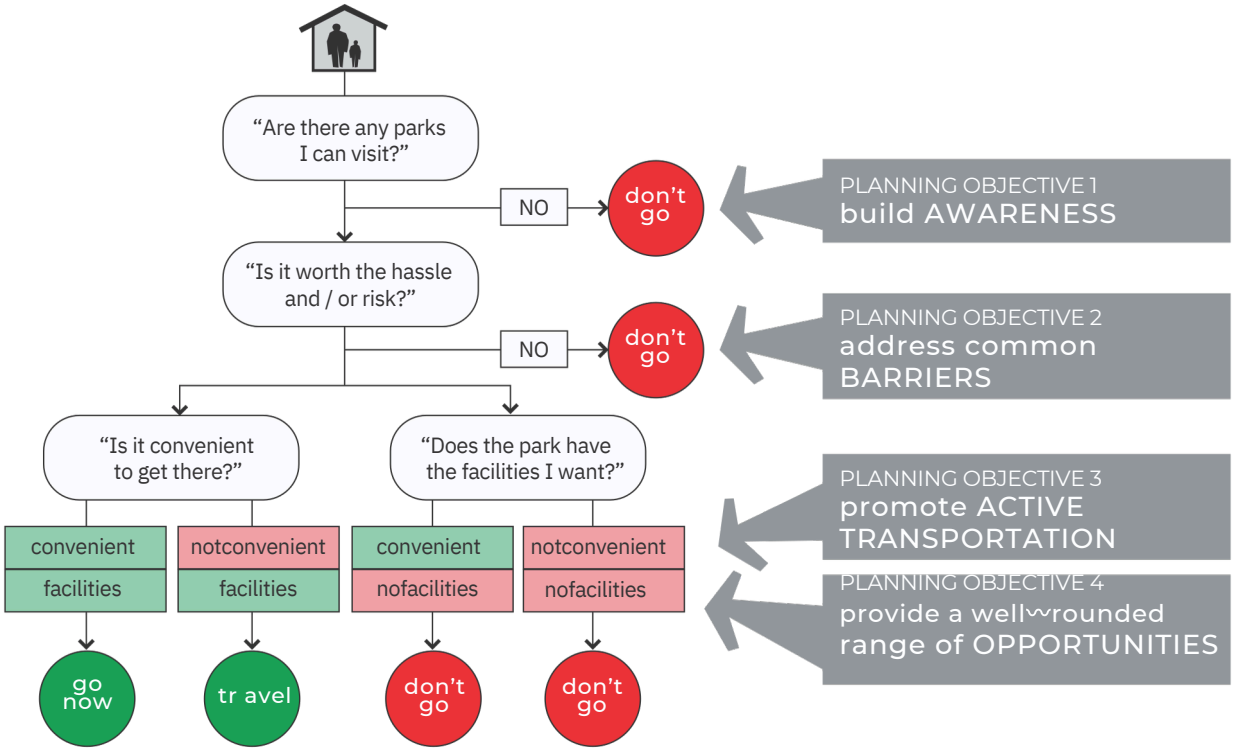


FIG. 1: The visitor's decision-making process

2 Build Awareness

Parks were once the exclusive province of the rich and powerful. T ey served as enclaves of privilege, or served to mark signifi ant civic functions. By the mid-twentieth century, parks had become an expected municipal amenity. What was once envied for its exclusivity became a part of the everyday fabric of life. While this ubiquity is evidence of thoughtful city planning, the ubiquity ofparks (of variable quality, it must be noted) means that sometimes it is hard to know or recall that there are parks just down the street. Te objective of this section is to address this problem by providing strategies to build awareness.

T ink of the decision-making process a potential park visitor undertakes: Te first question is, "Are there any parks conveniently nearby?", immediately followed by "Does that park have what I am looking for?" Te question of nearby parks is addressed in the first section, accompanied by the claim that "people should know about their local parks." Walkable park coverage is good in the higher-density parts of the study area, but the survey showed that a surprising number ofpeople were not aware of nearby parks. Te second section addresses the question of amenities. Many parks in the study area serve a narrow range of population and age groups with a similar inventory of facilities. Te range of population served is addressed in a later section of this report, but it is reasonable to suggest that education about existing amenitiesis a more cost-effective strategy than "build itand they will come."

2.1 ISSUE

People should know about their local parks.

T is study assessed walkable coverage to parks in the studyarea. Te assessment was conducted by creating half-mile buffers around each park location; this distance is equivalent to about 10-minutes walking time. Buffers were developed using Geographic Information System (GIS) maps which computed actual traveldistances, and barriers such as arterial roads were taken into account. In higherdensity areas, the walkable coverage of parks—calculated by subtracting the walkable coverage area from the total developed area—was nearly 100%. Te surveyfound that approximately 37% of residents in these areas thought that there are "Few or no parks in the neighborhood." Stated another way, more than a third of the residents in higher-density areas are not aware that they have a park within a 10-minute walking distance of their homes. Tis disparity indicates a lack of awareness ofavailable amenities.

By way of example, Pottstown Borough and West Pottsgrove are two higher density areas rich with parks. In Pottstown, 27% of those surveyed agreed or strongly agreed that "there are few or no parks" in their neighborhood (agree/strongly agree combined). In

West Pottsgrove, the response by respondents tothe same question was that 47% think there are few or no parks in their neighborhood. But both Pottstown and West Pottsgrove have parks within a half mile walking distance of nearly everyone. Tis leads to the con- clusion that the problem is awareness—residents simply don't know aboutnearby parks. It may also be related to a lack of facilities in that the parks thatexist have nothing for them, so they don't come to mind when people think about parks they could visit. Te fact re- mains, however, that between a quarter and a half of people living in areas where there are parks within a half mile don't believe there is a park nearby.

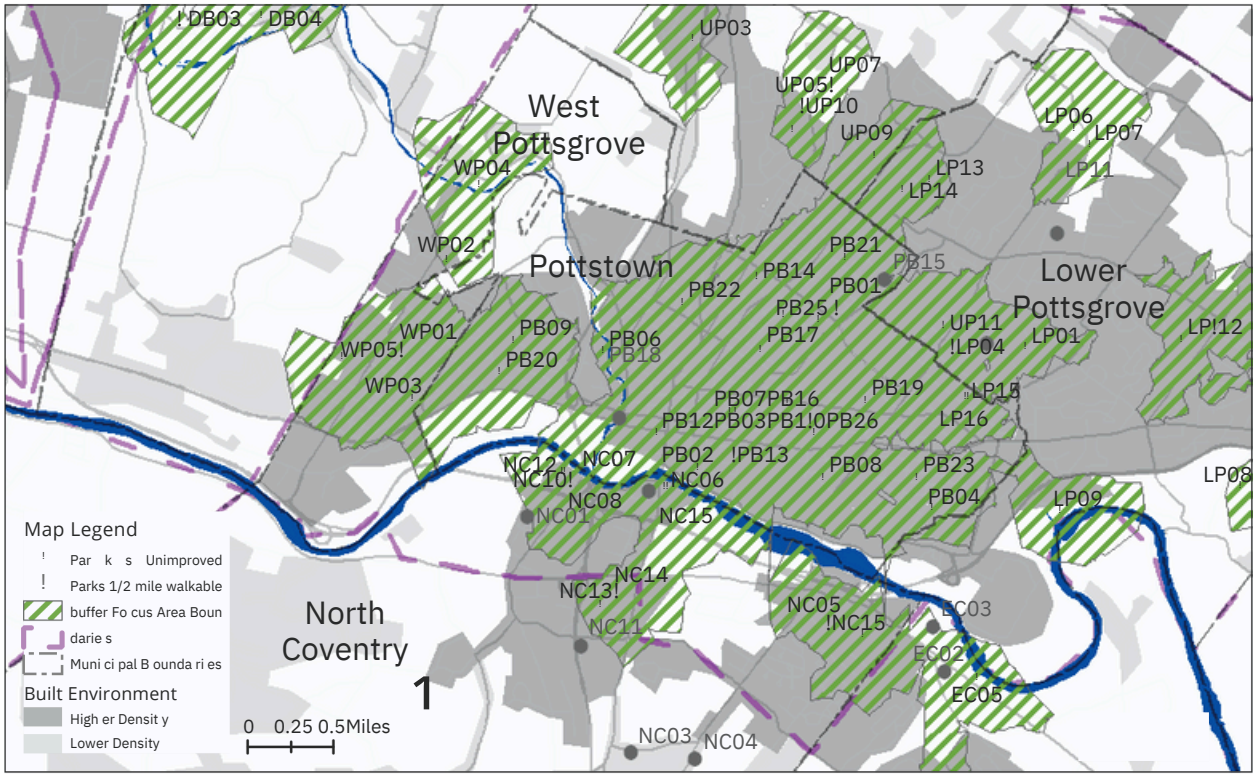


FIG. 2: Parks coverage in Pottstown and West Pottsgrove

2.1.1 RECOMMENDATION

Provide information about the location of local parks.

Knowledge about the presence of local parks is essential to promoting local park usage. Information should be made conveniently available in a variety of formats. Information should include the location of parks, their facilities, and information about opportunities, programs, and features at each park. Te intent is to increase awareness of local parks, familiarize residents with opportunities, and provide a supportive mechanism for visiting local parks.

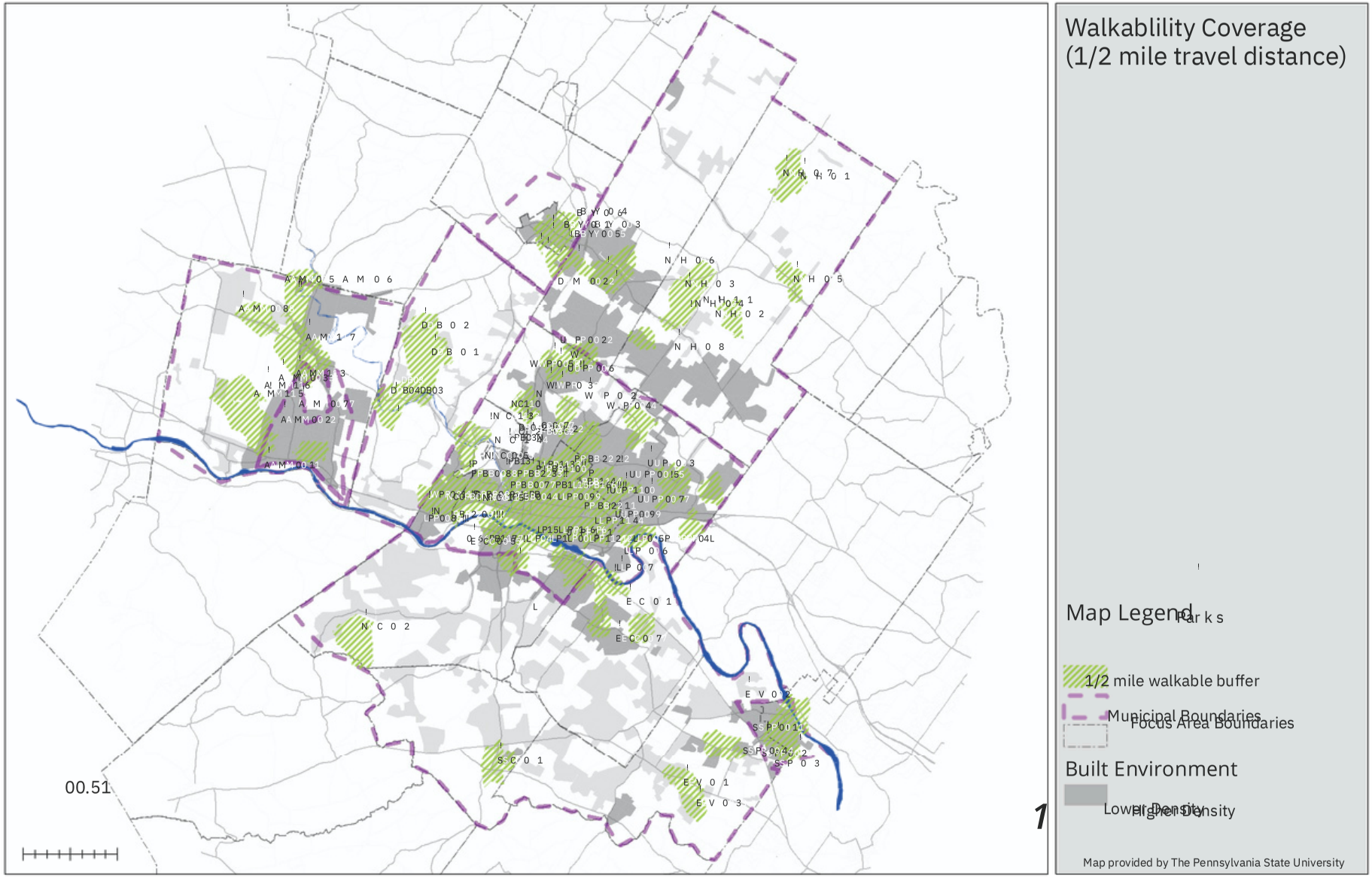


FIG. 3: Walkability coverage, 1/2 mile travel distance

2.1.2 RECOMMENDATION

Provide information about activities, facilities, and programs available at the park being visited.

People visitparks for a variety of reasons andon dierffg occasions. Somemay visit to participate in a particular activity, others may be passing by and seeing what is happening in the park. T is recommendation suggeststhat placing informational signage about the facilities and activities available in the park may increase knowledge about what is available at the park itself. Facilities are the most visible aspect, but activities may not be. Some facilities may also not be clearly visible from outside the park, or even from areaswithin the park. By clearly posting not only the available amenities at the park, but also a listing of activities which are possible, a greater range of opportunities is presented to potentialpark users.

2.2 ISSUE

0EOPLE SHOULD BE ABLE TO ÌND PARKS which match their interests.

In the introductiontothissection, a hypothetical potential park-goer asked two questions: “Are there any parks conveniently nearby?” and “Does that park have what I am looking for?” In the survey, responses to questions regarding barriers to park visitation revealed that the second most frequent barrieris that residents have inadequate knowledge about parks programs/facilities (46.4% of respondents overall). Tis percentage is quite high, and suggests that while residents may know

about local parks, they don't know what opportunities are available to them there. Tis is significant since the consideration of what to do atparks plays a major role in making choices to go or not to go to a park.

Also notable is that people from households with annual household income less than $40,000 have more issues with knowledge aboutparks programs/facilities than those with annual household incomes greater than $125,000. Tis finding suggests that outreach regarding parks' programs/facilities is not as successful in reaching the poorer segment of the population in the Greater Pottstown Area as the higher socio-economic groups.

Education about opportunities available at parks can have a significant impact on use of facilities (though not necessarily on increased parkuse). A 2004 study on improving walking activity found that information-oriented efforts increased usage of walking trails. Efforts studied included providing more information about walking trails to local residents, supporting interpersonal reinforcements such as social support groups, and conducting community-wide events. Interestingly, the study found no increase in overall walking rates in the community; the researchers concluded that these efforts were effective in increasing walking among those who already pursue walking for physical activity, but had little or no effect on those who were not already active (Brownson et al., 2004).

Parks and recreation departments can educate people about the ways in which they can become active. A range of settings, facilities, and programs as well as educationfor and about the benefits of physical activity should be made available.

2.2.1 RECOMMENDATION

Provide information about other parks in the network.

Parks have a range ofopportunities, butnot all parks willprovide everyactivity. Coverage for some kindsof activity may be provided at nearby parks in the network, yet it is often difficult to know which parks are nearby. Tis recommendation suggests that each park be provided with a local map of nearby parks and the opportunities they offer. In this way, visitors can familiarize themselves with other nearby parks and opportunities, and may also discover opportunitiesthey may not have considered beforehand.

2.2.2 RECOMMENDATION

Provide information by special interest groups.

Many parks providefeatures andfacilities which are oriented to specic iinterest groups. For example, Pottstown's Riverfront Park is a nature-oriented park, and visitors value the contact with natural surroundings. Te parks inventory provides an overview of clusters of facilities and features which cater to special interest groups such as team sports players, outdoor recreation enthusiasts, nature lovers, picnic groups, and children's playgrounds. By explicitly identifying these activity groups in outreach materials, people with special interests may more easily find the parks that suit their needs. It is likely that a number of local parks provide features that residents do not know about.

Children's Active Play

Associated facilities

Playground or tot lot

Number of associated facilities at parks

	PARK NAME	#
AMITY	Lake Drive Park & Recreation Area	1
	Hill Road Recreation Area	1
	Locust Grove Recreation Area	1
	Weavertown Road Open Space	1
	Amity Intermediate Center	1
	Amity Primary Center	1
BOYERTOWN	Boyertown Community Park	1
	Franklin St Mini〰Park	1
	Municipal Park	1
	Boyertown Elementary	1
DOU GL AS S (BERKS)	Ironstone Park	1
	Municipal Park @ Municipal Building	1
	Pine Forge Elementary School	1
DOU GL AS S (MONT)	Douglass Park	1
	Gilbertsville Elementary School	1
EAST COVENTRY	Towpath Park	1
	East Coventry Elementary School	1
EAST VINCENT	Community Park on the Ridge	1
	Vincent Elementary	1
	Kimberton Waldorf School	1
LOWER POTTSGROVE	Sanatoga Park	1
	Lower Pottsgrove Elementary School	1
	Ringing Rocks Elementary School	1
	Wyndcroft School 〰 Preschool	1
	Wyndcroft School 〰 Elem School	1
	Kenilworth Park	1
NORTH COVENTRY	Riverside Park / South Pottstown Recreation Area	1
	North Coventry Elementary School	1
	West〰Mont Christian Academy	1
	Coventry Christian Schools	

	PARK NAME	#
NEW HANOVER	NewHanover/UpperFrederick ElementarySchool	1
POTTSTOWN	New Hanover Community Park	1
	BrooksidePark	1
	Cherry Street Park	1
	Chestnut Street Park	1
	Maple Street Park	1
	Memorial Park	1
	New Chestnut Street Park	1
	Polluck Park	1
	Potts Drive Park	1
	Ricketts Community Center	1
	South Street Park	1
	Spruce Street Park	1
	Walnut Street Park	1
	Washington Street Park	1
	Edgewood ElementarySchool	1
	Elizabeth B. Barth Elementary School	1
	Franklin ElementarySchool	1
	Lincoln ElementarySchool	1
	Rupert ElementarySchool	1
	ConnieBatdorfPark	1
SOUTH COVENTRY	BrownStreetPark	1
SPRING CITY	Spring City Elementary	1
	CherryTreeFarmsPark	1
UPPER POTTSGROVE	Heather Park Place	1
	HowardStreetPlayground	1
WEST POTTSGROVE	Old Timer's Field / Township Bldg	1
	Vine Street Playground	1
	West Pottsgrove Elementary School	

Organized Team Sports

Associated facilities

Large multipurpose open space; baseball field; basketball; football/field; hockey/soccer fields; tennis court; gymnasium; volleyball court; pool; hockey rink.

Number of associated facilities at parks

	PARK NAME	#
AMITY	Lake Drive Park & Recreation Area	4
	Hill Road Recreation Area	1
	Myron S. Wheeler Recreation Area (Township Fields)	1
	Locust Grove Recreation Area	2
	Amity Park Road Recreation Area	1
	Weavertown Road Open Space	3
	Amity Intermediate Center	1
NuBmObYerEoRfTaOsWsoNciatedfacilitiesatparks	Boyertown Community Park	3
	Franklin St Mini Park	2
	Municipal Park	1
	Boyertown Elementary	2
	Boyertown Jr High West	2
	Boyertown Senior High	2
DOU GL AS S (BERKS)	Ironstone Park	4
	Municipal Park @ Municipal Bldg	3
	Pine Forge Academy	6
	Pine Forge Elementary School	5
DOU GL AS S (MONT)	Douglass Park	6
	Gilbertsville Elementary School	4
EAST COVENTRY	Ellis Woods Park	1
	Towpath Park	1
	East Coventry Elementary School	4
EAST VINCENT	Community Park on the Ridge	4
	Vincent Elementary	3
	Kimberton Waldorf School	3
LOWER POTTSGROVE	Gerald G. Richards Park	3
	Kelm Street Park	1
	Ringing Rocks Upper Park	1
	Sanatoga Park	3
	Lower Pottsgrove Elementary School	2
	Ringing Rocks Elementary School	2
	Pottsgrove High School	5
	Wyndcroft School Elem School	1
NORTH COVENTRY	Kenilworth Park	3
	Penn Street Courts	1
	Anderson Field	2
	River Road Recreation Area	2
	Riverside Park / South Pottstown Recreation Area	1
	North Coventry Elementary School	3
	West Mont Christian Academy	2
	Coventry Christian Schools	2

	PARK NAME	#
NEW HANOVER	JuniorHigh,EastCenter	4
	Middle Creek Athletic Fields	3
	New Hanover / Upper Frederick Elementary School	5
	New Hanover Community Park	4
	Pleasant Run Park	1
	Optimist Club Fields	3
POTTSTOWN	Brookside Park	2
	Cherry Street Park	1
	Maple Street Park	2
	Memorial Park	4
	Polluck Park	3
	Potts Drive Park	1
	Ricketts Community Center	2
	South Street Park	1
	Spruce Street Park	2
	Washington Street Park	1
	Edgewood ElementarySchool	1
	Elizabeth B. Barth Elementary School	1
	Franklin ElementarySchool	2
	Lincoln ElementarySchool	2
	Rupert ElementarySchool	2
	Pottstown Middle School	1
	Pottstown High School	5
	The Hill School	2
	Connie Batdorf Park	1
SOUTH COVENTRY	Brown Street Park	3
SPRING CITY	Hall Street Park	1
	Heather Park Place	1
UPPER POTTSGROVE	Hollenboch Park	2
	Kulp Field	1
	Pottsgrove Middle School	1
	St Pius X High	2
	Howard Street Playground	1
WEST POTTSGROVE	Old Timer's Field / Township Bldg	2
	Vine Street Playground	1
	Manatawny Park / West Pottsgrove Township Recreation Area	1
	West Pottsgrove Elementary School	4

Outdoor Recreation

Associated facilities

Internal trails; fishing; boating/boat ramp;BMX track; nature study area;other uniquenaturalfeatures: water features; natural water feature (creek/river); unique landscape

Number of associated facilities at parks

	PARK NAME Lake Drive Park &	#
AMITY	Recreation Area	1
	Locust Grove Open Space	4
	Monocacy Hill Recreation Area	3
	Weavertown Road Open Space	1
BOYERTOWN	Franklin St Mini~Park	1
	Boyertown Senior High	1
DOU GL AS S (BERKS)	Ironstone Park Douglass Park	1
DOU GL AS S (MONT)	Ellis Woods Park	1
	Towpath Park	7
EAST COVENTRY	Community Park on the Ridge	1
	Vincent Elementary	1
EAST VINCENT	Alfred B. Miles Park	5
	Gerald G. Richards Park	1
LOWER POTTSGROVE	Norton Park	2
	Ringing Rocks Upper Park	1
	Ringing Rocks Lower Nature Park	6
	Sanatoga Park	7
	Schuylkill River Park	5
	Pottsgrove High School	1
	Coventry Woods	3
	Kenilworth Park	4
	Anderson Field	4
NORTH COVENTRY	River Road Recreation Area	4
	Riverside Park / South Pottstown Recreation Area	
	Schuylkill River Park	4
	Deep Creek Park	1
	Layfield Park	1
	New Hanover Community Park	2
NEW HANOVER	Pleasant Run Park	1
	Swamp Creek Park	2
	Cherry Street Park	1
	Memorial Park	5
	Polluck Park	1
POTTSTOWN	Riverfront Park	6
	Smith Family Plaza	1
	South Street Park	1
	Pottstown High School	1
	Spring City Boat Ramp Area	3
	Schuylkill River Trail Mocharniuk Meadows	6
SPRING CITY	Turnberry Farms	2
RIVER ADJ MUNICIP ALITIE S	Pottsgrove Middle School	2
UPPER POTTSGROVE	St Pius X High	1
	Manatawny Park / West Pottsgrove Township Recreation Area	6
WEST POTTSGROVE		

Nature Lovers

Associated facilities

Natural study areas; ornamental gardens; planting gardens;

water feature; natural waterfeature(creek/river);
unique landscape; other unique natural features

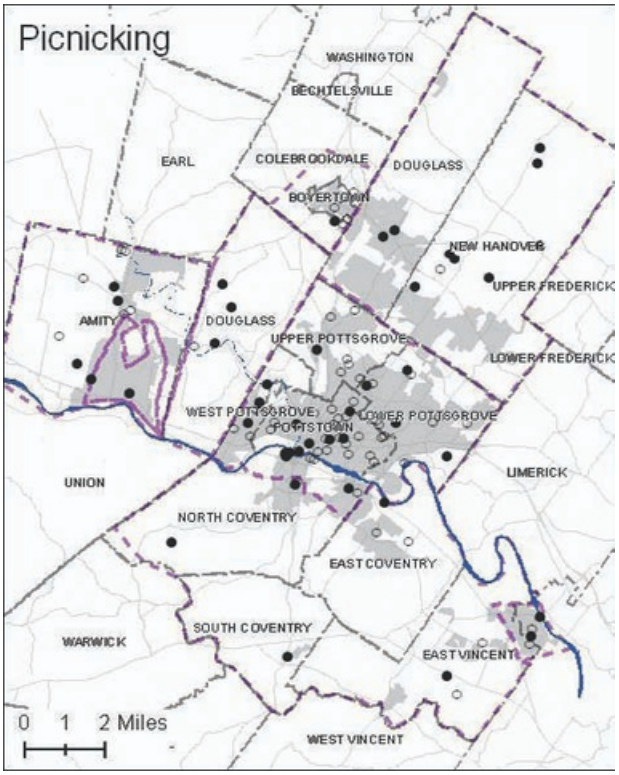
Number of associated facilities at parks

	PARK NAME	#
AMITY	LocustGroveOpenSpace	4
	Monocacy Hill Recreation Area	2
DOUGLASS (BERKS)	IronstonePark	1
	Douglass Park	1
	Gilbertsville Elementary School	1
EAST COVENTRY	TowpathPark	4
	CommunityParkontheRidge	1
	AlfredB.MilesPark	
EAST VINCENT	Norton Park	4
	Ringing Rocks Upper Park	1
LOWER POTTSGROVE	Ringing Rocks Lower Nature Park	1
	Sanatoga Park	5
	Schuylkill River Park	4
	CoventryWoods	4
	Kenilworth Park	2
	Anderson Field	4
NORTH COVENTRY	River Road Recreation Area	4
	Riverside Park / South Pottstown	4
	Recreation Area	2
	Schuylkill River Park	2
	NewHanoverCommunityPark	
	Pleasant Run Park	1
	Swamp Creek Park	1
NEW HANOVER	MemorialPark	1
	Riverfront Park	4
	SpringCityBoatRampArea	5
POTTSTOWN	SchuylkillRiverTrail	3
	MocharniukMeadows	5
SPRINGCITY	Turnberry Farms	1
RIVERADJ MUNICIP ALITIE S	ManatawnyPark/WestPottsgrove	1
	TownshipRecreationArea	5
UPPER POTTSGROVE		
WEST POTTSGROVE		

Picnic Groups

Associated facilities

Picnic areas or tables; picnic pavilions



Number of associated facilities at parks

	PARK NAME	#
AMITY	LakeDrivePark&RecreationArea	2
	Hill Road Recreation Area	1
	Myron S. Wheeler Recreation Area (Township Fields)	1
		1
	Monocacy Hill Recreation Area	1
	Weavertown Road Open Space	1
BOYERTOWN	Boyertown Community Park	2
DOU GL AS S (BERKS)	Ironstone Park	2
	Municipal Park @ Municipal Bldg	1
	Pine Forge Elementary School	2
DOU GL AS S (MONT)	Douglass Park	2
	Gilbertsville Elementary School	2
EAST COVENTRY	Towpath Park Community Park on the Ridge	1
EAST VINCENT	Alfred B. Miles Park Ringing Rocks	1
LOWER POTTSGROVE	Upper Park Sanatoga Park	2
	Pottsgrove High School Coventry Woods Kenilworth Park Anderson Field River Road Recreation Area	2
		1
		2
NORTH COVENTRY	Riverside Park / South Pottstown Recreation Area	2
	Schuylkill River Park	2
	North Coventry Elementary School DeepCreekPark	1
	Middle Creek Athletic Fields	1
	New Hanover / Upper Frederick Elementary School	1
	New Hanover Community Park	1
NEW HANOVER	Pleasant Run Park	2
	Swamp Creek Park	2
	Optimist Club Fields	1
	Brookside Park	2
	Memorial Park	1
	New Chestnut Street Park	2
	Riverfront Park	2
	Smith Family Plaza	1
POTTSTOWN	Walnut Street Park	2
	Connie Batdorf Park Brown Street Park	1
		1
	Spring City Boat Ramp Area	2
	Heather Park Place Howard Street Playground	2
		1
SOUTH COVENTRY	Old Timer's Field / Township Bldg	1
SPRING CITY	Manatawny Park / West	1
	Pottsgrove Township Recreation Area	2
UPPER POTTSGROVE		1
WEST POTTSGROVE		

2.3 ImplementationStrategies

T is sectionprovidesactionablestrategiesforaddressing issues related to building awareness of parks and facilities.

2.3.1 IMPLEMENTATION

4RADITIONAL MAPS AND mYERS

An easily implemented, system-wide strategy is to provide an overview map of the parks network. Te map should include the location, type and facilities available for all parks. Parks should be defined by opportunities and type (sports fields, nature park, etc.) if the parkname does not already reflect this. An accompanying table cross-referencing parks and available facilities by activities and special interests would be particularly helpful in assisting residents to identify parks which meet their needs. Te parks inventory provides allof the information needed to completethis document. Existing maps of open spaces fromGeneral Plans may be modified for this purpose, but only improved parks should be included.

2.3.2 IMPLEMENTATION

Interactive website.

An internet-based map system allows for dynamic engagement and information retrieval. In such a system, a resident can enter their home address and receive a map with local parks highlightedas well as the distances to each park. A dynamic system would link to park information which could be retrieved by clicking on the park icon. Another approach to finding local parksis to have the system returninformation by special interest or facilities. For example, a resident could select 'parks with playgrounds' and view a map of all parks in the system with these facilities. A further feature would be to include photographs and information about other activities and programs available at each park, including opening hours, availability of amenities such as restrooms and parking.

2.3.3 IMPLEMENTATION

Post information at parks.

An easily overlooked strategy forinformation-dispersal is to make information available at the parks themselves. Clearly posted maps and parks features listings, as well as informationabout nearby parks and parks catering to special interest groups, will directly serve those already active and visiting parks. In addition, this strategy builds awareness of the overall network ofparks, and may make them more accessible to those unfamiliar with the opportunities they provide. Finally, posting available activities as well aspark amenities may provide inspiration to visitors as to what is possible at their local parks.

3 Address Common Barriers

This section identifies four key barriers to park visitation: conflicts over shared use; cleanliness; perceptions of safety; and personal barriers, including a lack of time and motivation. These factors influence park visitation because they have a negative impact on the decision-making process to visit parks, thereby preventing individuals from taking advantage of opportunities at parks for physical activity and other recreation choices. Each barrier is identified and described, and specific recommendations for implementation are provided.

3.1 ISSUE #ONFLICTS OVER SHARED USE

PUBLIC RECREATION SPACES REQUIRE EQUITY AND fairness in shared use.

Conflicts over shared use of publicly-available spaces were identified in the focus groups conducted with community leaders and planners. The key issue is the perception that since formal sports fields are often used by local non-profit sports organizations and are rarely vacant, residents find themselves unable to use the spaces or organize informal activities or sports. The planners noted that few opportunities appear to exist today for the informal 'pick-up' game they recalled from earlier times. In fact, the planners felt that the sports fields were threatened with overuse, and had received complaints from local resi- dents unable to use the fields for other purposes.

The community leaders indicated that large parks, such as Memorial Park in Pottstown, contain a variety of sports-related fields and opportunities, which residents see as primarily spaces for active recreation. They recommended additional equipment such as children's play areas, a pool, and amenities such as restrooms and picnic pavilions. These ideas indicate a strong understanding of the fact that people visit parks for a variety of reasons, and that the presence of multiple activities in a park will have an impact on how it is perceived and thus used.

Solutions to these conflicts include: increasing the number of sports fields, or placing limits on their use. A paradox created by scheduling the fields is that during 'open' times, no 'pick-up' games may occur, since it isthe signal of availability generally which suggest the idea of using the sports fieldsfor informal activities. Additionally, when the fields are not used during this period, the formal organizations will perceive this as a missed opportunity for their (also laudable) sports promotion activities. Approaching the problem from the 'supply' side, the field audits indicate a great number of unprogrammed, 'large, multipurpose spaces' available at parks. However, these spaces have few indicators that their use as informal sports fields is permissible. In studies of park usage, safety and equity are often noted as primary barriers, but ones that can be addressed by parks and recreation departments (Henderson, Neff, Sharpe, Greaney, & Ainsworth, 2001). Te primary recommendations for addressing this barrier are to 1) make information easily available about other spaces available for informal sports; and 2) to provide some signals to residents that these uses are permitted in the unprogrammed spaces.

3.1.1 RECOMMENDATION

0ROVIDE DEINITION FOR UNSTRUCTURED OPEN SPACES to encourage informal team sports use.

A significant number of large multipurpose spaces exist in parks throughout the study area.Tese spaces have the potential to help alleviate overcrowding issues if a policy is developed to determine whether or not they may be used for informal field sports. Current park planning and maintenance practices favor these sorts of 'managed open spaces', but the spaces themselves often do not provide adequate cues to park users as to their function (for a detailed inventory and discussion of naturalness types, please refer to the Phase 1 assessment document). Large mowed spaces with grass and few defining features may be intended by park managers to invite use, but users' perceptions of 'sylvan' park spaces may lead them to believe that these features are intended for aesthetic function only. Tis recommendation suggests that the addition of simple cues such as signage, temporary goalposts, benches, or spatial boundary indicators encouraging informal field sport use would assist users in understanding that such activities are allowed. A practical example of this is the way that children will create goalposts from two backpacks; adults, having greater awareness of protocol, may not be willing to do so without reassurance.

3.1.1.1. IMPLEMENTATION

Increase awareness of alternative opportunities at local parks to minimize use conmicts

T e accompanyingmap andtable belowindicate parksiteswhich have large, multipurpose open spaces and those which have formal sports fields for soccer, football, and/or field hockey. Building awareness of alternate opportunities may be achieved by identifying alternate local sites for informal sports and making this information clearly available at each park. Priority should be given to those parks that experience heavy use conflicts.

TABLE 1: 3DUNV ZLWK PXOWLSXUSRVH RSHQ VSDFHV DQG RU IRUPDO VSRUWV ¿HOGV

	AM05	Locust Grove Recreation Area
	AM13	Weavertown Road Open Space
BOYERTOWN	BY03	Municipal Park
DOUGLASS (BERKS)	DB01	Ironstone Park
DOUGLASS (MONT)	DM02	Douglass Park
EAST COVENTRY	EC01	Ellis Woods Park
LOWER POTTSGROVE	LP04	Kelm Street Park
	LP06	Ringing Rocks Upper Park
NORTH COVENTRY	NC05	Kenilworth Park
	NC07	Anderson Field
NEW HANOVER	NH06	New Hanover Community Park
	NH07	Pleasant Run Park
POTTSTOWN	PB01	Brookside Park
	PB08	Polluck Park
	PB14	Spruce Street Park
	PB17	Washington Street Park
	UP05	Hollenboch Park
UPPER POTTSGROVE	WP03	Vine Street Playground
WEST POTTSGROVE		

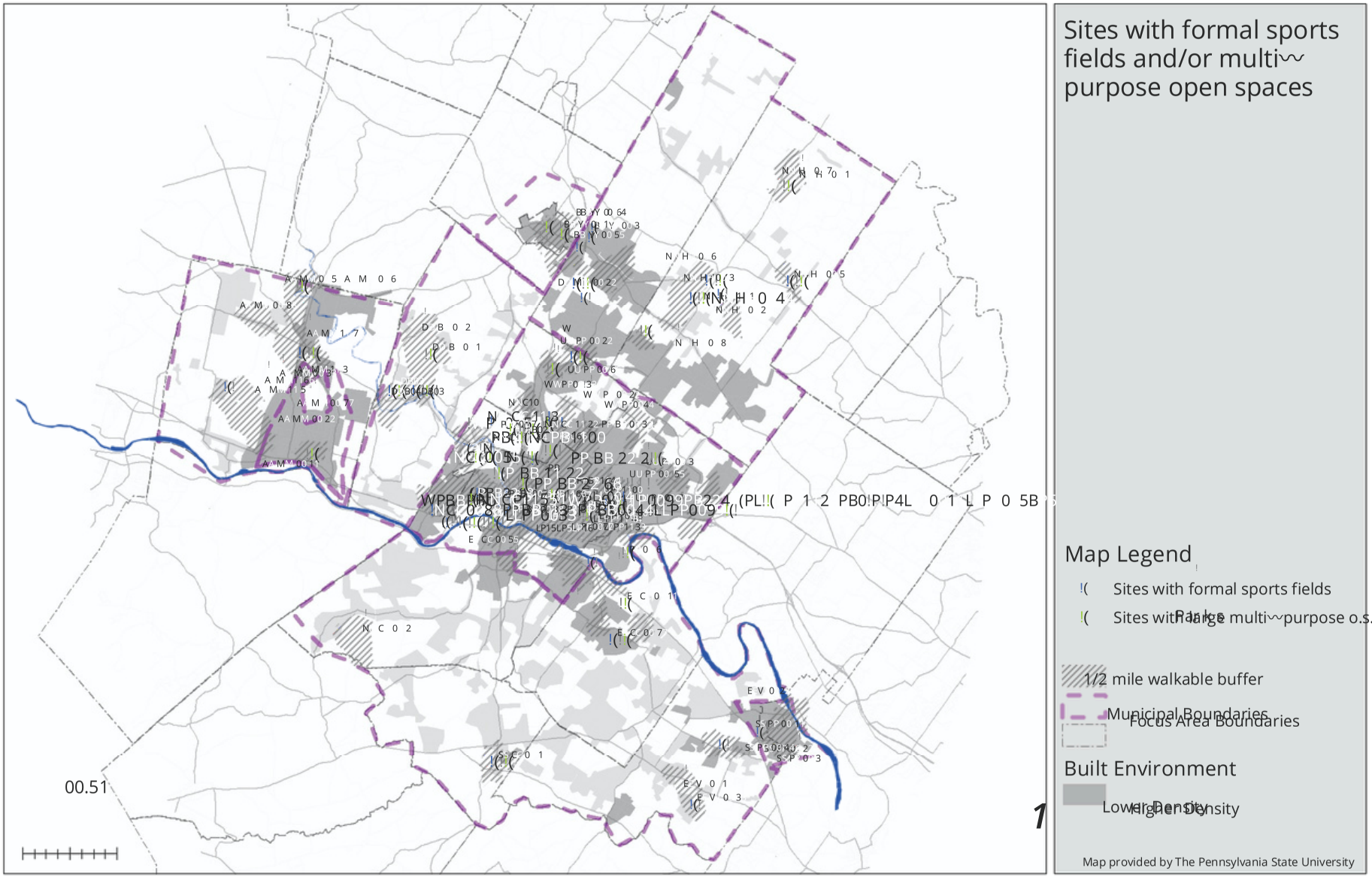


FIG. 4: 6LWHV ZLWK IRUPDO VSRUWV ¿HOGV DQG RU PXOWL SXUSRVH RSHQ VSDFHV

3.2 ISSUE Appearance and Cleanliness

Appearance and cleanliness affect peoples' choices to visit parks.

Nearly half of residentssurveyedwho visited parksstated that litter, trash, andinappropriate disposal were barriers to park visitation (47%). In addition, environmental conditions such as water contamination (34%), industrial activity or pollution (17%), and animal waste (7%) wereconcerns. Litter, trash, inappropriate disposal, and animal waste are factors which may be addressed by park maintenance, but environmental factors such as water contamination and industrial activity and pollution must beaddressed on a larger scale. Tis recommendationsuggests that action be taken at the park level to address the most pressing concerns throughincreased maintenance.

3.2.1 RECOMMENDATION

5PGRADE MAINTENANCE INCLUDING DAILY CLEANING and preventative maintenance.

Park management staff are in the best position to evaluate which parks need regular maintenance and to implement such measures. Specific park sites should be prioritized and addressed. Timing is a key issue: litter accumulates after periods of heavy use, and a maintenance schedule should be determined according to observed park usetimes. A regular cleaning and maintenance program provides a perception of care for users, and prevents littering caused by overturned or overflowing litter barrels.

Measures at parks themselves to discourage littering should be based on the users' convenience, not the ease of park maintenance. For example, litter barrels which are clearly visible and conveniently located in proximityto activity areas will be more effective than litter barrels located at entrances and exits. In addition, social engineering such as signage toencourageasense of ownership and responsibility may be effective measures.

3.2.2 RECOMMENDATION

Encourage community volunteers to assist with improvements or maintenance.

Park maintenance is a often a first casualty of lack of funding, though the impact of its absence is dramatic. Community groups such as civic associations, youth organizations, and service groups are a resource which may help with maintenance. While these groups shouldnot be usedas a replacement for regular maintenance, which may be seen as the responsibility of the parks and recreation departments, instituting a series of annual cleaning days or 'love yourlocal park' programs will provide communitypresence and engagement with local parks.

3.3 ISSUE 3AFETY

Perceptions of safety affect peoples' choices to visit parks.

Several studies have shown that fear of crime and physical injury have a signicant association with reduced levels of physical activity at parks (Henderson et al.,2001). T e findings of the resident survey indicate this to be true within the study area as well, as 29.2% of respondents indicated a fear of crime at parks as a barrier to park use. Tese results were consistent for both active and underactive populations. However, women are significantly more worried about crime in parks than male respondents in studies of park usage.

T e issue of safety was brought up by planners in the focus group, specifically inregard to safety on trails, and the planners noted a series of robberies which had recently occurred along trails in the Norristown area. Te planners felt that safety kiosks along trails such as the Schuylkill River trail would help to address the problem.

Young adults also mentioned safety, especially at night time, asa concern. Tey stated that they did not believe that police patrolled parks at night, and that this allowed vandalism and other undesirable activities to occur. Tis groups also mentioned safety kiosks, and noted that increased nighttime lighting would alleviate perceptions of lack of safety and improve use in the evenings. Te idea of evening use fits well withthe time available to many groups—not just teens—but increased evening use and noise may create conflicts with immediate neighbors.

3.3.1 RECOMMENDATION

Incorporate safety〰conscious features in park design.

Perceptions of safety arise from a number of factors, and need not only be addressed through formal presence such as police patrols. Subtle choices in park design and features may lead to increased use, which in turn adds to a sense of safety and security through the presence of other park users. Many of these features also achieve other goals such as providing more opportunities for park activities, and in turn, increase the sense of security.

3.3.1.1. IMPLEMENTATION

Provide features and implement strategies to improve perceptions of safety.

Specific features and strategies to improve perceptions of security and safety include (Coates, Guberman, & Orsini, n.d.):

- t Support park activities and programming to have a populated place.
- t Cluster activity areas to provide greater informal oversight between areas.
- t Enhance site legibility through layout choices, clear entrances and exits, focal points, signage, and nighttime lighting.
- t Provide walkways and paths that bypass areas which may be perceived as threatening.
- t Provide opportunities to avoid channelized paths or 'entrapment' areas.

3.4 ISSUE Personal Barriers

Personal barriers affect peoples' choices to visit parks.

Some barriers to park use may be addressed by changes in programming, maintenance, and the physical features of parks. Others are personal barriers, which mayseem disconnected from features available at parks. However, there are strategies available to address each barrier at the park level.

T e four most prevalent personal barriers to park usage common across gender and income groups are lack of time; feeling too tired; obtaining enough physical activity at one's job; and having no motivation tobe physically active (Brownson, Baker, Housemann, Brennan, & Bacak, 2001). It is important to note that women more frequently reported a personal barrier tophysical activitythan did men.

3.4.1 RECOMMENDATION

Provide information, programming and access options for people who "do not have enough time."

A key component of not having enoughtime in one's day to visit parks is that many people are at work during the day, and can only visit parks in the evenings or on weekends. Evening access to parks is an issue since many parks close at dusk, and do not provide lighting or programming at night. the young adults from the focus group conducted as part of this study indicated that working a full work weekday leaves little time for visiting parks after work, and that many therefore prefer to recreate in their backyards. In addition, hours of operation of parks were noted by survey respondents as an issue, particularly by thosein households with annual incomes of less than $40,000.

While visiting parks on weekends is not as much of an issue because more time is available, increasing activities in parks on evenings could contribute to overall higher levels of physical activity and contribute to an increased overall number of hours weekly.

3.4.1.1. IMPLEMENTATION

Implement strategies which address time issues.

Strategies toincreasedailyphysicalactivitiesatparks,takingintoconsideration weekend time issues include:

- Providing nighttime lighting and extending park operating hours.
- Providing evening programming at selected parks while minimizing conflicts with neighbors.
- Providing a range of activities at parks in addition to physical activity. As noted elsewhere, seeing parks as destinations in an overall active living strategy, which includes active transportation, may be beneficial to increased overall levels of physical activity. For example, walking to parks in the evening to see others engaged in activities and meeting neighborswould provide an amount of daily moderate physical activity.

3.4.2 RECOMMENDATION

Provide information and 'entry level' opportunities for physical activity address barriers of "feeling too tired" and "no motivation."

Research has shown that the primary personal barriers to physicalactivity—having too little time, being too tired, not being in good health, lacking energy, lacking motivation, and not liking physical activity—are positively affected by increased levels of physical activity (Brownson et al., 2001). Tese findings are consistent across income groups (Brownson et al.). In particular, the strongest personalbarriers by gender are lack of energy among women and not being in good health among men (Brownson et al.).

Yet those who are more active report less of these barriers than those who do not. In this sense, lack of physical activity is a self-reinforcing cycle. Parks offer a range of physical activity opportunities from casual walking to intense sports. With parks understood as sites for physical activity and as destinations in an active living lifestyle, increases in physical activity may begained, which in turnsupport changes to perceptions of personal barriers. A person with low physical activity levels may begin by walking within a parkin the evenings, then move on to walking to the park, and perhaps eventually also engaging in other forms of physical activity.

3.4.2.1. IMPLEMENTATION

Provide well-rounded parks with a variety of opportunities available, including passive as well as active recreation.

4 %MPHASIZE !CTIVE 4RANSPORTATION

4.1 ActiveTransportationandActiveLiving

Active transportation isakey component of an active living strategy. Active transportation refers to modes of travelsuch as walking and bicycling, which also provide physical activity. But walking and bicycling are more often seen as types of exercise ratherthan modes of travel (Handy, Boarnet, Ewing, & Killingsworth, 2002). Infact, one study has found that 75% of people say that they use trails only for recreation, rather than for other things (Shafer,Linton, & Turner, 2000). Tis implies that people may see 'exercise'as a specific activity to be undertaken rather than as part of a daily routine. Seen another way, it may reflect the fact that daily exercise due to travel is not counted by people towards their daily exercise.

Active transportation is a potential source of increased overall levels of physical activity, which can be harnessed by making parks into destinations, and connecting them with a network of safe routes and dedicated paths. Young adults participating in the focus groups noted a desire for alternative modes of travel beyond cars, proposing that connecting neighborhoods and parks with pedestrian and bike-friendly trails could increase recreation levels.

Studies ofpedestrian activities and barriers have shown that people value walking for both travel and exercise (Lee & Moudon, 2006). Te most common facilities people walked to are part ofdaily routines: grocery stores, non-fast food restaurants, drug stores, convenience stores, banks, cafes, and post offices. Results from the same survey showed that the most popular site for recreational walking is the neighborhood street (83.5% of respondents), followed by parks and natural open space (63.1%) and walking/jogging trails (42.6%).

4.1.1 Access and Levels of Physical Activity

Access refers to the availability and convenience of getting to a park. Proximity is one indicator, and the mode of transportation is particularly important to consider. Logically, any park within a reasonable driving distance is 'proximate', but a local park in a walkable area offers the benefit of active transportation choices. Walking is a popular form of physical activity across all ages, andconsidering travel to and from the park as part of a physical activity regime effectively increases the overall rates of physical activity. Tis makes it desirable to include as much access as possible; this can be considered as 'coverage.'

A growing body of research among health and parks scholars is defining the relationship between parks and the built environment, and clarifies the need for well-considered community design and planning. Consider these findings:

- Access to public spaces such as parks has been associated with higher levels of walking, and individuals who used public open spaces were nearly three times more likely to achieve recommended levels of physical activity (Giles-Corti et aI. (2005).
- Access to parks, indoor gyms, and treadmills has been positively associated with physical activity (Brownson, Baker, Housemann,Brennan, & Bacak, 2001), and the impact of proximity and coverage has been shown to be an important factor in increased physical activity rates (Giles-Corti et al., 2005).
- Other recent studies have demonstrated positive relationships between access and the amount of time children spend in play spaces (Sallis et al., 1997), and an increase in physical activity levels neartrails (Huston et al., 2003).
- Proximity, convenience, and perceptions of safety have a significant impact on whether people visit parks, for physical activity or otherwise (Humpel, Owen,& Leslie, 2002). Convenient access to parks has been associated with higher levels of vigorous physical activity (Sallis, Prochoaska, & Taylor, 2000), and even the perception of access has been shown to affect visitation for both adults and children (Sallis, Bauman, & Pratt, 1998; Hoehner, Brennan, Brownson, Handy & Killingsworth, 2003).

Within the study area, young adults who participated in the focus groups stated that they visited parks closest to their homes most often, and they preferred parks with activities geared to their age groups, including basketball, tennis, and volleyball. Particularly notable was their explicit statement that one of the factors which made park visitation enjoyable was the opportunity to socialize with other young adults. Overall, the young adults noted that the park location and the presence of their most desired amenity were the determining factors.

4.1.2 Walking as Exercise and Transportation

As noted above, walking to parks has the potential to add to the overall amount of physical activity. Tis is important because it suggests that not all park amenities must be geared to active recreation; in fact, it emphasizes the importance of other activities which may be attractors for people to walk to parks. Walking is a preferred mode of transportation because it is acceptable and accessible for a range of age and ethnic groups (Brownson et al., 2000).

However, the resident survey showed that walking to parks is not a very common occurrence: Only 9.9% indicated walking as their primary form of transportation. Just over 50% drive to parks, and only 3.4% ride their bicycles to parks. Tere areseveral reasons why this situation may exist: nearby parks do not have the desired facilities (an opportunity issue), or it is not convenient or perceived as safe to walk or bike to a local park (an access issue). Both of these issues are covered in this report, but access is specifically addresses in this section.

Studies suggest that people would like to walk more than they do now. In a recent national study, 55% of respondents indicated they would like to walk more during their day, either for exercise or for transportation (Belden, Russonello, & Stewart, 2003). Furthermore, 63% of respondents stated they would like to walk more for their daily errands. Parks as destinations, along with trails and greenways as connectors, provide opportunities for people to fulfill their desires for increased walking. Linking parks and trails to daily destinations and sites of interest encourages walking overall. Researchers have found that once people begin to walk as part of their exercise regime, parks and neighborhood streets are important environmental supports. In one study, almost 25% of respondents indicated neighborhood streets as important resources, over 28% indicated parks as important, and almost 30% valued the presence of walking and jogging trails (Brownson et al., 2001).

T e quality of the built environment also has an impact on rates of walking and bicycling. Neighborhood characteristics, including the presence of sidewalks, enjoyable scenery, heavy traffic, and hills, have beenpositively associated with physical activity (Brownson et al., 2001). Additional features found to encourage greater rates of walking include nighttime lighting, proximity of interesting destinations, the presence of paths or walking trails, buildings or landscapes of interest, parks and recreation facilities, and proximity to shopping (Lee & Moudon, (2006).

Hills and traffic may seem surprising features to be seen to increase walking, but they provide interest and challenges. Te issue, then, is not simply difficulty, but rather overcoming the specific barriers which arise from conflicts in modes of transportation. Heavy traffic, forexample, is not a concern with a trail system or an adequately designedsidewalk network with safe crosswalks. Traffic is not the problem; safety is the issue.

4.1.3 Addressing safety Issues associated with active transportati

Care must be taken in integrating modes of travel such as walking and pedestrians. Shared use paths should be clearly marked or planned according to national guidelines. Without clear indicators of routes and shared use, conflicts can arise due to the speed of travelof bicycles on shared paths. Community leaders in the focusgroups noted that the popularity of trails for both walkers and bicyclists had led to some problems, particularly on the part of walkers and runners. Te leaders observed that distinct lanes on the shared trails would alleviate these safety issues.

4.1.4 !CTIVE TRANSPORTATION PRESENTS AN ISSUE IN LOWER DENSITY AREAS

Active transportation choices are directly related to the opportunities available in the built environment. As noted above, the presence of nighttime lighting, proximity to attractive features, safe routes, anddedicated paths increase active transportation choices. T ese features are more likely to be present in higher-density areas than lower density ones. Te resident survey also found a strong,if unsurprising, correlationbetween location and walking as a mode of travel. People living in lower density areas were significantly less likely to walk than those who live in higher-density urban or suburban areas. Lower density areas not only tend to have fewer features available, but also have greater distances between amenities. Te increase in distances implies a dependence oncars or public transportation. Tis presents a problem for populations that do not have access to cars. Tese groups may include those families without a car at all, but also single-car families in which some members remain at home during the day. For such populations, it is important to focus on providing local options for active transportation and parks.

4.2 RECOMMENDATION

In higher density areas, provide neighborhood parks within half a mile (10 minutes) walking distance of residents in walkable areas.

T e intent of this recommendation is to provide park opportunities within easy access of all residents in the study area. Te accompanying map shows coverage for a half-mile distance, which is equal to 10 minutes of walking. Te half-mile/10-minute distance is a reasonable assumption for access. Te accompanying map indicates 'parksheds' calculated by actual travel distance along the road network. Major arterials such as state highways are excluded from the calculation because they either do not provide adequatecrossings or sidewalks.

It should be noted that the presence of parks does not mean that a range of opportunities is provided. For example, a nearby park with only a playground is of no use for seniors seeking recreation activities. A full assessment of opportunities is providedin a later section; this section emphasizes access to parks, not their facilities.

A review of the accompanying maps shows that park coverage is good for urban and suburban areas in the municipalities of Pottstown, West Pottsgrove, Boyertown and Spring City. Lower coverage is provided in the urban and suburban areas of Amity, North Coventry, North Pottsgrove, and South Pottsgrove. Significantly, very low rates of coverage are found in exurban and rural areas.

4.2.1 IMPLEMENTATION

Increase the total number of available parks by taking advantage of unimproved sites.

Creating new parks requires both landand facilities. A simple strategy to increase park coverage is to take advantage of existing properties already under the control of the municipalities. Te parks inventory addendum provides a detailed list of all unimproved properties identified in the study. Te accompanying map shows the increase in access that would be provided by improving currently unused properties. Significant coverage may be gained in North Coventry, portions of the urban and suburban areas of Amity and New Hanover; some minor increases may be seen in East Pottsgrove.

Developing unimproved sites will increase the overall amount of access coverage, but this should not be undertaken simply forits own sake. Considered as part of a strategy to provide as broad coverage as possible requires both upgrading existing parks facilities as well as selectively developing unimproved sites. Te first goal of such a strategy, especially in higher-density areas, should be to provide access to a well-rounded range of opportunities for as many residents as possible. Specific implementation strategies for each municipality are included in the 'Opportunities' section later in this report.

4.2.2 IMPLEMENTATION

Provide full walkable coverage in urban and suburban areas.

Walkability is ofmost importance in urbanandsuburban areas where the pedestrian infrastructure may be present to support safe and easy walking. In the study area, thefocus areas categorized as urban and suburban include parts of Amity, the greater Pottstown Area, Boyertown, and Spring City. Providing full walkable coverage of parks in these areas should be a priority. Te accompanying four maps provide an overview of thegaps in coverage in these areas, and should be used to prioritize the placement of new parks in those areas without coverage. Where unimproved properties are available, they are indicated in yellow.

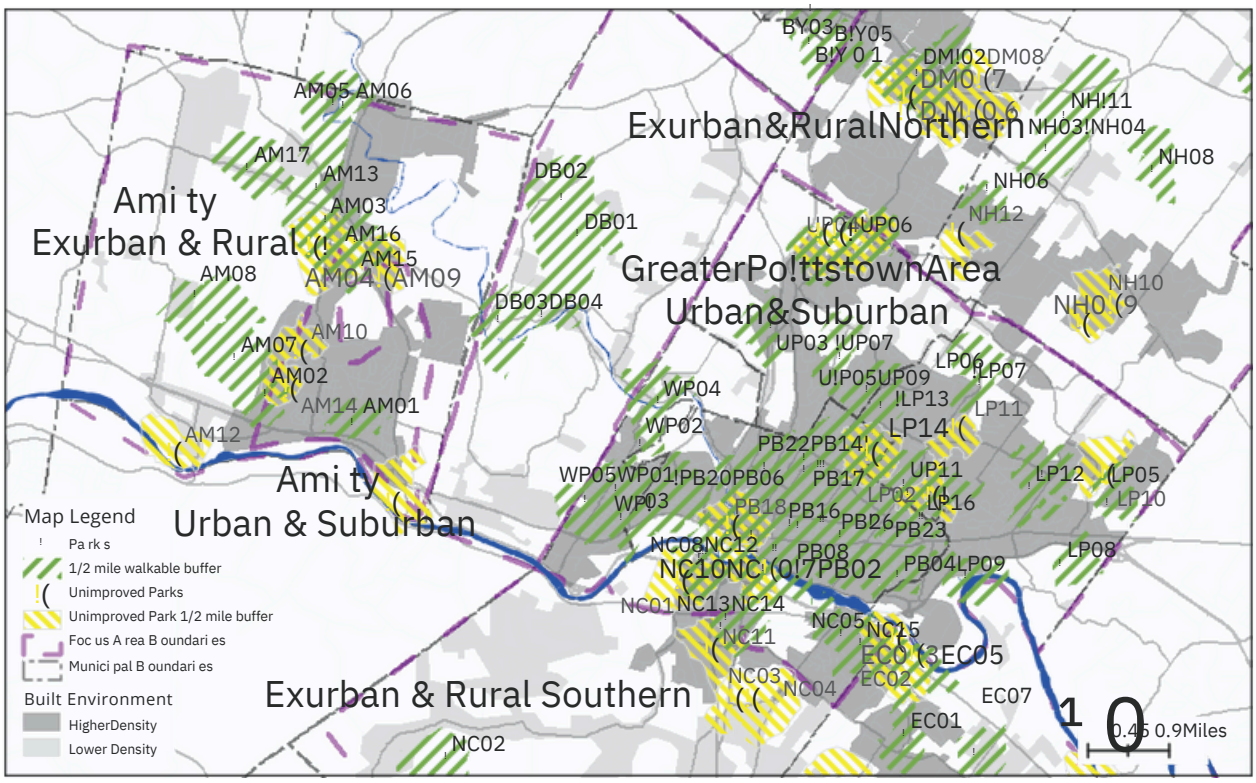


FIG. 5: Gaps in parks coverage in Amity and the Greater Pottstown Area

4.2.3 IMPLEMENTATION

Promote parks and open spaces in new developments by improving available spaces in existing developments.

A signifi cant gap in coverage exists in exurban developments, especially inthe exurban areas of northern Amity, North Coventry, South Coventry, East Coventry, and the southern parts of New Hanover and Douglass (Montgomery). Density is a key consideration: itmakes little sense to place parks within such low densities as to be undesirable on a cost-per-resident basis. A number of new developments, however, do have adequate densities. For example, the accompanying aerial images of new developments in East Coventry provide an example of higher density residential developments which, while isolated in rural areas, provide a density of residents that can support a lively public space. Park features in such areas also providean amenity which make them more attractive to homebuyers. Such exurban 'enclaves' may also benefit from including parks in their neighborhoods because of a simple calculation of time: a number of parents may stay at home with children who would benefit from opportunities for recreation provided by a park. Additionally, the timeavailable outside of work hours is the evening and the weekends. Providing local opportunities which are easily accessible will take advantage of the research findings which show that physical activity will increase with access to nearbyparks.

T e challenge of these rural developments, however, lies in the equitable distribution of municipal resources to provide and maintain parks. Public parks in enclaves may be seen to be for the local residents only. Tis is certainly an important consideration, but may be mitigated by the inclusion of appropriately scaled facilities across the breadth of the municipality. Local, neighborhood-level parks in urban and suburban areas often have minimal features and are located in existing neighborhood which provide primarily local usage.Te existence of parks in isolated enclaves actually bears little distinction when one calculate a parks-per-resident coverage which is equitable. Concerns may arise when an uneven distribution of resources occurs—for example, when a medium or large park is built in an area which is seen to be a distinct entity.

4.2.4 IMPLEMENTATION

Promote parks and open spaces in new developments by promoting or enforcing municipal codes.

New developments in isolatedexurban andrural areas are often developedby private entities and managed by homeowners associations. Tese developments are often seen as placing an uneven burden on municipal resources because of the need to provide infrastructure. However, the isolation of such developments does not freethem from conforming to existing municipal codes. In many cases in the study area, it appears as if 'open space' requirements are fulfilled by passive uses only. For example, the placement of retaining basins and stormwater drainage is counted for 'open space', when in fact, thesespaces provide few amenities which would characterize the well-rounded park, particularly in regard to opportunities for physical activity. If the municipal codes provide requirements for open space development and management, these codes should be enforced. If no such codes exist, a priority should be placed on creating codes that provide for substantive development of parks and open spaces.

4.3 RECOMMENDATION

In all areas, promote active transportation to parks as part of an overall active living strategy.

Opportunities for physical activity at parks themselves has been a major focus of active living research. Te ties to the built environment, especially in regard to walking, play a major role. Practically, this means considering parks not only as sites for physical activity, but including access to parks as part of an overall active living strategy. Walking has been shown to be a predominant form of exercise across age groups. When a park serves as an attractivedestination and is easily and locally accessible, then walking or bicycling to parks may contribute to an overall increase in physical activity. In this way, visits to parks need not be the sole producer of physical activity; getting to and from them may be included a measure of moderate physical activity. Additionally, parks as attractive destinations for walking or bicycling may increase overall rates and distances foractive transportation because one can walk to apark, enjoy its features, and walk home.

4.3.1 IMPLEMENTATION

Provide safe routes to parks.

A primary barrier to increasedwalking is perception of safety while walking or bicycling. A built environment strategy to increase overall walking is to provide safe walking routes. Linked with a parks-based active living strategy, a priority should be placed on routes which make parks accessible. A similar strategy has been employed in the 'safe routes to school' programs across the nation; this is easily applicable to a 'safe routes to parks' strategy. For detailed information on the quality of existing walking routes, please refer to the relevant sections in the built environment strategies portion of this report. Specific implementation features to encourage active transportation include:

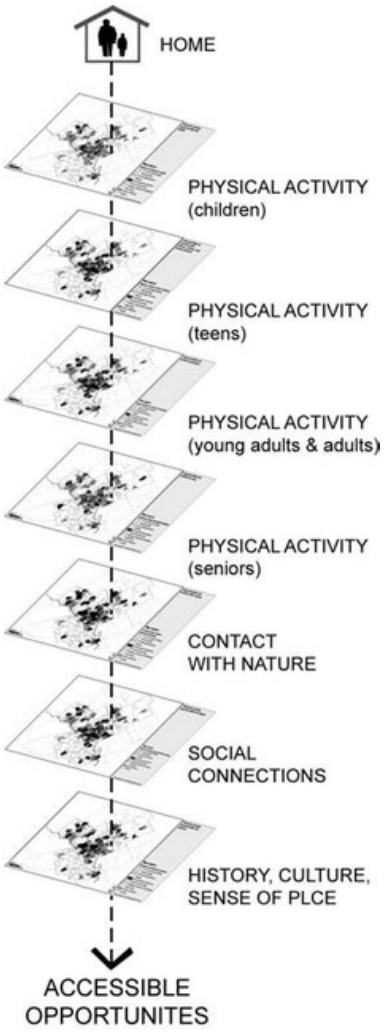
- Widening sidewalks
- Providing sidewalkextensions and crosswalks
- Providing bicycle lanes, and
- Balancing pedestrians and bicyclist uses with motorized vehicles

4.3.2 IMPLEMENTATION

Provide safe access at parks themselves.

T is strategyencourages safeandeasy direct access to parksat the park sites.Perceptions of park access are directly impacted by the condition of access to the parks. Parks without safe streetcrossings do not encourage walking to the park, since it is the point-of-contact with the park itself which forms the impression in the visitor's mind. An encouraging impression at the park may serve to promote consideration of walking to the park as an option for physcial activity.

5 Provide a Well-Rounded Range of Opportunities

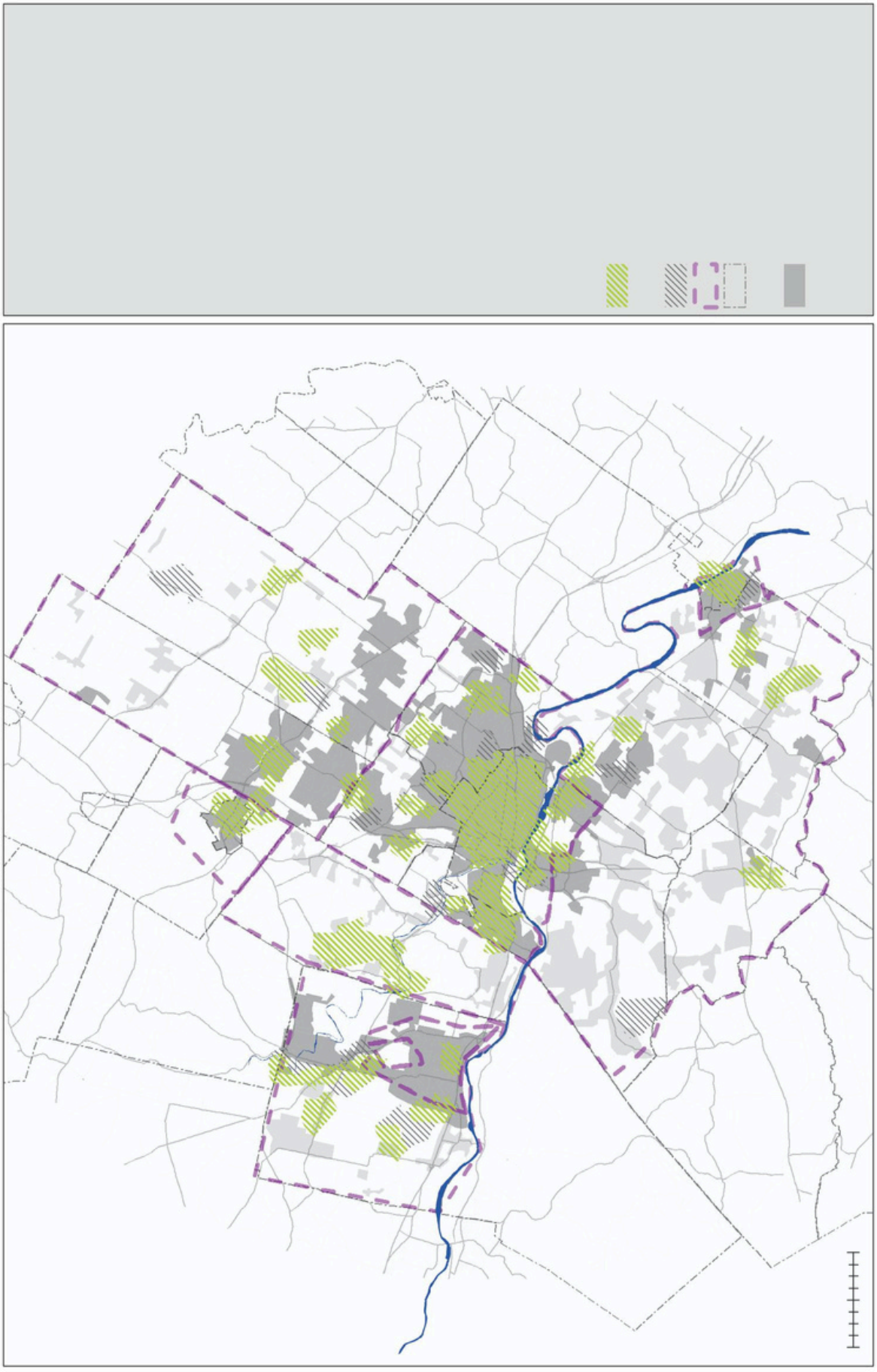


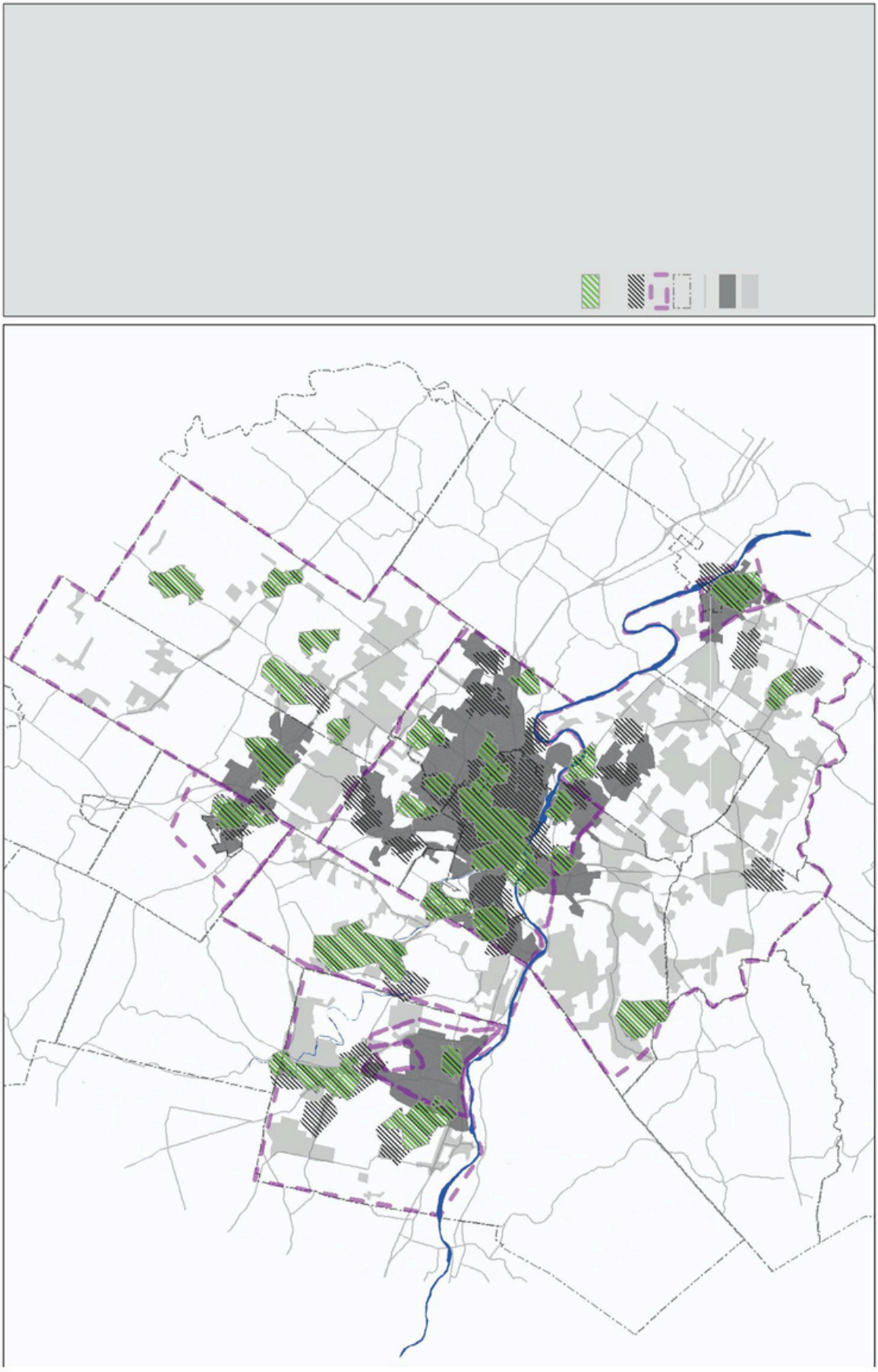
Te user's perspective on parks visitation presented in an earlier section proposed a decision-making tree which included access and opportunity as important factors. Te previous sectiondealt with access in regard to walkable coverage and active transportation. Tis section addresses opportunities. Te key concept underlying the analysis and set of recommendations is the provision of a full range of opportunities for any park user to access. During the assessment phase and the resident survey, the range of possible opportunities at parks was classified into four areas: physical activity, contact with nature, social connections, and connections with history, cultureand sense of place. Te responses to the survey supported the projected importance of a range of opportunities at parks. A very high number of respondents reported that they went to parks to connect with nature (93.1% agreed or strongly agreed), followed by active recreation (77.1%), for connectingwith culture/history (59.3%), andsocial connections (46.4%). Opportunities for contact with nature is at least as important if notmore important than using parks for active recreation. Te four categories are correlated strongly with one another, implying that a breadth of opportunities is important for park visitation.

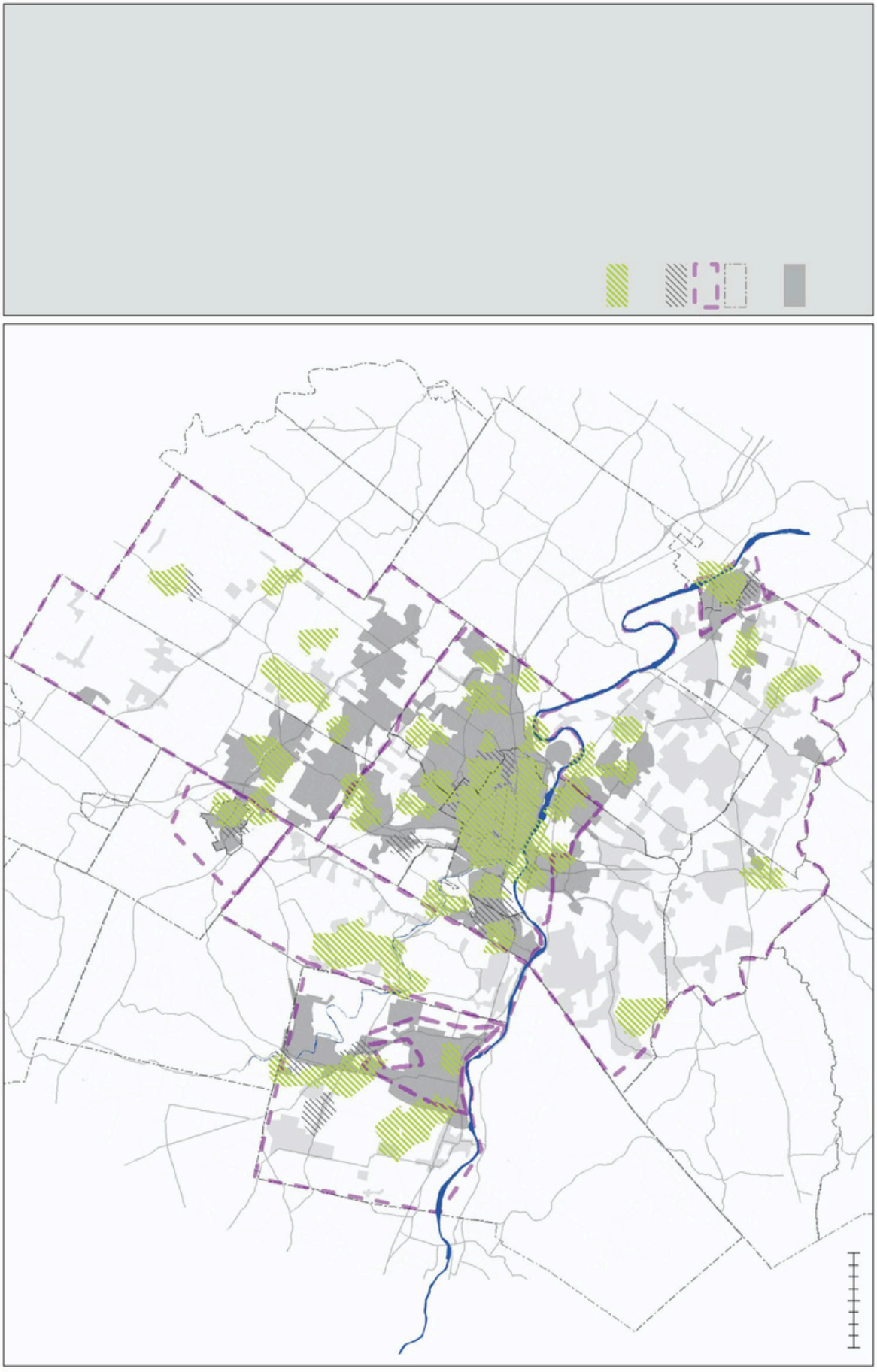
Tese opportunities need not be provided at each park, however. While local parks,in order to be part of an active living network, should provide a rich and accessible mix of uses, a full range of opportunities may also be achieved if different sites complement one another. An area covered by multiple parks can rely on the shared overlaps of the individual sites to provide a full rangeof opportunities. In lower-density areas, by contrast, where parksare destinations, each park should provide a full range of opportunities. Te survey results also showed that as thenumber of opportunities increases, so does the popularity of the park as a destination.

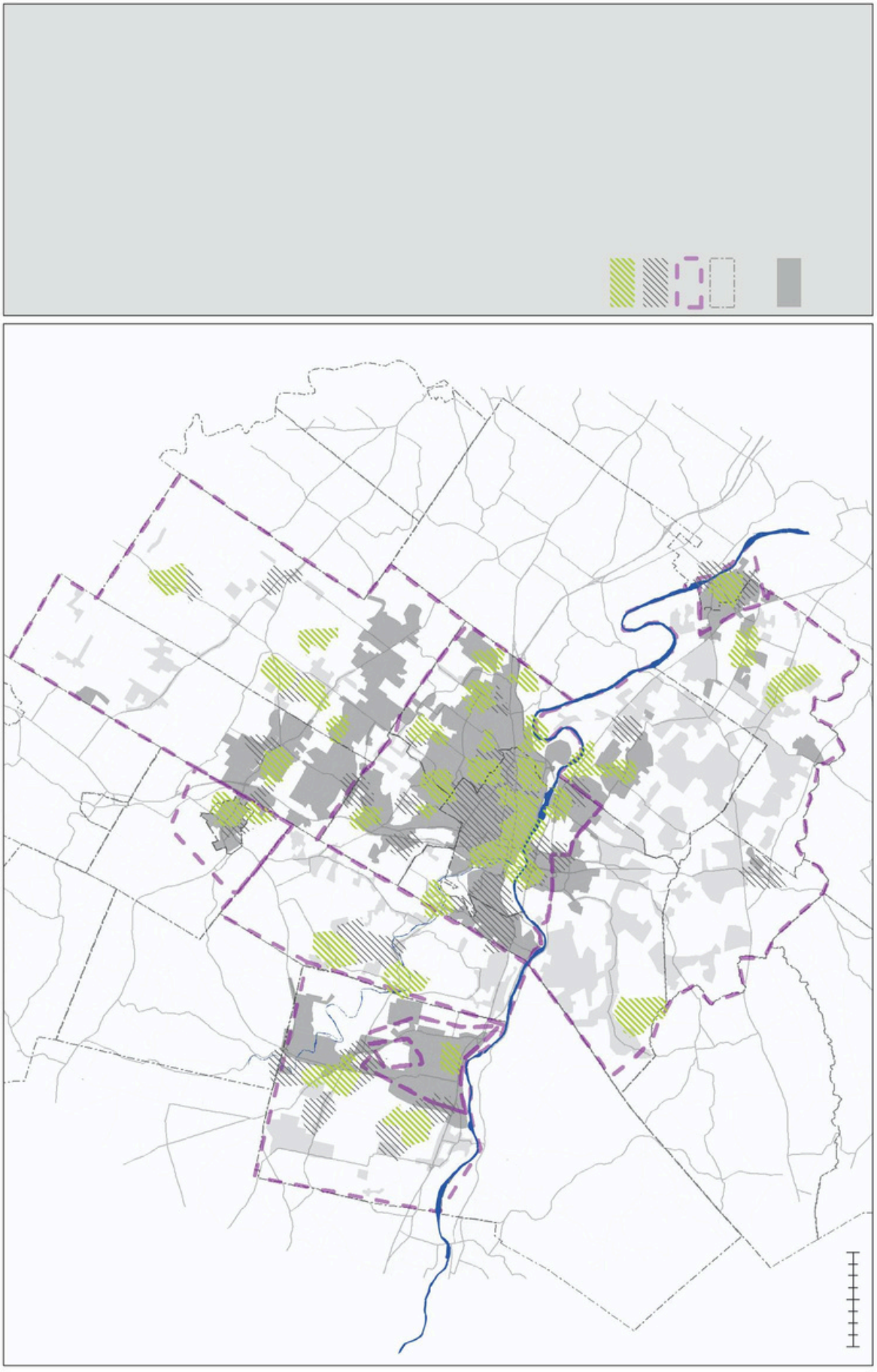
Te following sections provide recommendations on improving the four areas of opportunity. Each section provides an introduction to the category, followed by a review of information from the parks inventory, and information relevant to making planning decisions. Tis information includes a list of facilitiesappropriate to each category. Te list of facilities is taken from the parks inventory. Te facilities are categorized as 'generic', referring to those with general use options, but without direct signals for use; or, 'specific' facilities, those which are clearly designated or designed for particular uses. Certain recommendations also include a third category called 'attractors', which are features that may be of particular interest or provide a particular visitor draw. Specific counts of facilities and their distribution may be found in the parks inventory and assessment document.

Implementation strategies for increasing the range of opportunities at parks will depend on the choice of model appropriate to the area in question. In high density areas, a full coverage of walkable opportunities may take precedence over developing individual parks as destinations. Specific park siteimprovements for the full range of opportunities are provided in the models section later in this document.









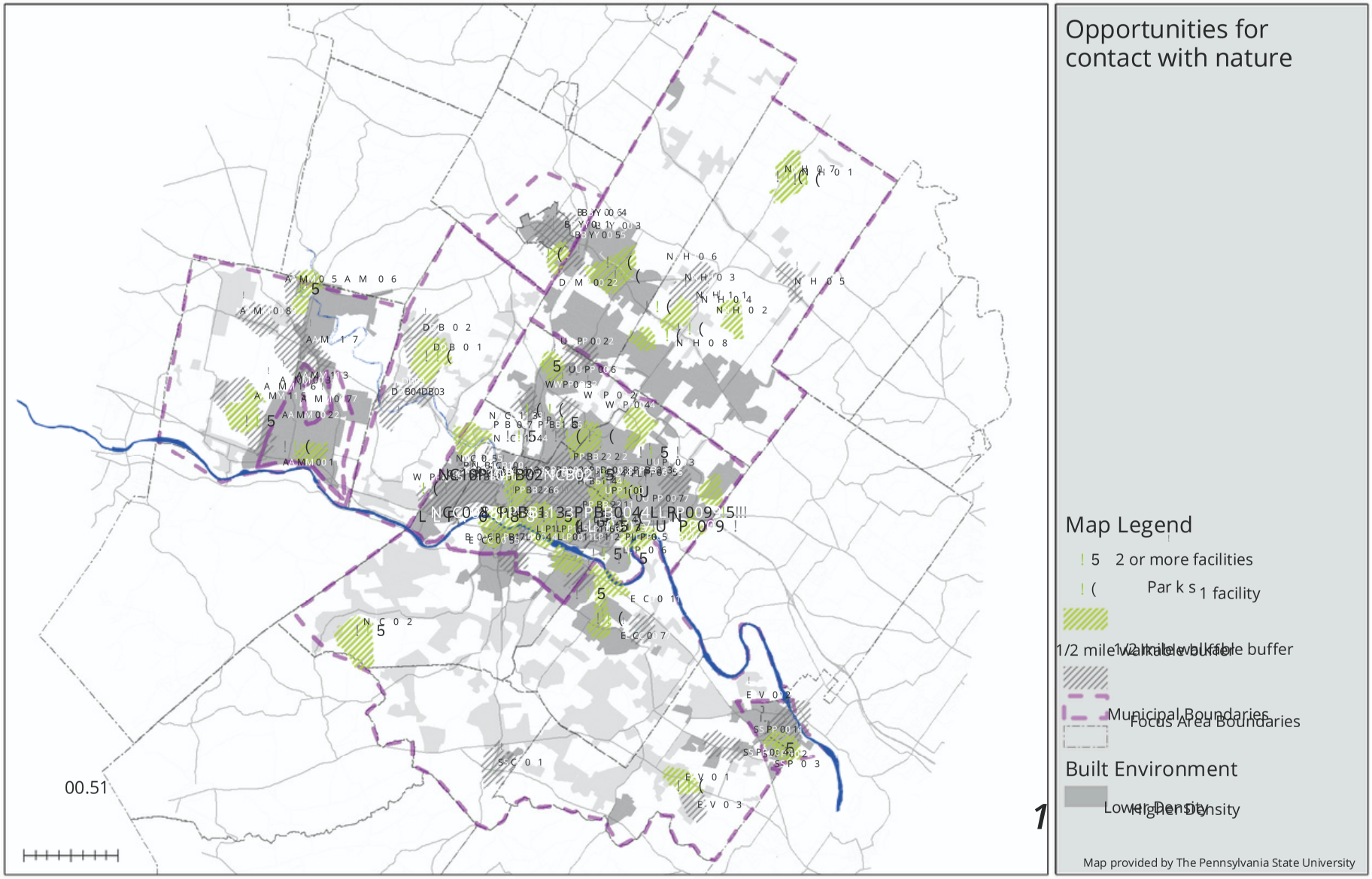


FIG. 10: Opportunities for contact with nature

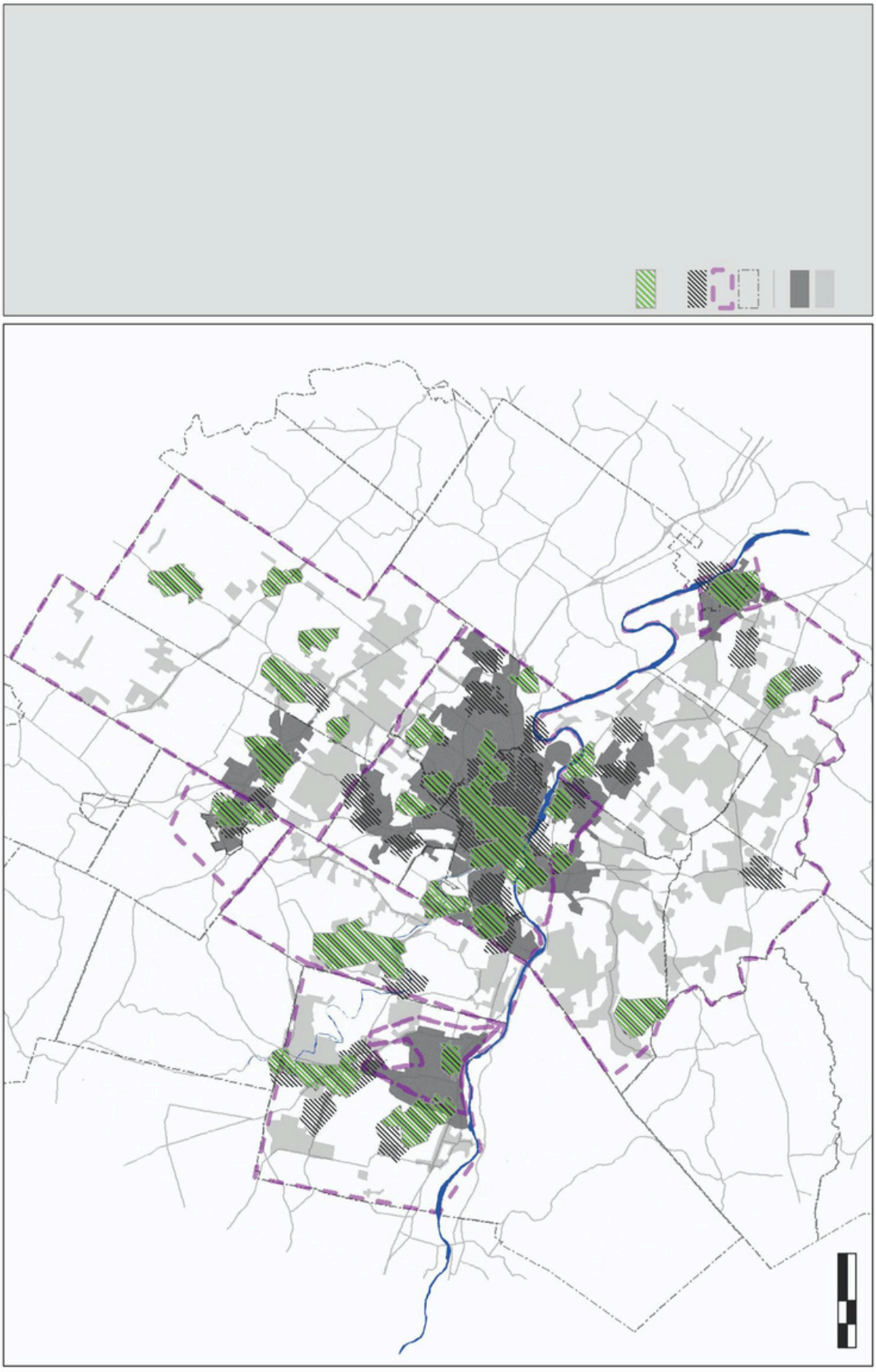


FIG. 12: Opportunities to connect with history, culture, and sense of place

5.1 RECOMMENDATION

Provide opportunities for physical activity.

Parks should provide opportunitiesfor physical activity for arange of age groups, even if the parks are small or single-use oriented. In the focus group with community leaders, opportunities forphysical activity were mentioned as popular features in parks. T ese features included ball fields and trails, which were reported aswell used by residents, and the community leaders noted that play equipment for children was important to attract local families to parks.

Active recreation has been a predominant focus of park planning in the last half century, and as a result, many sites are primarily oriented towards physical activity. Te parks assessmentshowed that nearly half of sites located in urban or suburban areas are single-use sites oriented to active recreation, such as children's play, informal sports, or organized sports (26 of 58 sites). Additionally, of these 58 sites, 23 were dedicated toonly active uses, with 30 sites having both active and passive uses, and 5 sites providing only passive uses. One drawback of this approach is that the other factors—nature, people, history—are overlooked, and thus decreaseoverall parks visitation.

5.1.1 Provide Physical Activity Opportunities for Children

Recent studies andguidelines by public health professionals show an increased concern with the importance of physical activity for children. For example,the US Department of Health and Human Services reports that the proportion of young peoplewho are overweight has more than doubled in thelast 20 years (US Department of Health and Human Services, 2001). Among children ages6 through 19 in 2002, 31.5% were either overweight or at risk of overweight and 16.5% were overweight (Hedleyet al., 2004). Physical activity opportunities for children positively impact health, but also increase park visitation: planners in the focus group reported that play equipment for children was found to increase park use by nearly 100% and, when properly maintained, the number of residents did not diminish.

Play opportunities for children should also include types beyond active recreation. Other developmentally important types of play include imaginative play and role playing. Tese activities can take advantage of features provided in the park context, including topology, vegetation, and culture. Robin Moore, professor ofLandscape Architecture at North Carolina State University and president of the International Association for the Child's Right to Play states, "Exercise is important, of course, but childrenhave many other needs that are not being addressed. Tey need a diverse, secure and supportive place, a safe haven. Once they have that, the play will come. And that play, you know, will be wonderful."

TABLE 2: Facilities associated with children's physical activity

Generic Facilities	Specific Facilities
Small multipurpose open space Large multipurpose open space Internal trails	Playground / tot lot Basketball BMX Pool Exercise stations Football / field hockey / soccer Frisbee golf course Skateboarding / roller□skating T ennis Volleyball

- At least 60 minutes, and up to several hours, of age-appropriate physical activity on most if not all days ofthe week
- Vigorous intensity: active games involving running and chasing; bicycle riding; jumping rope; martial arts; running; sports such assoccer, iceor field hockey, basketball, swimming, tennis; cross-country skiing
- Moderate intensity: hiking, skateboarding, rollerblading, bicycle riding, brisk walking
- Aerobic: brisk walking, running, hopping, skipping, jumping rope, swimming, dancing, bicycling
- Muscle-strengthening: playing on playground equipment, climbing trees, playing tug-of-war, lifting weights, gymnastics, push-ups
- Bone-strengthening: running, jumping rope, basketball, tennis, hopscotch, hopping, skipping, sports such as gymnastics, basketball, volleyball, tennis

5.1.2 Provide Physical Activity Opportunities for Teens

Teens are a group who have a range of needs which are often underrepresented in parks and recreation spaces. Active recreation such as team sports are provided for as part of a larger active recreation programming, but age-specific preferences and newer forms of active recreation such as skateboarding and BMX are the exception. Te landscape histo- rian J. B. Jackson refers to thesealternative spaces—such as "the much used grove" atthe edge of town—as informal spaces which servedthe social and recreational needs of teens.

T ese alternative spaces allowed teens to "assert themselves and become social beings, defending and serving some youthful concept of community" (Jackson, 1986). Tese spaces were a sortof public playground, often unsightly and experimental — much as skate parks and BMX parks are regarded today. Tey were the total opposite of the formal sylvan park: noisy, deliberately artificial, for a "boisterous and undisciplined public... dedicated to the violent expenditure of energy and to hitherto unheard of contacts with nature."Yet these spaces allowed a variety of functions important to teens: unstructured,self-determined exercise and play, and an opportunity to participate in community life on their own terms.

In the study area, little or no facilities provide for contemporary forms of adolescent physical activity. Particularly notable in their absence are facilities which correspond to current physical activity trends in adolescents such as skateboarding, climbing, or BMX bicycling. Tis absence was noted by community leaders in focus groups, who noted that teens were a demographic which was underrepresented in parks and recreation provision. ey stated that teens are too oldfor playlots and that formal sports leagues had limita-

T

tions in attracting teens to parks. Planners in a separate focus group recalled letters from residents advocating for recreational resources for teens such as skate parks, but also noted concerns about liability and safety.

- At least 20 minutes of moderate physical activity 3 days a week
- Active recreation such as canoeing, hiking, skateboarding, rollerblading; brisk walking, bicycle riding; housework and yardwork such as sweeping or pushing a lawnmower; games that involve catching or throwing such as baseball or softball
- At least 30 minutes of vigorous physical activity 5 days a week
- Active games such as running and chasing, such as flag football; bicycle riding; jumping rope; martial arts; running; sports such as soccer, ice or field hockey, basketball, swimming, tennis; vigorous dancing; cross-country skiing
- Muscle strengthening: tug-of-war; push-ups and pull-ups; resistance training; climbingwall; sit-ups
- Bone-strengthening:hopping, skipping, jumping; jumping rope; running; sports such asgymnastics, basketball, volleyball, tennis

TABLE 3: Facilities associated with teens' physical activity

Generic Facilities	Small Specific Facilities
multipurpose open space Large multipurpose open space Internal Trails	Baseball Basketball BMX Climbing wall Exercise stations Football / field hockey / soccer Pool Skateboarding / roller□skating T ennis T etherball Volleyball

ACTIVITY PREFERENCES | TEENS

- A 1997 study of the demographics of outdoor recreation ranked participation in outdoor recreational activities by ages 16~24: Walking (68.2%); swimming (pool) (60.6%); swimming (non~pool) (51.3%); running, jogging (50.4%); picnicking (45.1%); bicycling (37.8%) (Outdoor Recreation Resources Review Commission, 1997).
- A study by the Outdoor industry Foundation reported 2005 and 2006 participation in outdoor recreation activities by ages 6~24: Running/jogging (27.6%); bicycling ROAD PAVED SURFACE ISHING (freshwater/other) (26.4%); camping (w/in quarter mile of vehicle or home) (25.8%); hiking (day) (16.1%); skateboarding (13.9%) (Outdoor Industry Foundation ~ OIF,2007).
- Skateboarding has gained great popular~ ity. The change in participation rates from 1997 to 2008 for ages 7~11 is a 36.7% increase, and for ages 12~17 is an 85.1% increase. Skateboarders age 6~24 are more than twice as likely to bicycle than those who do not skateboard. Higher rates OF PARTICIPATION IN CAMPING HIKING ISHING and paddling are also seen in this group (OIF,2007).
- "Taking part in 'urban~associated' outdoor activities like skateboarding, running and bouldering can lead to an appreciation of BEING OUTDOORS AND HIGHER ITNESS LEVELS THAT increase levels of participation in 'tradi~ tional' outdoor activities" (OIF, 2007).

5.1.3 Provide Physical Activity Opportunities for Young Adults and Adults

Next to children, young adults and adults are the group for whom the greatest amount of opportunities are provided in parks. However, many of these activities are team-sport oriented. Tis may be because this age group has the greatest abilityto choose locations other than parks for their physical exercise needs, and see parks as a space for specific, singular activities such as active recreation or nature contact. Almost all parks in the study area have at least one facility for this age group, but the diversity of these uses tends to be low. Te most common facilities are multipurpose open spaces, followed by internal trails (but these are found in a small percentage of parks). Little or no opportuni- ties are provided for alternative physical activities such as gardening or dancing.

PHYSICAL ACTIVITY GUIDELINES | YOUNG ADULTS & ADULTS

- Moderate physical activity 3 days a week: Walking briskly; water aerobics; bicycling; tennis (doubles); ballroom dancing; general gardening
- Vigorous physical activity 3 days a week: racewalking, jogging, or running; swimming laps; tennis (singles); aerobic dancing; bicycling 10mph+; jumping rope; heavy gardening; hiking with pack
- Muscle strengthening:tug-of-war; push-ups and pull-ups; resistance training; climbing wall; sit-ups
- Bone-strengthening:hopping, skipping, jumping; jumping rope; running; sports such as gymnastics, basketball, volleyball, tennis

TABLE 4: Facilities associated with young adults' and adults' physical activity

Generic Facilities Internal trails	Specific Facilities
Large multipurpose open space Small multipurpose open space	Planting gardens Pool Skateboarding / roller□skating T ennis T etherball Volleyball Baseball Basketball BMX Boating / boat ramp Climbing wall Exercise stations Fishing Football / field hockey / soccer Frisbee / golf course Hockey rink Horseshoes

ACTIVITY PREFERENCES YOUNG ADULTS & ADULTS

- Over time, participation by adults in team BALL SPORTS DECREASES SIGNIICANTLY BUT OUTDOOR AND INDOOR ITNESS ALSO DECREASES)NDOOR ITNESS INCREASES FROM YOUNG ADULT to adult, and also rises in seniors, from over 60%, then down to 50% (OIF, 2007).
- Favorite outdoor activities of young adults ages 18~24 by number of outings (2006): Running/jogging/trail running (86 outings per year); bicycling (any type) (73 outings PER YEAR ISHING OUTINGS PER YEAR skateboarding (75 outings per year); wild~ life viewing (at least a quarter mile away) (33 outings per year) (OIF, 2007).
- The 1994~1995 NSRE reported percent of persons participating (Outdoor Recreation Resources Review Commission, 1996):
- 16~34 year olds: Walking (73%); swim~ ming (63%); sightseeing (59%); picnick~ ing (58%); bicycling (51%);
- 40~49 year olds: Walking (72.0%); picnicking (55.4%); swimming (pool) (44.8%); swimming (non pool) (42.4%); birdwatching (33.8%); bicycling (30.6%);
- 50~59 year olds: Walking (65.5%); picnicking (47.7%); swimming (pool) (34.8%); birdwatching (32.8%); swim~ ming (non pool) (30.5%); bicycling (22.0%).
- The Centers for Disease Control reports PARTICIPATION IN ITNESS ACTIVITIES IN Walking for exercise (43.2%); gardening or yard work (28.1%); stretching exercis~ es (27.2%); weightlifting or strengthening (15.5%); bicycling or exercise bicycle (12.3%); jogging or running (10.6%).

5.1.4 Provide Physical Activity Opportunities for Seniors

T e recommended physical activity guidelines for seniors tendtowards lower intensity and duration than other groups. Tis implies that parks as destinations may be an important strategy to pursue for seniors. Many parks are not of sufficient size to allowfor activities of sustained duration such as walking, but walking to parkscan satisfy this need. In addition, specific facilities to accommodate seniors such as benches and places tosocial- ize or engage in passive recreation are important to include. Community leaders noted this in theirfocus group, noting the need formore seating for seniors. However, seniors are a group that use parks for active recreation aswell, as noted in the sidebar. In the study area, little or no facilities are provided for activities such as gardening or low-intensity recreation.

PHYSICAL ACTIVITY GUIDELINES | SENIORS

- Moderate activities: Swimming; bicycling; cycling on a stationary bicycle; gardening (mowing, rak- ing); walking briskly on a level surface; mopping or scrubbing floor; golf, without a cart; tennis (doubles); volleyball; rowing; dancing Vigorous activities. Climbing stairs or hills; shoveling snow; brisk bicycling up hills; tennis (singles); swimming laps; cross-country skiing; downhill skiing; hiking; jogging

TABLE 5: Facilities associated with seniors' physical activity

Generic Facilities	Specific Facilities
Small multipurpose open space	Internal trails
	Boating / boat ramp
	Fishing
	Planting gardens
	Pool
	T ennis
	Volleyball
	Natural study areas
	Water feature

ACTIVITY PREFERENCES | SENIORS

- **A 2001 study lists the most popular sports for seniors based on frequent participation: 2ECREATIONAL WALKING ITNESS WALKING TREADmill exercise; stretching; golf; recreational vehicle camping; free weights/hand weights; FRESHWATER ISHING WEIGHT RESISTANCE MAchines; recreational swimming (Sporting Goods Manufacturers Association, 2001).**
- **The 1994–1995 NSRE reported percent of persons participating, 60 and over: Walking (51.8%); picnicking (35.1%); birdwatching (28.9%); swimming (pool) (21.8%); swimMING NON POOL FRESHWATER ISHING (13.9%) (Outdoor Recreation Resources Review Commission, 1996).**
- **A study of park usage of older adults (50 years and older) in Cleveland found that the majority of these park users were physically active during their visit with more than two thirds using the parks for moderate or high levels of physical activity (Payne et al., 1998). 16% enjoyed a high level of physical activity (e.g., jogging, bicycling, hiking); 51% had a moderate level (e.g., walking 21–45 minutes, biking, hiking or swimming for less than 30 minutes); 17% had a low level (e.g., playing with grandchildren, walking 20 minutes or less).**

5.2 RECOMMENDATION

Provide opportunities for social connections.

Parks playimportant social and neighborhood roles. T ey provide civic spaces in which to be around and meet others, and they provide a focal point for community life through programming. Infact, most Americans "spend their leisure time in primary, informal relationships with familiar people"(Bauer, 1966). Parks have a civic role as areas of civic engagement which bring residents together for shared activities and dialogue (Bachlin, 2003). Social factors have been shown to be positively associated with levels of physical activity. Tese factors include being in surroundings in which many people were exercising, being with friends who encouraged exercise, and having at least one friend with whom to exercise (Brownson et al., 2001).

Belonging and being among others are primary human needs, and this function is particularlyimportant for teens as it allows them to establish their own identity in public. Young adults in the focus groups frequently mentioned sports such as basketball, tennis, and volleyball, especially whenthese sports involved socializing with other young adults.

T e parks inventory assessment included two categories for people-related activities: passive enjoyment, oriented to individual pursuits such as people and sports watching, and nature observation; and picnic groups, facilities available for individual, and group picnic activities. Approximately one half of parks inventoried provide some opportunity for passive enjoyment: 46 (53%) of 87 total parks. Te most common facilities are for picnicking (about half of sites, though not all sites have pavilions in addition to picnic tables), followed by natural features which may be a draw. People or sports-watching opportunities were very underrepresented.

T e categories of passive recreation andpicnicking were combined into a single category called "Opportunities for social connections." Tis larger classification includes the range of activities and facilities that are associated with meeting and being around others in public spaces. Te facilities table below also includes a list of attractors, features which may be of particular interest or service in encouraging social activities at parks.

TABLE 6: Facilities associated with social connections

Specific Facilities	Attractors
Sitting areas	Natural study areas
People watching areas	Water feature
Sports□watching seating	Natural water feature (creek/river)
Gazebo	Ornamental gardens
Picnic areas/tables	Unique landscape
Picnic pavilions	Other unique natural features

5.3 RECOMMENDATION

Provide opportunities for contact with nature.

Peoplevalue substantivecontact with nature at parks. Of the four features queried in the resident survey—physical activity, nature, social connections, and history, culture, and place—contact with nature was rated as the top reason for visiting parks. Historically, many urban parks were deliberately created as retreats from the ills of urban life. However, the more recent orientation to parks as recreational facilities—a "machine for recreating", in one critic's words (Hester, 1989) — has resulted in a distancing of some parks from connections with nature. No longer connected to or expressive of natural processes, critics contend that these spaces contribute to alienation from other people and the natural environment (Hester, 1989). Community leadersin the focus groups noted that they valued a sense of nature in parks as a separation from urban life. Contact with nature has positive impacts on physical activity; studies have shown that scenery and contact with nature are attractive features which affect park usage, especially for walking (Gobster, 1995; Wilcox, Castro, King, Houseman, & Brownson, 2000).

TABLE 7: Facilities associated with contact with nature

Specific Facilities	Attractors
Natural study areas	Water feature
Ornamental gardens	Natural water feature (creek/river)
Planting gardens	Unique landscape
	Other unique natural features

Contact with nature need not be limited to the traditional interpretation of nature as a 'wild' encounter, but should also consider other forms of natural contact: gardening, native plants, and unique natural features. Some natural features can reasonably be expected to be included in any park site. Specific strategies to increase contact with nature at parks include:

- Improve ecosystems to make parks more attractive and part of a functioning larger ecosystem. Parks are often created on surplus remnants or land which cannot be used for other development because of floodplains or difficult terrain. T ese features are indicators of largerecosystems and landscapes, which include not only vegetation but also animal and avian biodiversity.
- Provide opportunities for diverse natural landscapes, rather than simply providing open green spaces. Diversity in features, uses, and landscapes creates successful park spaces which attract and sustain use throughout the seasons. Tis includes a richness in texture, smells, color, and forms.
- Include planting gardens as focal elements. Planting gardens—for either ornamentals or vegetables—serve as a focus not only forfood production, but also a sense of community and engagement. Gardens often are managed and cared for by the people who use them. Tey are also valued as being placesfor hobby work and for socializing with others (Francis, 1989).

5.4 RECOMMENDATION

Provide opportunities for connecting with history, culture, and sense of place.

T e findings from the resident survey substantiated theproposition that people value connecting with history, culture, and sense of place. Connections with local history, culture, and a celebration of unique features can give character to parks, and make them destinations for visitation.Tese features also help to distinguish unique sitesand tie them into a larger social, cultural, and historical context. Parks should be designedwith features that are suited to the personality of the particular place, with physical characteristics which appear to grow organically from what already exists,and be created with an awareness of what visible and invisible characteristics contribute to the personality of place (Dahl & Molnar, 2003).

Park-level strategies which can promote thesefeatures include:

- Highlighting existing historical ties.
- Promoting cultural programming.
- Promoting and capitalizing on existing unique features.

TABLE 8: Facilities associated with history, culture, and sense of place

Specific Facilities
Unique landscape
Other unique natural features
Historical marker
Amphitheatre / bandshell
Historical feature

5.5 RECOMMENDATION

Provide opportunities for special interest groups.

The preceding sections have provided recommendations for specific age groups (children, teens, young adults and adults, and seniors) and specific categories (contact with nature, social connections, and connections with history, culture, and sense of place). Some forms of physical activity and recreation embody multiple categories. Outdoor recreation, for example, combines active recreation with contact with nature. Other types of physical activity may cross age groups, such as informal sports, or be representative of non-programmed or group physical activity, such as informal exercise. This section provides recommendations on these categories, and suggests that carefully accommodating these groups in appropriate locations may aid in increasing overall physical activity in subsets of the population that organize themselves according to common interests and pursuits.

5.5.1 Add or Upgrade Facilities for Outdoor Recreation

Outdoor recreation activitiescan rangefrom sports such as canoeing or mountain biking to lower-intensity pursuits such as hiking. T ese pursuits are popular among a range of age groups, and are accessible by age and ability. Opportunities for outdoor recreation arepresented by the combinationofspeci c facilities with opportunities presented by naturalfeaturessuchasriversornaturalareas.Forexample,theadditionofaccessible internaltrails toa naturearea providean opportunity for hiking and nature walks. T e parks inventory and assessment found that the most common outdoor recreation features are naturalstudyareas(18),followedcloselybyinternaltrails(17)andwaterfeatures(16). Of theparkswithahighdegreeofnaturalness(vs.managedopenspacesorhardscapes), almost allsites (21 of23) provide opportunities whose combination is conducive to high- or low-intensityoutdoorrecreation. T emostcommonfacilitiesarenaturalstudyareas, internaltrails, and waterfeatures.

Outdoor recreation need not bethought of as only active recreation. Lower-intensity physicalactivity such as walking in naturalsurroundings, or nature study areas are also vital elementsofoutdoorrecreation.Plannersparticipatinginthefocusgroupsnotedthat paved trailswerehighlyvaluedandusedbythoseseekingpassiverecreationopportunities, and thatfishingpondsandotherbodiesofwaterattractedmanyvisitors.

T ekey to promoting outdoor recreation opportunities is to take advantage ofthe combination of generic and speci c facilities with attractors. However, care must be taken to balanceoutdoorrecreationuses,especiallyhigher-intensityonessuchasmountainbiking, withthedesiresforvisitorstoenjoynaturalsurroundingsinlower-intensitywayssuch as walkingorbird-watching.Inthestudyarea,theprimarysiteswhichshouldbeconsidered foroutdoorrecreationopportunitiesarelargeexistingnaturalsitessuchasCoventry Woods in North Coventry, and the set of opportunities represented by sites adjacent to the SchuylkillRiver.

TABLE 9: Facilities associated with outdoor recreation

Generic Facilities	Specific Facilities	Attractors
Internal trails	Fishing Boating/boat ramp BMX track	Natural study area Other unique natural features Water feature Natural water feature (creek/river) Unique landscape

5.5.2 Add or Upgrade Facilities for Informal Sports

Informal sports opportunities include those for 'pick-up' games or loosely organized groups. Anumber of participants in thefocus groups recalled the informal sports uses of parks in their younger years, and the young adults also mentioned the desire for spontaneous sports uses. Tese were often mentioned in conjunction with descriptions of conflicts of other activities with formal sports leagues. A separate recommendation in this report suggests that the identification of alternative spaces for informal sports would help to alleviate the conflicts of shared spaces. Tis requires that facilities for informal sports, the most common of which are small and large multipurpose open spaces, be clearly designated as allowable for sports to occur on them. Tis can be achieved with informal markings of goals, and the provision of seating which looks out upon sports spaces. Once a group knows that it is allowable to use the spaces for sports, the news will likely spread to others, and encourage the appropriation of these spaces for informal sports.

TABLE 10: Facilities associated with informal sports

Generic Facilities	Specific Facilities
Small multipurpose open space Large multipurpose open space Internal trails	Baseball field Basketball Football / field hockey / soccer Tennis court Gymnasium Volleyball court Pool Skateboarding / roller□skating T etherball Hockey rink BMX track Horseshoe pits Golf course Climbing wall

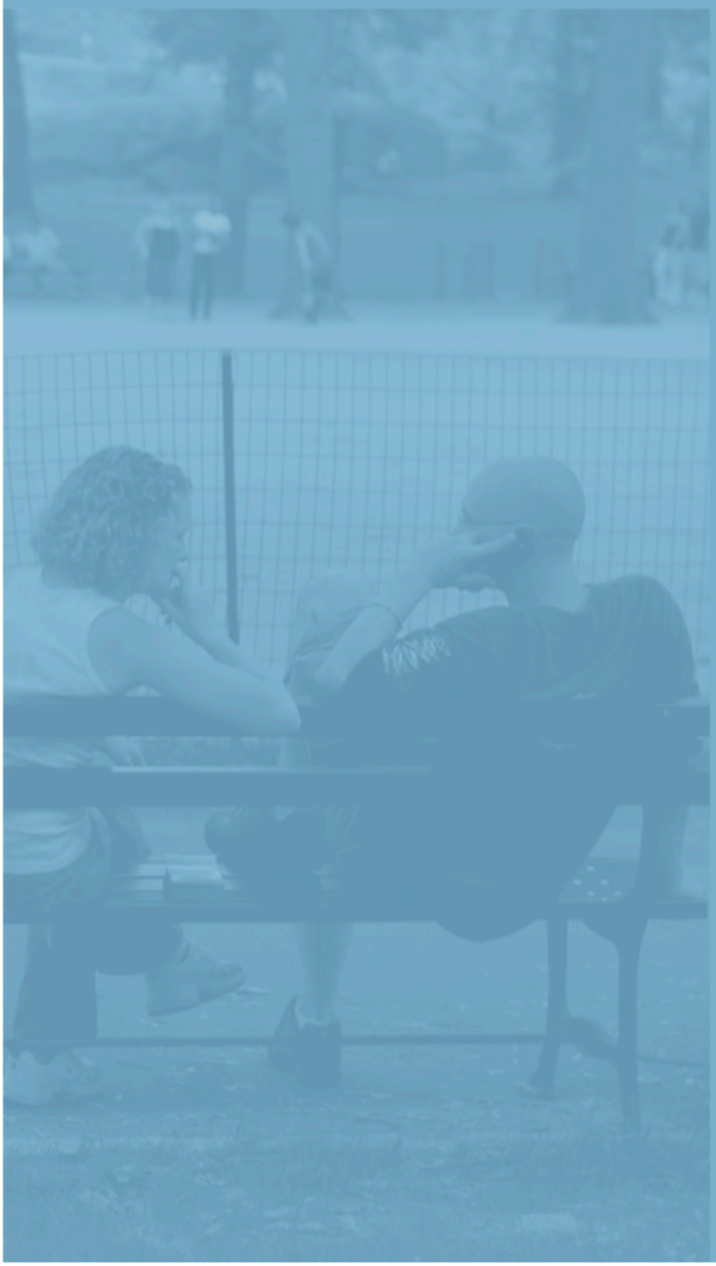
5.5.3 Add or Upgrade Facilities for Informal Exercisers

Informal exercise runs the gamut from the use of specific facilities such as exercise stations to small multipurpose open spaces for stretching, yoga, or fitness exercises. Informal exercisers are a group who find opportunities for physical activity without participating in organized activities. Tis category also includes facilities for the most popular form of exercise across the adult and senior age groups: walking. Many parks cannot accommodate internal trails due to their limited size, but considering opportunities for informal exercise as the destination in an overall program of active living would encourage both walking to and from parksas a form of exercise, along with selected activities at parks themselves. Here, clear designations or signage displaying examples of exercise activities or regimes would be particularly helpful in encouraging these sorts of uses.

TABLE 11: Facilities associated with informal exercise

Generic Facilities	Specific Facilities
Small multipurpose open space Large multipurpose open space	Internal trails Gymnasium Pool Exercise stations Dog park

SECTION 3
MODELS FOR PARKS SYSTEMS



This section provides three models for parks systems:

- The Walkable Network of neighborhood parks
- Well-Rounded Destinations at the community and regional level
- The Blended Approach, combining the two models.

This section also provides information on specific actions and parks to be improved. Application of the models depends largely on the density of the built environment. The Walkable Network is appropriate for higher-density areas, whereas The Well-Rounded Destinations Model can be used in all areas. However, most areas will likely require The Blended Approach. Once the model is chosen, undertake the specific actions to achieve the model's goals.

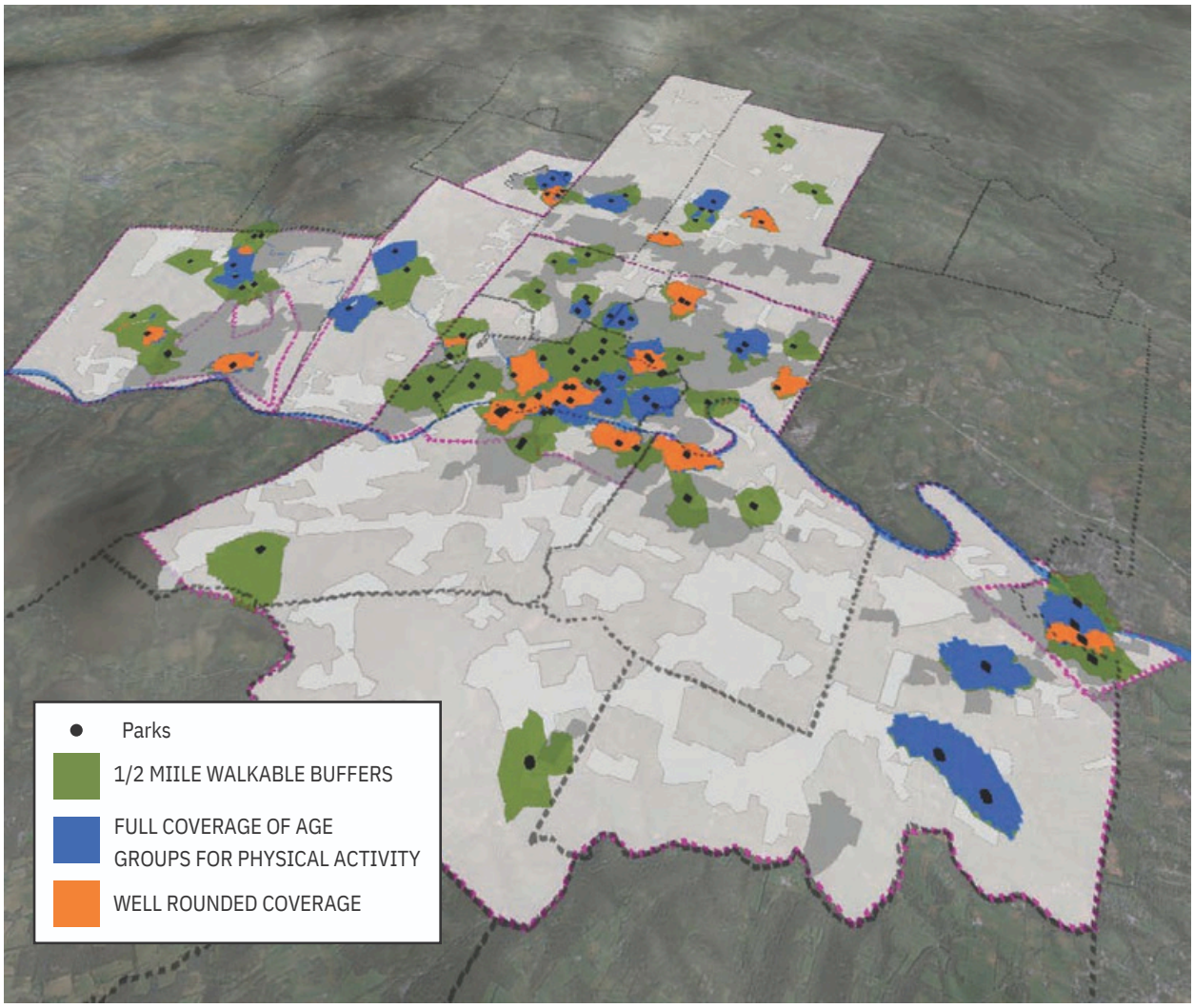


FIG. 1: Current state of walkable covergae in the study area.

1 A Walkable Network at the Neighborhood Level

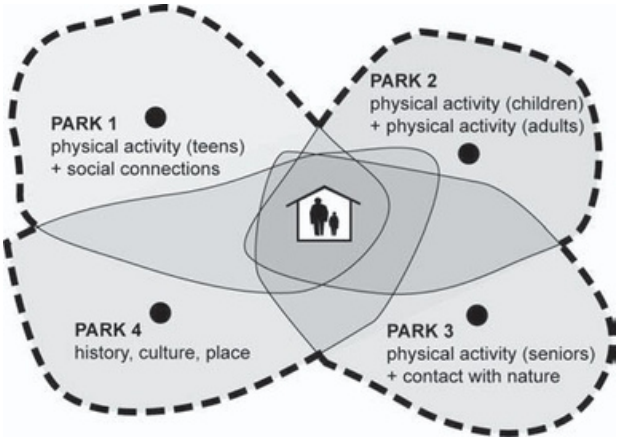


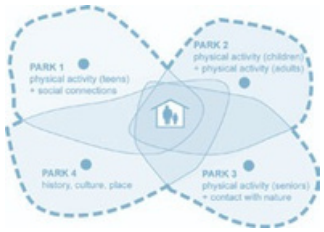
FIG. 2: The Walkable Network model

The idea driving the Walkable Network Model is that a given individual's range of opportunitiesmay be satisfied by a collection of nearby parks. Considering single parks as part of an overlapping network of walkable areas releases parks evaluation from focusing on parks in isolation. Because the model emphasizes active transportation choices such as walking, it is most appropriate for higher-density areas. A primary reason for this is that higher-density areas present enough population numbers to make it feasible to provide a higher number of parks and facilities.

The remainder of this section provides specific implementation strategies for municipalities with higher-density areas. Implementation in each municipality may require up to three actions: upgrading or adding facilities at existing parks; improving sites currently owned by the municipalities; or acquiring new properties and developing parks. The specific tasks for each municipality are derived from the parks inventory and the walkable buffer analysis conducted for this study. Recommendations on adding or upgrading facilities are based on the facilities assessment which provides a score for opportunities across four areas: physical activity (by age groups); contact with nature; social connections; and connections with history, culture, and sense of place. The number of additional parks required is estimated from the gaps in walkable coverage and the typical half-mile buffer area for parks in the individualmunicipality.

AMITY

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well~rounded range of opportunities.



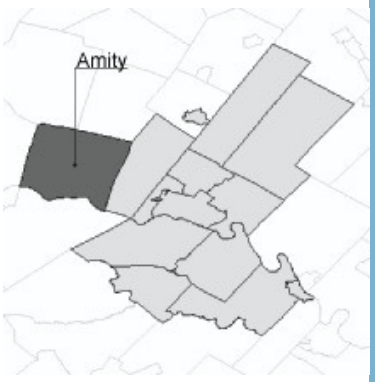
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
AM02: Hill Road Recreation Area				+		+	+
AM03: Myron S. Wheeler Recreation Area (Township Fields)	+					+	+
AM05: Locust Grove Recreation Area	+*			+	+	+	
AM06: Locust Grove Open Space	+*		+*	+*			
AM07: Monocacy Hill Recreation Area				+			
AM08: Amity Park Road Recreation Area					+	+	+
AM13: Weavertown Road Open Space					+	+	+
AM16: Amity Intermediate Center				+	+	+	+
AM17: Amity Primary Center		+	+	+		+	+

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

to increase the amount of walkable area coverage

	Naturalness	Type
Cider Mill Open Space	wild nature	landbank
Greenbriar Open Space	wild nature	landbank
Old Airport Road Open Space	managed nature	landbank
Open Space Adjacent to Sewage Plant	wild nature	landbank
Open Space along Schuylkill River	wild nature	remnant
West Ridge Open Space	wild nature	

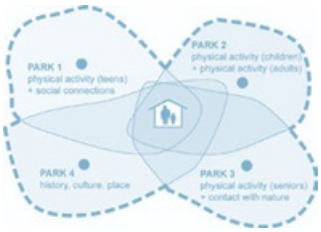
STEP 3: Estimated number of new parks required

for full walkable coverage in higher~density areas

9

BOYERTOWN

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well-rounded range of opportunities.



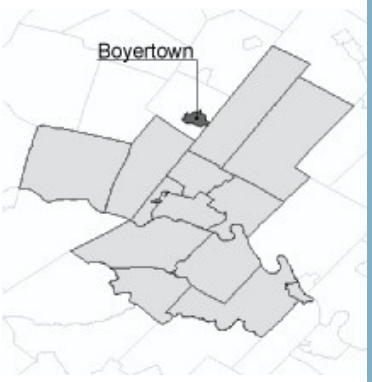
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
BY02: Franklin St Mini-Park					+	+	+
BY03: MunicipalPark	+	+	+	+	+	+	+
BY04: BoyertownElementary			+	+	+	+	+
BY05: Boyertown Jr High West			+	+	+	+	+
BY06: BoyertownSeniorHigh				+	+	+	+

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

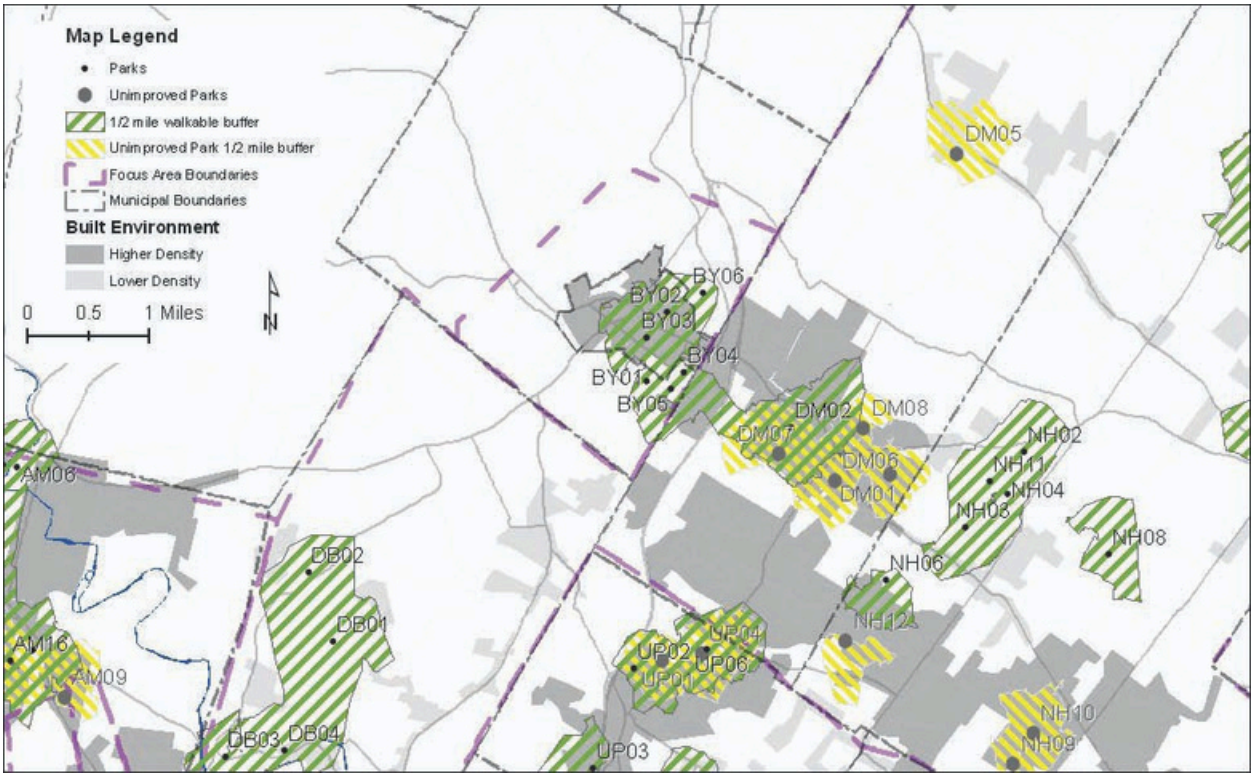
to increase the amount of walkable area coverage

NONE AVAILABLE

STEP 3: Estimated number of new parks required

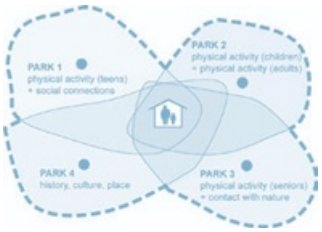
for full walkable coverage in higher-density areas

2



LOWER POTTSGROVE

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well~~rounded range of opportunities.



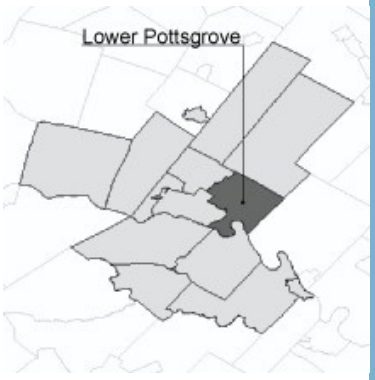
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
LP01: Alfred B. Miles Park	+	+*					
LP03: Gerald G. Richards Park					+	+	+
LP05: Norton Park	+	+			+		+
LP09: Schuylkill River Park					+		+
LP12: Lower Pottsgrove Elementary School					+	+	+
LP13: Ringing Rocks Elementary School						+	+
LP14: Pottsgrove High School						+	
LP16: Wyndcroft School ~~ Elem School		+	+	+		+	

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

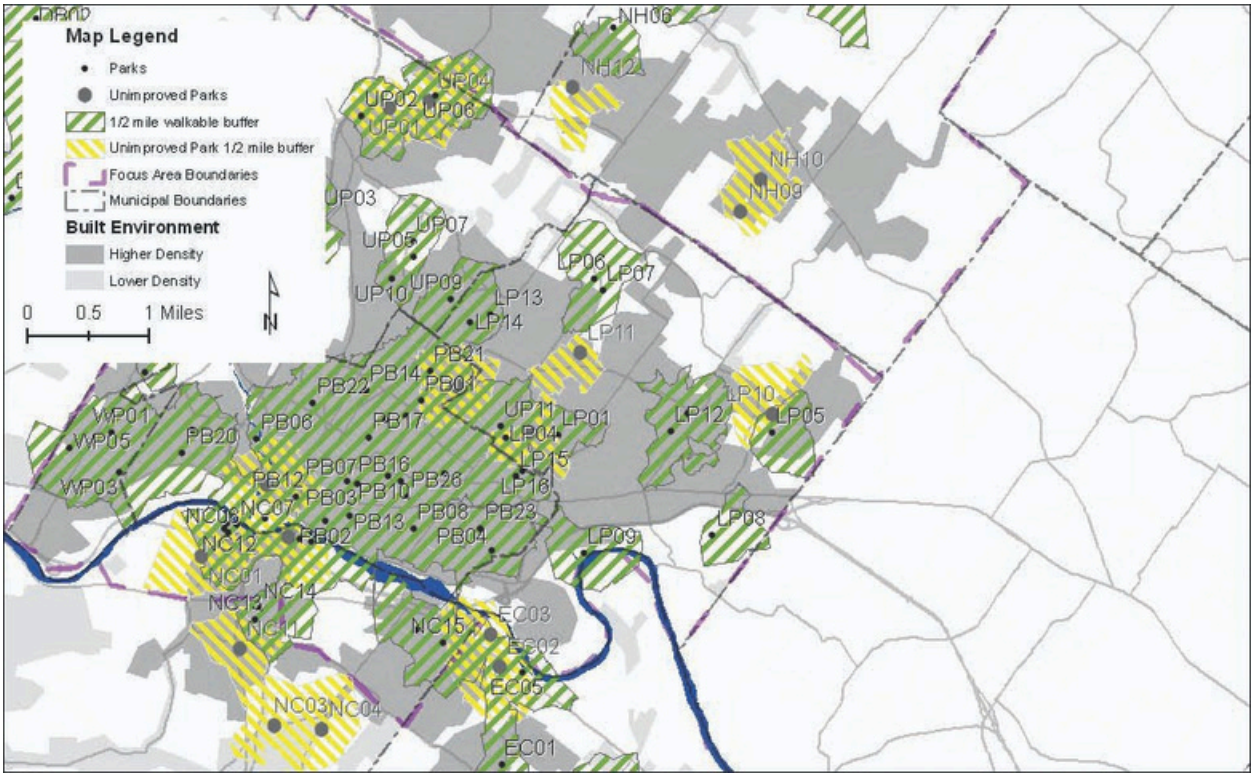
to increase the amount of walkable area coverage

	Naturalness	Type
Crimson Lane Park	wild nature	landbank
Snell Park	wild nature	landbank
Sprogels Run Park	managed	landbank
	open space	

STEP 3: Estimated number of new parks required

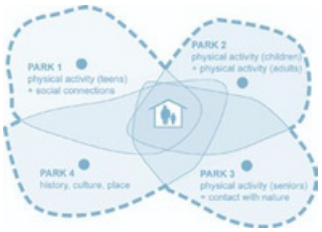
for full walkable coverage in higher~~density areas

9



NORTH COVENTRY

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well~rounded range of opportunities.



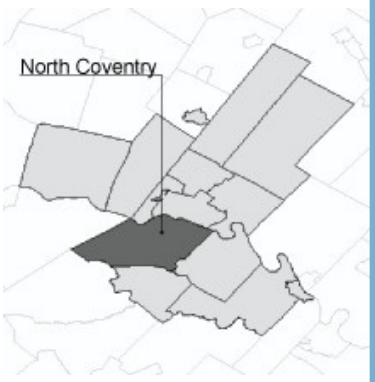
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
NC02: Coventry Woods	+	+					
NC06: Penn Street Courts						+	
NC13: North Coventry Elementary School				+		+	+
NC14: West~Mont Christian Academy				+		+	+
NC15: Coventry Christian Schools				+	+	+	+

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

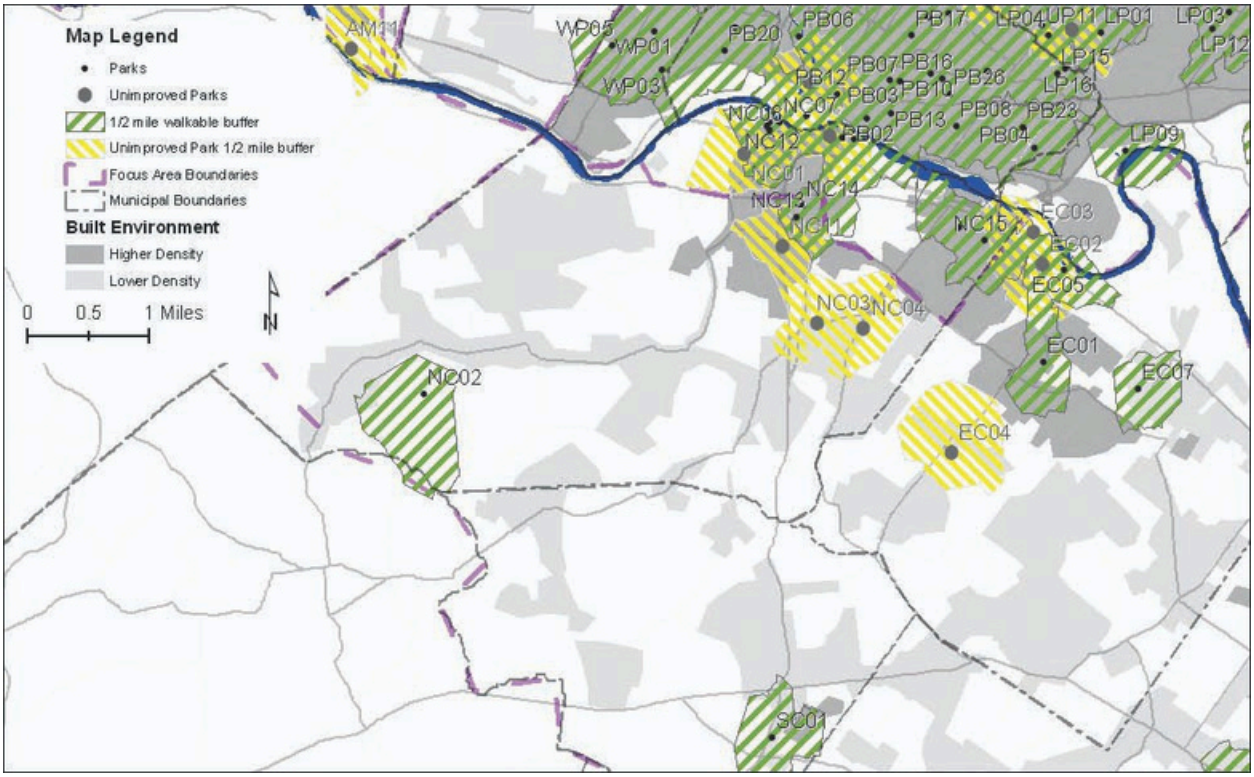
to increase the amount of walkable area coverage

	Naturalness	Type
Bickels Run Park	wild nature	landbank
	managed	idle
Bryton Avenue Park	open space	
	wild nature	landbank
Kemp Road Park		
	managed	idle
Riverside Avenue Playlot	open space	
	managed	landbank
Town Square Property		
	open space	

STEP 3: Estimated number of new parks required

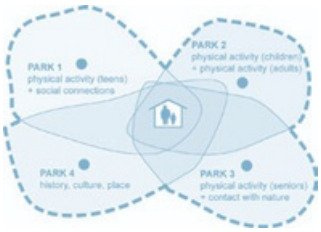
for full walkable coverage in higher~density areas

4



POTTSTOWN

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well~rounded range of opportunities.



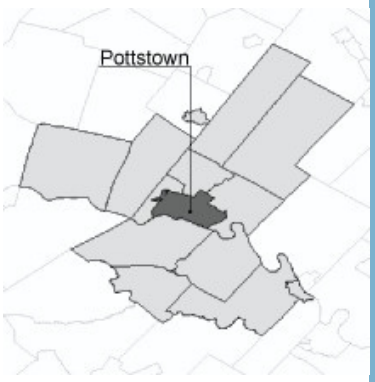
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
PB01: Brookside Park				+		+	
PB02: CherryStreetPark		+					
PB03: ChestnutStreetPark		+	+			+	
PB04: Maple Street Park		+				+	+
PB07: New Chestnut Street Park			+			+	
PB08: PolluckPark						+	
PB09: Potts Drive Park				+	+	+	+
PB10: Ricketts Community Center				+	+	+	+
PB11: RiverfrontPark	+	+*					
PB12: Smith Family Plaza	+	+				+	
PB14: SpruceStreetPark				+	+	+	+
PB16: WalnutStreetPark				+	+	+	+
PB17: Washington Street Park		+	+	+	+	+	+
PB19: Edgewood ElementarySchool		+	+			+	+
PB20: Elizabeth B. Barth Elementary School		+	+		+	+	+
PB21: Franklin Elementary School		+		+	+	+	
PB22: Lincoln ElementarySchool				+	+	+	+
PB23: Rupert Elementary School				+		+	+
PB24: PottstownMiddleSchool				+		+	+
PB25: Pottstown High School				+		+	
PB26: TheHillSchool							+

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

to increase the amount of walkable area coverage

	Naturalness	Type
Pottstown Metal Welding Property	managed open space	landbank
Terrrace Lane Park	managed open space	landbank

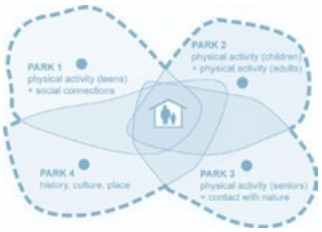
STEP 3: Estimated number of new parks required

for full walkable coverage in higher~density areas

2

SPRING CITY

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well-rounded range of opportunities.



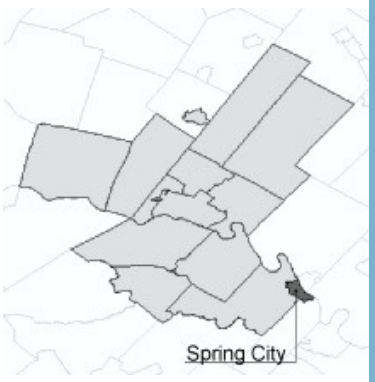
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
SP01: Brown Street Park				+		+	+
SP02: HallStreetPark				+		+	+
SP03: Spring City Boat Ramp Area				+*	+	+	+
SP04: Spring City Elementary	+	+	+*				

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

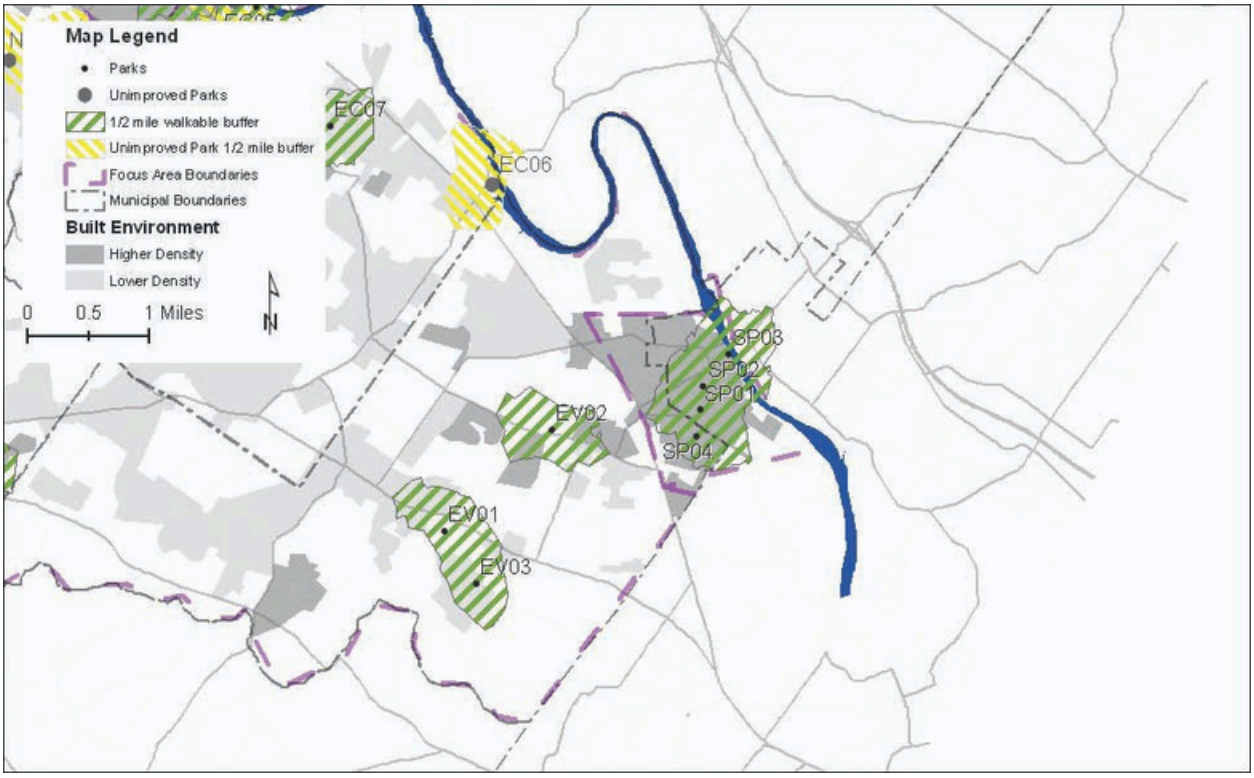
to increase the amount of walkable area coverage

NONE AVAILABLE

STEP 3: Estimated number of new parks required

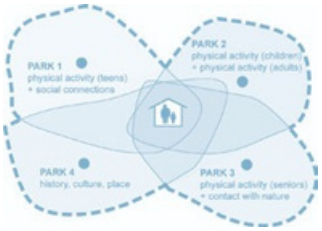
for full walkable coverage in higher-density areas

1



UPPER POTTSGROVE

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well-rounded range of opportunities.



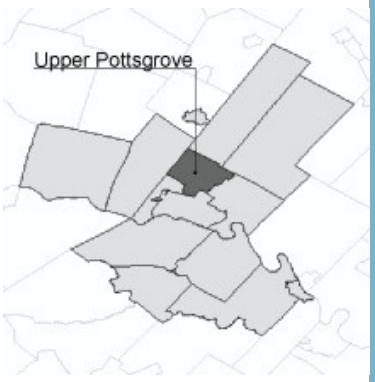
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
UP02: Cherry Tree Farms Park	+	+			+		
UP03: Heather Park Place	+	+	+	+	+	+	+
UP05: Hollenboch Park				+	+	+	+
UP06: Kulp Field	+			+	+	+	+
UP07: Mocharniuk Meadows				+		+	+
UP10: Pottsgrove Middle School						+	+

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

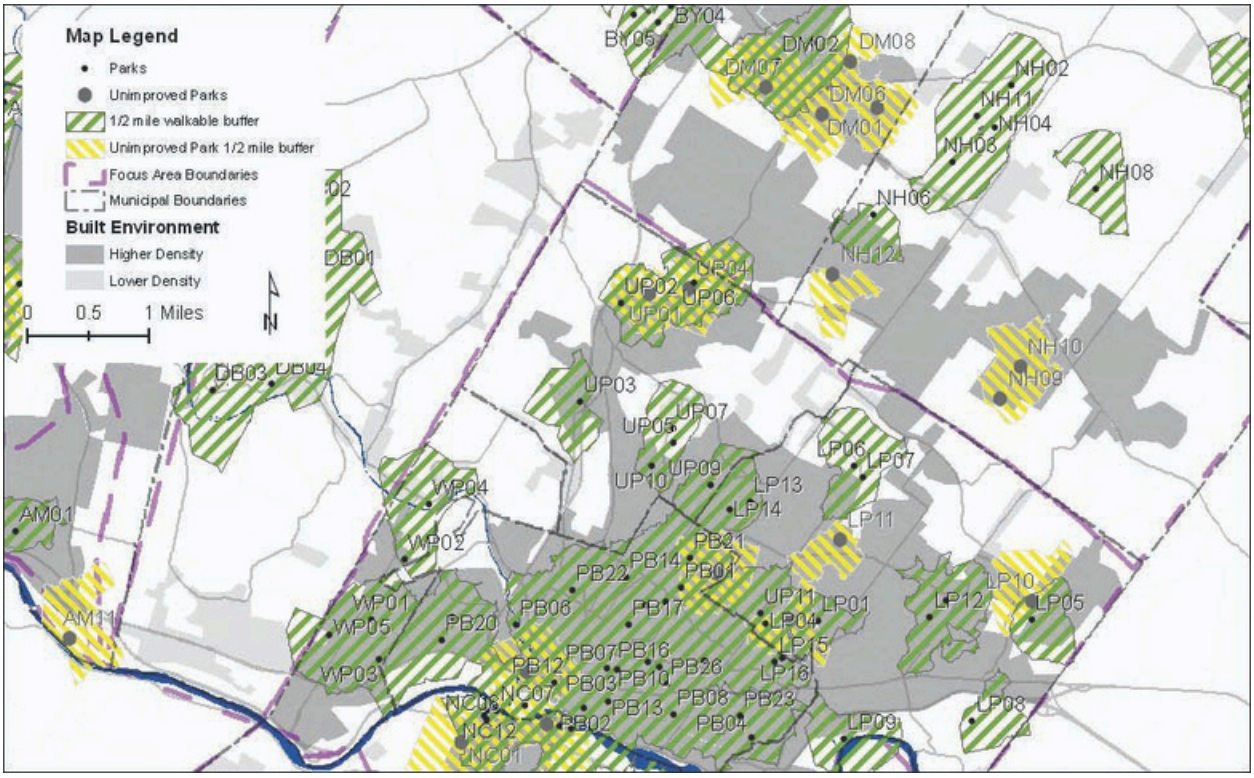
to increase the amount of walkable area coverage

	Naturalness	Type
Cherry Tree Farms	wild nature	remnant
Hillside Park	wild nature	remnant

STEP 3: Estimated number of new parks required

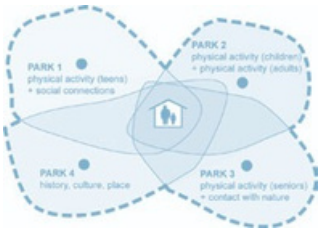
for full walkable coverage in higher-density areas

6



WEST POTTSGROVE

In the WALKABLE NETWORK MODEL, MULTIPLE PARKS SERVE TO FULILL A well~rounded range of opportunities.



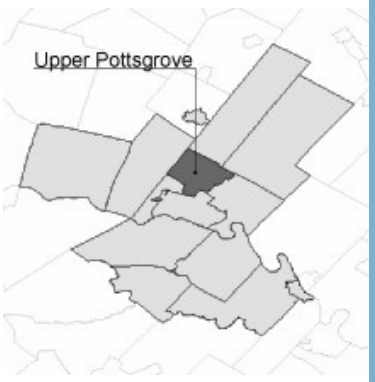
STEP 1: Upgrade or Add Facilities at Existing Parks

to make a full range of opportunites available across the existing network

	PHYSICAL ACTIVITY				SOCIAL CONNECTIONS	CONTACT WITH NATURE	HISTORY, CULTURE, AND PLACE
	Children	Teens	Young Adults & Adults	Seniors			
WP01: Howard Street Playground		+	+	+		+	+
WP02: Old Timer's Field / Township Building				+		+	+
WP03: Vine Street Playground		+	+	+	+	+	+
WP04: Manatawny Park	+	+		+		+	+
WP05: West Pottsgrove Elementary School					+		

* Has attractor feature for this category.

Italics indicate schoolyard.



STEP 2: Add unimproved sites to the network

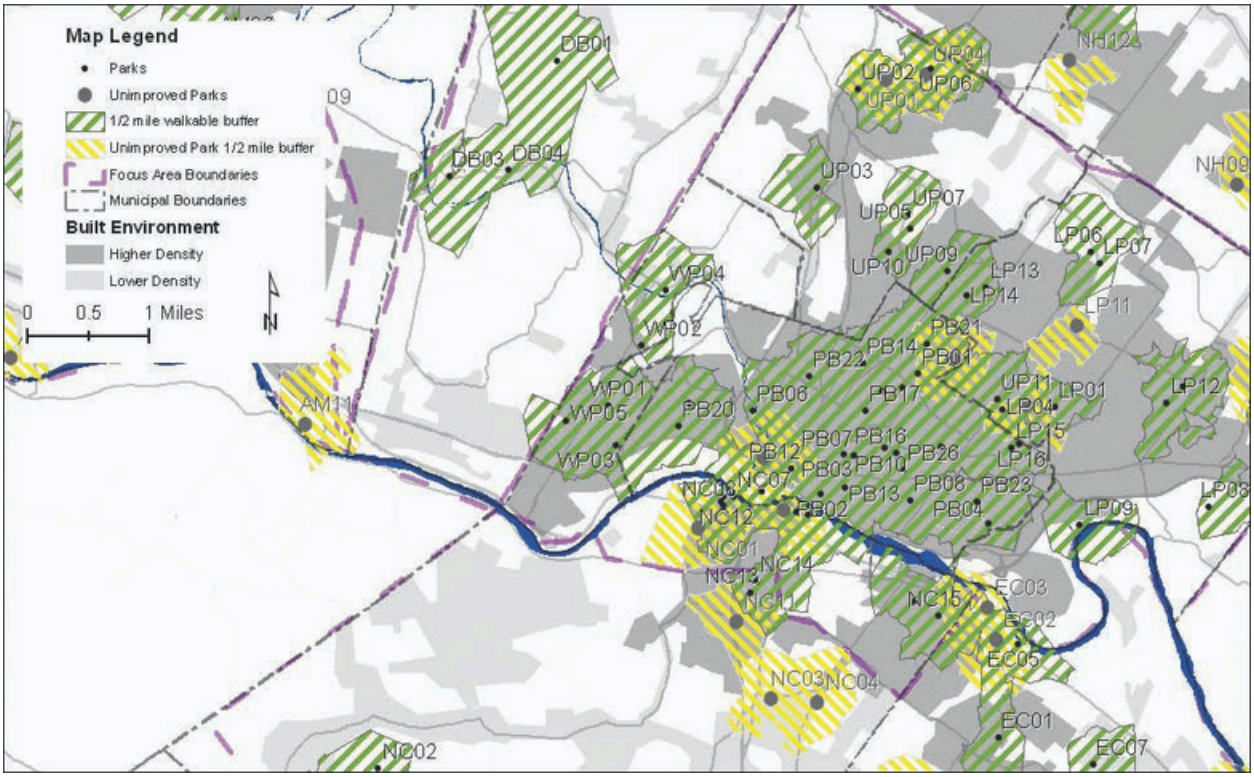
to increase the amount of walkable area coverage

NONE AVAILABLE

STEP 3: Estimated number of new parks required

for full walkable coverage in higher~density areas

2



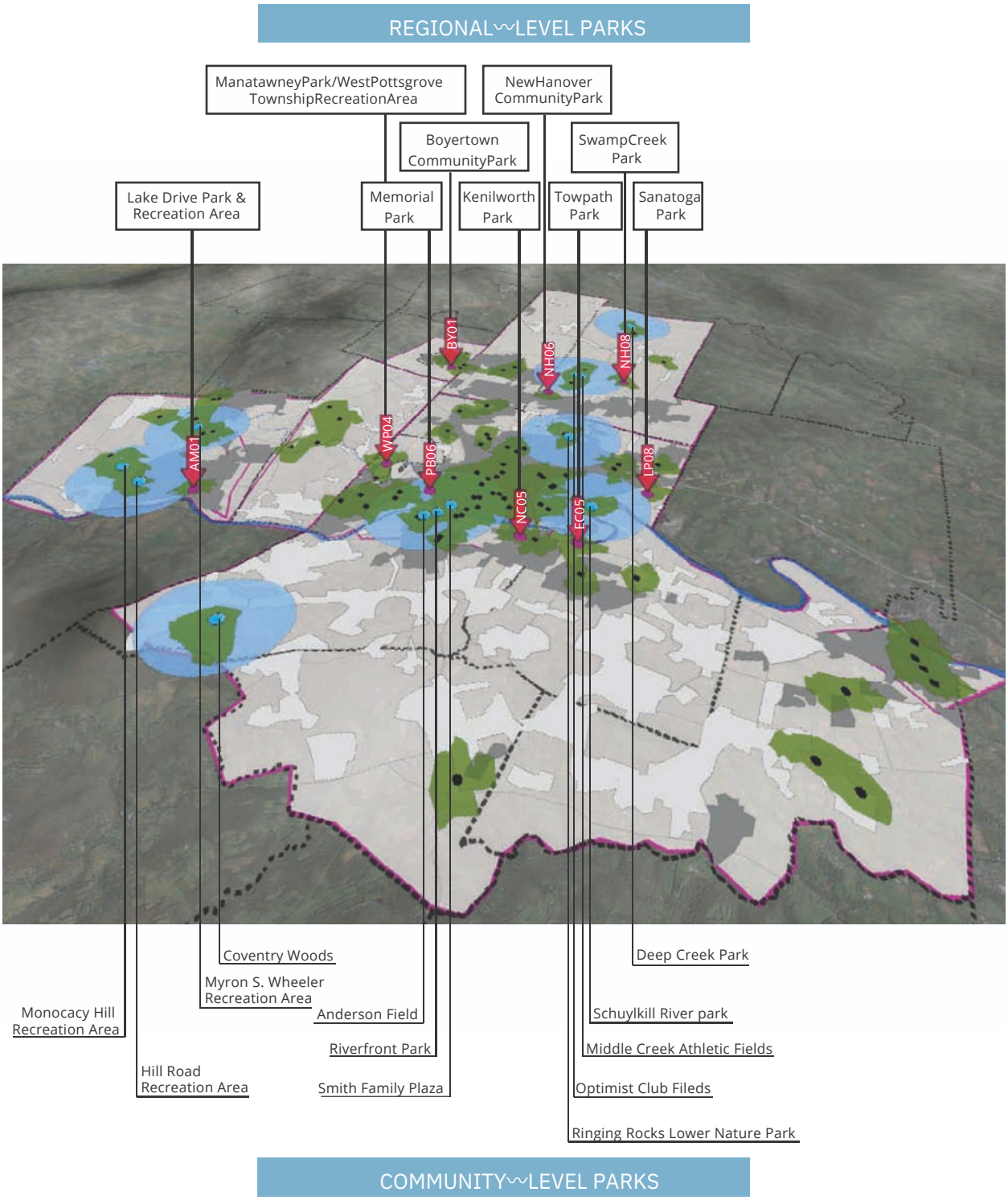


FIG. 3: Current state of regional and community level parks in the study area.

2 7ELL 2OUNDED $ESTINATIONS at the Community Level

Under the Well-Rounded Destinations Model, each park provides a full range of opportunities—physical activity across the age groups; contact with nature; social connections; and connections with history, culture, and sense of place. Te remainder of this section provides specific implementation strategies for the 14 municipalities in the Focus Area. Implementation in each municipality is based on the upgrading of parks from neighborhood to community or regional destinations. Te specific recommendations for each municipality arederived from the parks inventory conducted for this study. Gaps in specific facilities to be added orupgraded are highlighted in red and noted with a blank score. Adding one to two facilities for the particular category raises the park score and also serves to raise the park's popularity, with the likely impact of increasing visitation.

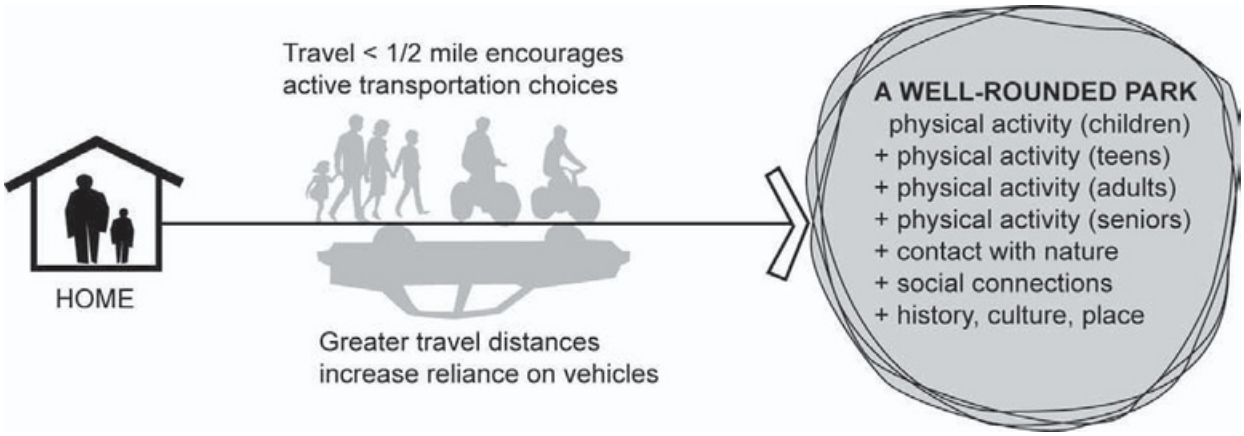
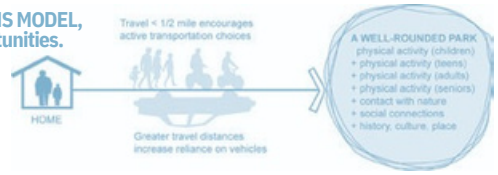


FIG. 4: The Well□Rounded Destinations model.

AMITY

In the WELL-ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.



A park has multiple facilities

a park has few facilities

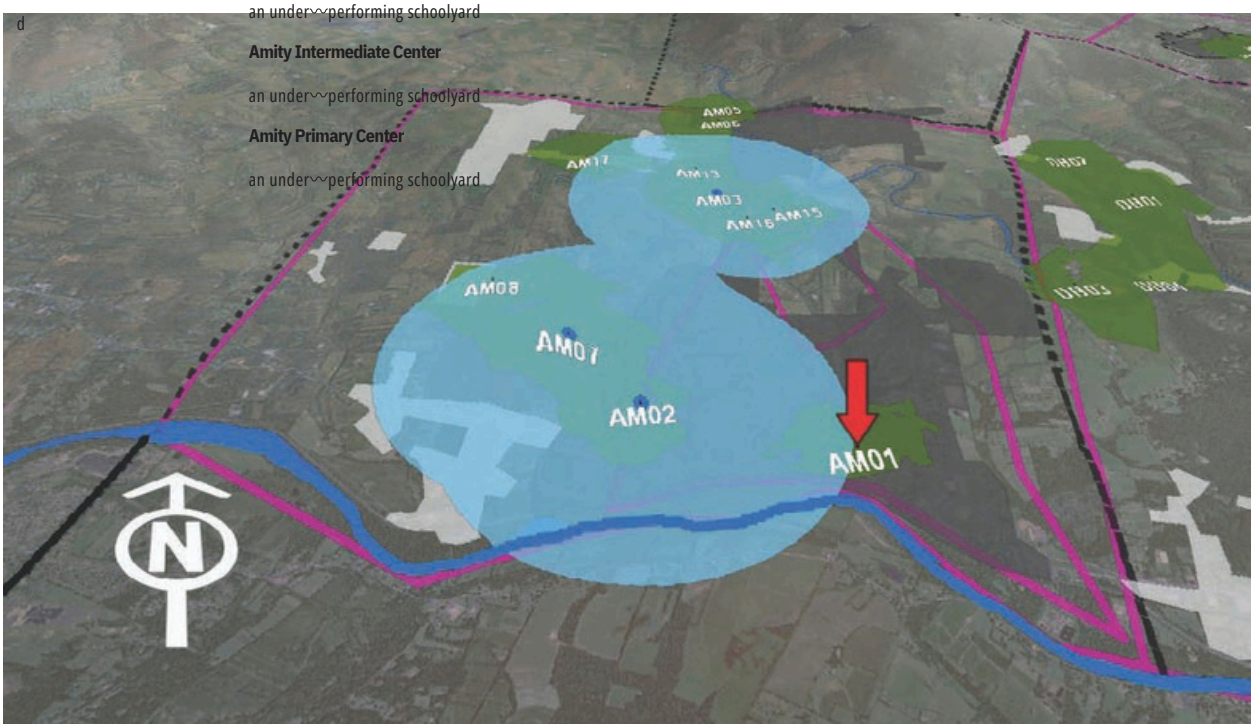
_ park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional	AM01	**Lake Drive Park & Recreation Area** a well-rounded large park	C	T	A	s	n	p	h
~~Community~~	AM02	**Hill Road Recreation Area**	c	t	a	_	_	p	_
~~Community~~	AM03	a moderately well-rounded medium sports-oriented park	_	t	a	s	_	P	_
~~Community~~	AM07	**Myron S. Wheeler Recreation Area (Township Fields)**	_	_	a	s	N	p	h
Neighborhood	AM06	a moderately well-rounded small sports-oriented park	_	_	_	_	N	p	h
Neighborhood	AM08	**Monocacy Hill Recreation Area**	c	t	a	_	_	_	_
Neighborhood	AM13	a moderately well-rounded extra large nature-oriented park	c	t	A	s	_	P	_
Neighborhood	AM05	**Locust Grove Open Space**	c	t	a	_	_	_	_
Neighborhood	AM15	a somewhat under-performing nature-oriented greenway	_	_	_	_	_	_	_
Neighborhood	AM16	**Amity Park Road Recreation Area**	c	t	a	_	_	_	_
Neighborhood	AM17	a somewhat under-performing medium sports-oriented park	c	_	_	_	_	_	_
Neighborhood		**Weavertown Road Open Space** a somewhat under-performing large park							
Neighborhood		**Locust Grove Recreation Area** an under-performing mini-park							
Neighborhood		**Amity Elementary school** an under-performing schoolyard							
		Amity Intermediate Center an under-performing schoolyard							
		Amity Primary Center an under-performing schoolyard							

REGIONAL-LEVEL PARKS provide a well-rounded range of opportunities and attract visitors from across the region.

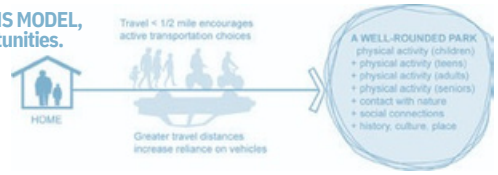
COMMUNITY-LEVEL PARKS provide a limited range of opportunities and serve a group of neighborhoods.

NEIGHBORHOOD-LEVEL PARKS provide a very limited range of opportunties and serve a small AREA AND OR A SPECIIC GROUP



BOYERTOWN

In the WELL-ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.



- A — park has multiple facilities
- a — park has few facilities
- _ — park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional	BY01	**Boyertown Community Park** a well-rounded extra large park	C	T	A	s	n	p	h
Community		***none***							
Neighborhood	BY02	**Franklin St Mini-Park** a somewhat under-performing mini park	c	t	a	s	_	p	_
Neighborhood	BY03		c	_	_	_	_	_	_
Neighborhood	BY04	**Municipal Park** an under-performing small park	c	t	a	_	_	_	_
Neighborhood	BY05		c	t	a	_	_	_	_
Neighborhood	BY06	**Boyertown Elementary** an under-performing schoolyard **Boyertown Jr High West** an under-performing schoolyard **Boyertown Senior High** an under-performing schoolyard	c	t	A	s	_	_	_

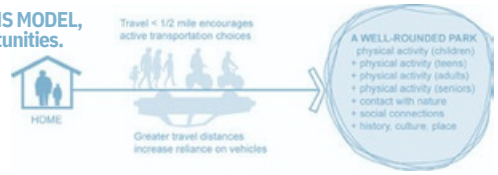
REGIONAL-LEVEL PARKS provide a well-rounded range of opportunities and attract visitors from across the region.

COMMUNITY-LEVEL PARKS provide a limited range of opportunities and serve a group of neighborhoods.

NEIGHBORHOOD-LEVEL PARKS provide a very limited range of opportunties and serve a small AREA AND OR A SPECIIC GROUP

LOWER POTTSGROVE

In the WELL-ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.



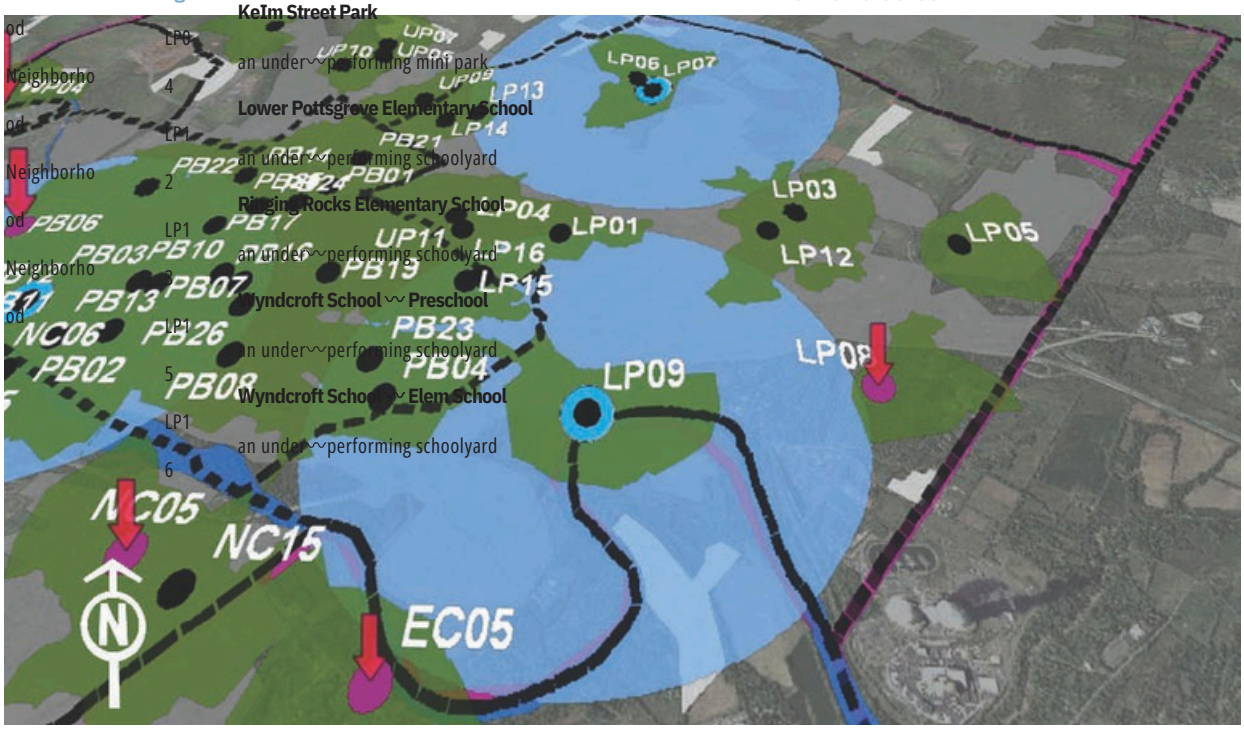
- A — park has multiple facilities
- a — park has few facilities
- _ — park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional	LP0	**Sanatoga Park** a well-rounded large park	c	t	A	S	N	P	H
Community	8	**Ringing Rocks Lower Nature Park**	_	_	a	s	N	_	h
Community	LP0	a moderately well-rounded large nature-oriented park	_	_	a	s	N	_	h
Neighborho	7	**Schuylkill River Park**	_	_	a	s	N	p	h
od	LP0	a moderately well-rounded medium nature-oriented park	_	_	a	s	n	_	_
Neighborho	9	**Alfred B. Miles Park**	c	t	a	_	n	P	H
od	LP0	a somewhat under-performing medium nature-oriented park	C	T	A	s	_	p	_
Neighborho	1	**Norton Park**	c	T	A	s	_	_	_
od	LP0	a somewhat under-performing medium nature-oriented park	_	_	_	_	n	p	h
Neighborho	5	**Ringing Rocks Upper Park**	c	t	a	_	_	_	_
od	LP0	a somewhat under-performing large park	c	t	a	_	_	_	_
Neighborho	6	**Pottsgrove High School**	c	_	_	_	_	_	h
od	LP1	a somewhat under-performing schoolyard	c	_	_	_	_	_	_
Neighborho	4	**Gerald G. Richards Park**							
od	LP0	an under-performing large sports-oriented park							
Neighborho	3	**KeIm Street Park**							
od	LP0	an under-performing mini park							
Neighborho	4	**Lower Pottsgrove Elementary School**							
od	LP1	an under-performing schoolyard							
Neighborho	2	**Ringing Rocks Elementary School**							
od	LP1	an under-performing schoolyard							
Neighborho	3	**Wyndcroft School - Preschool**							
od	LP1	an under-performing schoolyard							
	5	**Wyndcroft School - Elem School**							
	LP1	an under-performing schoolyard							
	6								

REGIONAL-LEVEL PARKS provide a well-rounded range of opportunities and attract visitors from across the region.

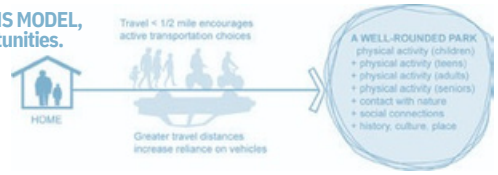
COMMUNITY-LEVEL PARKS provide a limited range of opportunities and serve a group of neighborhoods.

NEIGHBORHOOD-LEVEL PARKS provide a very limited range of opportunities and serve a small AREA AND OR A SPECIIC GROUP



NORTH COVENTRY

In the WELL-ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.



A park has multiple facilities

a park has few facilities

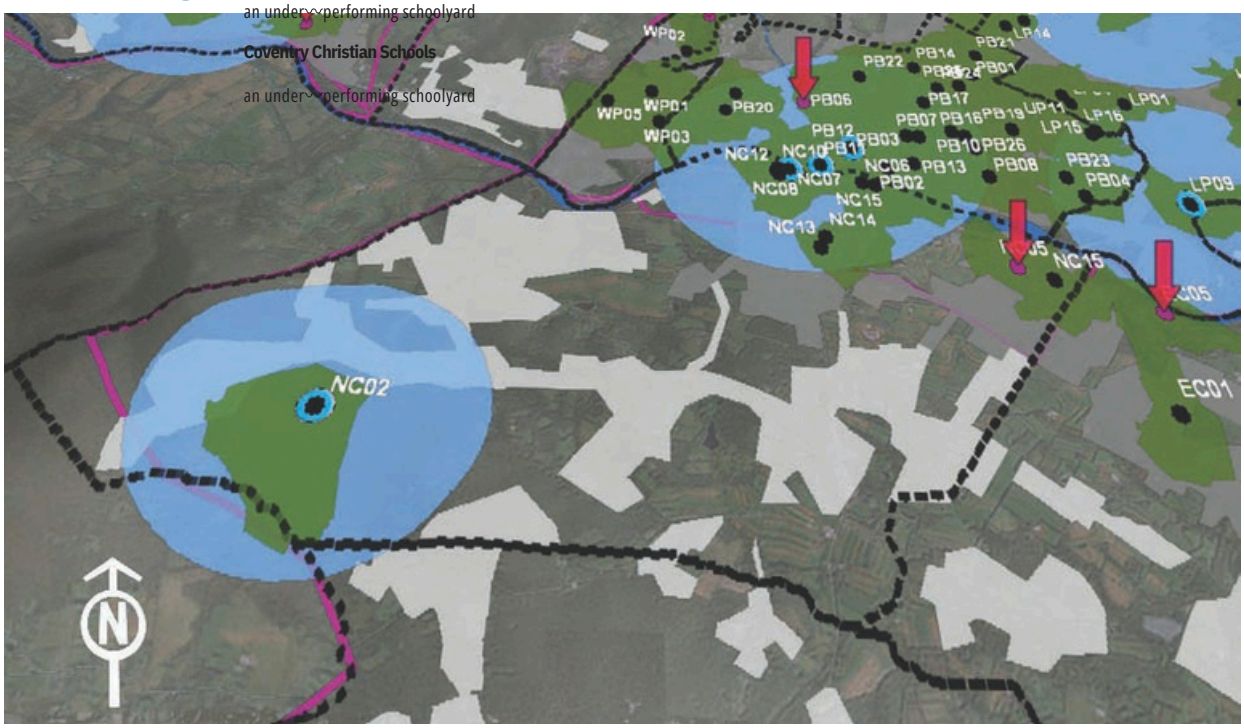
_ park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional	NC05	**Kenilworth Park** a well-rounded large park	c	t	A	s	N	p	h
Community	NC02	**Coventry Woods**	_	_	a	s	N	p	h
Community	NC07	a moderately well-rounded extra large nature-oriented park	_	t	a	_	N	p	h
Neighborhood	NC06	**Anderson Field**	c	t	a	_	_	_	_
Neighborhood	NC08	a moderately well-rounded small sports-oriented park	_	t	a	_	N	p	h
Neighborhood	NC10	**Penn Street Courts**	c	t	A	s	n	p	_
Neighborhood	NC12	a somewhat under-performing mini sports-oriented park	_	_	a	s	n	p	_
Neighborhood	NC13	**River Road Recreation Area**	C	t	a	_	_	p	_
Neighborhood	NC14	a somewhat under-performing medium park	c	t	a	_	_	_	_
Neighborhood	NC15	**Riverside Park / South Pottstown Recreation Area**	C	t	a	_	_	_	_
Neighborhood		a somewhat under-performing small park							
Neighborhood		**Schuylkill River Park**							
Neighborhood		an under-performing large park							
Neighborhood		**North Coventry Elementary School**							
Neighborhood		an under-performing schoolyard							
Neighborhood		**West-Mont Christian Academy**							
		an under-performing schoolyard							
		Coventry Christian Schools							
		an under-performing schoolyard							

REGIONAL-LEVEL PARKS provide a well-rounded range of opportunities and attract visitors from across the region.

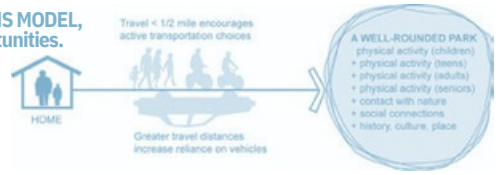
COMMUNITY-LEVEL PARKS provide a limited range of opportunities and serve a [illegible] neighborhoods.

NEIGHBORHOOD-LEVEL PARKS provide a very limited range of opportunties and serve a small AREA AND OR A SPECIIC GROUP



POTTSTOWN

In the WELL-ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.

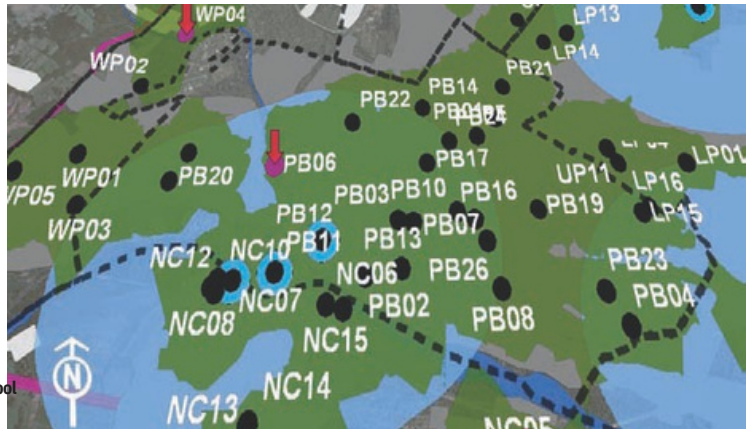


A park has multiple facilities

a park has few facilities

_ park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional	PB06	**Memorial Park**	C	T	A	s	N	P	h
Community	PB11	a well-rounded large park	_	_	a	s	N	P	H
Community	PB12	**Riverfront Park**	_	_	a	s	_	P	h
Neighborhood	PB02	a moderately well-rounded large nature-oriented park	c	_	a	s	n	_	h
d	PB08	**Smith Family Plaza**	C	t	A	s	n	_	h
Neighborhood	PB13	a moderately well-rounded mini people-oriented park	c	t	a	s	n	_	h
d	PB01	**Cherry Street Park**	c	t	a	_	_	p	_
Neighborhood	PB03	a somewhat under-performing mini park	c	_	_	_	_	_	_
d	PB04	**Potluck Park**	c	t	a	s	_	_	_
Neighborhood	PB07	a somewhat under-performing mini park	c	_	_	_	_	p	h
d	PB09	**South Street Park**	c	t	a	_	_	_	_
Neighborhood	PB10	a somewhat under-performing mini park	c	t	a	_	_	_	_
d	PB14	**Brookside Park**	c	t	a	_	_	_	_
Neighborhood	PB15	an under-performing mini park	_	_	_	_	_	_	_
d	PB16	**Chestnut Street Park**	c	_	_	_	_	p	_
Neighborhood	PB17	an under-performing mini park	c	_	_	_	_	_	_
d	PB19	**Maple Street Park**	c	_	_	_	_	_	_
Neighborhood	PB20	an under-performing medium park	c	_	_	_	_	_	_
d	PB21	**New Chestnut Street Park**	c	t	a	_	_	_	_
Neighborhood	PB22	an under-performing mini park	c	t	a	_	_	_	_
d	PB23	**Potts Drive Park**	c	t	a	_	_	_	_
Neighborhood	PB24	an under-performing mini park	c	t	a	_	_	_	_
d	PB25	**Ricketts Community Center**	c	T	A	s	_	_	_
Neighborhood	PB26	an under-performing mini park	c	t	a	_	_	_	_
d		**Spruce Street Park**							
Neighborhood		an under-performing mini park							
d		**Terrace Lane Park**							
Neighborhood		an under-performing mini park							
d		**Walnut Street Park**							
Neighborhood		an under-performing mini park							
d		**Washington Street Park**							
Neighborhood		an under-performing mini park							
d		**Edgewood ElementarySchool**							
Neighborhood		an under-performing schoolyard							
d		**Elizabeth B. Barth Elementary School**							
Neighborhood		an under-performing schoolyard							
d		**Franklin Elementary School**							
Neighborhood		an under-performing schoolyard							
d		**Lincoln Elementary School**							
Neighborhood		an under-performing schoolyard							



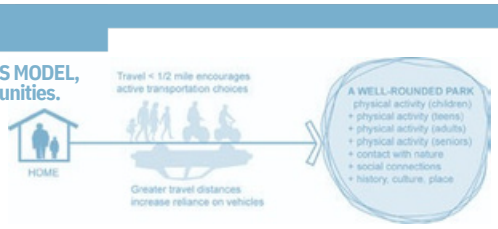
REGIONAL-LEVEL PARKS provide a well-rounded range of opportunities and attract visitors from across the region.

COMMUNITY-LEVEL PARKS provide a limited range of opportunities and serve a group of neighborhoods.

NEIGHBORHOOD-LEVEL PARKS provide a very limited range of opportunities and SERVE A SMALL AREA AND/OR A SPECIFIC GROUP.

SPRING CITY

In the WELL~ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.



A park has multiple facilities

a park has few facilities

_ park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional		***none***							
Community		***none***							
Neighborhood	SP01	**Brown Street Park**	C	T	A	s	_	p	_
Neighborhood	SP02	a somewhat under~performing small park	c	t	a	_	_	_	_
Neighborhood	SP03	**Hall Street Park**	_	_	_	_	N	p	h
Neighborhood	SP04	an under~performing mini park	c	_	_	_	_	_	_
Neighborhood		**Spring City Boat Ramp Area**							
Neighborhood		an under~performing mini park							
Neighborhood		**Spring City Elementary**							
Neighborhood		an under~performing schoolyard							

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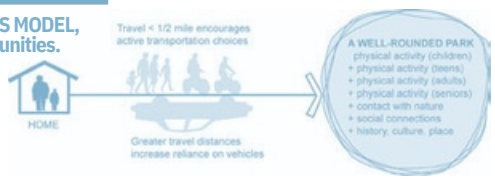
UPPER POTTSGROVE

In the WELL-ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.



A park has multiple facilities

a park has few facilities

_ park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional		*none*							
Community		*none*							
Neighborhood	UP05	**Hollenboch Park**	c	t	a	_	_	_	_
	UP06	a somewhat under-performing large sports-oriented park	_	t	a	_	_	p	_
Neighborhood	UP07	**Kulp Field**	_	_	a	s	n	_	_
	UP02	a somewhat under-performing large sports-oriented park	c	_	_	_	_	_	_
Neighborhood	UP03	**Mocharniuk Meadows**	c	t	a	_	_	p	_
	UP10	a somewhat under-performing medium nature-oriented park	c	t	a	s	_	_	_
Neighborhood	UP11	**Cherry Tree Farms Park**	c	t	A	s	_	_	_
		an under-performing small park							
Neighborhood		**Heather Park Place**							
		an under-performing small park							
Neighborhood		**Pottsgrove Middle School**							
		an under-performing schoolyard							
Neighborhood		**St Pius X High**							
		an under-performing schoolyard							

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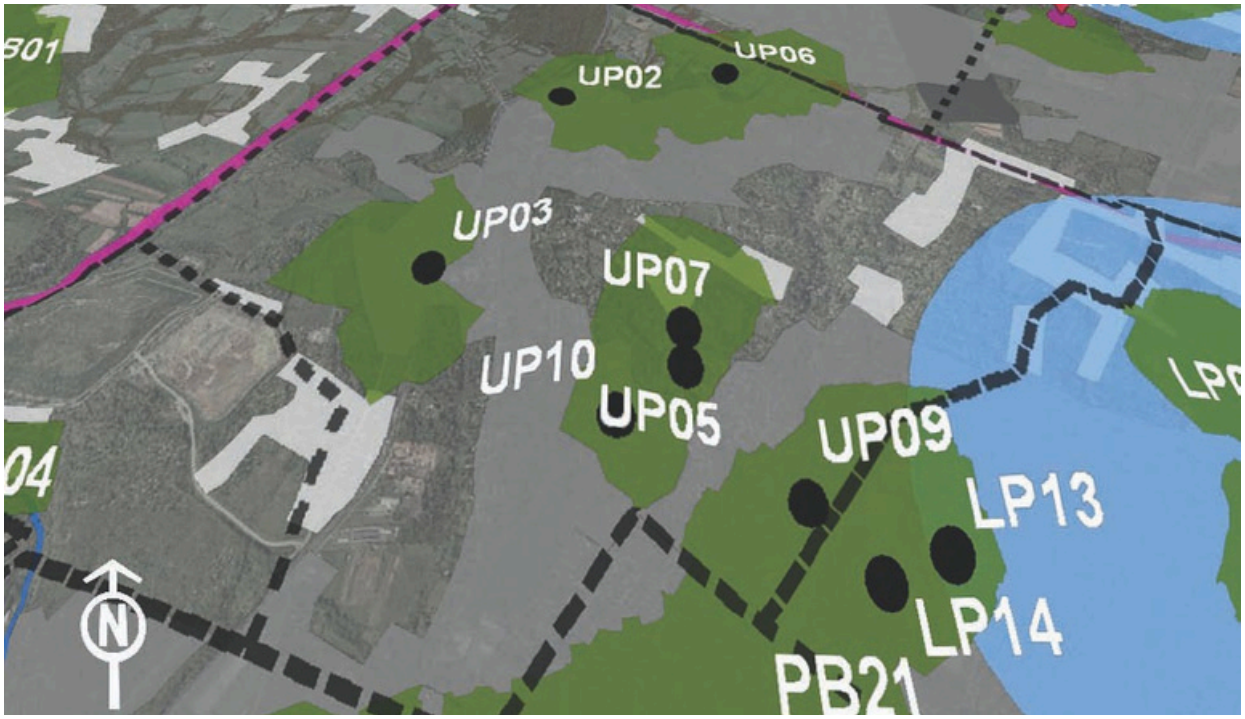
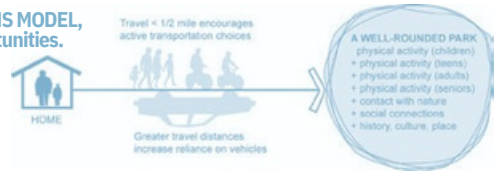


WEST POTTSGROVE

In the WELL-ROUNDED DESTINATIONS MODEL, each park provides a full range of opportunities.



- A — park has multiple facilities
- a — park has few facilities
- _ — park has no facilities

			Children	Teens	Young Adults & Adults	Seniors	Nature	Social	History, Culture, Place
Regional	WP04	**Manatawny Park / West Pottsgrove Township Recreation Area** a moderately well-rounded small nature-oriented park	_	_	a	s	N	p	h
~~Community~~		***none***							
Neighborhood	WP01	**Howard Street Playground**	c	_	_	_	_	p	_
Neighborhood	WP02	an under-performing mini park	c	t	a	_	_	P	_
Neighborhood	WP03	**Old Timer's Field / Township Building**	c	_	_	_	_	_	_
Neighborhood	WP05	an under-performing small park	c	t	A	_	_	_	_
Neighborhood		**Vine Street Playground** an under-performing mini park							
Neighborhood		**West Pottsgrove Elementary School** an under-performing schoolyard							

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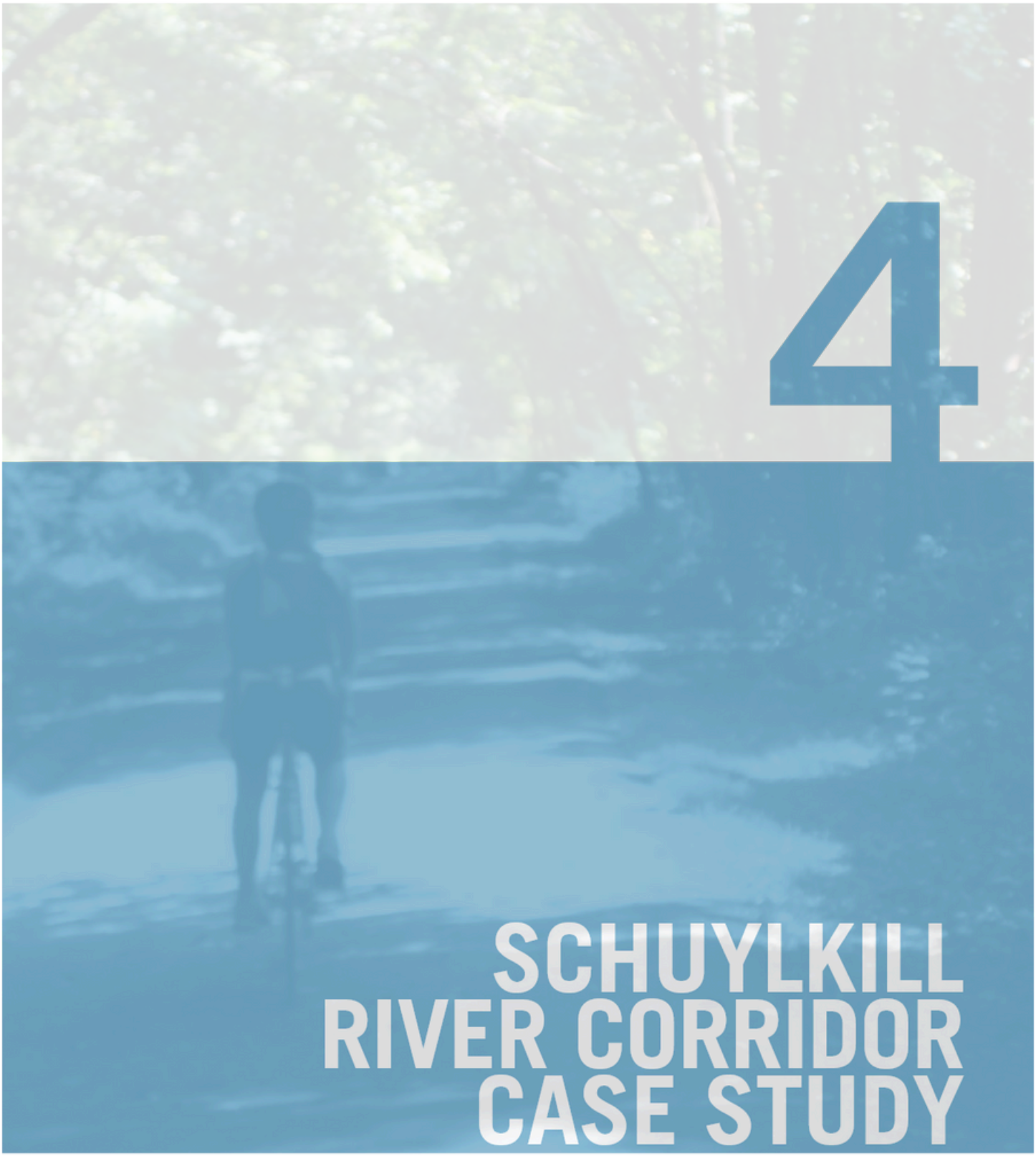


4

SCHUYLKILL RIVER CORRIDOR CASE STUDY

PREPARING FOR IMPLEMENTATION
STRATEGIES & GUIDELINES FOR HEALTHY LIVING, PARKS, AND RECREATION

PENNSTATE

1 Introduction

T is case study envisions the Schuylkill River Corridor in the Focus Area as a single entity, that includes the parks and recreation system to which strategies can be applied for comprehensive revitalization. Te connecting corridor comprises a strand of communities whose potential for greatest benefit emerges from regional cooperation and coordination. T e series of determined recommendations responds to the necessity for community revitalization within the larger region. In providing a riverfront master plan, this case study denotes critical sites within each urban environment where the discovery of an intervention can occur.

T rough revitalization strategies at various scales, the recommendations acknowledge the significanceof the Middle Schuylkill area and the communities thatcompose the region. It is essential for each of these communities, including Birdsboro, Pottstown, Spring City, and Royersford, to become connected by their active participation in the revitalization processes. Tis will afford greater prosperity to communities than if they act independently. Focusing on the Schuylkill River development collectively allows each of the urban environments to define a riverfront neighborhood to act as a catalyst for community rejuvenation. Te neighborhood around Riverfront Park in Pottstown Borough is an example of master planning and appropriate intervention that will encourage active recreation and growth. By effectively bridging scales from regional to neighborhood, the suggested strategies for coherent revitalization and connection can have a profound impact in the Focus Area.

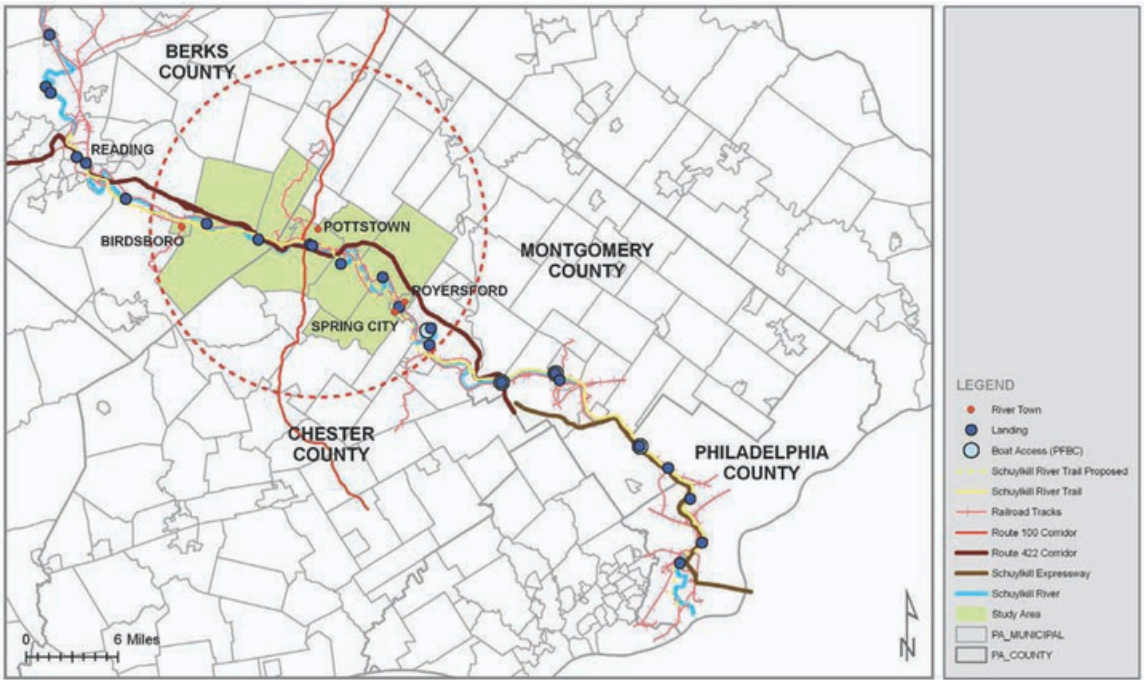


FIG. 1: Schuylkill River Corridor in relation to the Focus Area

A major reason for the recent rapid growth in areas surrounding Pottstown is the continuing interconnectedness with other major urban areas including Reading, Allentown, King of Prussia, and Philadelphia. With the completion of the Route 422 Corridor in 1985, Pottstown and the surrounding municipalities have become commuter towns for the greater Philadelphia region. Future plans for Septa rail line and Schuylkill River Trail connections will tie Pottstown directly to Philadelphia and Reading on both occupational and recreational levels (Figure 1).

T e Middle Schuylkill River region presents a significant potential for future development. Te current state and diversity of riverfront properties along the Schuylkill River provide a unique opportunity for reconnecting it to adjacent municipalities and reintroducing the river to community residents. Designated as the Schuylkill River National and State Heritage Area in 1995, the Schuylkill River Watershed is characterized by historic places, picturesque river towns, active recreational spaces along the river, trails, and year-round festivals and activities (Schuylkill River National and State Heritage Area, 2008). Supplementing current conditions with pedestrian accessibility will increase the usage of public amenities. Trails have a proven record of stimulating economic growth and can act as a catalyst for creating active recreation environments. Te Schuylkill River and Schuylkill River Trail constitute the backbone of this region and must play a vital role in the redevelopment strategies of adjacent communities.

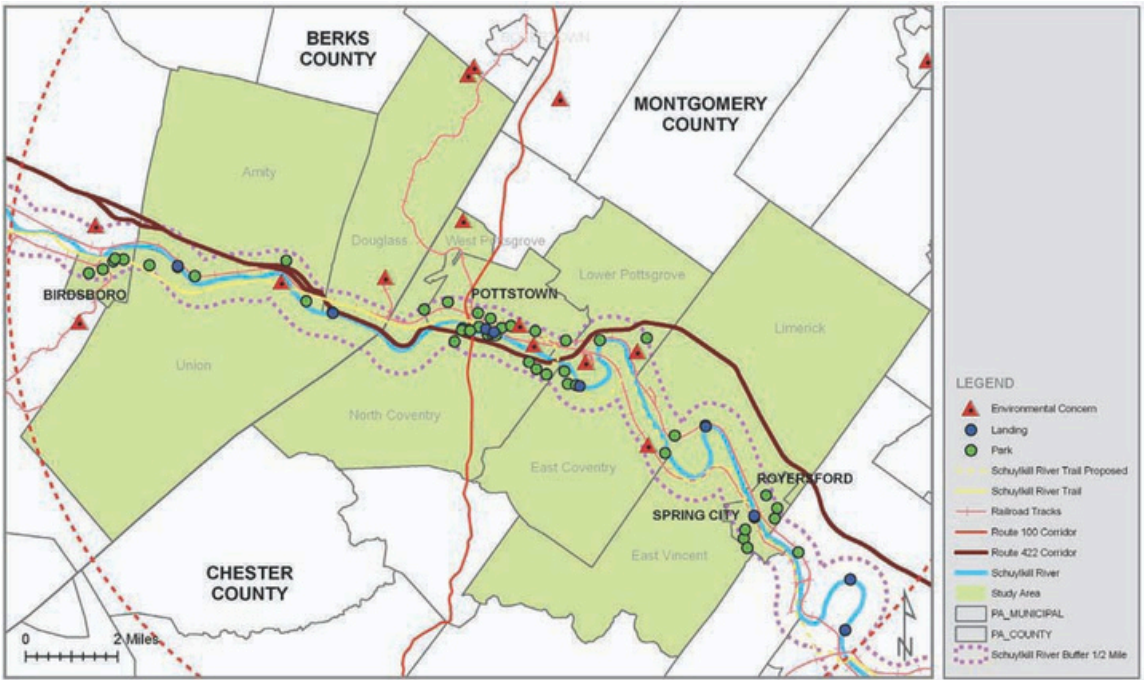


FIG. 2: Focus Area with parks and recreation facilities within a half-mile of the Schuylkill River

Based on the Parks and Recreation assessment in Phase I, the Focus Area's existing parks and recreation system shows adequate coverage. However, as discussed in the report, coverage and visitation are two different matters. Integrating parks and recreation opportunities into a single system will help address issues of usage and active living. While the Schuylkill River Trail presents a greatopportunity for effectively connecting the entire Study Area, the uncompleted portions between Pottstown and Phoenixville prevent a regional trail network from beingformed. Aiding trail development are the existing parks and recreation facilities. As seenin Figure 2, there are many parks within a half-mile of the Schuylkill River, which can be interconnected,less than a ten-minute walk away from the water's edge. Te current conditions present a rich potential for the Schuylkill River Corridor in the Focus Area.

1.1 ActiveRecreation

T e Schuylkill Riverfront plays a key role in trail towns and potential gateway communities, affecting recreation and tourism businesses. Communities unwittingly neglect the resources available in the river and waterfront sites, even though these sites provide unique opportunities. Te negative perceptions of safety and cleanliness of the water are based on the industrialriverfronts of the past, providing little incentive for the population to visit or interact with this valuable natural resource. Despite the current environmental efforts toward restoringthe Schuylkill River, negative connotations continue to persist and should be addressed through future planning efforts for the Middle Schuylkill. Te numerous vacant or contaminated sites remaining from industrialization create an excellent opportunity toincorporate active living into redevelopment strategies that contribute positively to the quality of life. Te reinterpretation of the forgotten history and vitality of the river can spark a renewed sense of growth, as well as celebrate what the river truly means to the community—and reveal to citizens the undiscovered treasures and resources of this historic riverfront.

T e Schuylkill River represents an exceptional opportunity to focus on the crucial issues confronting riverfront redevelopment. Te state and diversity of waterfronts along the Schuylkill River allow for a variety of reconnecting strategies to address river-adjacent municipalities in the Focus Area. Te strand of communitiesalong the river can bejoined through the physical elements of the Schuylkill River and the Schuylkill River Trail in a manner thatemphasizes recreation and active living.

1.2 Reconnection

Accessibility is crucial to active living and the economic success of a municipality or region. It is not only the ease of accessibility from outside, but also the clarity of internal circulation that is vital. By physically reconnecting the strand of small towns along the Schuylkill River banks, the region begins to work as a collective unit. Trough the definition of places along the river and the development of accessible networks, an interconnected series of destinations can take form. Te relationship of places and businesses, or destinations, can stimulate economic growth regionally and locally while encouraging residents to participate in an active lifestyle.

Reconnection also includes the manner in which small towns are attached to their waterfronts, a relationship that has been lostsince industrialization's exploitation of the river and the resulting severance of the natural asset from the town. Te connection to this resource can be completed through a reserved greenway of parks and recreation spaces along the bank of the river. While the greenway is preserved throughout the urban context, it still remains an urban park accessible to many residents. Te value of urban parks counters isolation and creates linkages that tie cities and towns together to produce a living body.

Pottstown is a strategic area that necessitates uniting with Spring City, Royersford, and Birdsboro; as a collective unit within a region, so that these communities can all thrive and support one another. Opportunities for other small towns to become destinations arise, creating a dynamic region of cultural and historical heritage that stimulates future growth. Te Middle Schuylkill area is a small portion representative of the much larger Schuylkill River Valley (Figure 1). Using revitalization techniques that employmeans of reconnecting through active living environments can be a great catalyst for inspiring small industrial cities and towns, such as Spring City, Royersford, and Birdsboro, to rehabilitate them at a neighborhood scale consistent with regional revitalization strategies.

2 Develop Regional Connections

T e Schuylkill River Corridor offers immense possibilities for revitalization consistent with its historic, natural, and cultural resources. Te recommendations in this section are based on principles informed by techniques of waterfront development research and suggest a methodology to adapt these practices to a variety of scales. By looking at the Focus Area's riverfront as a single, continuous piece of real estate, the region can adapt contemporary revitalization strategies consistent with large-scale planning efforts.

T e Riverfront Park site can be effectively connected to Pottstown and to the region as the existing context of the site supports multiple levels of reconnection. Pottstown shouldalso embrace a revitalization strategy that incorporates other riverfront townsin the Focus Area and beyond. Reconnecting the towns as they once were linked through industry by introducing active recreation could successfully establish this relationship. Moreover, exposing Pottstown to the Schuylkill River Trail will promotean influx of visitors from the surrounding areas and region.

FIG. 3: Current termination point of the Schuylkill River Trail in the heart of Philadelphia

2.1 IssuesandCharacteristics

T e completion of the Schuylkill River Trail will effectively create a physical connection from Philadelphia to Reading. To accomplish this, the many regional stakeholders, including government commissions, businesses, and social, recreational, cultural, historical, and other community associations and organizations, should coordinate and cooperate through partnerships and collaborative projects that improve the region as a whole. Te Schuylkill River is rife with existing associations and organizations available to work together to define the riverfront as a recreational corridor. While the task of completing a large-scale project is daunting, public and private partnerships have proven to be productive.

An integrated, regional network of parks and recreationspaces will connect residents and visitors from a greater area (Figure 5). Te spaces between small towns have been transformed to sprawling suburbs and bedroom communities for concentrations of affluent people. Improving accessibility to the SchuylkillRiver Trail will connect influential residents from the suburbs and exurbs to the urban cores, and increasing these residents' interaction with the riverfront towns will create a vested interest for growth and enhancement within the urban cores. Te Schuylkill River Watershed has the potential to attract many visitors, as it is accessible by a five-hour drive for 25% of the American population (Schuylkill River National and State Heritage Area, 2008). Tis regional trail is an attraction as it provides a means of recreational transportation for vacationers once they reach an initial destination within the river valley.

Regional events will allow residents and visitors with similar interests to meet and support healthy lifestyles. Additionally, supplementing recreation with educational value will help encourage self-management of community and natural resources. Improving awareness ofthe abundance of resources available in the Study Area will create more active and dynamic public spaces. Te creation of regional public spaces, such as the Schuylkill River Trail, and public/private events, such as the Schuylkill River Sojourn, are a direct result of partnerships (Figure 4). Without multi-jurisdictional cooperation and organiza- tional input, the strand of communities along the Schuylkill River will falter in regional revitalization attempts, causing a corresponding adverseimpact on each community.

2.2 RECOMMENDATIONS

0RIORITIZE THE COMPLETION OF THE 3CHUYLKILL 2IVER 4RAIL BETWEEN 0HOENIXVILLE AND Pottstown as a recreational entity that connects the urban environments within the Focus Area to the larger region, including Philadelphia and Reading.
Generate and promote regional activities, such as the Schuylkill River Sojourn, which encourage recreation at a larger scale while providing insight into the rich culture and history of the local communities and their regional heritage.

2.3 RelatedPlanningObjectives

- CreateIntegrated Networks.
- Encourage Partnerships.
- Emphasize Active Transportation.
- Provide a Well-Rounded Range ofOpportunities.

FIG. 4: Pottstown's Riverfront Park and boat landing is a destination for Schuylkill River Sojourn participants

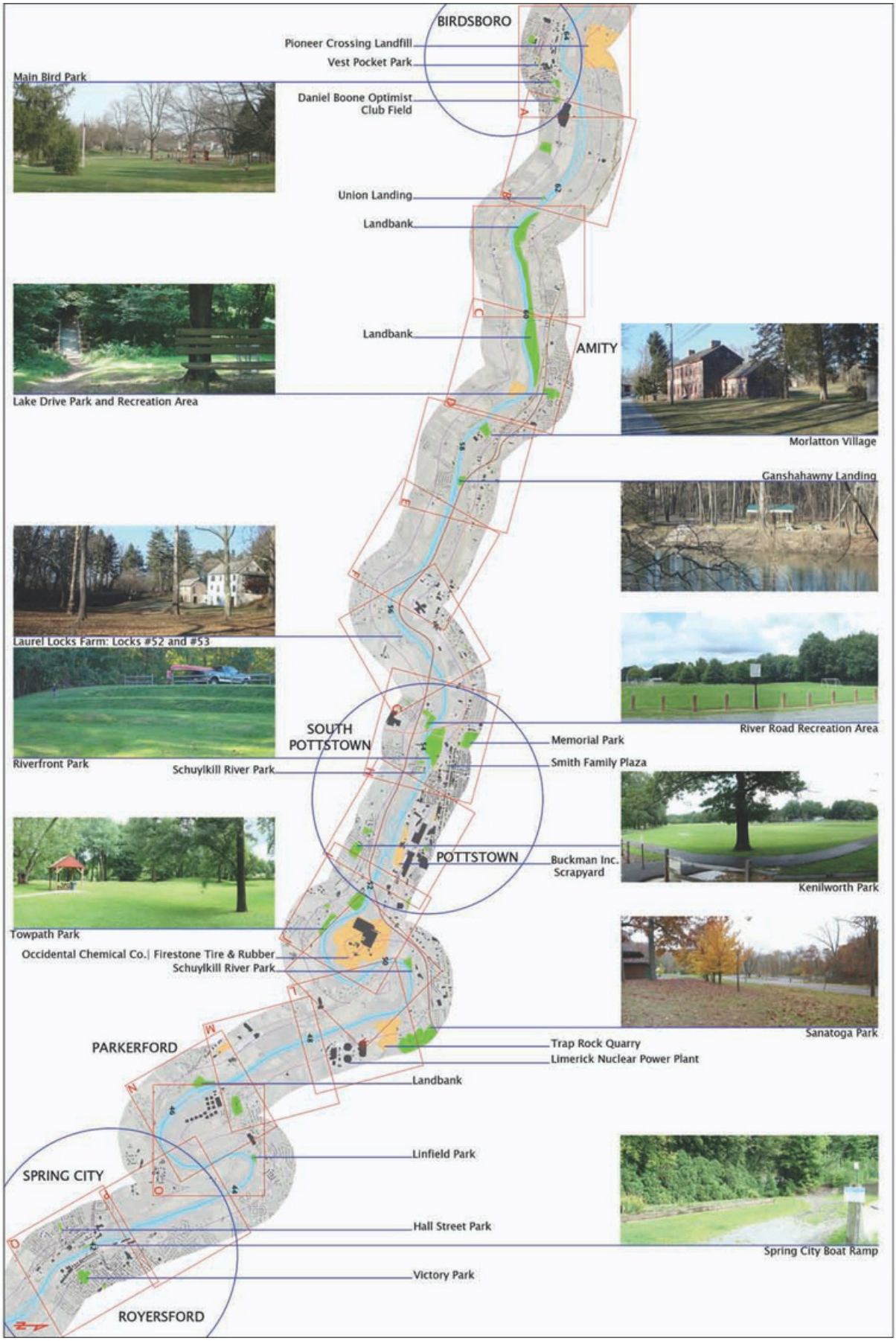


FIG. 5: Middle Schuylkill River banks manifest rich opportunities for active recreation

3

$EINE A #OMMUNITY 2IVERFRONT

Regional reconnection through parks and recreation within the Schuylkill River Corridor is one part of the equation and should be coupled with community acceptance and celebration of such an achievement. While regional strategies help to map overarching ideals, the way each community begins to translate and implement strategies at the local level presents opportunities to augment regional goals and make a profound impact on residents. Te community iswhere large-scale issues translate into small-scale understanding. Following major cities' trends in their waterfront redevelopment strategies, small cities and towns can plan for appropriately scaled mixed-use and infill typologies for implementation at the community's riverfront. In many instances, this method will start with a single intervention, designed as a catalyst for future growth in mixed-use environments.

On a community scale, access to and mobility throughout the site is available by various recreational modes: foot, bicycle, and boat. Pottstown provides a rich and dynamic environment for the chosen sites within Riverfront Park, which possesses a varietyof resources in its immediate vicinity. Starting with the Schuylkill River, this vital element has been neglected in post-industrial times; but without it, Pottstown would never have been founded. Trough industrialized development, the town has effectively been structured with its back to the river, but Pottstown can and has begun to integrate the riverfront into itsfuture development.

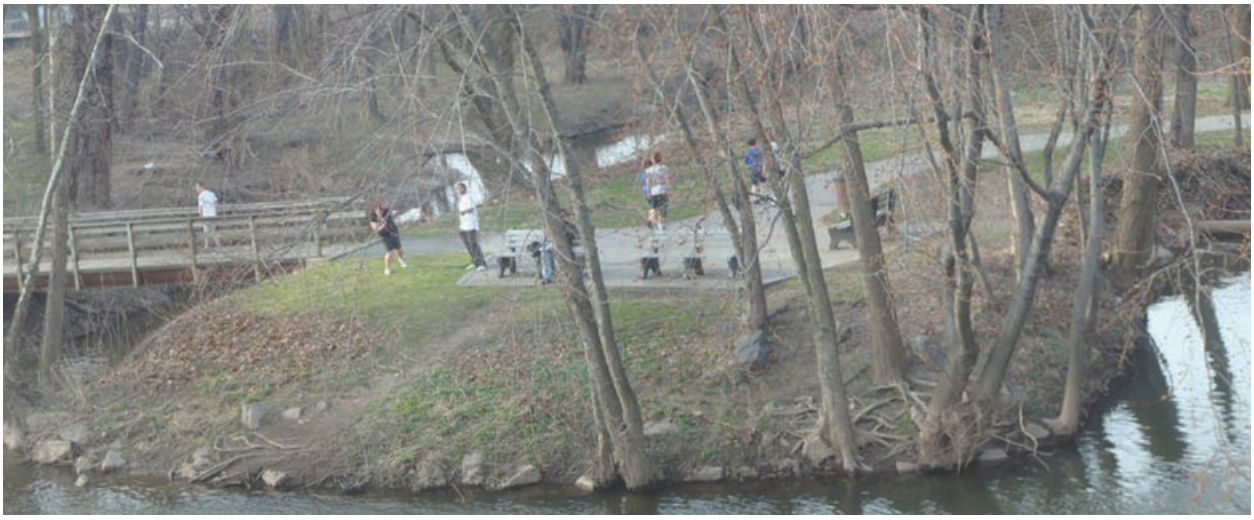


FIG. 6: 6FKX\ONLOO 5LYHU 7UDLO LQ 5LYHUIURQW 3DUN H[HPSOL¿HV D VFHQLF ULYHU FRUULGRU DWWDFKHG WR DQ XUEDQ HQYLURQPHQW

3.1 IssuesandCharacteristics

River towns should thoughtfully invoke the Schuylkill River Trail and other connecting trails, crosswalks, sidewalks, and pathways to interweave their built environment context and utilize mobility systems to create a network of parks and recreation spaces. Furthermore, destinations can and should include sites of historical, cultural, and social significance. While this strategy applies to individual communities, it is also appropriate for a regional network of cities and towns that can develop a means for various modes of mobility among them. An integrated network creates a greater inclination of resident usage,visitor attraction, and a dynamic environment, conducive to active lifestyles.

T e Schuylkill River Trail should acknowledge user preferences and, in addition to the riverfront trail, providea cyclist-friendly business route where visitors could choose to interact with the built environment. Emphasis should be placed on the necessity of uniting the riverfront with the commercial center. Te continuation of the trail into the commercial center of each town will promote economic growth and change the existing situation where communities have turned their backs to the riverfront. Tis connection will also bring residents from downtowns to the waterfront—initiating a dynamic relationship animated with people.

In contrast, there should be a scenic route along the river that bypasses commercial downtowns and provides for off-road safety conditions. A key component of the success of the Schuylkill River Corridor is accessibility; by providing multiple access points to the adjacent small cities and towns,it will be possible to maximize the opportunity for recreation participation by local residents and selectively include access points containing parking for ease of participation by more remote users.

At each intersection where the trail meets the urban environment there is an opportunity for a “gateway” or an instance of welcoming and defining of place. Regional trail users should be able to recognize their location along the river, acknowledging their adjacencies to river towns without removing themselves from the trail. Te transitional spaces between the urban and natural context can provide a means for economic enhancement within the built environment.

To this end, a seriesof playful architectural interventions are proposed. Tese structures will work together regionally to create a waterfront redevelopment scheme and will be visually and physically connected by river and trail, guiding visitors from one intervention to the next and creating a complete and satisfying riverfront experience. Te resulting site interaction is a major design goal with the intent of promoting recreation. Tis design process can be additive;when smaller communities want to grow with the Schuylkill River Trail, they can create another structure and insert it into the continuous strand of other small towns’ interventions. A great example of this can be found at Parkerford, where the ultimate goal of becoming a destination on the Schuylkill River Trail can be realized through this type of reference.

3.2 RECOMMENDATIONS

Create an integrated network of destinations within each community, including the Schuylkill River Trail and its connections to parks and recreation opportunities that improve mobility within the built environment.

Design the Schuylkill River Trail to split at selective locations, providing an optional avenue to travel through the urban realm, or one that traverses the scenic river corridor.

#APITALIZE ON THE OPPORTUNITY FOR EACH TOWN ALONG THE RIVER TO PROVIDE A hGATEWAYv to recreation participants where the town intersects with the Schuylkill River Trail.

FIG. 7: Contrasting the disconnect of Pottstown residents and the Industrial Highway (across the river) from the Schuylkill River with North Coventry's boat launch at Schuylkill River Park

3.3 RelatedPlanningObjectives

- Prevent Land Loss.
- Create Integrated Networks.
- Build Awareness.
- Address Common Barriers.
- Emphasize Active Transportation.
- Provide a Well-Rounded Range ofOpportunities.
- Achieve a Walkable Network at the Neighborhood Level.
- Create well-Rounded Destinations at the Community Level.
- Provide a Mix of Opportunities at Parks, Regardless of Size.
- Design for a Mix of Ages, Genders, and Engagement Levels at Parks.
- Design Parks to be Landmarks in Neighborhoods.

FIG. 8: The Schuylkill River Trail as it intersects Birdsboro, illustrating inadequately maintained infrastructure

BIRDSBORO

ANALYSIS

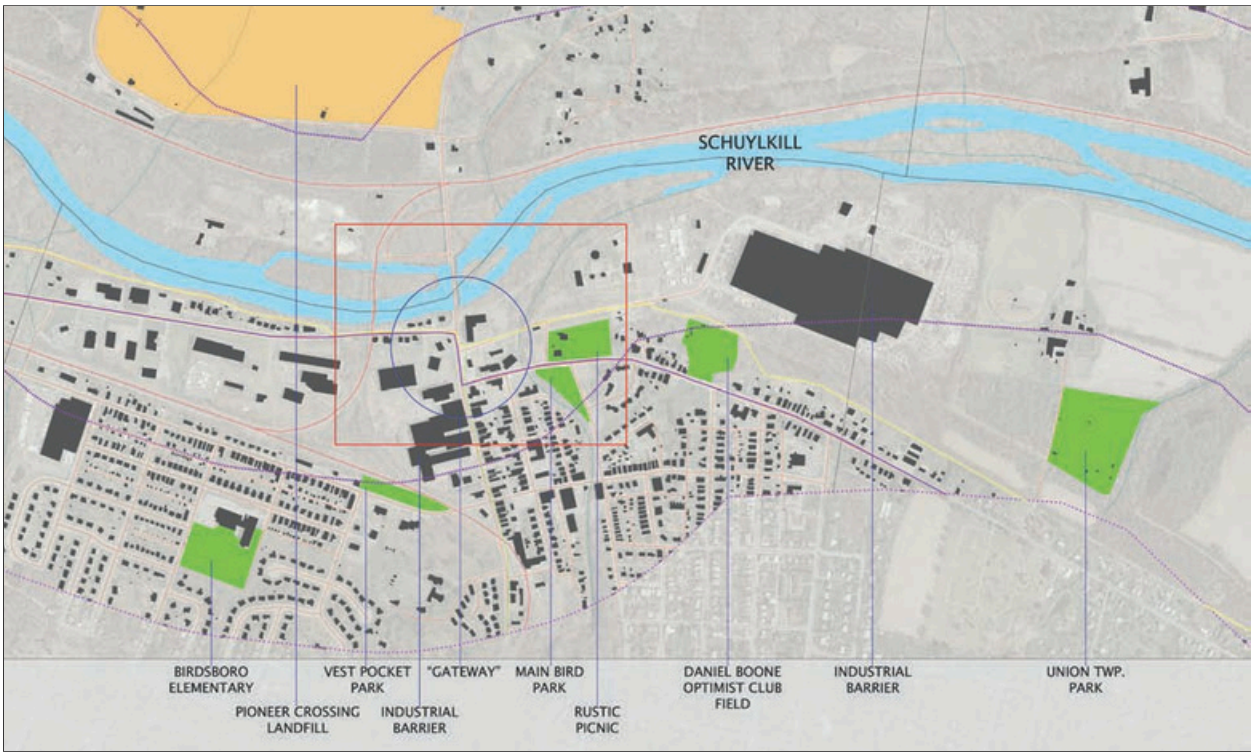
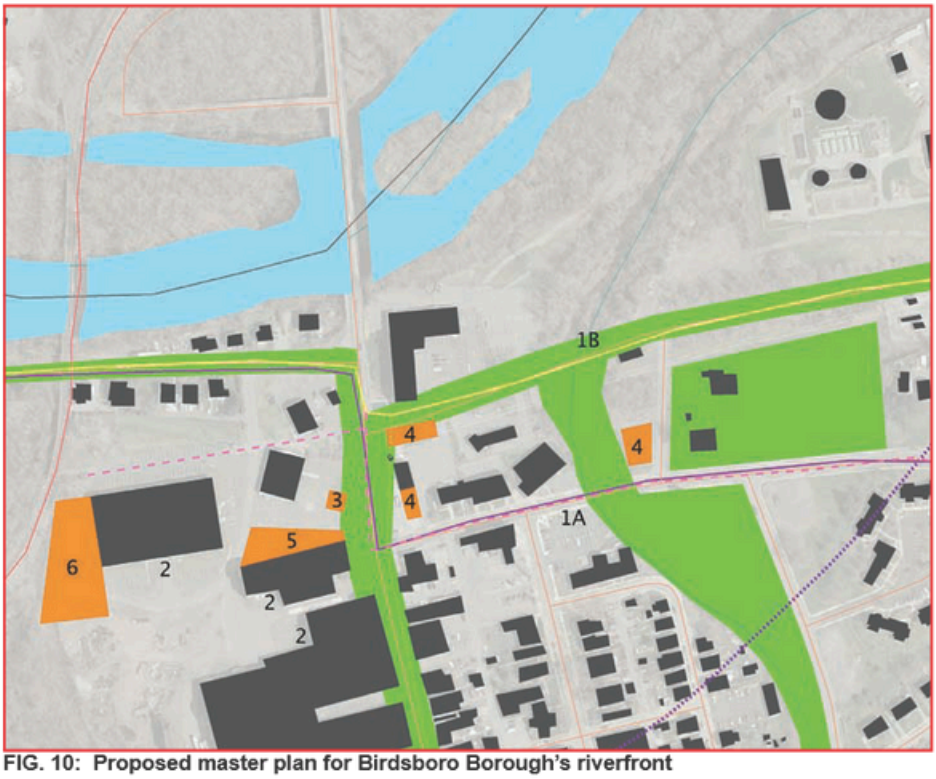


FIG. 9: Figure Ground study of the Schuylkill River Corridor as it intersects with Birdsboro Borough

Birdsboro is the only urban realm in the Study Area where the Schuylkill River Trail currently exists, connecting Reading to Pottstown. However, the trail does not have a presence within the Borough and there is a large void between the residents and the riverfront. Tis abandoned industrial zone prevents interaction between people and the Schuylkill River.

In contrast to Pottstown, Spring City, and Royersford, there is very little development across theSchuylkill River from Birdsboro. Currently the area adjacent to Birdsboro is inadequately developed and has meager recreational or other facilities. Without the incentive to cross the river, Birdsbororesidents are reluctant to use the riverfront at all. Because the development parallel to the river banks in Birdsborohas resulted in disconnecting residents from the Schuylkill River, there is an imperative to create more access points to the Schuylkill River Trail.

ACTION: A Place-Defining Intervention



1 Proposed Trail
1A Business
1B Scenic
2 Future Adaptive Reuse Opportunity (large industrial building)
3 "Gateway" Structure
4 Retail/Commercial
5 Mixed-Use Infill
6 Reintroduce Rail Station

FIG. 10: Proposed master plan for Birdsboro Borough's riverfront

Birdsboro's proposed master plan recognizes the vast amounts of old industrial space that could be adaptively reused. There is a great opportunity to showcase the industrial heritage of the Borough at its "gateway" through these opportunities.

A key consideration in the master plan is connecting the Schuylkill River Trail to the built environment. Its current location and condition do not promote resident usage. However, planning and implementing a secondary trail that penetrates into the Borough along Hay Creek will create an access point to the Schuylkill River Trail and integrate Main Bird Park and Rustic Picnic area into the parks and recreation system. Further mixed-use growth could result in a riverside trail that brings Birdsboro residents to the waterfront.

POTTSTOWN

ANALYSIS

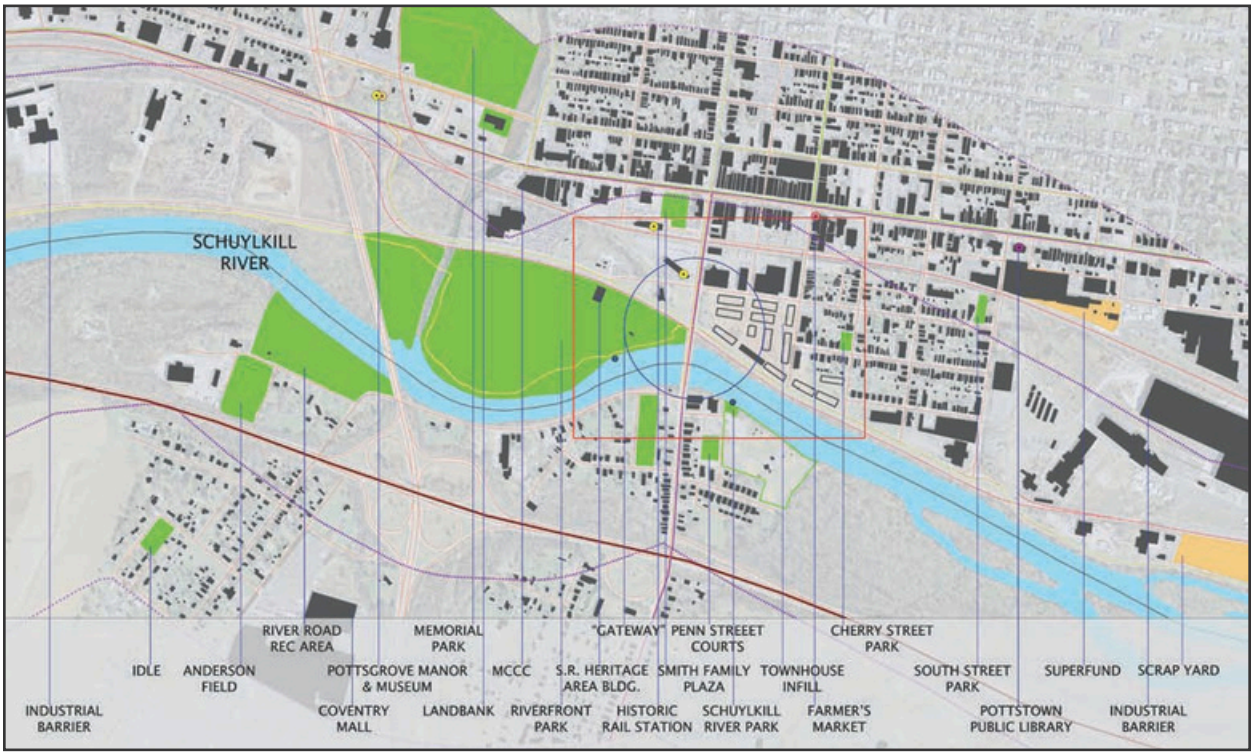
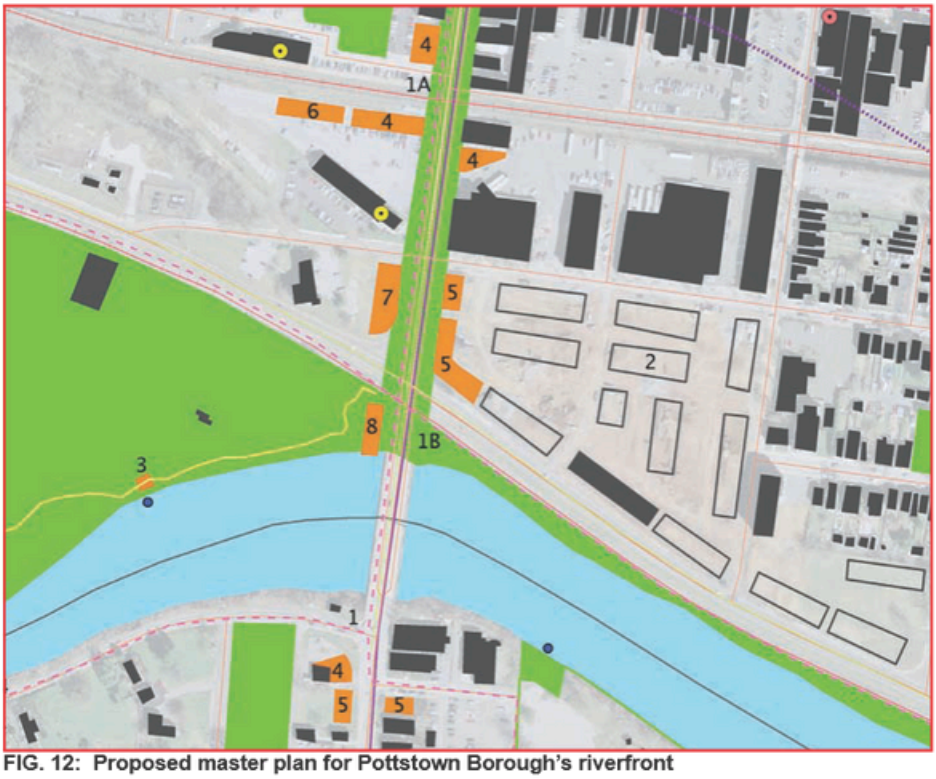


FIG. 11: Figure Ground study of the Schuylkill River Corridor as it intersects with Pottstown Borough

Pottstown is trying to overcome the negative effects of its industrial past and the subsequent impact on the Schuylkill River. Using the Hanover Street Bridge as a connection between South Pottstown and North Coventry, the Borough is uniting residents across the Schuylkill River. Te neighborhood aroundRiverfront Park becomes an excellent choice for initial revitalization, with larger industrial obstacles existing to the east.

T e Schuylkill River Corridor has the potential to string the existing parks of Pottstown and North Coventry together with pedestrian and cyclist friendly access as a means of creating a greenway for recreation. Additionally, the possibilities of using Manatawny Creek as a future trail extension north into Pottstown and beyond should be explored. Te ultimate goalof this strategy is to provide safe accessibility to as many residents as possible, overcoming barriers of park usage, such as the railroad, industrial contamination, Route 422 and Route 100, and the lack of awareness of park existence.

ACTION: A Place-Defining Intervention



1 Proposed Trail
1A Business
1B Scenic
2 Future Townhouse Density
3 Boathouse & Observation Tower
4 Retail/Commercial
5 Mixed-Use Infill
6 Reintroduce Rail Station
7 Hotel: Catered to Recreation Participants
8 Café: "Gateway" between Pottstown and Schuylkill River Trail

FIG. 12: Proposed master plan for Pottstown Borough's riverfront

The proposed master plan for Pottstown's riverfront utilizes a mixed-use environment that strengthens the connection with North Coventry along Hanover Street. Here, a hotel is proposed, which would cater to people who are attracted by recreational activities along the Schuylkill River Trail and Schuylkill River Water Trail. Other infill opportunities will grow with population density, beginning with the completion of the town-house development at the corner of Industrial Highway and Hanover Street. At this key intersection, a "gateway" café is proposed between the urban built environment and Riverfront Park with the Schuylkill River Trail. Another structure within the park would be a vertical boathouse and observation tower that encourages recreation and creates a dialogue between the riverfront and the community. The café and boathouse are further explored in the Pottstown case study as an illustrative example of the possibilities the Riverfront Park neighborhood offers to the residents.

SPRING CITY & ROYERSFORD

ANALYSIS

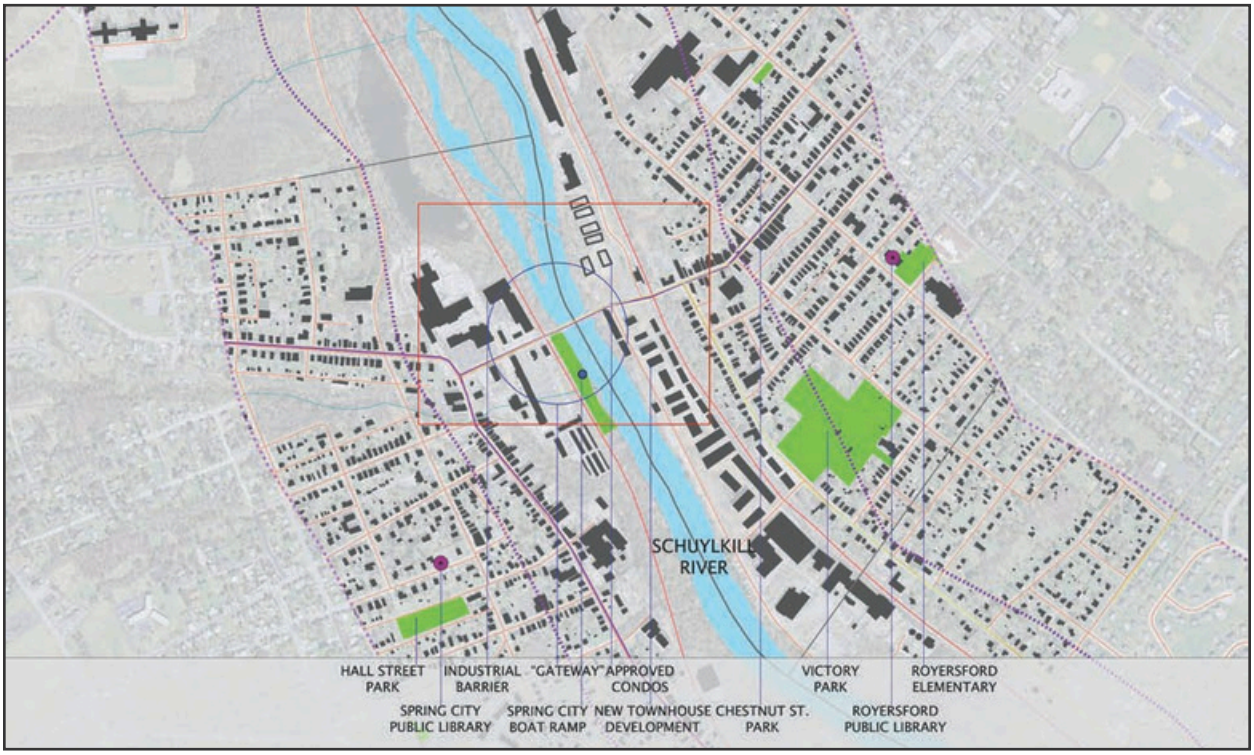


FIG. 13: Figure Ground study of the Schuylkill River Corridor as it intersects with Spring City and Royersford Boroughs

Spring City andRoyersford present a rich opportunity to grow with one another through their connections with the Schuylkill River. While the Schuylkill River Trail has yet to reach these urban environments, Royersford is currently redeveloping its riverfront with townhouses and condominiums. Tere is a need for more access to parks and recreation opportunities with this ongoing growth and concentration of residents. Plans for Royersford's Riverwalk are an excellent first step and could potentially provide access to the Schuylkill River Trail, which is planned for Spring City's banks.

Spring City's residents are still disconnected from the river. Tis can be attributed to growth along the Schuylkill River Canal during itsoperation, which no longer exists. Access to the future Schuylkill River Trail can only be made along Bridge Street, emphasizing the necessity for a "gateway" to both SpringCity and Royersford to occur here. Tere should also be a strategy for introducing Spring City's riverfront to residents by creating new access points.

ACTION: A Place-Defining Intervention

1 Proposed Trail
1A Business
1B Scenic
2 Approved for 124 Condominiums
3 "Gateway" Structure
4 Reuse Abandon Bridge for Trail
5 Mixed-Use Infill
6 Reintroduce Rail Station

FIG. 14: Proposed master plan for Spring City and Royersford Boroughs' riverfront

The opportunity for dual "gateway" structures presents itself in Spring City and Royersford. These two structures will create a relationship between the two communities and help them grow together along Bridge Street and Main Street. This strategy can incorporate recreation opportunities along the Schuylkill River and help the area become vibrant within the greater Schuylkill River Corridor. While housing along the riverfront is a positive development, it is vital to supplement this growth with infill and mixed-use possibilities.

Spring City's current boat landing is hidden and not easily accessed. In creating a "gateway" along the Schuylkill River Trail in the Borough, this type of facility should be celebrated and have a strong presence to encourage recreation and reveal the possibilities available along the river. In doing so, a more defined parks and recreation system will emerge.

4 Create Neighborhood Places

4.1 Pottstown'sRiverfrontPark

Pottstown has the opportunity to extendits urban environmentto the waterfront. T is development will help initiate aneconomic and social revitalization of the city. Recognizing the need to incorporate the Schuylkill River Corridor into theurban fabric, the Pottstown Planning Commission has begun the necessary evaluation and planning processes. Te townhouse development on the former site of Mrs. Smith's Pie Factory, with plans for mixed-use construction along Hanover Street, will provide constant human occupation. Tere is also a special interest in recreation within the built environment with the integration of the SchuylkillRiver Trail and other cycling lanes into the High Street commercial district.

Future design should supplement and enhance the existing development and infrastructure while emphasizing interaction with the Schuylkill River Corridor. Toughtfully designed recreational interventions can be used to reconnect the riverfront to the urban realm. Te Borough is poised to create a commentary on the exploitation of the natural environment as seen during industrialization and to reinvent its relationship with the Schuylkill River through recreational activities.

4.2 IssuesandCharacteristics

T etwo recommendationsfor PottstownBorough can be explored through design interventions. Te effectiveness of these recommendations is enhanced because they are created on an overlapping site. Strengthening the connection between the municipalities will increase building density and utilize infill opportunities to create a more walkable community. It shouldbe noted that these types of improvements blur municipal boundaries strictly in an attempt to create the most livable and healthy built environment.

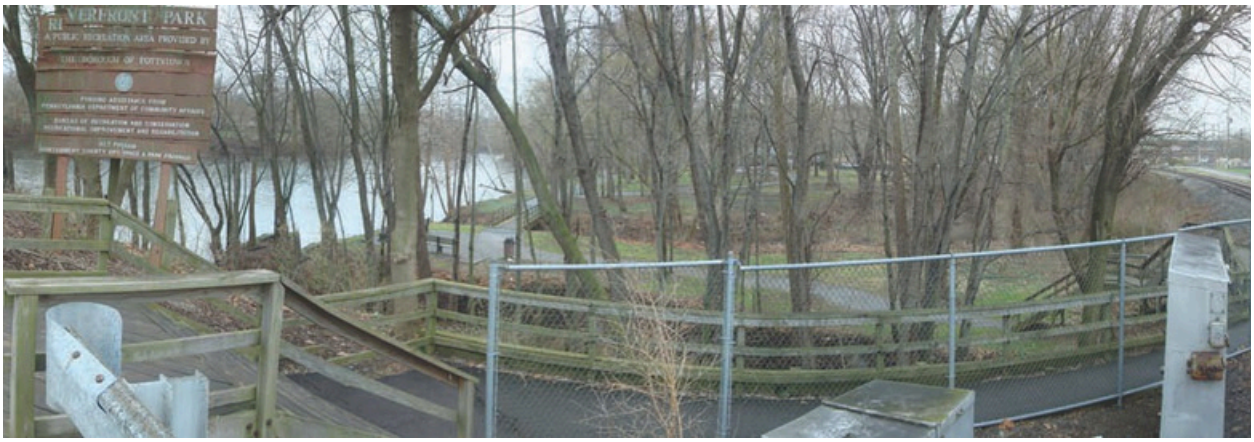


FIG. 15: Existing condition of Riverfront Park entrance at the intersection of Hanover Street and College Drive

T e Riverfront Park site is zoned both “downtown gateway” and “park” According to the Pottstown Economic Development Strategic Plan (Gannett Flemming Inc., 2008), the intent of the “downtown gateway” is:

> ...to promote the redevelopment of existing vacant industrial sitesat the entryway to the downtown, creating a pleasant mixture of stores, homes, and offices that will complement the downtown to the north, the historic residential neighborhood to the east, and the Schuylkill River and greenway to the south. (p. 112)

T e opportunity exists to create asignificant small-scale structure in this area, in the form of both a “gateway” and an architectural intervention, because it will convey a sense of richness and contemporary success to visitors and can become a catalyst in the redevelopment of Pottstown from within—encouraging growth and renewal in its urban realm.

T e selected site along Hanover Street and within Riverfront Park is simultaneously an entrance to the town and a recreational realm—an ideal place to encourage interaction between the downtown and the waterfront. It is here that the Schuylkill River Trail should split, both continuing along the river by utilizing a set of abandoned rail tracks and into the commercial center of Pottstown along Hanover and High Streets through the use of existing bike lanes. Tis approach uses recreation as a means of revitalizing the town and defining active living environments. Te continuation of a recreational trail into the heart of the town allows visitors to effortlessly move between the riverfront and the commercial district. Likewise, it encourages Pottstown residents to utilize the recreational opportunities along the Schuylkill RiverCorridor.

T e proposed interventions will act as catalysts for specific instances of reconnection. Te café will become a dual gateway, stitching the urban fabric with the Schuylkill River Corridor. Te observation tower, whichis also a boathouse, will reveal tovisitors the relationship between town and river. Providing a view of Pottstown andits riverfront, the damaging effects of industrialization will be highlighted and meaningful rehabilitating efforts understood. Furthermore, the observation tower will be visible from the urban realm, acting as an architectural landmark along the river, which will attract residents to the water. It will also encourage additional recreational activities and provide a way for residents and visitors to interact with the river. Just as Bike Pottstown has become a success by giving the public access to bicycles, a boathouse will follow this model, and inso doing, it will address issues of perceived safety and cleanliness of the Schuylkill River. As awareness ofnatural resources grows, the educational value attained through participation will discourage pollution and sustainthe integrity of the Schuylkill River Corridor.

4.3 RECOMMENDATIONS

Create an architectural intervention at the “gateway” to Pottstown’s commercial

district, where the town intersects the Schuylkill River Trail, to serve as Pott STOWN S PLACE DEINING ELEMENT IN THE CONTEXT OF THE 3CHUYLKILL 2IVER 6ALLEY

Strengthen the connection between Pottstown and North Coventry along Hanover 3TREET UTILIZING INILL STRATEGIES AND PROGRESSIVELY DENSIFYING THE BUILT CONTEXT WITH A MIXED USE PROGRAM TO FURTHER CELEBRATE THESE MUNICIPALITIES PROXIMITY TO THE Schuylkill River Trail.

4.4 RelatedPlanningObjectives

- Prevent LandLoss.
- Create Integrated Networks.
- Build Awareness.
- Address Common Barriers.
- Emphasize Active Transportation.
- Provide a Well-Rounded Range ofOpportunities.
- Achieve a Walkable Network at the Neighborhood Level.
- Create well-Rounded Destinations at the Community Level.
- Provide a Mix of Opportunities at Parks, Regardless of Size.
- Design for a Mix of Ages, Genders, and Engagement Levels at Parks.
- Design Parks to be Landmarks in Neighborhoods.

FIG. 16: “Gateway” site, intersection of Hanover Street, College Drive, and Industrial Highway

T is section is based on the thesis work of Carson Parr that was completed during his pursuit of a Master of Architecture degree at Te Pennsylvania State University. T e following is an illustrative example of design interventions, rather than a proposed solution addressing Riverfront Park in Pottstown.

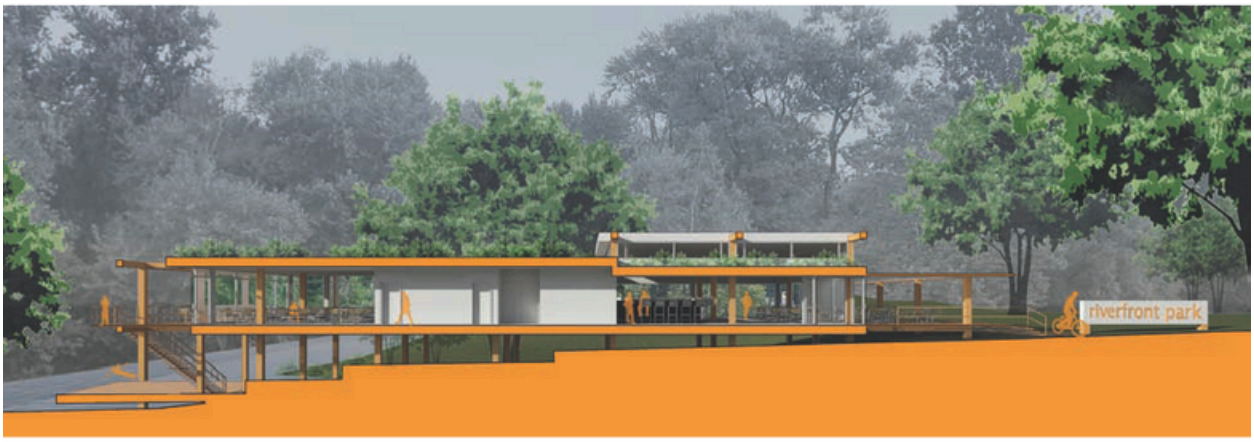
MASTER PLAN

FIG. 17: Proposed master plan for Pottstown Borough's Riverfront Park neighborhood, including café and boathouse

Pottstown's proposed master plan was developed with consideration of recommendations made in the Pottstown case study and signifies the potential for a gateway at the intersection of HanoverStreet, College Drive, and Industrial Highway. Te illustrative examples of design interventions include a "gateway" café and vertical boathouse andobservation tower. Tese structures are intended to be playful and act aslandmarks and destinations integrated into the parks and recreation system along the Schuylkill River Corridor.

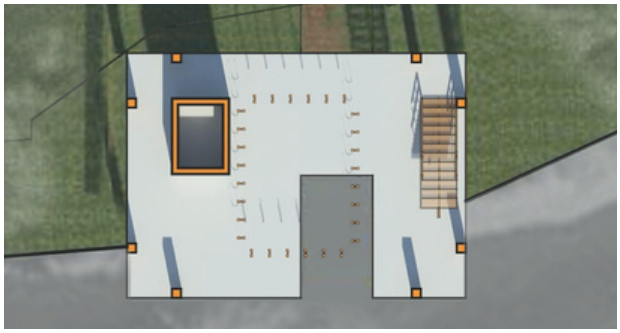
“GATEWAY” CAFÉ

T e proposed“gateway”toRiverfrontParkcelebratestheSchuylkill River Trail while connectingtheurbanrealmtorecreationalactivities.Byintroducing visitors to Riverfront Park and theSchuylkillRiverthroughcantilevereddecks,scenicviews, and river access dock, the “gateway”becomesatransitionalelementbetweenPottstownand the riverfront.



BOATHOUSE STRUCTURE

T e architecturallyplayfulvertical boathouseand observation towerin RiverfrontPark acts as a landmark along the Schuylkill River Corridor. T e structure encourages recreation and interaction with the Schuylkill River Corridor and supplements current park usage during the Schuylkill River Sojourn. Te observation deck reveals Pottstown's heritage to visitors.

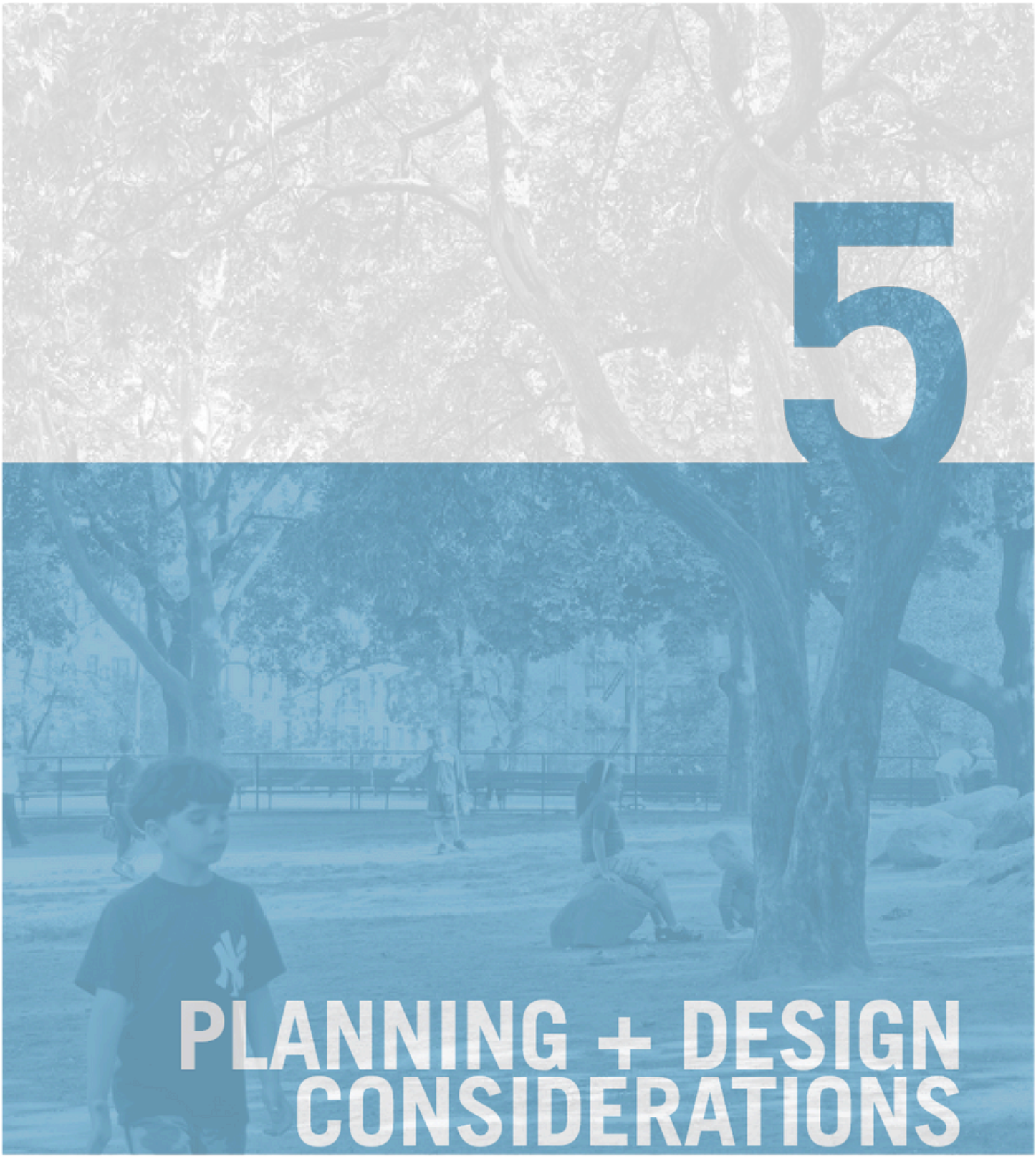


4.5 2EmECTIONS

PottstownBorough has the potential to become an excellent example for parks and recreation development strategies within the Focus Area. Te measures that have been taken by the Borough and other vested stakeholders can set the tone for a region thirsty for a boost in economic growth and vitality. Toughtfully designed interventions will lay the groundwork for a sustainable riverfront revitalization that builds the integrity of individual communities through regional consideration. Small interventions within Pottstown will create a synergistic effect within the Borough, but more importantly along the Schuylkill River Corridor, where small communities such as Parkerford, are offered the prospect of becoming a destination in a prosperous region.

Pottstown's riverfront demonstrates how small-scale interventions can reconnect a town with its waterfront and catalyze the revitalization process. Te proposed master plan with specific program elements for Pottstown satisfies the criteria for successful active recreation environments. A boathouse with an observation tower in Riverfront Park provides public access to the river as an urban amenity. Trough interaction with the river, those participating in active recreational activities can learn about the region's heritage and become an integral part of maintaining the environment for future users. In addition to providing direct access to physical activity, the dual programmed structure also offers an observation tower, which provides an interesting visual experience.From the created vantage point, visitors are provided the opportunity to understand the purpose of the built environment and how active livingand recreation amenities play a role in the revitalization of Pottstown and the reconnection of its population with the Schuylkill River Corridor, neighboring communities, and each other.

T e proposed Pottstown master plan will support revitalization and reconnection of the community to the Schuylkill River Corridor, including Philadelphia and Reading. T e Schuylkill River Trail can attract residents who have chosen to migrate outward into suburbia and exurbia to Pottstown. Providing accessibility to these areas can reigniteaffluent residents' interests in the urban environmentand generate investment for new growth, including adaptive reuse of abandoned industrial structures and infill development of vacant urban lots. Tese next steps in rehabilitating Pottstown will occur from the commercial center outwards, along High andHanover Streets and along the Schuylkill River Corridor and Industrial Highway due to its new trail amenities and scenic value. While these are the immediate results from a few small-scale interventions, the synergistic nature of the revitalization process can renew a desire to live and work in healthy living environments, sustainably reversing sprawl and outward migration, through the densification and inward growth of Pottstown.



5

PLANNING + DESIGN CONSIDERATIONS

PREPARING FOR IMPLEMENTATION
STRATEGIES & GUIDELINES FOR HEALTHY LIVING, PARKS, AND RECREATION

PENNSTATE

1 Planning Considerations

Planning a well-functioning parks system is a complicated endeavor involving a range of stakeholders, the physical factors of proximity andlocation, and thelimitations of budgets. Interdepartmental cooperation and governmental positions also play important roles. Negotiating this terrain requires deliberation, negotiation, an inclusive process, and a careful assessment ofavailable resources. Te conflicting agendas and goals of multiple stakeholder groups must also be considered and factored into thedecision-makingprocess. Te table below outlines some of the goals or objectives each primary stakeholder may have, and illustrates the potential for conflicts between them.

T is section presents three recommendations for enabling a better planning process: encouraging participation, engaging underrepresented groups in the planning processes, and prioritizing populations with low levels of physical activity. Each of these recommendations has its immediate cost in time and energy, although the benefits often pay off in the long run. Parks systemshave the potential for higher rates of visitation if facilities are well matched to local needs, and residents may feel a greater sense of affiliation if they played in a role in making the parks happen.

TABLE 1: Stakeholders and Goals in Parks Planning (Bauer, 1966)

Group	Expressed Goals or Objectives
Community Decision Makers	Pride and status Cohesion and social betterment Reduction in juvenile delinquency Increase in economic development Increase in public health and safety Beautification and aesthetics Increase in culture and education Community development
Suppliers of Public Recreation	Happiness or enjoyment Personal growth Physical and mental health Personal safety and welfare Integrative sociability Citizenship and democratic values Group interaction and sociability
Users of Public Recreation	Relief from roles and surroundings, status, identity, Recognition Competition and self□evaluation Variety excitement challenge

1.1 Participation

Residents are the local experts on what they need and desire in parks. Te findings from the resident survey in the Focus Area showed a broad range of values for parks: physical activity, contactwith nature, opportunities for social connections, and connections with history, culture, and a sense of place. Involving local residentsin the planning process for parksis a challenging process, but has numerous benefits. A study conducted by the Urban Land Institute and the Trust for Public Land of 15 parks systems in the nation suggested that parks planners actively engage residents in the planning, funding, and maintenance of parks. Tey write, "In virtually every case study, residents provided input and oftentimes resistance that ultimately made the park a better place" (Garvin & Berens, 1997). Public participation also helps supportlocal use of parks, discourage vandalism, and gain political support for parks funding. Policies that enhance physical activity are popular among people, with strong support of the use of government funds to provide areas to engage in physical activity and for zoning requirements what would include walking and bicycle paths (Brownson et al., 2001).

Decisions about park facilities and programming are often made as a result of combining anecdotal observation about use, input from engaged residents, and user-counts. However, attendance counts are a problematic source of information about park use because they depend on receipts for organized activities, and thus do not include informal park use or casual visitation. It is often prohibitively expensive to conduct user counts in parks. A set of daily counts is extrapolated to estimate a monthly or yearly visitation rate. But the issue with these counts is that they don't take into consideration 'user days' - the number of repeat visitors each day of the year. User-day counts can exceed the local population numbers because ofrepeat visitors (Harnik & Kimball, 2005). However, usercounts are often directly linked to appropriations for parks funding. Viewed this way, 'benefit' and 'appropriation' are the public sector equivalent to the private sector's 'profit' and 'investment' (Harnik & Kimball). Nonetheless, "User counts are the only form of profit and loss account that exists in park management. It is an object lesson in the patient, persistent, and professional application of sound business principles in the pubic realm" (Harnik & Kimball). A range of user-count methods should be considered, including observational surveys, intercept surveys, focus groups, and telephone surveys.

T is study, since it focuses onthe parks system overall, has employed focus groups and a telephone survey. Specific information about particular parks can be gained through park-level user-countstrategies.

Parks and recreation leaders participating in the focus groups noted several positive outcomes from participatory processes and surveys. Oneexample cited was the replacement of basketball court with a children's' play area. As it turned out, the basketball court was not as under-used as had been thought, and community members responded with astonishment at thechange. Te leaders noted this example as evidence of the need to conduct regular surveys, although they also mentioned that these surveys quickly go out of date, or may not represent future trends of which local residents may not be cognizant.

1.2 %NGAGING 5NDER 2EPRESENTED 'ROUPS in Planning Processes

Participants in a range of focus groups conducted inthe course of this study mentioned the desire for engaging under-represented groups in parks planning processes. A particular group of note was young adults. Responses in the young adult focus group included an anecdote about a successful engagement with Springford High School students, one of whom conducted a survey of her fellow students, the result of which was the implementation of a carnival for teens.

One obstacle to participation byunder-represented groups is their not receiving information about meetings and opportunities. Young adults participating in a focus group suggested a number ofways to increase outreach, including flyersand advertisements. One participant further suggested that parks and recreation departments deliberately target high school and college student participation.

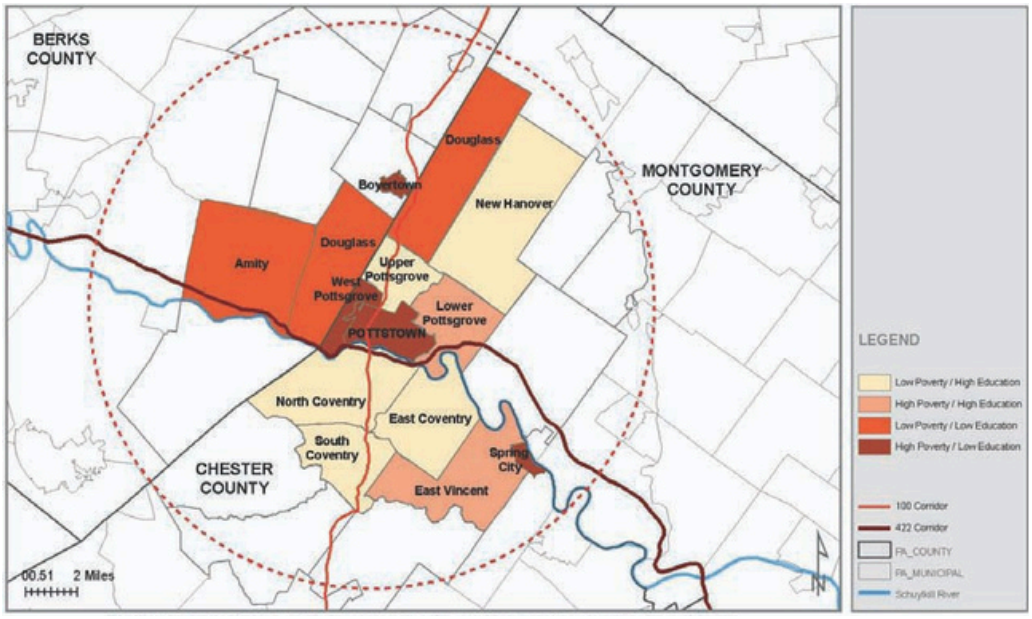
1.3 Populationswithlowlevelsofphysicalactivity

Several population groups have lower rates ofphysicalactivity, namely, women, minorities, and those with lower incomes. Nationalrecommendations on physical activity include the following general observations (US Department of Health and Human Services, 2000):

- Women generally are less active than men at all ages. People with lower incomes and less education are typically not as physically ac- tive as those with higher incomes and education. African Americans and Hispanics are generally less physically active than Whites. Adults in northeastern and southern States tend to be less active than adults in North-Central and Western States. People with disabilities are less physically active than people without disabilities. By age 75, one in three men and one in two women engage in no regular physi- cal activity. Adults with incomes below the poverty level are threetimes as likely as high-income individuals not to be physically active (Barnes & Schoenborn, 2003).

T ese findings strongly suggest that at-risk populations be prioritized in planning for parks and recreation opportunities.

FIG.1: EducationalAttainmentandPovertyStatusinQuartiles



2 Design Considerations

When designed well, parks can transmit to visitors a sense of overallpurposeand deliberation. Good design satisfies the senses on many levels and interweavesaesthetics and function (Dahl &Molnar, 2003). Single-use parks minimize conicts between groups, but sacrifice the opportunity for compatible uses to provide a rich diversity of activity.Ifplaces are neutral, or uncared for, the tendency for undesirable encroachment goes up. When areas are clearly designed, cared for, and well maintained, undesirable uses can be minimized.

The distinction betweenparks and recreation spaces is also important. Historically, parks have been seen as 'naturalized passive retreats' whereas recreation areas are 'active-sports oriented facilities.' Historically, parks received much more design attention because of designer's preferences for recreating natural areas (Dahl &Molnar, 2003).

The Project for Public Spaces provides five indicators of highly successful public open spaces, which the recommendations that follow serve to encourage:

1. a high proportionof people in groups use space
2. a higher than average proportion of women use the space due to a higher level of perceived safety and comfort.
3. different age groups use the space, together and at different times of the day.
4. a range of varied activities occurs simultaneously
5. more activities of affection are present, such as smiling, kissing, embracing and holding hands. (Francis, 1989)

Park-level strategies for good design include:

- Parks should have a fine grain and scale. When spaces are too large, groups are separated and isolated, minimizing social connections. When spaces do not have sufficient size or boundaries, conflicts between groups can occur, or single groups can dominate a space, pushing out others who desire to use it.
- Park design should consider a variety of experiences:
  - active engagement: having some physical involvement with the space. This is can be achieved by providing for a range of sports or activities.
  - discovery:the experience of stumbling upon unexpected places. Tis can beachieved through the inclusion of public art and opportunities for discovery-based learning and education.
  - fun: desire for fun and excitement in public spaces
  - mystery, adventure; challenge across a range of age and interest groups. For example, for young visitors, this might include skate parks or ad venture playgrounds. (Francis, 1989)

Park-level implementation strategies for a positive design experience would include:

- developing a series of community-oriented programs with local users from institutions to attract people in the short term and demonstrate that someone is in charge.
- creating an active edge so passersby can see what is happening in the park (Coates, Guberman, & Orsini, nd).
- creating highly visible entry points and activity areas to promote casual use by passersby (Coates, Guberman, & Orsini, nd).
- adding practical amenities – seating, telephones, waste receptacles, information booths, food vendors, community oriented pubic art, flowers, foundations – in carefully considered locations.
- creating a management presence through vendors or food or information kiosks by adding an entrance or adding views into places from adjacent buildings
- developing focal points – public gathering places that accommodate a variety of activities.
- arranging amenities to encourage social interaction, such as groupedbenches and movable seating.

5.1 Providingamixofopportunitiesatparks, REGARDLESS OF SIZE

Traditional park physical planning allots a set amount of space for each type of activity. Tis leads to a separation of uses and a less dynamic environment. While it is not realistic to put a football field in a pocket park, it is reasonable to include a range of opportunities in each park. Adding features for social connections, contact with nature, and elements referring to a local history, culture, or sense of place need not be stand-alone elements or be set aside in separate spaces. A number of small parks exist in the study area, many of which have only a single use, most often a children's playground. With good design strategies, small parks can be enlivened with a variety of other users, experiences, and features.

Community leaders participating in the focus groups specifically mentioned the role of small pocket parks. Tey noted that most of the pocket parks in the Pottstown region tend to be green spaces with play equipment for young children, and are used more by families and daycare facilities. Te leaders seemed satisfied with this use as long as equipment was well maintained. Tey hoped to attract more seniors to the pocket parks by providing seating, an amenity currently missing in many small parks.

TABLE 2: Small Parks (1 acre or less) with Single Uses

MUNICIPALITY	PARK NUM	PARK NAME	ACRES	USE
AMITY	AM05	Locust Grove Recreation Area	0.4	playground
LOWER POTTSGROVE	LP04	Keim Street Park	0.2	ornamental
NORTH COVENTRY	NC06	Penn Street Courts Brookside	0.81	sports
POTTSTOWN	PB01	Park	0.5	playground
	PB02	Cherry Street Park	0.25	playground
	PB03	Chestnut Street Park	0.25	playground
	PB09	Potts Drive Park	0.5	playground
	PB10	Ricketts Community Center	0.5	sports
	PB13	South Street Park	0.25	playground
	PB14	Spruce Street Park	1	playground
	PB16	Walnut Street Park	0.5	playground
	PB17	Washington Street Park	0.5	playground
	WP01	Howard Street Playground	0.3	playground
WEST POTTSGROVE	WP03	Vine Street Playground	0.9	playground

FIG. 2: New Chestnut Street Park provides a variety of uses within a half~acre site

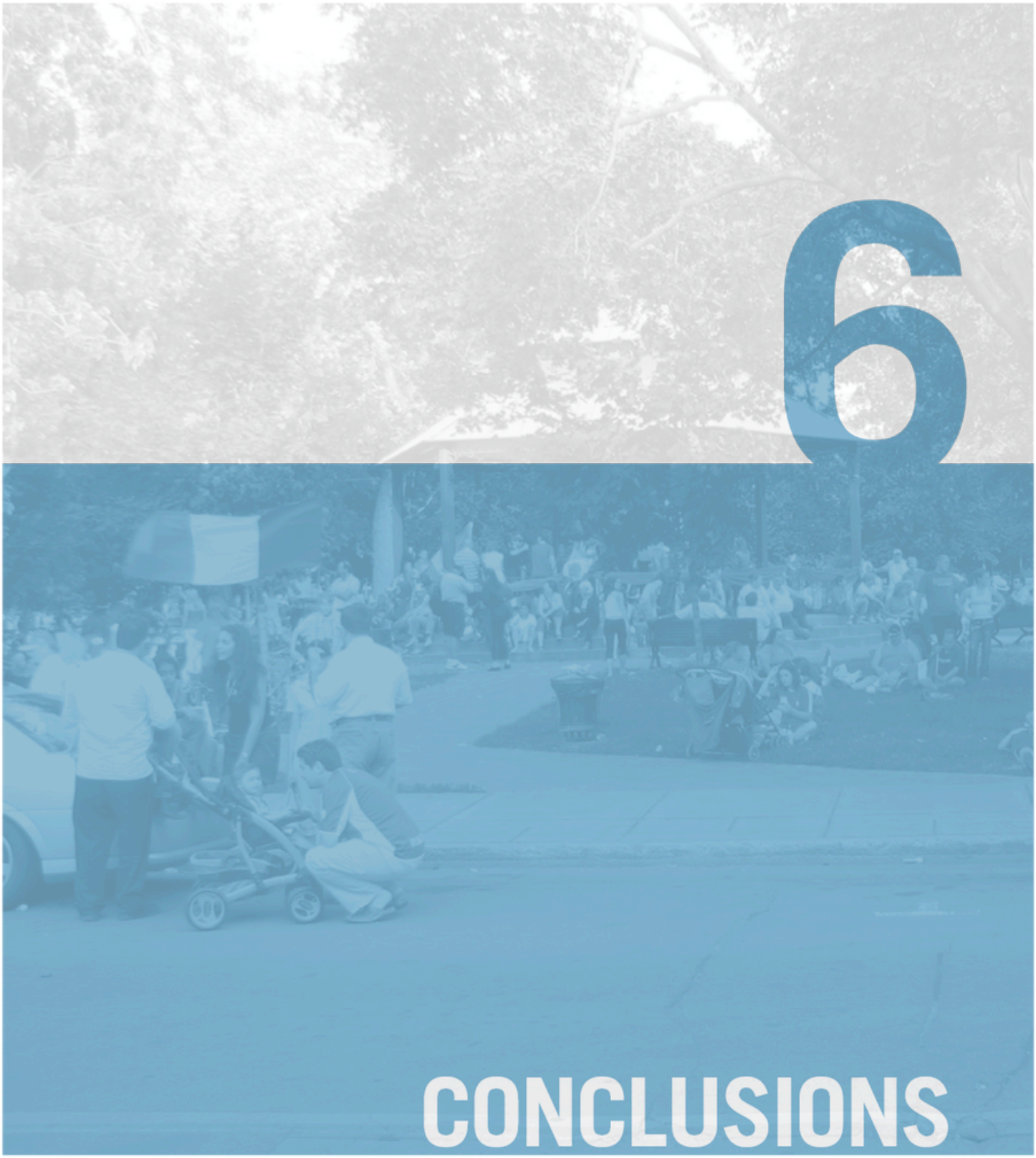
5.2 Designingforamixofages,gendersand engagement levels at parks

Te presence of people in parks can serve a numberof beneficial ends:parks are safer, more control is evident dueto social pressures to not misbehave, and the presence of other people encourages use and visitation. Te increased presence ofpeople is also a strategy to address undesirable uses in spaces because the increased density often disallows damaging or dangerous activities such as skateboarding or bicycling on walking paths.

A key park level design strategy for encouraging social interaction favors sociopetal spaces which encourage face-to-face communication over sociofugal spaces,which are outwardly oriented, reducing eye contact and conversation (Hopper, 2007). Te archetype for sociopetal spaces is a 6–12' inward-oriented circle, while an example of a sociofugal arrangement is a single line of benches. Both types are necessary because they provide a range from active to passive engagement. Passive engagements provide a sense of relaxation because they allow for engagement with the context without the obligation of becoming actively involved. Such activities include watching the passing scene, lookingrather than talking or doing, sitting, reading, people watching, and observing games or sporting events. Other needswhich should be considered are comfort and relaxation including the restorative effects of water or vegetation (Francis, 1989).

5.3 Parksaslandmarksinneighborhoods

Parkscan create a sense of placeand act as landmarks in neighborhoods. Parks have been shown to increaseproperty values, and are valued by residents as vital elements in their neighborhoods (Garvin & Berens, 1997). Using parks as landmarks supports active living strategies at the community level and can make neighborhoods more attractiveto live and work. Community leaders participating in the focus groups remarked on the value of attractive and well-maintained parks in attracting visitors. An attractive park system may serve to attract new residents to the area, and the community leaders also stated that visitors could help stimulate the local economy, thereby generating funds that would help to further maintain the open space network.



6

CONCLUSIONS

PREPARING FOR IMPLEMENTATION
STRATEGIES & GUIDELINES FOR HEALTHY LIVING, PARKS, AND RECREATION

PENNSTATE

1 Conclusions

T e Pottstown Area is a significant region in Pennsylvania, due to its proximity to Philadelphia and the Schuylkill River, with a substantial potential for redevelopment. T rough funding from the Pottstown Area Health and Wellness Foundation, this study was designed to identify improvements in the planning and design components of the parks and recreation system with the objective of promoting healthy living behavior. T e study poses a straightforward key question: How can the existing parks and recreation system in the Focus Area contribute more effectively to active living? Tis generated a series of follow up questions related to an assessment of the status ofthe existing parks and recreation system, the percentage of people who use these amenities for physical activity, the significance of the geographical context of these places, perceived or real barriers to visiting these facilities, design elements that attract residents to these places, and the activities people engage in when they arrive at these destinations. In order to conduct a substantive evaluation of parks and recreation facilities in the Focus Area, broader social, environmental, and planning issues that affect the region at large were included as integral parts of the study. Based on an analytic framework forthe assessment of parks and recreation in the Pottstown Area, the research focused on active living and the built environment. It was completed in two phases and centered on planning anddesign strategies for improving the health and wellbeing of the residents.

Phase I identified critical components of planning and design for the development of the Pottstown Area: active living, the built environment, the parks and recreation system, and partnerships. To this end, it delved into four critical and interrelated areas: Profile of the People, Profile of the Built Environment, Assessment of Parks and Recreation, and Assessment of Existing Partnerships and Organizational Structures. Te research included an inventory of all parks in the Focus Area. Te analysis of baseline information and findings for Phase I were compiled in the “Community Built Environment and Parks Assessment Report” andthe “Parks and Recreation Sites Inventory.”

Phase II culminated in recommendations and guidelines for development strategies for the built environment and parks and recreation system in the Focus Area. Tese recommendations are based, in part, on data collected from focus groups of stakeholders and end users. Te comprehensive Phase IIReport, “Preparing for Implementation: Strategies and Guidelines” links findings and conclusions from Phase I to planning objectives, issues and characteristics, recommendations and guidelines, and implementation strategies. Te methodology used to develop these guidelines consisted of an assessment of key behavioral factors for park visitation and active living, an assessment of the “well roundedness” of parks, and the development of three models for planning parks systems.

T e first two phases of this research established a sound foundation for the development of the parks and recreation system and its effect onactive living in the Focus Area. T e research produced objectives, recommendations, and strategies to evaluate the effect of development and establish viable standards for community design and planning. T e study provides a thorough understanding of existing parks and recreation amenities within the Focus Area through the development of new integrative tools and models for the future development of parks and recreation. When incorporated in policy documents and codes governing community development, this research will serve as a model for other regions. A significant finding of this study was that, for the most part, the Focus Area's existing parks and recreation system shows adequate walkable coverage in higher density areas, but coverage does not imply that parks are visited and used by the residents. Assessing parks and recreation opportunities as a single system will help address issues of usage and active living.

T e final product of this study is a series of planning objectives, recommendations, and implementation strategies for the Focus Area. Te recommendations are based on sound planning principles informed by a critical assessment of the built environment, the parks and recreation system, resident surveys, and input from focus groups of various stakeholders. We are confident the concepts generated in this study will provide useful insight into the growth of these communities, while contributing considerably to healthy living and future prosperity.

T ese guidelines embody a wide spectrum of planning concepts that could significantly enhance the overall quality of the parks and recreation system and contribute positively to active living. On a regional scale, the planning objectives and recommendations respond to the need for integrated networks, prevention of agricultural land loss due to sprawl and other planning policies, and alleviation of environmental concerns relative to contaminatedsites, landfills, and pollution—both in terms of people's perception and reality. Te parks and recreation objectives, recommendations, and implementation strategies recognize that the ultimate beneficiaries of this research will be the residents of the Focus Area, so their needs and aspirations must becentral to the study. Four planning objectives directly address the issues raised:

1. Build awareness of nearby parks that provide desired amenities.
2. Address common barriers to park visitation, such as cleanliness and safety.
3. Emphasize active transportation choices for access to local parks to increase over all rates of physical activity.
4. Provide a well-rounded range of opportunities at parks through a breadth of facilities and programming.

T e Schuylkill River Corridor case study guidelines are based on a synthesis of the strategies identified to enhance the built environment and the parks and recreation system in the region. Te case study illustrates how planning and design objectives can be articulated at the regional, community, and neighborhood levels to improve the region. Te recommendations in this section are therefore aimed at the imperative need to develop regional connections, define a community riverfront that is socially and economically sustainable, and create meaningful neighborhood interventions that can further contribute to the rejuvenation of the area in general and the Riverfront Park in particular.

Currently underutilized, the Schuylkill River Trail presents a great opportunity for connecting the parks and recreation system in the entire Focus Area and therefore warrants further study. Te Middle Schuylkill River offers immense possibilities for active recreation consistent with its historic and cultural resources. Te Schuylkill River Corridor is used as a case study in which the recommended strategies are applied in order to understand the existing parks and recreation system and revitalize the corridor, with an emphasis on active recreation. Because the connecting corridor encompasses a strand of communities, the series of recommendations presents evidence of the need for community revitalization in an effort to improve the region. Te case study is intended to create a better understanding of planning and design issues at the regional, community, and neighborhood scales. In developing a riverfront master plan, the case study denotes critical sites within each urban environment for intervention that would aid in revitalization and attract people through new and viable opportunities. Te neighborhood around Riverfront Park in Pottstown Borough isused as an example of master planning and potential interventions to encourage active recreation and appropriate growth. Te proposed master plan, with specific program elements for Pottstown, strives to generate the necessary criteria for successful active recreation environments and demonstrates how small-scale interventions can reconnect a town with its waterfront and become the catalyst for a sustainable revitalization process.

T ese initial ideas for new interventions generated for Riverfront Park in Pottstown are illustrative and require further investigation for implementation.

When dealing with the complexity of issues in this research, some concerns could not be fully addressed, and warrant further study. For instance, given the enormity of the planning and design process for encouraging active living through the parks and recreation system in the Focus Area,many budget and equity issues for various municipalities in the Focus Area were not fully addressed. Tese issues haveimplications not only for partnerships and management structures in the area, but also for planning and development strategies that are fully effective. Among other reasons, the problem of budgets is compounded due to their variable nature and soft money. In this context, itwould be worthwhile to

continue to investigate the numerous municipalities in the Pottstown Area to develop compelling strategies for municipalities to merge or consolidate resources. Offering incentives through a Grantmakers Forum would be a good beginning, but a long-term strategy could also be developed based on the commonality of shared issues and concerns identified and discussed in this study.

The choices communities make today about their planning and design strategies to promote healthy living will invariably affect future generations in profound ways. Given its foresight and commitment to encouraging active living through a long-term investment in the parks and recreation system, the Pottstown Area is poised to become a vibrant and prosperous region, which could afford a substantially high quality of life. The findings of this report reinforce thefact that prosperity of the region cannot be achieved through continued emphasis of planning initiatives on existing municipal or jurisdictional boundaries. In this context, this study has filled a gap in providing guidelines for a socially relevant, environmentally feasible, and politically viable regional framework. It is hoped that various planning agencies operating in the Focus Area and beyond will review and integrate the findings of this report and will be guided by the framework proposed in this study.

Many small towns in Pennsylvania, as well as in other parts of the United States, are confronted with similar planning issues. The predicament many communities are currently facing in terms of health, such as obesity and diseasesrelated to sedentary lifestyles, have brought into focus the role of the built environment in encouraging and facilitating physical activity.Hence the framework and methodology developed for this study are applicable to these small towns as well. Given the importance of healthylifestyles and the role parks and recreation play in promoting activeliving, the objectives,recommendations, and strategies developed for this study have significantrelevance beyond the Pottstown Area.

2 Future Studies

It is recommended that a discussion about future studies be initiated. Tese two future phases will primarily target implementation and post-implementation monitoring, adjustment, evaluation, and community feedback on the parks and recreation system. Tese phases would be instrumental in insuring that this research achieves the desired results in positively shaping the built environment of the Focus Area and contributing effectively to active living by attracting more people to parks and recreation facilities.

Implementation

T is phase should place emphasis on oversight of identified interventions, and the implementation process will potentially include the following activities:

- Familiarize various townships and boroughs with the content and intent of this research and encourage them to adopt the planning objectives, recommendations, and guidelines in their futureenvironmental planning strategies.
- Initiate a region-wide visioning process with an emphasis on building cross-municipal and multi-sector alliances. Facilitate partnerships of regional parks and recreational groups and other community organizations.
- Consolidate the creation of a Grantmakers' Forum to coordinate and strategically target projects for investment that are consistent with the findings of this research.
- Facilitate the hiring of a part-time coordinator for subsequent coordination of regional and community park planning, marketing, outreach, and implementation.
- Create proposals for the planning, design, and construction of model parks incorporating site-specific development, intervention, or modification consistent with Phase I and II research, objectives, and recommendations.

Assessment and Feedback

T is final phase should comprise post-intervention activities, such as review, analysis, and feedback that will include the following actions:

- Review and documentation of change in usage of parks, open spaces, and impact on healthy living already initiated inPhase I and II.
- Post-intervention evaluation of goals and objectives.
- Tracking of capacity building of stakeholder groups.
- Evaluation of the performance of model parks developed with particular attention to design and behavior change factors.
- Revision or modification of recommendations and guidelines based on feedback and review with stakeholders and end-users if warranted.

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P 3USAN .9# WWW mICKR COM
P +OREAN 2ESOURCE #ENTER WWW mICKR COM
P 3USAN .9# WWW mICKR COM
P 2ESTFUL# WIKIMEDIA ORG
P 0ETER !ESCHBACHER
P 3USAN .9# WWW mICKR COM
P #ARSON 0ARR
P (UMANOIDE WWW mICKR COM
P HEBEDESIGN WWW mICKR COM
P (UMANOIDE WWW mICKR COM

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