



**CITY OF DURHAM**  
**PARKS AND RECREATION**  
**DEPARTMENT**  
**LYON PARK PLAN**





## CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

### DISCLAIMER

The safety assessment for Lyon Park was conducted by a Crime Prevention Through Environmental Design (CPTED) Designated Professional as part of the development of the Lyon Park Plan. The information, language, and terminology related to the safety assessment contained herein are based on guidelines set by the National Institute of Crime Prevention and the observations of the individual members conducting the assessment. The assessment is intended to assist the City in improving the overall level of safety and security. It is not intended to imply the existing safety and security measures or proposed measures are absolute or perfect.

All new construction or retrofits should comply with existing building codes (including ADA compliance), zoning laws, and fire codes. Prior to installation or modifications the proper licenses and variances should be obtained and inspections should be conducted by the appropriate agency.



DURHAM TEEN CENTER, HALLEY STREET AND CORNELL STREET

### Lyon Park Plan

Durham Parks and Recreation 2019

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LYON PARK BASEBALL FIELD, HALLEY STREET



LYON PARK SWINGS, W. LAKEWOOD STREET



# I ntroduction



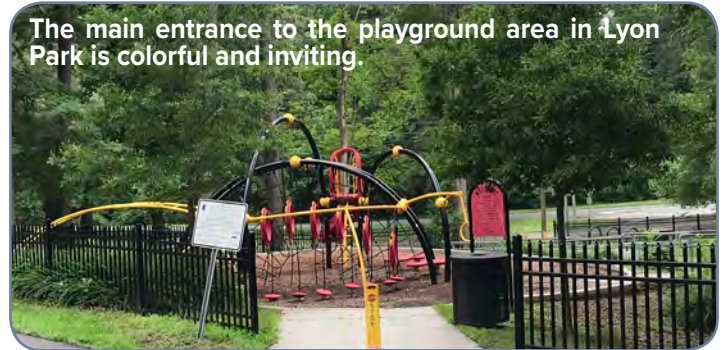
## Purpose

The City of Durham recognizes that “parks build communities” and strives to provide a diverse system of parks from the smallest pocket park to the largest regional parks. Neighborhood parks are included in the park system and facilitate neighbor interaction, fitness, and recreational enjoyment and increase the sense of community surrounding the park. Neighborhood parks preserve and protect community character, history, and identity, and provide and promote recreational and leisure opportunities. A vibrant and dynamic neighborhood park serves residents regardless of income, background, and ability and encourages volunteerism and interactions.

In 2018, the City of Durham Parks and Recreation Department prioritized the development of a plan for Lyon Park. The Lyon Park Plan evaluates existing conditions and physical features within the park to accurately inventory assets and develop strategic recommendations for new assets that will build on current infrastructure, attract new visitors, make it easier for park visitors to more fully utilize all areas of the park, and reduce opportunities for crime. The Lyon Park Plan provides a framework for improvements and a strategy to implement them over time. The City recognizes the importance of creating a safe, crime-free, and well-maintained park, which will provide a place for healthy recreation for children and families, bring neighbors together, and attract new users to the park.

The overall purpose of this Lyon Park Plan is the establishment of a guide to direct the operations of the Department of Parks and Recreation in development decisions for Lyon Park. The plan is aligned with the City and the Department Strategic Plans as well as with the City and the Department mission and visions.

The main entrance to the playground area in Lyon Park is colorful and inviting.



## Sense of Place and Identity for Lyon Park

It is important for visitors of the City of Durham’s Parks and Recreation system to experience a sense of place when they visit a park. Experiencing a sense of place helps park visitors recognize where they are, feel that they belong in the space, and feel that they play a role in the experience of the space. When visitors spend time in a park that has an established sense of place, they are more likely to feel temporary guardianship and act as stewards of the park during their visit. Great parks have an identity and strong sense of place that foster successful social networks and benefit multiple, diverse user groups and influence the physical, social, emotional, and ecological health of individuals that use the park in a positive way. When a sense of place doesn’t exist for a park, the park is considered placeless. In a placeless park, feelings of fear, isolation, and disconnectedness take over and discourage visitors to the park. Once residents begin to avoid the park, abnormal users begin to territorialize the park and use the park for undesirable and sometimes criminal activities.

Creating a strong identity and sense of place is more than constructing a building, designing a playground, or adding public art. It requires establishing a vision for a space that can be entwined in different ways into all areas of the park. The Lyon Park Plan includes an evaluation of Lyon Park and the surrounding



## DURHAM PARKS AND RECREATION

neighborhood and presents a diverse plan for large and small improvements that will realize the City's vision to establish an identity and a sense of place for Lyon Park that visitors will appreciate, enjoy, and protect.

### Methodology

The assessment of Lyon Park began with on-site field investigations and a review of available historic and current documentation. The on-site field investigations were conducted over several days in the spring and summer 2018 to examine existing infrastructure and amenities and to observe the habits and behaviors of park users. Information gained during the existing document review and through field investigations was compiled and carefully considered during the development of the recommendations presented later in this plan.

### Brief History

In the early and mid-1940s, the City of Durham identified the property that would become Lyon Park. Lyon Park opened in 1964 with the baseball field as the primary recreation asset. Since 1964, Lyon Park has grown to include basketball courts, a picnic shelter, picnic tables, playground, swings, walking paths, restrooms, the Durham Teen Center, and the Community Family Life & Recreation Center (CFLRC). See Figure I.1.

### Background & Context

Lyon Park is a 12-acre neighborhood park in Partners Against Crime (PAC) District #3, southwest of downtown and bounded by Carroll, Bivins, Kent, and Halley Streets. It is one of the 68 parks in the City of Durham's park system. Adjacent land uses are primarily zoned single family/multi-family residential, with the exception of the former U.S. Army Reserve Center and Armory that is located to the east of the Park on Carroll Street.

The Durham Teen Center is located on the northwest corner of the park, at the intersection of Halley and Cornell Streets. The Community Family Life & Recreation Center is located adjacent to the park, at the other corner of Halley and Cornell Streets. Figures I.1 and I.2 provide site location and context. Figure I.3 depicts destinations within a one quarter-mile radius of Lyon Park.

A one-quarter mile radius around Lyon Park was identified as the appropriate focus for the Study Area because that radius captures the characteristics of the surrounding neighborhood. Beyond the one-quarter

mile radius, the neighborhood area transitions to more commercial and retail uses and these uses aren't consistent with the primarily residential uses that exist within the one-quarter mile radius.



The playground and swings are amenities for the youth populations and families that visit Lyon Park.



The picnic shelter provides gathering space for small groups and the ADA parking area provides a convenient and accessible option for people of all abilities to enjoy the Park.



Benches along the walking paths provide visitors of all ages a place to stop and rest while observing park activities.

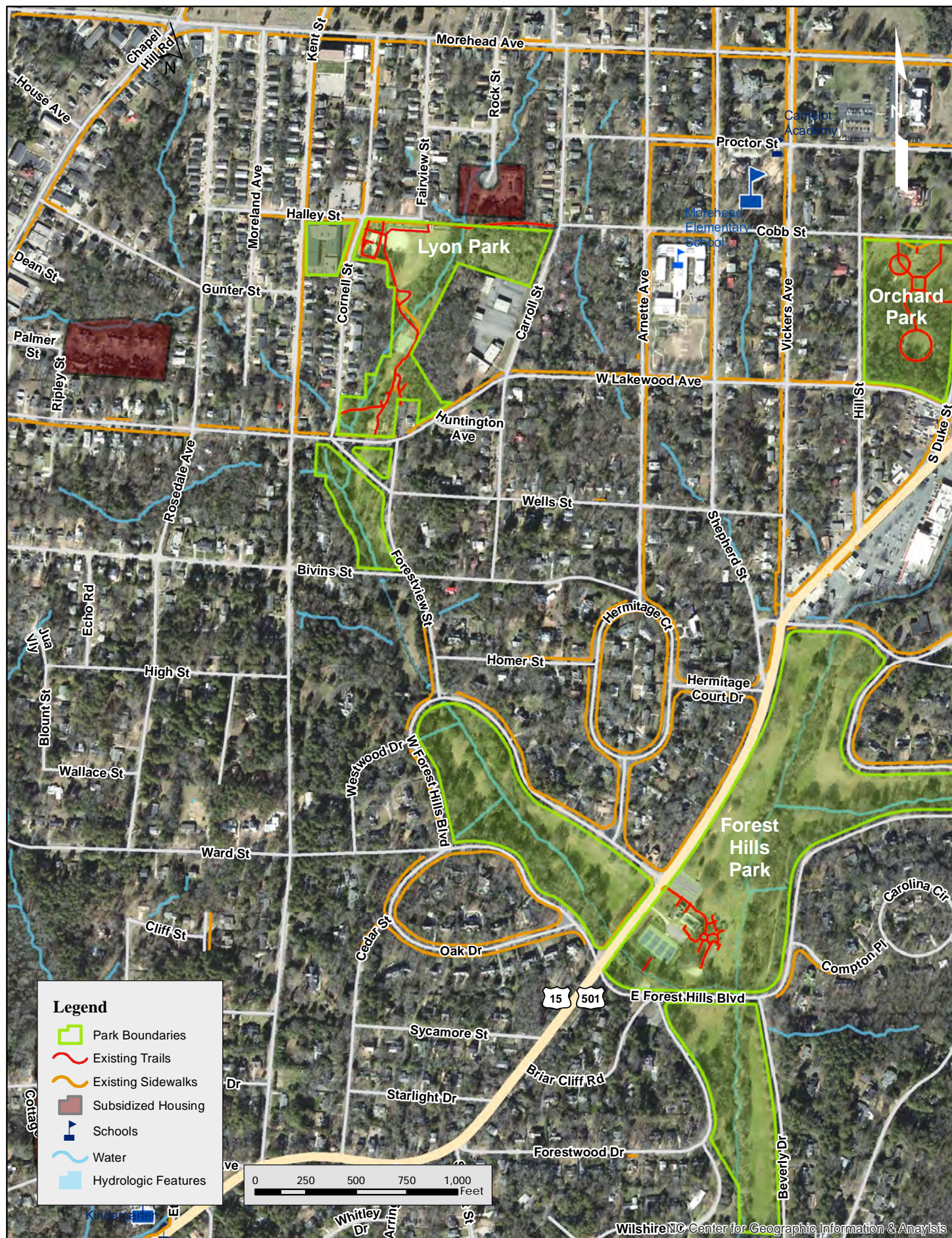


Figure 1.1. Lyon Park Site Map





Figure 1.2. Lyon Park Neighborhood Map



WilshireNC Center for Geographic Information & Analysis



Figure 1.3. Points of Interest Within 1/4 Mile of Lyon Park





## ***Population Characteristics***

### **U.S. Census Data (2016)**

Figure I.4, titled “U.S. Census Block Group Summary Data,” depicts population, age, and socioeconomic data for the seven U.S. Census Block Groups that make up the Study Area for Lyon Park. The Study Area has a total population of 9,572. The most densely populated Block Groups are located just north of the park. Other areas of higher density exist west of the park. Lower density areas exist east and south of the park. Figures I.5, I.6, and I.7 are maps presenting the geographic distribution of age and socioeconomic data for the Study Area.

### **Summary of Population Characteristics**

During the planning process for the Lyon Park Plan, it was crucial to consider the needs of all populations living in close proximity to the park, as these are the primary users of the park on a daily and weekly basis. The needs for improved park assets and amenities are greatest where higher density of populations exist. Future projects and improvements to the park should fully consider the needs and desires of the populations mapped in this section of the plan, otherwise there will be a significant disconnect between the development of the park and the needs of the surrounding neighborhoods. Such a disconnect would result in Lyon Park being considered a placeless park without a strong sense of identity which negatively impacts reservations for the picnic shelter and general usage rates for the rest of Lyon Park. Proposed improvements to Lyon Park discussed in chapter 3 include the expansion of recreation areas within the Park and the future Lyon Park to Forest Hills Connector Trail that will link Lyon and Forest Hills Parks. All of these improvements will increase the usage of Lyon Park and help it become a regional destination.



**Figure 1.4. U.S. Census Block Group Summary Data**

MAP ID (Block Group #)	POPULATION TOTAL	MEDIAN AGE	% YOUTH AGED	% MIDDLE AGED	% RETIRE- MENT AGED
5003	1,039	28.3	20	78	2
5004	1,191	31.4	28	66	7
6001	2,989	34.6	20	71	8
7001	909	42.6	14	68	18
7002	1,475	35.5	32	57	10
7003	1,347	37.4	24	64	12
6003	622	54.5	12	79	9

MAP ID (Block Group #)	MEDIAN IN- COME	PER CAPITA INCOME	% RECEIVING SSI (TOTAL POPULATION)	% RENTERS SPENDING >30% OF IN- COME ON RENT	% OWNERS SPENDING >30% OF IN- COME ON MORTGAGE
5003	\$24,667.00	\$15,234.00	5	54	14
5004	\$34,554.00	\$14,463.00	11	50	15
6001	\$41,591.00	\$26,069.00	2	48	16
7001	\$22,105.00	\$28,709.00	8	38	13
7002	\$59,097.00	\$42,302.00	4	22	24
7003	\$76,071.00	\$48,190.00	7	60	19
6003	\$110,326.00	\$64,190.00	3	50	15



Figure 1.5. U.S. Census Block Group Age Characteristics

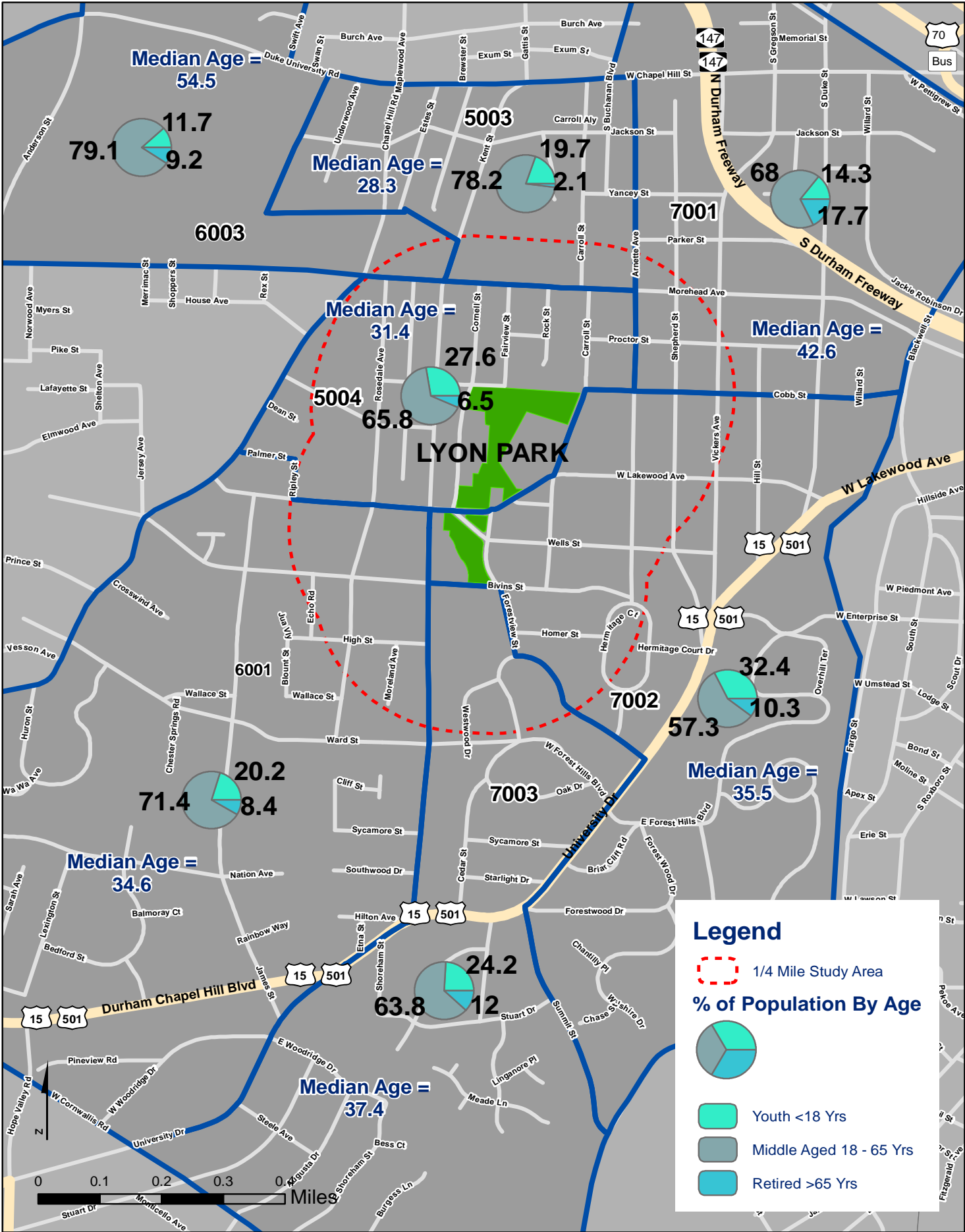




Figure 1.6. U.S. Census Block Group Income and Housing Characteristics

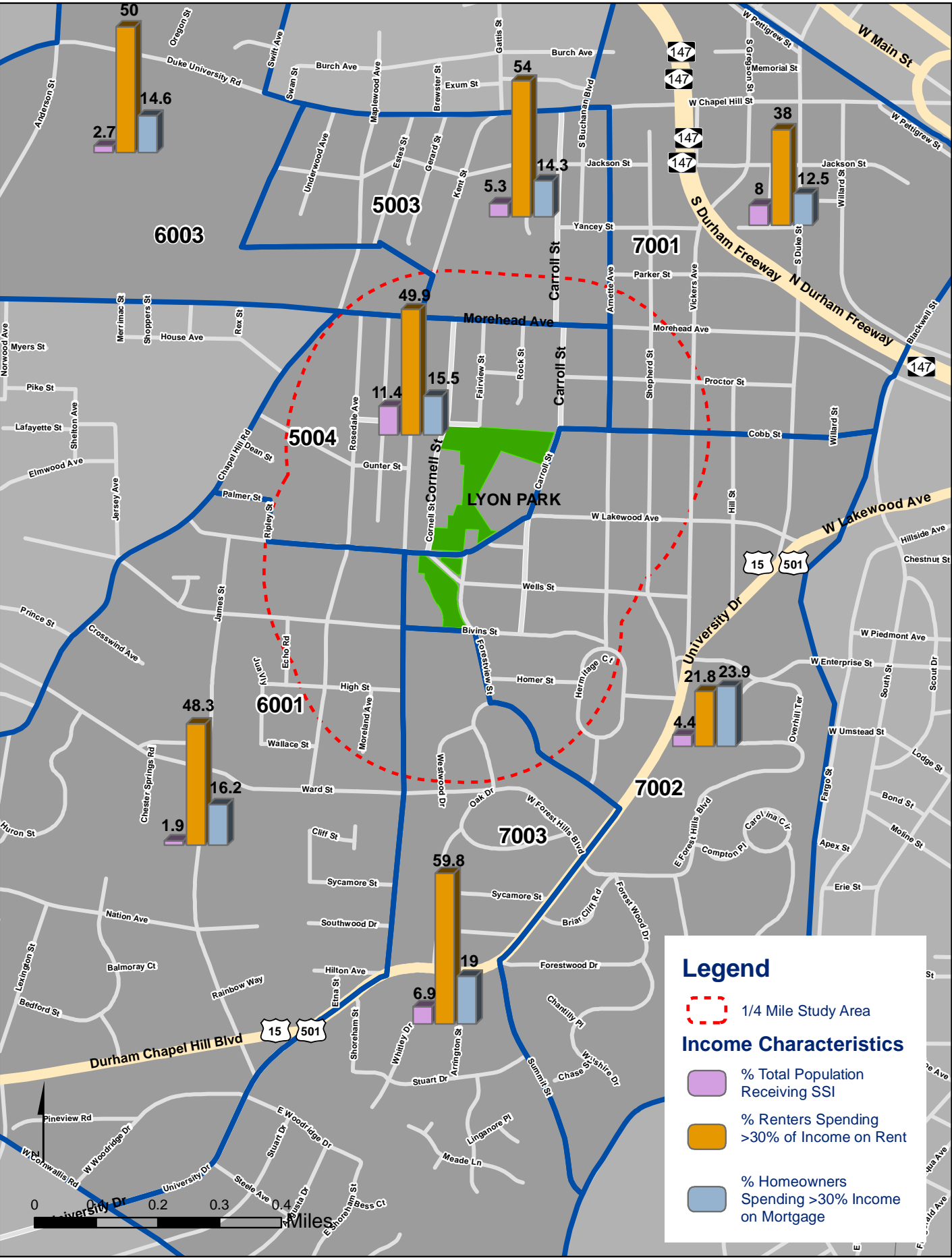
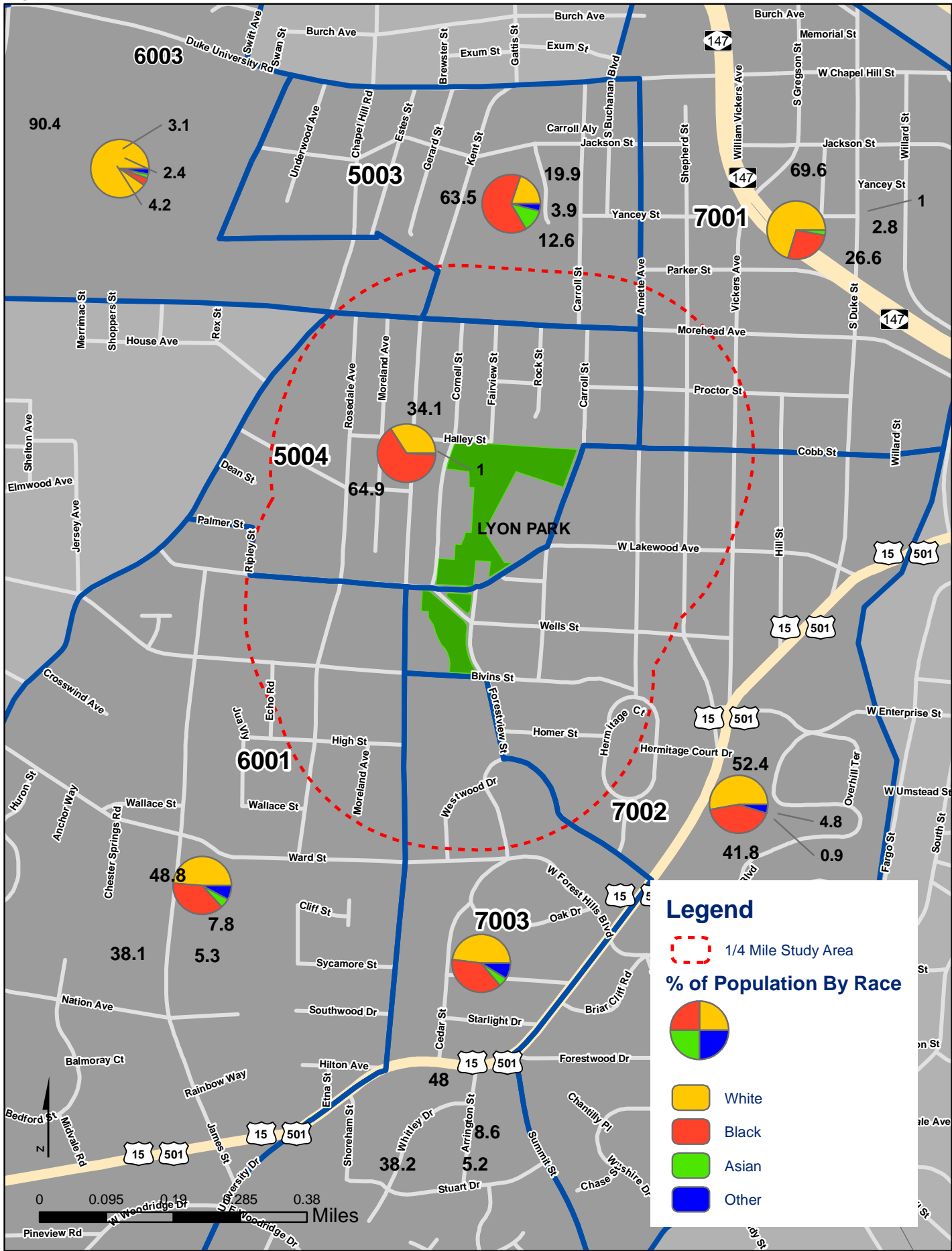




Figure 1.7. U.S. Census Block Group Race Characteristics





## Crime Analysis

Crime, safety, and the perception of safety in public spaces are reflective of the broader areas surrounding the public spaces. Public spaces don't bring more crime but they are also not immune to crime. Crime happens in all areas of a community, including public spaces. It is important to review historical crime trends as well as recent incidents of crime to understand someone's perception of safety in a public space. Crime mapping is a main component of a crime analysis. Historically, cities developed pin maps to represent different types of crimes that were occurring. Different size and color pins represented prevalence and types of crimes. With advancements in data management and technology, pin maps became digital, colorful "heat maps" that represent type and prevalence of crime for a given study area. Heat maps are one component of a crime analysis and are an excellent visual communication tool. A five year crime analysis that includes heat mapping is often performed as part of a planning study for a public space. Comparisons of Lyon Park study area data to data for a broader context (City-wide) are made to further understand the relationship between the study area and a larger area.

During the development of the Lyon Park Plan, five years of crime information was requested from the City of Durham Police Department. Five years of crime information for the neighborhood areas surrounding Lyon Park was provided in Geographic Information Systems (GIS) data. DPR's analysis of the GIS crime data presented in this chapter is fundamental to the evaluations of Lyon Park discussed in chapter 2, as the park was carefully evaluated with the results of the crime analysis in mind.

### Crime Analysis Findings

The crime analysis was a review of data for the five year period between 2013-2017 for Lyon Park and the surrounding neighborhood. It is important to distinguish the difference between Calls for Service and Incident Reports. Calls for Service do not always result in formal action or a written report. Incident Reports are documented criminal activity with prescribed follow-up procedures.

In the quarter-mile Study Area surrounding Lyon Park, there were considerably more Calls for Service (approximately 11,000) than Incident Reports (approximately 400). For the purposes of the Lyon Park

Plan, the Durham Police Department recommended using Incident Report data for the crime analysis.

Crime data for Incident Reports within the Study Area were categorized based on the classification system used in Durham Police Department's annual report. Figures 1.8 and 1.9 represent Incidents of Crime for the City of Durham and for the Study Area respectfully, based on Durham Police Department's crime classification system. Generally, the percentages of types of crime were consistent between the City-wide data and the Study Area data, with the exception of Larceny and Burglary. There were more reports of Larceny in the City-wide data than for the Study Area but there were more reports of Burglary in the Study Area than City-wide.

### Crime Prevalence/Incident Rates

To determine prevalence, crime data for Incident Reports were grouped into two primary categories, Violent Crimes and Non-Violent Major Crimes. The Violent Crime category includes Homicide, Rape, Robbery, and Aggravated Assault. The Non-Violent Major Crime category includes Burglary, Larceny, and Vehicle Theft. Figures 1.11 and 1.12 are heat maps of crime incident rates. Larceny is the taking of another person's property with the intent to permanently deprive them of that property and is a lesser offense than Burglary but if often the intent of the Burglary. Burglary is the breaking and entering into another person's home, car, office, etc. and is often the precursor crime to Larceny.

The crime data for Violent Crimes and Non-Violent Major Crimes were normalized to find the incident rate per 1,000 people. The Study Area's population was estimated using 2016 population data (the most recent year data was available) for each U.S. Census Block Group of the Study Area, then multiplying that number by the area occupied by each Block Group within the Study Area. For comparison, the City's population for 2014 was used to calculate the incident rate per 1,000 people across Durham as a whole. From 2013-2017, the Study Area had a higher rate (per 1,000 people) of Homicide (1.11 vs 0.62), Aggravated Assault (34.98 vs 23.82), and Burglary (74.96 vs 61.94) than the City of Durham as a whole.



## Summary of Crime Analysis

The prevalence and types of crimes in Lyon Park and in the Study Area were given careful consideration during the development of recommendations for future improvements to the park. Many of the recommendations in chapter 3 are made specifically in response to the results of the crime analysis with the goal of deterring the types of crimes that are occurring in and surrounding Lyon Park.

Figure 1.8. Five Year Crime Report for the City of Durham

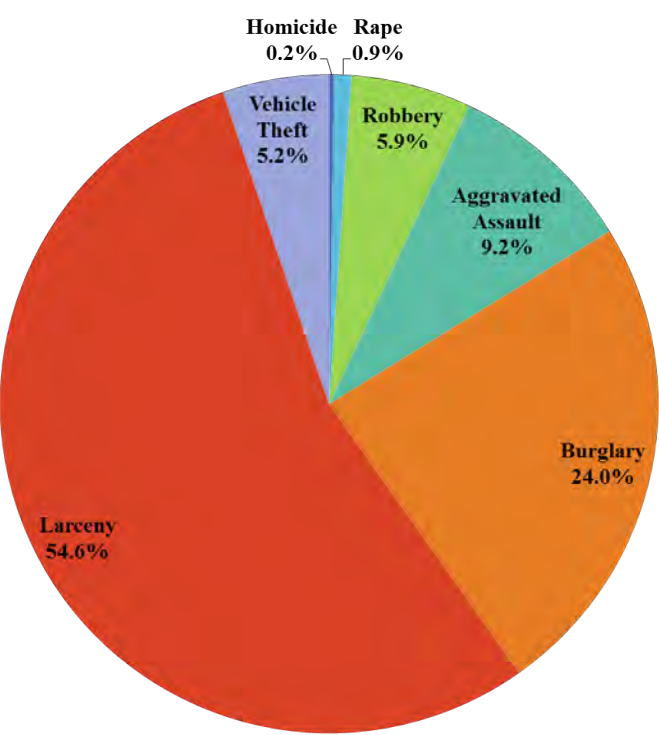


Figure 1.9. Five Year Crime Report for the Lyon Park Study Area

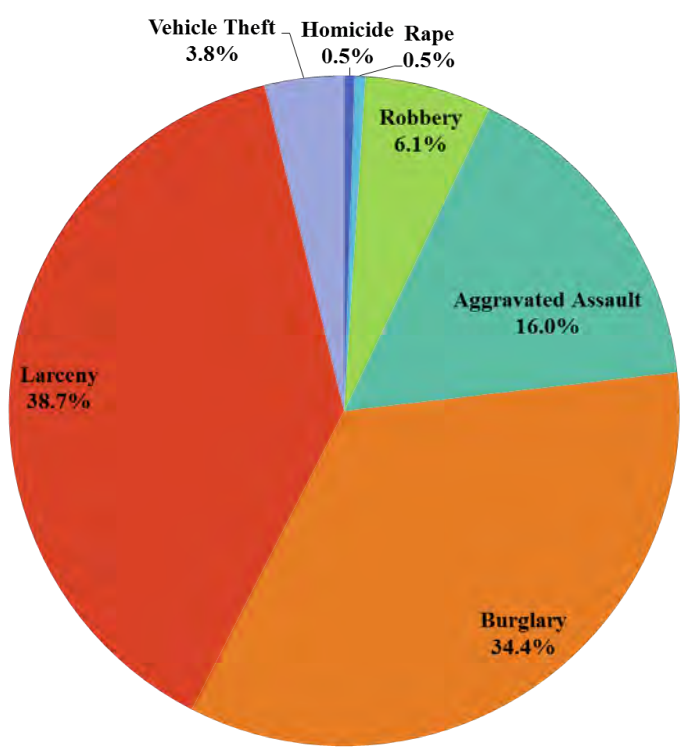


Figure 1.10. Crime Incident Rates Violent Crimes and Major Crimes Per 1,000 People

Violent Crime	Occurrences	Site Avg/1000 People	City Avg/1000 People
Homicide	2	1.11	0.62
Rape	2	1.11	2.21
Robbery	24	13.33	15.22
Aggravated Assault	63	34.98	23.82
<b>Total Violent Crime:</b>	<b>91</b>		

Major Crime	Occurrences	Site Avg/1000 People	City Avg/100 People
Burglary	135	74.96	61.94
Larceny	152	84.40	141.00
Vehicle Theft	15	8.33	13.51
<b>Total Property Crime:</b>	<b>302</b>		



Figure 1.11. Non-Violent Major Crimes Heat Map

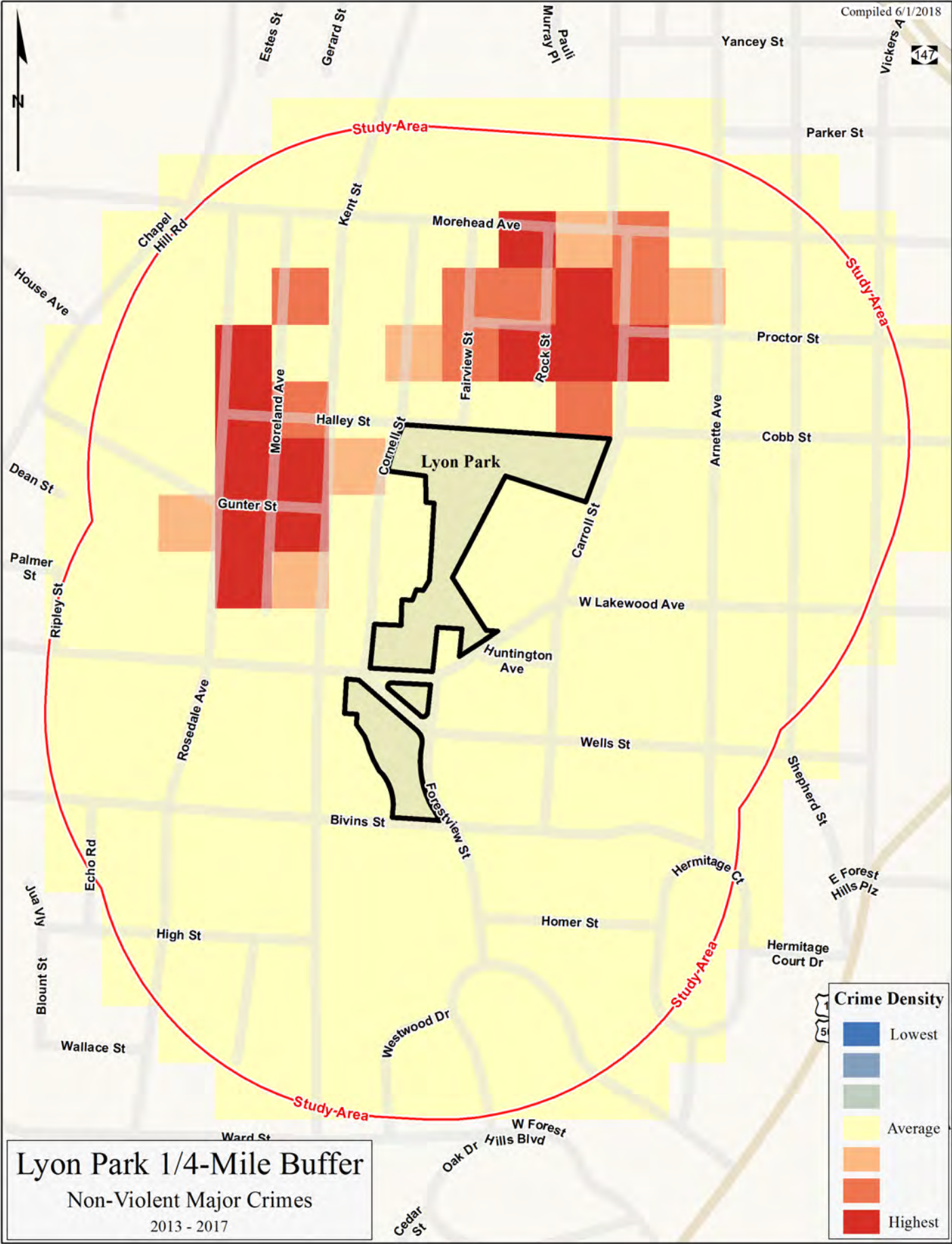
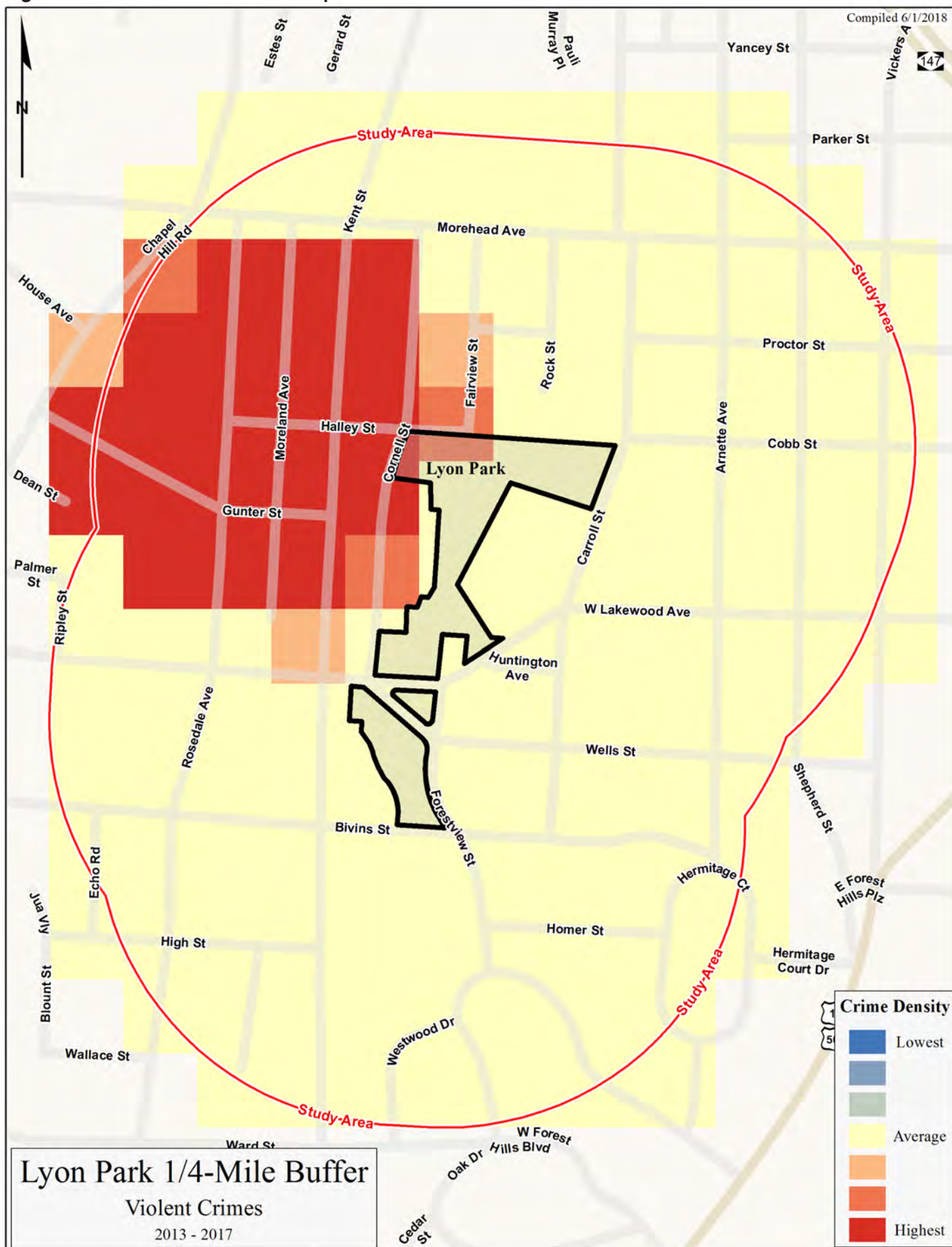




Figure 1.12. Violent Crimes Heat Map





# Evaluation



## ***Assessment of Sense of Place and Identity for Lyon Park***

The different assets and amenities in Lyon Park have been constructed in piecemeal fashion since the park was first established in the 1960s. The lack of a vision and construction fragmentation phenomenon is very typical for older, urban parks in cities around the United States that were first established decades or a century ago and have experienced sporadic renovations over the years. The lack of a guiding plan has resulted in the loss of a consistent vision and sense of place for Lyon Park. Best practices for design and construction of parks change over time and that leads to the construction and installation of assets and amenities that may deviate from a park's original sense of place and unique identity.

Lyon Park is no different than other urban parks in the United States. Lyon Park lacks an overarching vision and sense of place. The field assessment of Lyon Park identified inconsistent designs of the picnic shelter and bathroom structures. There are also inconsistencies in the signage, benches, tables, and trash receptacles throughout the Park. Without consistencies in the built environment, park visitors don't feel connected to a unique and identifiable space.

DPR staff spent time in Lyon Park over the course of several weeks at different times that the park was open and observed very little use or activity in any of the park areas. The low usage rates and reservations for the picnic shelter and athletic facilities combined with other placemaking challenges identified in this chapter begin to explain how and why Lyon Park lacks an identity and has become a placeless park.



The playground and basketball courts are two activity areas that were vacant of park visitors during several on-site field work trips to the Park. The presence of a police car parked in the entrance of the parking lot likely helps to deter would-be criminals. However, instead of increasing the perception of safety, police presence often decreases feelings of safety and confidence and results in visitors being discouraged from using the park.



## Existing Program Participation & Reservations

### Lyon Park Teen Center

The Lyon Park Teen Center is the original recreation center for Lyon Park. When the Community Family Life & Recreation Center at Lyon Park was built at the corner of Halley and Cornell Streets and began running programs, it superseded the use of the Lyon Park Recreation Center. The Lyon Park Recreation Center was unused until the City of Durham's Office on Youth created the Durham Teen Center.

The Office on Youth has been operating the Durham Teen Center for several years and offers programs that include Wise Guys and Making Proud Choices (Partnership with the Durham County Health Department), Cooperative Agreement with Rebound (Alternative School for at risk teens), Teen Volunteerism (Mobile Farmers Market), and Fun Friday. Teens also come to the Teen Center to use the computer lab, gaming systems, and other games offered on site. As of July 1, 2018, the City of Durham Parks and Recreation Department (DPR) became responsible for the Teen Center and will continue to offer teen programs and on-site activities. One pilot program will be to offer a My Durham Summer Camp, possibly in 2019. Other future program ideas are still in development for the Center and can't be evaluated as part of this planning process.

### Community Family Life & Recreation Center at Lyon Park

The Community Family Life & Recreation Center (CFLRC) at Lyon Park was originally a school. 1996 Bond funds financed the renovation of the building between 1997 and 2000. The CFLRC at Lyon Park is a community-based empowerment and partnership initiative to enhance the quality of life for citizens through education, community development, health care, job training and human enrichment. Currently, the following programs and activities are offered:

- Walking Track
- Couch to 5K
- Beginning Sports
- Intermediate Sports
- Teen Open Gym
- Teen Night
- Adult Open Gym
- Youth Open Gym

- Picasso Babies
- Video Game Tournaments
- Futsal
- Pickleball
- Summer Camp
- After School
- Buddy Basketball
- Photography 101
- Computer Lab
- Youth Basketball League
- Fast Pitch Divas Softball Clinics
- Teen Softball League
- Chair Exercise
- What's That and Why Should I eat it? Nutrition Class
- Mature Adult Bingo
- Night Flight

### Picnic Shelter Reservations

The picnic shelter at Lyon Park is a Tier 3 shelter, one of the smallest shelters that DPR offers. Tier 2 and Tier 1 picnic shelters are larger shelters that are offered at other City parks. The Lyon Park picnic shelter is available for reservations every day between April and October and DPR accepts one reservation per day. The picnic shelter is also available on a first come, first serve basis, which means that a reservation isn't required for use. Many groups feel comfortable taking their chances with the option of using the Lyon Park picnic shelter on the first come, first serve basis because the shelter is seldom booked.

In 2017, there were a total of five (5) reservations made for the Lyon Park picnic shelter, equaling a reservation rate of about 2.3 percent. Customer feedback regarding the use of the picnic shelter helps DPR begin to understand the very low reservation rate. Generally, the customer feedback is that the picnic shelter isn't large enough to support their event and the park doesn't offer enough amenities or any unique activities to draw them to Lyon Park. Customers would rather reserve a larger picnic shelter at a park that is more engaging and offers more activities.

### Athletic Programs and Usage

The baseball field is located at the northern end of Lyon Park and is used by two outside groups, TROSA and Durham Bulls Youth Athletic League. The baseball field is used by DPR to program Durham Divas Fast Pitch Advance and Intermediate Clinics/Leagues. The baseball field is used once a week at best.

The two basketball courts are located in the center of the park and are available for pick-up games and basketball tournaments. DPR can accept reservations for leagues or tournaments. No reservations were



received in 2017 for the courts at Lyon Park. For an example comparison, basketball court reservations are received for courts at Sherwood, Long Meadow, and Southern Boundaries Parks.

Customer feedback regarding the use of the baseball field and basketball courts helps DPR understand the very low usage rates of these athletic facilities. The baseball field has poor drainage which makes it difficult to consistently rely on the field being available for use. The field can take as long as two, three, or four days to drain enough for use. The lack of a proper mound and field lighting were also identified as a reason for the low usage rates. The basketball courts were recently renovated and feedback on the improvements has been positive. Customer feedback regarding the lack of use of the basketball courts is that there aren't enough other amenities in the park and basketball players prefer courts in other parks that offer more things to do in addition to basketball.

## **Crime Prevention Through Environmental Design**

Crime Prevention Through Environmental Design (CPTED) is a multi-disciplinary approach to deterring abnormal use and criminal behavior through the physical design and programming of a space. CPTED works by decreasing the ability of an abnormal user to use a space for undesirable behavior or to commit a crime. It also increases the chances that a typical user of the space will see and report the crime as it occurs. CPTED goes beyond traditional security methods by naturally integrating security measures and tactics into the design or redesign of a space. A CPTED assessment is an analysis tool that evaluates current patterns of use and includes a thorough review of site characteristics including the built environment, the natural environment, and programmed spaces. The assessment identifies possible options for redevelopment that will reduce opportunities for abnormal use and crime, thus improving the physical safety and the perception of safety for park visitors.

A full CPTED assessment includes a review of five years of crime data from the City of Durham's Police Department and an analysis of historical and demographic profiles of the surrounding community. The analyses of crime trends, Lyon Park's history, and population characteristics for the Study Area are presented in chapter I.

## **CPTED Assessment**

The assessment for Lyon Park was performed by a CPTED Designated Professional and other CPTED-trained staff. The assessment included careful evaluations of Natural Surveillance, Natural Access Control, Territorial Reinforcement, and Maintenance of the park. The results of the assessment described in this chapter, combined with the crime report data and the historical and socioeconomic characteristics of the surrounding Study Area that were described in chapter I, serve as the foundation for the recommendations for Lyon Park that are discussed later in this plan.

### **National Institute of Crime Prevention (NICP)\***

The National Institute of Crime Prevention (NICP) maintains the nationally recognized CPTED Program. All vocabulary and language related to CPTED concepts, opportunities for crimes to occur, strategies for crime deterrents, and project recommendations discussed in this plan are terminologies that are specific to the NICP's CPTED Program.

### **Natural Surveillance\***

Natural surveillance is defined as the placement of physical features, activities, and people in a way that maximizes visibility. Design of the built environment and layout of the space in such a way that allows for multi-directional visibility is important for public spaces. People have a greater sense of security when they can see and be seen by others. Appropriate uses of lighting, landscaping, positive activity areas, and focal points all contribute to the user's ability to have "eyes" on the space and play a role as a temporary guardian while using the space.

### **Natural Surveillance Assessment Findings**

There is a small 10-12 space vehicular parking lot at 1200 W. Lakewood Avenue, located adjacent to the playground area and near the picnic shelter that serves as the primary vehicular entrance to the park. Natural surveillance of the playground from the parking lot and walkway is possible. However, surveillance from the parking lot to other areas and amenities of the park are obstructed by vegetation, topography, and site layout. In general, the physical shape of the park property, the rolling topography, stream, overgrown vegetation, and design/layout of the park minimize opportunity for natural surveillance, making it almost impossible for park users to see or be seen from other areas of the park and this creates feelings of isolation.



## DURHAM PARKS AND RECREATION

Specific observations from the field assessment for Natural Surveillance are:

**Positive Findings**

- The northern section of the park contains the Teen Center and the baseball field and there is good visibility between these two areas.

**Areas for Improvement**

- The goal of natural surveillance is to bring “eyes on the park” but the design/layout of the park is fragmented and the majority of areas are disconnected from each other. Views into the park and views within the park are obstructed.
- Overgrown vegetation along the stream, through the park’s interior, and around the perimeter of the park disrupt critical areas of surveillance.
- Circulation (walking areas) between areas of the park feels confined, isolated, and hidden because of vegetation encroachment.
- There are several potential ambush points and concealment areas that have been created by the physical/built environment and encroaching vegetation.
- Benches are erratically placed and don’t maximize opportunities for natural surveillance.
- There are no focal points or celebrated entryways to draw attention to the park or areas within the park.
- The bathrooms are in a low-lying area and are not near a major positive activity generator.
- The design and orientation of the bathroom prohibits visibility of both bathroom entrances from any one area of the park.
- There isn’t visibility to the bathrooms or into parts of the bathroom to help a user identify potential safety risks.
- The bathrooms are not illuminated and partitions and doors are not ceiling-hung, however, the open-air areas at the top of the exterior walls do allow for communication and calls for help.
- The middle of the park, between the basketball courts and the baseball field has become an area of concealment\* because of the overgrowth of vegetation.
- There are areas of the park that are completely inaccessible and usable by any normal park visitor. These areas appear to be used by abnormal users who wish to remain unseen while in the park.



Both entrances to the bathroom are not visible from any one area in the park. There are ambush points around every corner and behind the vegetation. The building is not near any positive activity generators.



Pathways are isolated and offer ambush points.



Benches are not oriented to increase natural surveillance.



The picnic shelter and bathroom building are not visible from the walkway to the playground area.

\*See NICP on pg. 2-3



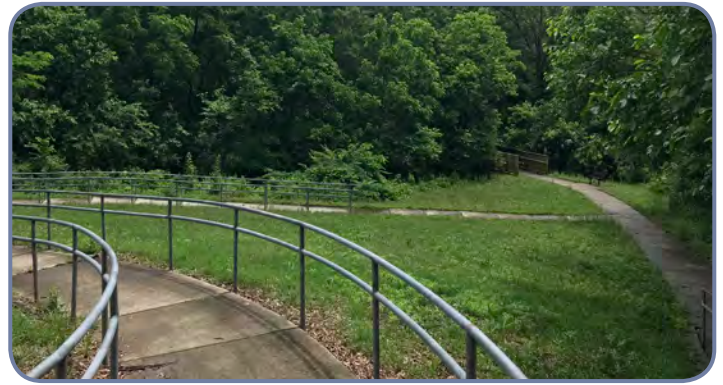
## Natural Access Control\*

Natural access control is defined as controlling access to and through a site. People are physically guided through a space by the strategic design of paths, entrances, landscaping, sight lines, and the built environment (fencing, bollards, other structures). Natural access control decreases opportunities for a person to become lost or feel isolated.

## Natural Access Control Assessment Findings

- Positive Findings**
- Transparent fencing delineates the southern boundary of the park along W. Lakewood Avenue.
  - Concrete sidewalks provide options for pedestrian travel and circulation.
  - Bollards block vehicles from accessing the concrete sidewalks.

- Areas for Improvement**
- There are no transition zones between adjacent private property and the public park space, or between different use areas within the park.
  - The perimeter of the park is marked by overgrown and encroaching vegetation.
  - Ingress and egress areas are not clearly defined or identifiable.
  - The distance between positive activity generators vary, making the park feel segmented and making transition and access between the different areas challenging.
  - In most areas of the park, there are no opportunities to bypass any areas that are perceived as unsafe or threatening. The only option is to retreat linearly.
  - There are at least three informal footpaths from the parking lot down the hill toward the bathroom.
  - The park lacks wayfinding signage to guide park users and/or to communicate where or how to get to different places within the park.
  - The park lacks any locational signage or markings to help people identify where they are in the park in the event of distress or emergency.



A significant area of concealment exists in the mid-section of the park and while there are concrete sidewalks, there is no opportunity to bypass this area if it is perceived as threatening.



Railings along walkways define the path and provide access to the playground area.



Concrete sidewalks connect the Teen Center, the baseball field, and the other areas of the park.



Bollards and transparent fencing control access to the playground area.

\*See NICP on pg. 2-3



## Territorial Reinforcement\*

Territorial reinforcement is defined as the use of physical attributes that express ownership, pride, and celebrations of the space. These all deter undesirable behaviors. This concept also includes distinguishing private property from public property by establishing transition zones between properties. Construction designs that include art, programming, inlaid pavers, proper maintenance, sidewalks, bollards, and fences all contribute to deterring potential crime by establishing territoriality and a sense of ownership over a site.

## Territorial Reinforcement Assessment

### Findings

#### Positive Findings

- There is a sign posted at the northern end of the parking lot that communicates the rules of the park.
- Different areas of the park are ADA accessible.
- Vehicle access to play areas and athletic fields is restricted.
- Walls of structures and other fixtures such as signage, light posts, benches, and receptacles are generally free from unwanted markings, vandalism, and graffiti.

#### Areas for Improvement

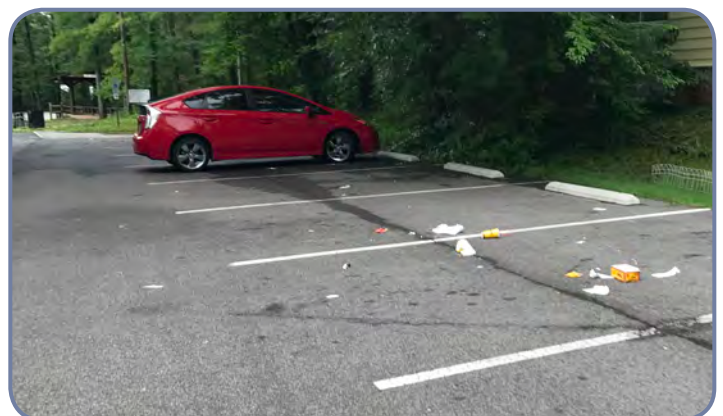
- Transparent fencing only exists along the southern boundary of the park along W. Lakewood Avenue.
- The vehicular parking lot doesn't have an entrance sign, the Lyon Park sign is approximately 60 feet away, near the pedestrian and bicyclist entrance along W. Lakewood Avenue.
- There is a sign kiosk near the bathroom building but information is only visible from the bathroom side of the kiosk.
- There are adequate trash receptacles but no recycling receptacles were observed.
- There is litter in various locations.
- The playground equipment is in good condition, however the playground surface is eroding and washing downhill.
- There are four (4) large, unprogrammed, and undeveloped spaces that are empty and placeless and there is evidence of these spaces being used for undesirable behaviors. These large areas are barriers to connectivity between the existing positive activity generators such as the playground or Teen Center.

- There are worn footpaths in areas of the park, indicating that park users don't find the existing pathways convenient or sufficient.
- There are bullet holes in the door to the bathroom and in the kiosk sign near the bathroom building.
- There is not a sufficient number of positive activity generators to draw visitors to the park.
- There are no celebrated entryways that communicate pride, ownership, or identity.
- There is no evidence of cultural or neighborhood values or historic heritage.
- The park lacks a consistent identity and sense of place. Areas of activity are disconnected and the built environment has differing architecture. Even the smaller amenities such as benches and trash receptacles are inconsistent in their design, orientation, and placement. The lack of identity creates a feeling of discombobulation and highlights the historical, piecemeal construction of the park.

\*See NICP on pg. 2-3



The main southern entrance along W. Lakewood Avenue lacks a single celebrated entryway and the non-vehicular entrance is over 60 feet away from the vehicular entrance.

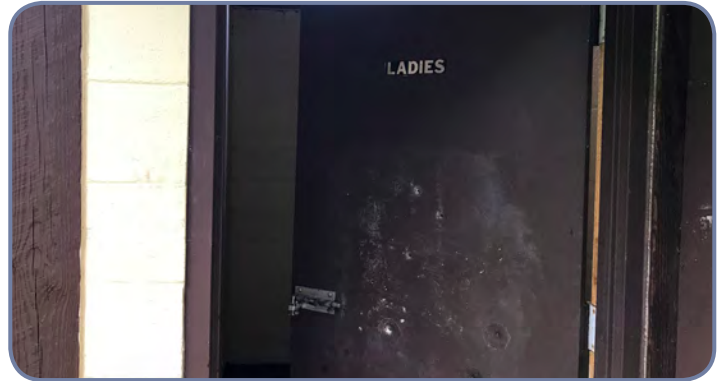


Litter is strewn around the parking area.





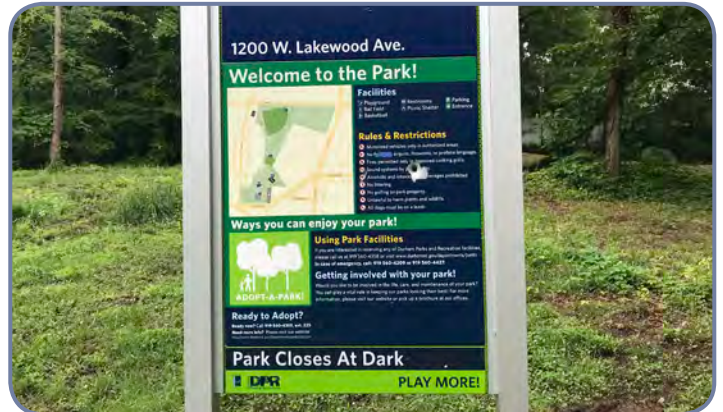
The playground surface is washing down the hill and the engineered wood fiber (EWF) surfacing can be seen on the ADA pathway down toward the swings.



There are bullet holes in the door to the ladies bathroom.



Signage near the entrance to the playground area communicates stewardship of the park.



There is a bullet hole in the Lyon Park sign near the bathroom.



There isn't a clear transition from public park space to adjacent private residential space.



Worn footpaths exist between the parking area and the bathroom area.



The Cornell Street entrance is unmarked, unsigned, and doesn't establish ownership or public park pride.



A large, empty space exists in the heart of the park, between the bathroom building and the basketball courts.



## Maintenance

Proper maintenance of Lyon Park allows for the continued use of the space for its intended purpose, serves as additional expression of ownership, helps deter unwanted behaviors, and supports all three previous CPTED\* concepts (Natural Surveillance, Natural Access Control, and Territorial Reinforcement). A lack of maintenance is an indication there may be weaknesses in security that can be exploited. Any hint or suggestion of a neglected area will encourage abnormal behavior, vandalism, or criminal activity. Preventing vegetation overgrowth from restricting visibility, lighting, pathways, and the accessibility of facilities as part of an on-going maintenance regime supports and makes the other components of the CPTED assessment more effective.

## Maintenance Assessment Findings

Positive Findings

- A review of completed DPR maintenance work order requests ascertain an impressive response time and moderate to high level maintenance and management practices.
- Exterior walls, signage, and other fixtures are generally free from unwanted markings and graffiti.
- There isn't evidence of abnormal usage such as drug paraphernalia or other items in programmed areas of the park.
- The basketball courts are well maintained and usable.
- Programmed areas are clearly identified and accessible.

Areas for Improvement

- The topography that is already a natural barrier is not maintained properly and washouts/stormwater drainage issues are evident.
- The stream or creek that runs through the majority of the park is a natural barrier and the riparian buffer is overgrown with vegetation that blocks surveillance, creates areas of concealment, ambush points, and areas of enclosure and isolation.
- The built environment (physical structures) show signs of damage or disrepair.
- Trees and shrubs in most internal areas of the park are overgrown.
- The baseball field does not appear to be used regularly and has drainage issues.

- Areas for Improvement
- The bleachers for the baseball field are in disrepair.
  - The steps between the Teen Center and the baseball field lack railings and are crumbling in some areas.
  - Stormwater drainage, silt, and moss are covering many sections of the concrete sidewalks in the park.
  - Overgrown vegetation is blocking sightlines within the park and opportunities for surveillance into the park from the perimeter.
  - The light near the bathroom doesn't appear to be working.



Stormwater and mud are creating hazardous conditions for users to navigate as they approach the bathrooms.



The bleachers for the baseball field appear disheveled or broken. The stone steps in the background are in disrepair and lack a railing.

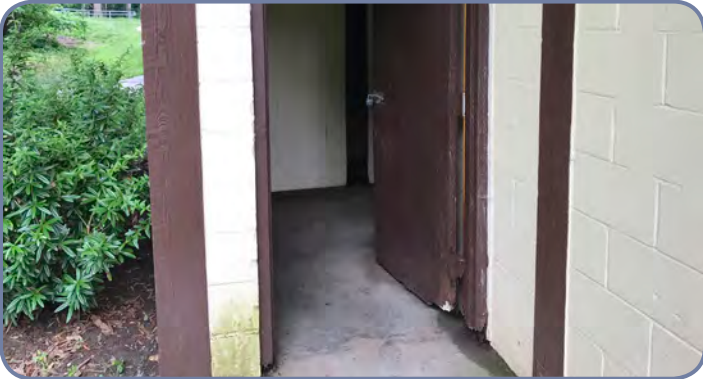


There are unwanted markings on the side of the bathroom and a debris pile is encroaching on the pathway to the entrance of the ladies room.

\*See NICP on pg. 2-3



Maintenance Assessment Findings (Cont'd)



The entrance and door to the men's bathroom is rotting and deteriorating.



Stormwater is ponding and creating very slick conditions near the baseball field.



The bridge that crosses the creek is covered in debris.



There is ponding in the infield of the baseball field and the field appears unused and neglected.



Overgrown vegetation makes it impossible to see the playground area and the parking area from the bathrooms.



Debris on the boardwalk and overgrown vegetation make this pathway treacherous and feel isolated.



Stormwater ponding and hillside washout impact the usability of the ADA parking space.



The front side of the sign kiosk doesn't display information and appears to be saturated from rain.



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# R recommendations



## Overview

The crime report and demographic profile analysis in chapter 1 and the evaluation of existing programs and reservations and on-site CPTED assessment in chapter 2 are the basis for the recommendations presented in this chapter. The goals of the recommendations for Lyon Park are to help establish an identity for the park, generate more interest, usage, and engagement in the park, and decrease the potential for crime and the feelings of isolation.

## Illustrative Concepts and Recommendations

The recommendations in this chapter are tailored to Lyon Park and most are not “one size fits all” improvements to be mimicked at other parks. The recommendations for Lyon Park are suggested examples or solutions and when images are included, the images are for illustrative purposes only. The images are not intended to be exact recommendations for specific make, model, brand, supplier, or equipment contractors. All recommendations should be carefully considered and evaluated for implementation by the City in accordance with the City’s procurement process and safety standards for park equipment and installations.

## Recommendations

### Create Positive Activity Generators

Positive activity generators should be added to Lyon Park to establish the identity of the park and create strong sense of place. Much of the customer feedback described in chapter 2 can be summarized into the need for new, unique assets and activities that stimulate and attract visitors to the park. Lyon Park currently provides programming and recreation for all ages with infant swings, playground area, basketball

courts, baseball field, Durham Teen Center, and the Community Family Life & Recreation Center also features a playground area. Any new installations should consider the existing users of the park, Teen Center, and Community Family Life & Recreation Center at Lyon Park. The existing users already visit the park and would be the first people to enjoy the benefits of new park assets.

### Four Potential Spaces for Positive Activity Generators

There are four large, undeveloped, lifeless areas in Lyon Park. Recommendations for each space are included in this chapter. Some of the recommendations are not exclusive to one particular space. For example, a recommendation for Space #2 may ultimately be better for Space #3 or vice versa. The recommendations are designed to increase park usage and diversify activity in the park so that the park is being used more often by different user groups and overall, more consistently throughout each week.

The City should work with the neighborhood and Partners Against Crime (PAC) District #3 to prioritize recommendations and identify the best placement of new recommended amenities. The four spaces are identified in Figure 3.1.



Figure 3.1. New Recreation Spaces #1, #2, #3, and #4





Figure 3.2. Buildable Area of each New Recreation Space





Figure 3.3. Space #1 New Recreation Area





## Space #1: New Recreation Area

Space #1, shown in Figure 3.3, has a developable area of approximately 1.6 acres or 69,000 sq ft and is located east of the baseball field and up a steep hill with frontage along Carroll Street, see Figure 3.3. The change in elevation between Space #1 and the rest of Lyon Park is approximately 46-48 feet., making it difficult for most people to travel on foot between Space #1 and the rest of the park. Space #1 is at the top of the hill and is currently relatively flat and wooded. Visitors to the park can't easily access this area from other parts of the park. There is a narrow sidewalk that travels from the baseball field up the hill to Carroll Street and provides a mediocre, non-ADA accessible pedestrian connection to Space #1. Primary access to Space #1 would likely be from Carroll Street. Enhancements to connectivity, access, and visibility would be needed for Space #1 to feel like a continuation of Lyon Park and not a completely separate, fragmented, and independent space. See page 3-7 for a proposed design of Space #1.

## Recommendations for Space #1:

1. **Create a connection from Lyon Park Teen Center to Space #1.** There is an insufficient concrete sidewalk that connects the baseball field to Carroll Street. The sidewalk is narrow and very steep with an approximately eight or nine percent (8-9 percent) slope. A new pathway that is at least ten feet wide and is ADA accessible (less than five percent grade) would need to be constructed to provide access from the rest of Lyon Park to Space #1. An additional, second pathway that more directly connects the picnic shelter area to Space #1 should be developed in cooperation with future redevelopment of the former U.S. Army Reserve Center site. This second pathway is proposed in the adopted 2011 Trails and Greenways Master Plan as the Lyon Park to Forest Hills Park Connector Trail and is a high priority for the City. More discussion on the Connector Trail is provided on page 3-17.
2. **Selective vegetation thinning.** Space #1 is on top of a hill and to create visibility and promote a sense of connectedness with the rest of Lyon Park, selective vegetation thinning should be done on the hill sides under the guidance and direction of an arborist or other qualified professional. More

comments on vegetation management and slope protection are provided later in this chapter.

3. **Multi-purpose athletic and activity space.** Evaluate Space #1 for potential development into an athletic and activity space to support the growing demand for pickleball and futsal and an activity attractor for youth populations and the new residents that are projected for the neighborhoods surrounding Lyon Park. See Figure 3.4, a potential design for the Space.

**3a. Pickleball Courts.** Four to six pickleball courts are recommended to allow for tournaments, league play, and pick-up games. The dimensions of a standard pickleball court is 20 feet x 44 feet.

A clear zone/buffer around each pickleball court is needed as well as shade for spectators and reservation-controlled court lighting, all of which increase the footprint of the space around the courts but all are important to provide the best experience and accommodate reservations.

**3b. Futsal Court.** A futsal court is recommended to allow for league play and pick-up games. The dimensions of a standard futsal court can vary and a size of 130 feet x 80 feet is recommended for Lyon Park.

A clear zone/buffer around the court is needed along with shade for spectators and reservation-controlled court lighting, all of which increase the footprint of the space around the court but all are important to provide the best experience and accommodate reservations.



Example outdoor futsal court.



## Recommendations for Space #1 (cont'd)

**3c. Sand and Water Activity Space.** Pullen Park in Raleigh, North Carolina attracts visitors from all of the Triangle-area. According to Raleigh staff, the greatest attractors to the park are the Sand and Water Play area, the Carousel, and the Arts Center.

The City of Durham Parks and Recreation has received feedback that Durham should offer more interactive water features in City parks. Installing a sand and water play area similar to Pullen Park would create a distinct attraction for the City of Durham and would expand on existing programs that Durham offers in other locations. Creating sand and water play area in Space #1 would create a positive activity area between the athletic courts and future residential development. The sand and water play area would attract and serve different user groups and stimulate activity at different times of the day than the pickleball and futsal courts.

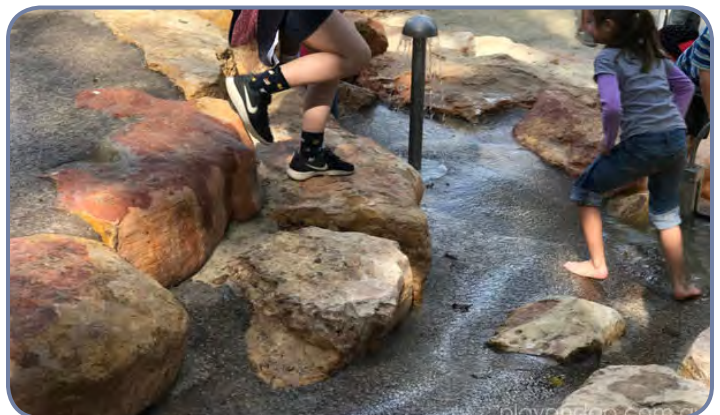
The multi-purpose athletic and activity space should be designed with deliberate attention to Crime Prevention Through Environmental Design (CPTED) concepts to provide for Natural Surveillance, Natural Access Control, Territorial Reinforcement, easy maintenance, and the overall safety of visitors. See chapter 2 for a discussion of these concepts and the CPTED section later in this chapter for the application of CPTED recommendations in other areas of Lyon Park. Site amenities such as signage, furniture, pavers, and pedestrian scale lighting in Space #1 should be consistent with other areas of Lyon Park. Pedestrian scale lighting should be provided along the improved pathways to Space #1 that are discussed in recommendation #1 on page 3-5.



Example sand and water play area in London, England park.



Example sand and water play area, photo from NRPA website.



Example sand and water play area in Portland, Oregon park.



Figure 3.4. Potential Design for Space #1 New Recreation

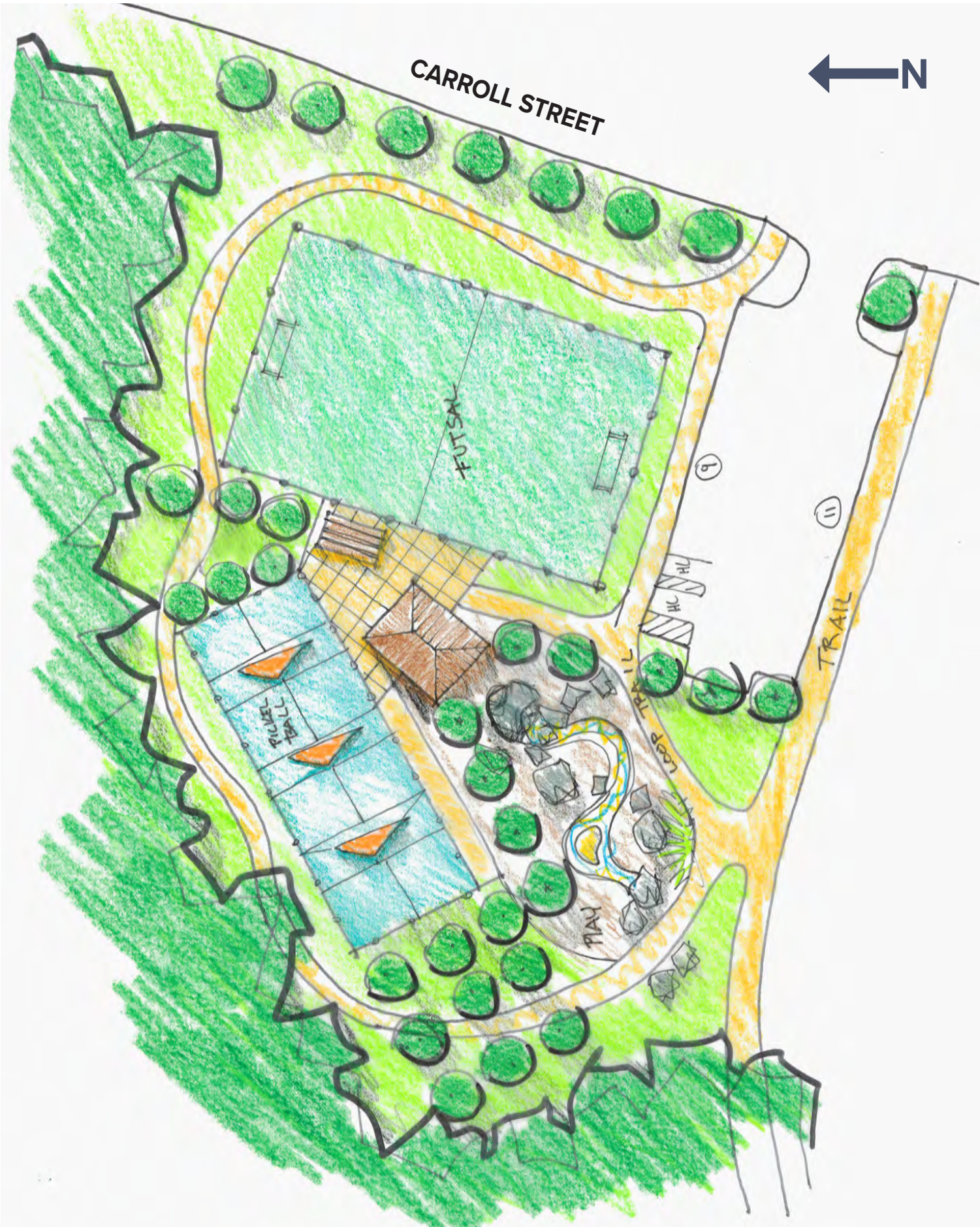
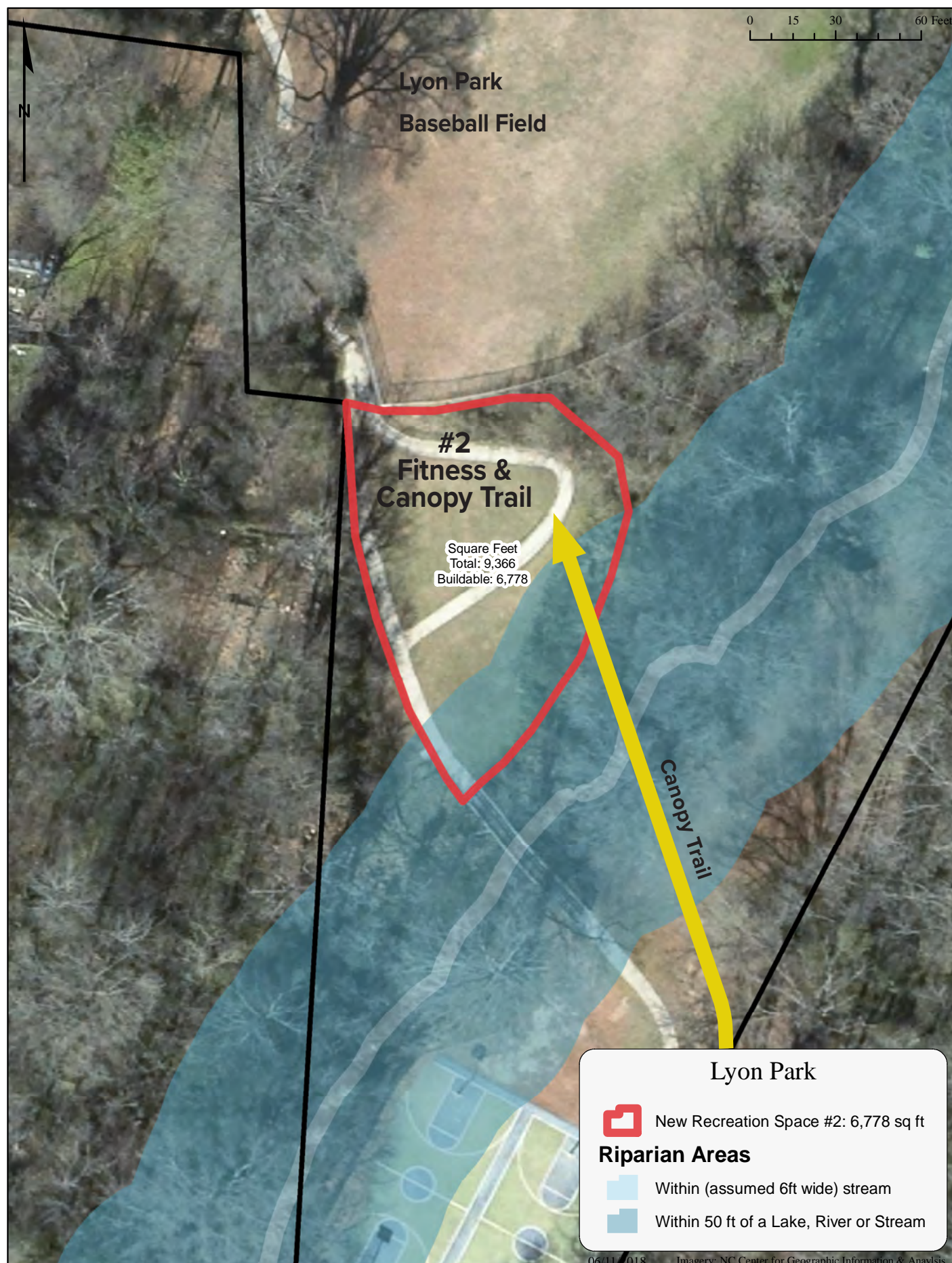




Figure 3.5. Space #2 Fitness & Canopy Trail





## Space #2: Fitness and Canopy Trail

Space #2, shown in Figure 3.5, is approximately 0.2 acres or 9,300 sq ft with a developable area of about 6,700 sq ft. This space is located south of the baseball field and currently is a significant area of concealment. Visitors to the park can't see into or through this space to other areas of the park. Potential threats or unsafe conditions in this space can't be identified prior to entering the space and that is a major challenge. Space #2 effectively fragments the park into two primary areas, the northern area that includes the baseball field and Teen Center and the southern area that contains the rest of Lyon Park's amenities and assets. Space #2 has an opportunity to serve as a focal point of the park, provide an opportunities for positive activity and engagement, and attract visitors to the park. There is a stream that travels north-south through the park and has a 50 foot riparian buffer that must be protected. Any improvements to Space #2 must not impact the riparian buffer and must meet any stormwater and other environmental regulations.

### Recommendations for Space #2:

1. **Selective thinning for vegetation that surround Space #2.** The dense vegetation surrounding Space #2 can be seen in the aerial imagery that is visible in Figure 3.5. Vegetation to the east and west of the existing concrete sidewalks should be cleared back to a minimum of 10 feet from the sidewalk. Vegetation along the outfield fence of the baseball field should be cleared back to a minimum of 10 feet from the fence line. Vegetation within the riparian buffer of the stream should be selectively thinned under the guidance and direction of a water quality specialist to protect the riparian buffer while also creating sightlines between Space #2 and the basketball courts. Vegetation management is more fully discussed later in this chapter.
2. **All-ages outdoor fitness equipment.** Outdoor fitness equipment provide many opportunities for maximum fitness and fun for park visitors of all ages. Installing outdoor fitness equipment in Space #2 creates an activity generator in addition to the ascent/descent of the Canopy Trail/tree line walkway. Placement and orientation of the outdoor fitness equipment is important to maximize opportunity for equipment users to feel safe while the users also provide natural surveillance of Space #2 and of the Tree Canopy Trail.

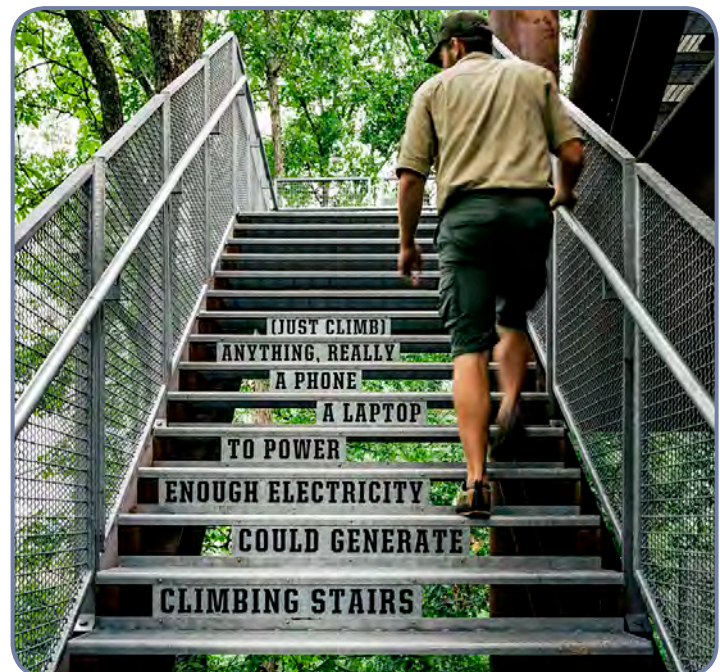
3. **Celebrated ascent/descent of Tree Canopy Trail (tree line walkway).** The Tree Canopy Trail (more fully described on page 3-13) would connect Space #2 and Space #3 and both spaces would need celebrated ascent/descent areas. Ideally, there would be a look-out platform at a mid-way point to provide park visitors with a chance to pause during their descent or ascent and rest or keep "eyes on the park" for natural surveillance while enjoying the Canopy Trail.



Example all-ages outdoor fitness equipment.



Example all-ages outdoor fitness equipment.



Example ascent/descent to tree line walkway.



Figure 3.6. Space #3 Music Garden & Canopy Trail





### Space #3: Music Garden & Tree Canopy Trail

Space #3, shown in Figure 3.6, is approximately 0.3 acres or 13,200 sq ft and is located adjacent to the bathroom building. This space is a long, rectangular, linear space that runs along the existing concrete sidewalk. The space is currently a large grass area between the bathroom building and the basketball courts. As a lifeless space, this area divides and isolates sections of the park instead of connecting them. This space has an opportunity to serve as a focal point of the park, provide opportunities for positive activity and engagement, and attract visitors to the park. Its close proximity to the picnic shelter is also taken into consideration during the development of recommendations. Page 3-18 discusses renovations to the existing bathroom that should be considered as part of the project for Space #3.

The same stream that travels through Space #2 also travels through Space #3. Any improvements to Space #3 must not impact the riparian buffer and must meet any stormwater and other environmental regulations. The riparian buffer overlaps the undeveloped space, resulting in a reduction of the developable square footage of Space #3 from 13,200 sq ft to 7,590 sq ft. This space should be designed to engage the diverse age groups of users that frequent Lyon Park. Opportunities for new, unique recreation assets are seemingly endless. A series of informal interviews with DPR Recreation Managers helped evaluate many different ideas and develop a short list of solutions that would be possible for Space #3 or some of the other New Recreation Spaces in Lyon Park. These suggestions would be distinctive to Lyon Park, would establish an identity for the park, and wouldn't be duplicative of assets in other City of Durham parks.

#### Rectangular Grass Area and Existing Bathroom Building





### Recommendations for Space #3:

1. **Outdoor sculptural or musical play equipment.** Installing sculptural and/or musical play equipment that have varying degrees of difficulty at different heights would offer a playful, colorful, and interesting activity for toddlers through teenagers. Some possible examples are shown below. A local example is the new Sound Garden at the Museum of Life & Science.
2. **Loop of colorful stepping stones.** Surround and create a walkway through the outdoor sculptural or musical equipment with a playful, colorful path of stepping stones. The design of the stepping stones could be created through a program with a local artist and the Durham Teen Center. Some possible examples are shown to the right.
3. **Additional seating and replacement seating.** Remove the existing seating throughout the park and install replacements. The existing benches vary in design and material. Replacing all existing seating, including the furniture in the picnic shelter with consistent and coordinated seating options will begin to establish an identity for Lyon Park. Some examples are shown as 3a and 3b on this page.



Examples of stepping stones created from re-used materials.



Examples of outdoor sound garden/musical equipment.



3a



3b

Examples of consistent and coordinated seating options.



4. **Canopy Trail/Tree line walkway.** DPR doesn't currently offer elevated walkways in the trees but peer communities in Virginia do. The Canopy Trail would provide park visitors with an aerial experience and view of the park from 20-30 feet in the air. Access to/from the Canopy Trail should be offered to connect the parking lot to the open area just south of the baseball field, shown as Space #2 in the map on page 3-8.

Currently, adequate ADA access circulation is provided throughout Lyon Park, the addition of a Canopy Trail wouldn't compromise the ADA compliance of Lyon Park, however, consideration should be given to making the Canopy Trail ADA accessible.



Example Canopy Trail in Lullwater Park, Atlanta.



Example ascent/descent to Canopy Trail in Washington state.



Example Canopy Trail, enjoyed by all ages.



Example Canopy Trail.



Example walkway in Atlanta that could be constructed as a Canopy Trail.



Example ascent/descent to elevated walkway.



Figure 3.7. Space #4 Art & Other Transitional Programming





### Space #4: Southern Park Expansion for Art & Other Transitional Programming

Space #4, shown in Figure 3.7, is approximately 0.7 acres or 31,300 sq ft and is located south of W. Lakewood Avenue, across the street from the main southern vehicular entrance to Lyon Park.

#### Recommendations for Space #4:

1. **Close and remove the diagonal section of Wells Street between W. Lakewood Avenue and Forestview Street.** Close Wells Street and prior to removing the asphalt, use the closed section of the street for transitional programming events such as Safety Town bicycle classes or Rough Truck Expos with City vehicles.

The eventual removal of the diagonal section of Wells Street (shown below in green hashing) would restore the connectivity between the triangular shaped parcel, labeled “A” below, and the larger, most southern parcel of Lyon Park, labeled “B” below. Once the diagonal section of Wells Street is removed, the former street area

can be converted to green space. The developable area of Space #4 (shown below in red) with Wells Street removed, is approximately 31,300 sq ft.

2. **Create celebrated entranceway to Lyon Park by establishing a transitional public art program.** Space #4 should be programmed to provide interactive experiences with public art. Work with the City’s Public Art Committee to establish a transitional program that has a schedule and themes. The neighborhood and the Durham Parks Foundation should be included in the development of the program. Neighborhood events should be scheduled to celebrate each new installation.
3. **Furniture and signage.** Include consistent seating (see page 3-12) and small tables in Space #4 to support the enjoyment of the public art program. Orient seating to maximize natural surveillance, natural access control, and territorial reinforcement. Signage should describe the overall art program and include a schedule of the transitions between installations. Signage should generate excitement about the current art exhibit and upcoming installations.

Figure 3.8. Southern Park Expansion for Art & Transitional Programming





Figure 3.9 Trail Network Expansion





### Trail Network Expansion

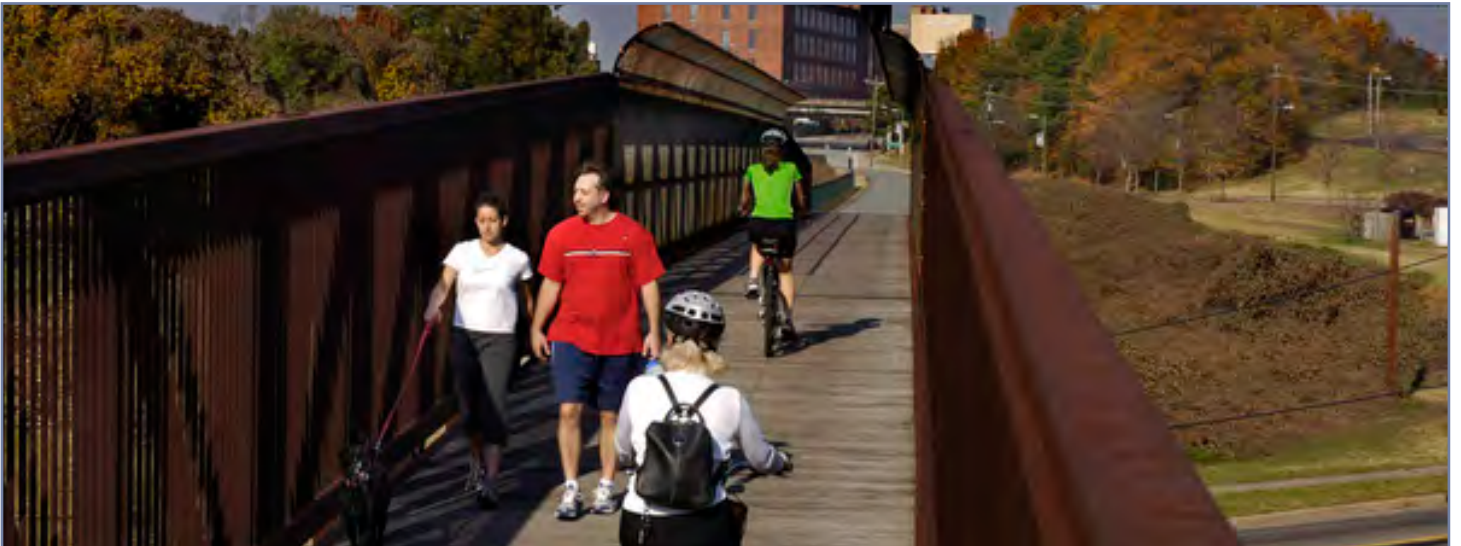
The City of Durham's existing trail network includes approximately 32 miles of paved shared use trails. According to a master plan developed in 2010-2011, the City has over 90 miles of shared use trails proposed within the city limits. One of the shared use trails that is proposed in the master plan is a Lyon Park - Forest Hills Connector Trail that would connect the American Tobacco Trail through Forest Hills Park and northwest to Lyon Park, see Figure 3.9. The construction of this connection trail is a high priority for the City.

The proposed shared use trail connection between Forest Hills Park and Lyon Park is an exciting trail project. It would provide safe passage and connectivity for trail users from the Durham Teen Center and the Community Family Life & Recreation Center at Lyon Park, south through the neighborhood to Forest

Hills Park and eventually the American Tobacco Trail. Expansion of the City's trail network to create a regional network of connected parks and to connect the parks with other destinations such as downtown and neighborhood areas will result in increased access to opportunities for recreation for all residents and visitors. The population characteristics of the Study Area presented in chapter 1 suggests that the proposed shared use trail would serve the diverse populations in this area of Durham.

Expansion of the City's trail network will require comparable expansion to the DPR Maintenance Division staff and equipment resources. See the maintenance section that begins on page 3-20 of this chapter for specific recommendations.

**The American Tobacco Trail (below) is a very popular shared use trail in Durham.**



**The Ellerbe Creek Trail (below) is a very popular shared use trail in Durham.**





## CPTED Recommendations

The goal of the CPTED assessment for Lyon Park is to provide the City of Durham with a diverse array of coordinated environmental design and management strategies that can be integrated into future redevelopment plans for Lyon Park that will reduce opportunities for crime and abnormal behaviors, increase safety and perception of safety for typical users of the park, and improve programs and reservations in the park (see NICP pg. 2-3).

The physical environment of the park must be of a character and quality that people will want to spend time there. The park must be perceived as a comfortable and safe place with clear boundaries, be of human scale, and have clusters of activity that are obviously distinct from one another while providing distinctive transitions and connections between areas of use. The park must be clean and free from the threat of crime.

The City should work with local law enforcement to develop safety improvement programs that will engage residents in the Study Area. Improvements to Lyon Park have the potential to initiate change in the Incidence Reports of crime for the Study Area presented in chapter I. The park should project an image that is clean and well maintained, well managed, organized, and that follows established national and industry standards of care. This will empower the property to be well cared for and make it more difficult for people to engage in acts of criminal behavior without drawing unwanted attention.

In addition to the recommendations for positive activity generators for Spaces 1 - 4 discussed earlier in this chapter, there are several crucial and high priority recommendations in each of the four CPTED concepts (Natural Surveillance, Natural Access Control, Territorial Reinforcement, and Maintenance).

### Natural Surveillance Recommendations

Natural surveillance into and within Lyon Park can be improved dramatically by implementing short term and longer term recommendations. The following recommendations should be considered, cost estimated, and prioritized by the Friends of Lyon Park group (see pg 4-1) of the City of Durham.

- Keep landscaping and other vegetation within the park growth trimmed to the CPTED “two foot/six foot” rule for vegetation management.

- Implement selective thinning program through the 50 ft riparian buffer along the stream, especially the area along the basketball courts, New Recreation Spaces #2 and #3, and the baseball field.
- Implement a phased (short, mid, and long term) plan for converting aggressive vegetation growth areas into more manageable areas. One solution is to transition some areas closest to human activity and travel to landscaping areas and brush mow other areas annually in the fall. No areas in Lyon Park (or any other park) should be converted to a high maintenance landscape area without the creation of additional of staff resources/capacity within the Park Maintenance Division.
- Clear vegetation that exists near entrances/exits to the park to a minimum of 10 feet away.
- Consider the installation of lighting on timers near bathrooms, the parking area, and along pathways to illuminate and guide foot traffic through the park. Lighting should be pedestrian scale, no more than 10-12 feet tall and generally be 50-60 feet apart. Lighting should be placed at closer intervals around curves and through areas of concealment to increase visibility and safety.
- If lighting is installed, all restroom entrances/exits should be well lit through the use of LED wall pack lighting.
- Widen pathways that will serve as the future Lyon Park Connector Trail should be widened to the width of ten feet and clear vegetation back a minimum of 10 feet from pathways. Visitors need opportunity to bypass or retreat if an area is perceived to be unsafe.
- New or additional seating areas near existing assets and future assets should have a design to deter sleeping and provide for bidirectional sitting and surveillance.

### Bathroom Facility Recommendations

- The bathroom building should open year round.
- The bathroom building should be reoriented to allow for observation of both entrances from multiple points in the park, including the parking lot.
- The bathroom building should have an indicator of occupancy or some degree of transparency (windows) to allow people approaching the building to identify occupancy prior to entering the building.



- Any internal partitions or doors in the bathroom building should be ceiling hung.
- Design of the bathroom building should allow for natural light and communication/calls for help.

### Natural Access Control Recommendations

Natural access control for Lyon Park can be improved dramatically by implementing short term, mid term, and longer term recommendations. The following recommendations should be considered, cost estimated, and prioritized by the Friends of Lyon Park group (see pg 4-1) of the City of Durham.

- Improve existing signage at entrances/exits and incorporate wayfinding signage within the park. Provide a new, overall signage program consisting of identification, regulatory, orientation, and interpretive signs to present a sense of uniformity and wholeness. A new system of consistent and appropriate signs is recommended to present a sense of uniformity and wholeness. This system can be viewed as an invitation into the park and as a statement of identity for Lyon Park. Consideration should be given to developing a comprehensive signage system that would be appropriate for implementation in all City parks and trails.
- Create emergency information signage for visitors of the park to be able to identify their location within the park in case of emergency.
- In areas where perimeter fencing doesn't exist, consider installing transparent fencing to define the boundaries of the park.
- Ingress and egress areas should be clearly signed.
- Signage, pavement markings, inlaid pavers, and/or short (two feet or less) landscaping should be used to guide visitors to different areas to enjoy the assets and amenities that Lyon Park offers.
- Consider implementing vegetation management plan for the park that defines types of vegetation to be installed. Similar to park amenities such as benches, tables, and trash receptacles, vegetation should be coordinated and consistent to increase sense of place and promote the identity of Lyon Park. More discussion on vegetation management is presented later in this chapter.
- Create positive activity generators in New Recreation Spaces 1 - 4 to reduce the distance between existing assets and help visitors enjoy more areas of the park.

- Use stepping stones to formalize the three informal footpaths that have been created from the parking lot down the hill toward the bathroom and connect these new pathways to the ascent/descent to the tree line walkway.
- Develop plan to construct a shared use trail through the undeveloped areas of Lyon Park that are south of W. Lakewood Avenue to connect to Forest Hills Park and the American Tobacco Trail.

### Territorial Reinforcement Recommendations

Many of the recommendations presented in the discussions for natural surveillance and natural access control will improve territoriality of Lyon Park because they will establish an identity, sense of place, pride, celebration, and ownership of the park. Additional recommendations listed below should be considered, cost estimated, and prioritized by the Friends of Lyon Park group (see pg 4-1) of the City of Durham.

- Work with the surrounding neighborhoods to design and construct at least two celebrated entryways that will capture attention, promote the identity of Lyon Park and guide visitors through those areas to enter the park.
- Collaborate with the City's Public Art Committee and the neighborhood to implement public art program in Lyon Park. Begin with Space #4 and expand the program into more areas of the park. Each installation or design should be created to be a focal point, to draw park visitor's attention to otherwise unprogrammed areas of the park and encourage them to engage in that particular space in the park which will help deter undesirable behavior.
- Create and highlight transition zones to distinguish private property from the park's public spaces. This will reinforce territoriality of the public space.
- Redesign the bathroom and picnic shelter to share consistent architecture and promote a consistent identity within the park.
- Enlarge the picnic shelter to better serve reservations and make Lyon Park a more popular destination.



- Develop additional programs in and around the existing assets and the new stepping stones and outdoor sculpture/musical equipment that draw visitors to the activity areas. One example would be educational signage or “music lessons” for how to play recognizable songs using the outdoor equipment.
- Add additional bicycle parking areas within the park to address safety concerns with leaving a bicycle at the perimeter of the park, even if the bicycle is locked.
- Program additional DPR activities and events in the park to promote the park and draw visitors.

### Maintenance Recommendations

Continued maintenance in accordance with a uniquely tailored maintenance, management, and operations plan for Lyon Park would allow for the continued use of the park for its intended purpose and helps to achieve the recommended goals for Natural Surveillance, Natural Access Control, and Territorial Reinforcement. The recommendations listed below should be considered and prioritized by the City of Durham for implementation based on available resources and additional future resources that must be made available as Lyon Park is expanded to offer additional amenities and assets.

- In 2018, DPR updated the Comprehensive Park and Trail Maintenance Plan (CPTMP) that details the Level of Service for Park Maintenance, Park Maintenance Standards, Vehicle and Equipment Standards, the Yearly Park Maintenance Calendar, Emergency and Severe Weather Responsibilities, and Maintenance Procedures for Selected Amenities and Facilities. The CPTMP is quite robust and has been recognized as a exemplary document by the Commission for Accreditation of Park and Recreation Agencies (CAPRA). However, several new tasks recently taken on by the maintenance unit do not have clearly defined levels of service. Examples of these are Trails Maintenance and general brush mowing. The CPTMP should be updated to show these levels of service and brush mow areas should be mapped into GIS as a separate layer to complement the mowing layers already digitized.
- The Park Maintenance Division does have an institutional, formal, and informal routine

maintenance practices in place that execute the directives set in the CPTMP. However, CPTMP is generally based on “one-size-fits-all” approach to parks maintenance that can result in missed opportunities to establish the identity and sense of place in each individual City of Durham park. The CPTMP should be updated to capture the informal and institutional knowledge of DPR maintenance staff. DPR maintenance staff know where areas of increased maintenance needs exist in each park and also where repair projects are needed that are beyond routine maintenance. Areas of increased maintenance needs and repair project areas should be clearly identified in the CPTMP to prioritize these areas for inclusion on Winter Project lists and funding request cycles such as the Capital Improvement Program and the Deferred Maintenance Program.

- Park and trail usage in Durham increases every year. The Park Maintenance Division should identify additional staff resource capacity needs, staff skill sets, and equipment needs to execute the CPTMP and maintain the historically high level of maintenance for the parks and trail system.

In particular, the City of Durham should consider the creation of weekend clean up crews. The new weekend clean up crews would help DPR respond to and provide for the increased usage of parks and trails and the ever growing number of picnic shelter reservations and events being held in parks.

Adding new amenities to Lyon Park will increase the service that the City provides to residents, attract new users, and increase the usage of Lyon Park. The increased usage will require increased clean-up by DPR maintenance staff.

The Lyon Park bathroom, as well as bathrooms in other parks are being renovated and converted into year-round bathrooms. Maintenance needs will increase as more bathrooms become open year round and additional custodial staff for these bathrooms should be included as in the creation of the weekend clean-up crew.

- Address the natural environment in Lyon Park by specifying, planting, and maintaining tree canopy and landscaping that will closely and naturally adhere to the CPTED “two foot/six foot” rule for vegetation to create good sight lines and prevent hiding or camping. The opportunity for longer-term solutions exist on the hillside adjacent to the parking lot to transition overgrown areas to



areas that are a combination of landscaped areas and brush mowed areas. All brush mowed areas should be mapped and added to the CPTMP.

- Vegetation understory growth, particularly invasive species, should be removed as soon as possible with available resources to open up views and increase the sense of safety for park visitors. All vegetation should be cleared back to a minimum of 10 feet from all pathways. Consider converting more areas in Lyon Park to mowable or lower-maintenance lawn/pasture or brush mow areas. Mowable areas may be possible and appropriate for many areas of the park, however there are significant changes in elevation between many areas of the park. These areas of elevation change are likely too steep to effectively maintain them in lawn/pasture. A phased approach is recommended to change these steep areas into more permanent plantings with native species that naturally remain less than two or three feet in height, could serve as habitat for birds, and effectively stabilize the steep slopes.

Converting unmaintained areas of Lyon Park into areas of maintenance is the equivalent of adding a new structure, facility, or asset into a park. When a new structure, facility, or asset is installed in a park, the maintenance and operations of the park increases to include the new feature. The same holds true for converting unmaintained areas into mowable areas or landscaped areas that will require additional maintenance.

Careful consideration and consultation with DPR Maintenance Division must occur during the identification of areas in Lyon Park to bring into maintenance schedules. Creating additional mowing and landscaping areas will increase maintenance personnel resources and time spent in Lyon Park.

- Maintain healthy trees by keeping them free of dead wood that could also fall on people or park elements. The reasons for pruning trees may include reducing hazards, maintaining, or improving tree health and structure, improving aesthetics, or satisfying specific needs such as: removing disease; removing dead, dying, interfering or obstructing branches; training young trees; and eliminating screened areas to discourage loitering, ambushing, and concealment. The uncontrolled growth of trees and weeds hides vandals and can cause toppling of park elements and widening of cracks in already damaged elements. Trees require pruning on a regular

basis to protect historic resources from damage by falling limbs. Too many trees or trees of the wrong type can create shade that is too dense to support and maintain a stabilizing ground cover, making the surface subject to erosion. The City's Urban Forestry resources are typically available to remove hazardous trees. Additional resources for inspection and management of Park Forestry resources should be considered.

- Address the built environment by providing safe and clean infrastructure. Infrastructure such as sidewalks that are known to have stormwater issues should be included in the CPTMP and in schedules of routine maintenance and those areas should be checked and maintained as quickly as possible after an inclement weather event.
- Consider partnering with the neighborhood or local groups for volunteer projects on park amenities and assets that show signs of deterioration such as rust. This will provide maintenance to those areas while also promoting a feeling of ownership and territorial reinforcement. Similar to adopt a park, but on a smaller scale, such as adopt a bench or kiosk.
- Recommendations for new positive activity generators and new shared use trails presented on pages 3-3 through 3-17 of this chapter should be considered in consultation with the DPR Maintenance Division. When a new recreation feature such as a trail, structure, facility, athletic area, or other type of asset is added to the parks and trail network the maintenance and operations resource needs will increase to properly care for the new assets.

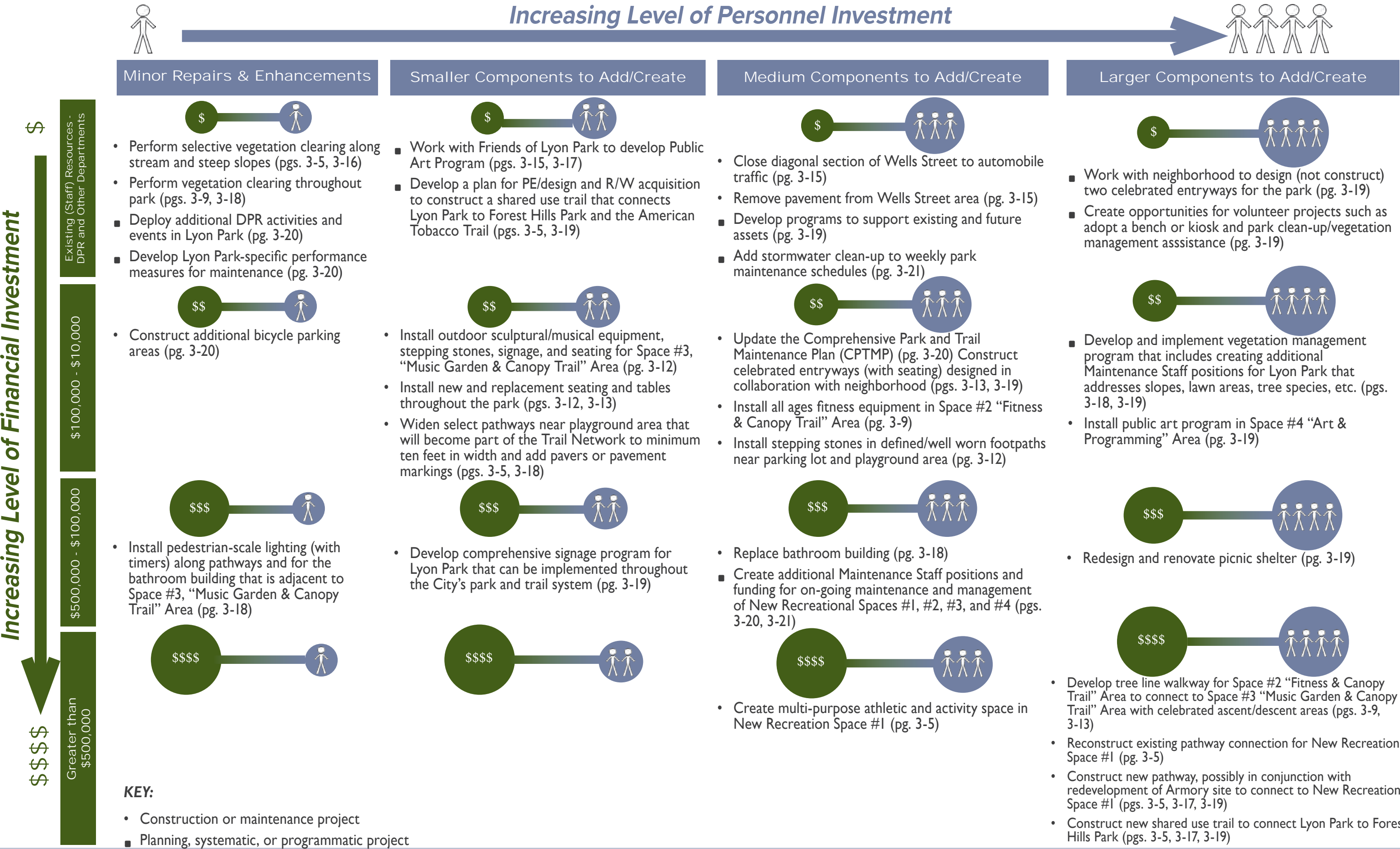


## ***Summary of Proposed Projects***

The first step in understanding the complex recommendations presented in this chapter is to organize recommendations according to the scale and the level of effort and/or funding that will be necessary for implementation. Figure 3.10 on page 3-23 presents the recommendations organized by levels of funding and effort needed and sets the foundation for the implementation program (chapter 4) that will support and lead to the prioritization of the recommendations (appendix A) and the phasing plan for development (appendix B).



Figure 3.10. Summary of Proposed Projects





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# I mplementation



## Purpose

To realize the vision set forth in the Lyon Park Plan, a realistic and achievable approach to project prioritization, phasing, and funding is required. Without a proper implementation strategy, the City of Durham doesn't have the direction needed to pursue funding resources. The implementation strategy presented in this chapter is designed to guide the City toward achieving the recommendations proposed in this plan.

Implementing the recommendations within this plan will require leadership and dedication to park facility development on the part of the neighborhoods, PAC #3, city departments, and the Durham City Council. Equally critical, and perhaps more challenging, will be meeting the need for a recurring source of revenue for the phasing of development and for the on-going maintenance and management needs. Even small amounts of local funding could be very useful and beneficial when matched with outside sources. Most importantly, the City of Durham need not accomplish the recommendations of this plan by acting alone—success will be realized through collaboration with state and federal agencies, the private sector, and non-profit organizations. Funding resources that may be available are presented in later in this chapter.

## Action Steps

Several action steps are crucial to the success of implementing the recommendations in the Lyon Park Plan (see chapter 3 and the summary on page 3-23). Completing the steps described in this chapter will legitimize the recommendations found in this plan and enable the City of Durham to identify and prioritize the funding needed to carry out those recommendations.

### 1. Collaborative Prioritization & Design Process for Recommendations

#### 1a. Create a Friends of Lyon Park Group

The prioritization process should be led by a Friends of Lyon Park Group comprised of members of the surrounding neighborhoods that represent PAC #3 with support from the Durham Parks Foundation and City of Durham DPR staff. When the Friends of Lyon Park Group assembles, DPR should clearly communicate the expectations of each Group member with regards to amount of time, number of meetings, and other responsibilities that will be expected of each Group member. Once the Group is established, DPR should establish a timeline for decisions to be made and share the schedule with the Group members.

#### 1b. Develop Prioritization Criteria

The collaborative prioritization process should begin with members of the Friends of Lyon Park Group creating a Project Prioritization subcommittee to identify and approve project prioritization criteria. Subcommittee members will then be asked to assign a score to each prioritization criterion. All of the scores should be averaged and a final weighted score for each criterion should be determined. Example prioritization criteria are listed below to help initiate the conversation but the subcommittee is encouraged to identify and approve criteria that are important to the neighborhood.

- Engages teen community
- Engages youth community
- Engages families
- Improves safety
- Improves attractiveness
- Increases reservations
- Funding is available in short term
- Increases interest in park
- Attracts new visitors
- Serves neighborhood interests / responds to concerns
- Protects environment
- Adds new opportunities for athletic experiences
- Adds new opportunities for education experience
- Promotes history and identity of park
- Improves connectivity to park and within park



### *1c. Review Designs for Project Areas (Spaces #1, #2, #3, #4)*

DPR staff and the Friends of Lyon Park Group should engage the neighborhoods and PAC #3 to review project recommendations for the design of Spaces #1 - #4. As mentioned in chapter 3, recommendations have been made for each space, but not every recommendation is prescriptive to a specific space. For example, input received may suggest that a recommendation for Space #2 may be better located in Space #3 or Space #4, or vice versa.

Input on the design and location of project recommendations should be solicited from the neighborhoods and PAC #3 by the Friends of Lyon Park Group. A final design proposal that represents the input from the Group, neighborhoods, and PAC #3, should be amended to the Lyon Park Plan into appendix A for quick and easy reference.

### *1d. Develop Planning Level Estimates or Opinion of Probable Costs for Project Recommendations*

DPR will take the input received during previous steps #1a-1c and work with other city departments to develop master planning level cost estimates for each project. The cost estimates will be based on several considerations, including **but not limited to**, project location, environmental constraints, internal resources, materials costs, contractual labor costs, and phasing. The development of cost estimates will assist with the prioritization of projects in step #1f below. Cost estimates for each project are necessary for DPR to identify and pursue of appropriate/feasible funding strategies for each project.

### *1e. Develop Strategy, Phasing, and/or New Initiative for Project Recommendations*

DPR will take the input received during previous steps #1a-1c and cost information gained during step #1d to develop an internal strategy to complete any project recommendations that can be done using existing staff capacity and DPR funding. DPR will also identify funding gaps and/or staff capacity constraints and develop a prioritized phasing plan (appendix B) and/or new initiative request to cover funding and staffing gaps and ultimately, achieve the recommendations in the Lyon Park Plan.

### *1f. Prioritize Project Recommendations*

Once recommendations for Lyon Park have been finalized by the Friends of Lyon Park Group the

weighted prioritization criteria should be applied to create a rank ordered list of project recommendations. The rank ordered list of projects should be organized by potential funding source and schedule such as short term (one to three years), mid-term (three to seven years) and long term (seven to 15 years). The project prioritization process will provide direction for DPR and the City to pursue funding opportunities.

## **2. Action Plan**

The priority-ranked list of projects described in step #1f will serve as the Action Plan for Lyon Park. The Action Plan will present recommended timelines (short, mid, and long term) for accomplishing the prioritized list of projects. The Action Plan will be added to appendix B of the Lyon Park Plan for quick and easy reference by DPR and the City during annual budget and grant cycles. See example Action Plan on page B-3.

## **3. Approve the Lyon Park Plan**

After each incremental step (#1a-#1f) of Step #1 have been completed and an Action Plan has been included in appendix B, DPR, with support from the Friends of Lyon Park and Durham Parks Foundation, will approve the complete Lyon Park Plan. Once DPR approves the Lyon Park Plan, the Plan should be incorporated into DPR's system-wide Parks and Recreation Master Plan. In 2017, DPR incorporated the standalone Aquatics Master Plan into the system-wide Parks and Recreation Master Plan, which sets precedent for a similar process to occur for the Lyon Park Plan.

## **4. Prepare Appropriate Funding Strategies**

Many federal, state, and private funding opportunities require that a project be included in an adopted master plan document. After the Lyon Park Plan has been approved and incorporated into DPR's Parks and Recreation Master Plan, DPR will be able to pursue funding for the prioritized project recommendations. With the guidance obtained from the Friends of Lyon Park Group and the information included in the Funding table that is presented on the last page of this chapter, DPR should begin to pursue funding opportunities for prioritized projects. DPR should begin to review departmental work programs to identify any available capacity to implement projects that won't require significant outside funding resource.

It is possible that some of the projects listed in the first row of the Summary of Projects table presented on page 3-23 could require little to no additional outside



funding to implement. However, some of those project may require the creation or allocation of additional internal/staff resources.

## **Funding Opportunities**

When considering possible funding sources for the recommendations in the Lyon Park Plan, it is important to remember that not all phases of a project and not all types of projects will be accomplished with a single funding source. It will be necessary to consider several sources of funding, that when combined, will support the implementation of the projects presented in chapter 3.

Funding sources can be used for a variety of activities, including: programs, planning, design, implementation, and maintenance. This section of chapter 4 outlines the most likely sources of funding from the federal, state, and local government levels as well as from the private and non-profit sectors. A summary table of funding sources is included at the end of this chapter. It should be noted that this section reflects the funding available at the time of writing the Lyon Park Plan. The funding amounts, fund cycles, and even the programs themselves are susceptible to change without notice.

## **Capital Improvement Program**

Annually, DPR submits prioritized project lists for consideration during the development of the City of Durham's Capital Improvement Program (CIP). The CIP is a statement of the City of Durham's policy regarding long range physical development. It is vital to the City because it is the principal planning tool designed to achieve urban growth and development. This program is developed for a six year period and is updated annually. To be included in the CIP, a project should require a total expenditure of at least \$100,000.

By providing a planned schedule, cost estimates, and location of public sector improvements, the CIP provides private sector decision makers with valuable information upon which to base investment decisions. It also provides local elected officials and the public with information for proposed public facilities and their associated costs. Ultimately, coordination of efficient partnerships of private and public investments will benefit the City.

## **The CIP Process**

The CIP process is the strategic prioritization process for the selection of capital projects that the City will fund over the next 10 years. **The strategic prioritization process is highly competitive with all projects in the city competing for a limited amount of funding. Very often, projects submitted to the CIP process are not funded on the first, second, or even third try.** The process involves the participation of senior management, the internal CIP advisory committee, and the citizen capital improvement panel. Keys to ensuring that the City's capital needs will continue to be met under restrictive financial limitations include asset management, effective project costing, and ongoing prioritization of capital projects.

## **CIP Preparation**

The CIP process includes a professional analysis of projects, the guidance of citizens, businesses, and community leaders and the leadership of the City Manager and City Council to produce a sound and balanced CIP for the upcoming budget cycle.

## **Utility and Impact Fees through the CIP Process**

### **Stormwater Utility Fees**

Shared use (greenway) trail property may be purchased with stormwater fees, if the property in question is used to mitigate floodwater or filter pollutants.

Stormwater charges are based on an estimate of the amount of impervious surface on a user's property. Impervious surfaces (such as rooftops and paved areas) increase both the amount and rate of stormwater runoff compared to natural conditions. Such surfaces cause runoff that directly or indirectly discharge into public storm drainage facilities and create a need for stormwater management services. Thus, users with more impervious surface are charged more for stormwater service than users with less impervious surface. The rates, fees, and charges collected for stormwater management services may not exceed the costs incurred to provide these services.

### **Open Space and Parks and Recreation Impact Fees**

Developers are required to pay impact fees through local enabling legislation. Impact fees are typically collected from developers or property owners at



the time of building permit issuance to pay for capital improvements that provide capacity to serve new growth. The intent of these fees is to avoid burdening existing customers with the costs of providing capacity to serve new growth so that “growth pays its own way.”

In North Carolina, impact fees are designed to reflect the costs incurred to provide sufficient capacity in the system to meet the additional needs of a growing community. These charges are set in a fee schedule applied uniformly to all new development. A developer may reduce the impacts (and the resulting impact fee) by paying for on- or offsite pedestrian improvements that will encourage residents/tenants to walk or use transit rather than drive. Establishing a clear nexus or connection between the impact fee and the project’s impacts is critical in avoiding a potential lawsuit.

### ***City of Durham Bond Options through the CIP Process***

#### **Bonds and Loans**

Bonds have been a very popular way for communities across the country to finance their pedestrian and shared use trail projects. A number of bond options are listed below. Contracting with a private consultant to assist with this program may be advisable. Since bonds rely on the support of the voting population, an education and awareness program should be implemented prior to any vote. Billings, Montana used the issuance of a bond in the amount of \$599,000 to provide the matching funds for several of their TEA-21 enhancement dollars. Austin, Texas has also used bond issues to fund a portion of its bicycle and trail system.

***Historically, the City of Durham has not used bonds to finance parks and recreation projects.*** Several types of bonds and loans are described here for completeness, in the event the city considered a bond to fund any future parks and recreation projects.

#### **Revenue Bonds**

Revenue bonds are bonds that are secured by a pledge of the revenues from a specific local government activity. The entity issuing bonds pledges to generate sufficient revenue annually to cover the program’s operating costs, plus meet the annual debt service requirements (principal and interest payment). Revenue bonds are not constrained by the debt ceilings of general obligation bonds, but they are generally more expensive than general obligation bonds.

#### **General Obligation Bonds**

Cities, counties, and service districts generally are able to issue general obligation (G.O.) bonds that are secured by the full faith and credit of the entity. A general obligation pledge is stronger than a revenue pledge, and thus may carry a lower interest rate than a revenue bond. The local government issuing the bonds pledges to raise its property taxes, or use any other sources of revenue, to generate sufficient revenues to make the debt service payments on the bonds. Frequently, when local governments issue G.O. bonds for public enterprise improvements, the public enterprise will make the debt service payments on the G.O. bonds with revenues generated through the public entity’s rates and charges. However, if those rate revenues are insufficient to make the debt payment, the local government is obligated to raise taxes or use other sources of revenue to make the payments. Bond measures are typically limited by time, based on the debt load of the local government or the project under focus. Funding from bond measures can be used for right-of-way acquisition, engineering, design, and construction of pedestrian and bicycle facilities. Voter approval is required.

#### **Special Assessment Bonds**

Special assessment bonds are secured by a lien on the property that benefits from the improvements funded with the special assessment bond proceeds. Debt service payments on these bonds are funded through annual assessments to the property owners in the assessment area.

#### **State Revolving Fund Loans**

Initially funded with federal and state money, and continued by funds generated by repayment of earlier loans, State Revolving Funds (SRFs) provide low interest loans for local governments to fund water pollution control and water supply related projects including many watershed management activities. These loans typically require a revenue pledge, like a revenue bond, but carry a below market interest rate and limited term for debt repayment (20 years).



## Deferred Maintenance Funding Program

Annually, DPR prioritizes project needs that can be funded through the Deferred Maintenance Funding Program. This funding is for repairing and replacing items in the parks in which maintenance was deferred for many years, even decades. This funding can't be used for any new items or additions to the parks, any project over \$100,000 or any repair or replacement of equipment in any Recreation Center Building.

### *Deferred Maintenance - Small Repairs*

This project category covers a host of park and trail items ranging from picnic tables to grills to retaining walls to drainage grates to pedestrian light fixtures. Work will be identified and performed by the four Facility Maintenance Technicians in DPR. Part of their task will be establishing a baseline of types, numbers, and costs of repairs that they perform.

### *Deferred Maintenance - Large Projects*

This project category includes asphalt and driveways in the parks, restrooms in parks, and play equipment, deferred park repairs over \$10,000 but below \$100,000. Recreation Centers, like all other occupied city facilities, remain on the General Services Department deferred maintenance list and are prioritized based on the current system.

### *Capital Projects / Renovations*

DPR can't include any projects in the Deferred Maintenance Funding Program that qualify as CIP projects over \$100,000. If the funding amount is large enough to qualify as a CIP project, these needs will be analyzed and submitted into the CIP process for next fiscal year. These projects will compete with all other CIP projects for funding. Examples of repairs/renovations for this category include court resurfacing projects, replacement of artificial turf fields, shared use trail repairs, park restrooms, and other new features or amenities for parks or trails.

## Other City of Durham Funding Options

### **Exactions**

Exactions are similar to impact fees in that they both provide facilities to growing communities. The difference is that through exactions it can be established that it is the responsibility of the developer to build the

greenway or pedestrian facility that crosses through the property, or adjacent to the property being developed.

### **In-Lieu-Of Fees**

As an alternative to requiring developers to dedicate on-site greenway or pedestrian facility that would serve their development, some communities provide a choice of paying a front-end charge for off-site protection of pieces of the larger system. Payment is generally a condition of development approval and recovers the cost of the off-site land acquisition or the development's proportionate share of the cost of a regional facility serving a larger area. Some communities prefer in-lieu-of fees. This alternative allows community staff to purchase land worthy of protection rather than accept marginal land that meets the quantitative requirements of a developer dedication but falls short of qualitative interests.

## Federal Funding Sources

Federal funding is typically directed through state agencies to local governments either in the form of grants or direct appropriations. Federal funding typically requires a local match of five percent to 50 percent, but there are sometimes exceptions; the American Recovery and Reinvestment Act stimulus funds did not require a local match. The following discussion details Federal funding sources that could be used to support transportation-related project recommendations for Lyon Park.

### **Federal-Aid Funding Sources**

In North Carolina, federal monies are administered through the North Carolina Department of Transportation (NCDOT) and Metropolitan Planning Organizations (MPOs). Most, but not all, of these programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system.

### *The Strategic Mobility Formula*

The Strategic Mobility Formula is part of the Strategic Transportation Investment (STI) law that was created by the State of North Carolina General Assembly, to replace North Carolina's Equity Formula. The Strategic Mobility Formula divides the North Carolina



## DURHAM PARKS AND RECREATION

Department of Transportation's budget into three classifications for distributing available transportation project revenue: State, Region, and Division.

**State:** 40 percent (\$6 billion over 10 years) will go to Statewide Mobility projects that include interstate highways, major U.S. and N.C. highways, Strategic Defense highways, airports with international passenger service or large numbers of passengers, and key freight service rail lines. This category of statewide projects will be entirely data-driven, meaning decisions will be based on data points such as traffic volume, crash statistics, economic competitiveness and freight movement. However, local officials will have the opportunity to submit candidate projects for consideration and share in their funding.

**Region:** 30 percent (\$4.5 billion over 10 years) will go to regional impact projects. The Regional category will allow local officials to provide their input on intrastate and regional projects. Because regional needs vary from one area of the state to another, there is flexibility to allow urban areas to address urban needs and rural areas to address rural needs.

**Division:** 30 percent (\$4.5 billion over 10 years) will be distributed equally to the state's 14 Transportation Divisions for projects that address local concerns, such as safety, congestion and connectivity. The Division category will allow local officials to provide at least 50 percent of the project score, which will allow them to greatly influence which projects get funded in their areas.

### *Strategic Prioritization in North Carolina*

The North Carolina Department of Transportation manages a strategic project prioritization process for the development of the STIP. The 3rd generation of this process, Prioritization 3.0 (P3.0) was underway during the passage of the STI law in 2014 and was a significant component of the development of the State's State Transportation Improvement Program (STIP) and the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) Transportation Improvement Program (TIP). Strategic prioritization uses transportation data as well as the input of local government partners and the public to generate scores and rankings of transportation projects across the state.

Transportation projects assigned to the three different categories (Statewide, Regional, Division) are scored

based on different formulas for each category. Each formula includes outputs of the state's quantitative data-driven process and the assignment of local input points that capture input solicited during public engagement events.

Bicycle and pedestrian transportation projects such as shared use trails, bicycle lanes, and sidewalks are eligible for scoring and funding in the Division Needs category. The graphic on the next page illustrates how bicycle and pedestrian projects are scored in the Division Needs Category. The graphic is current as of the 2017-2018 Prioritization process. NCDOT alters the scoring system with each new Prioritization process.

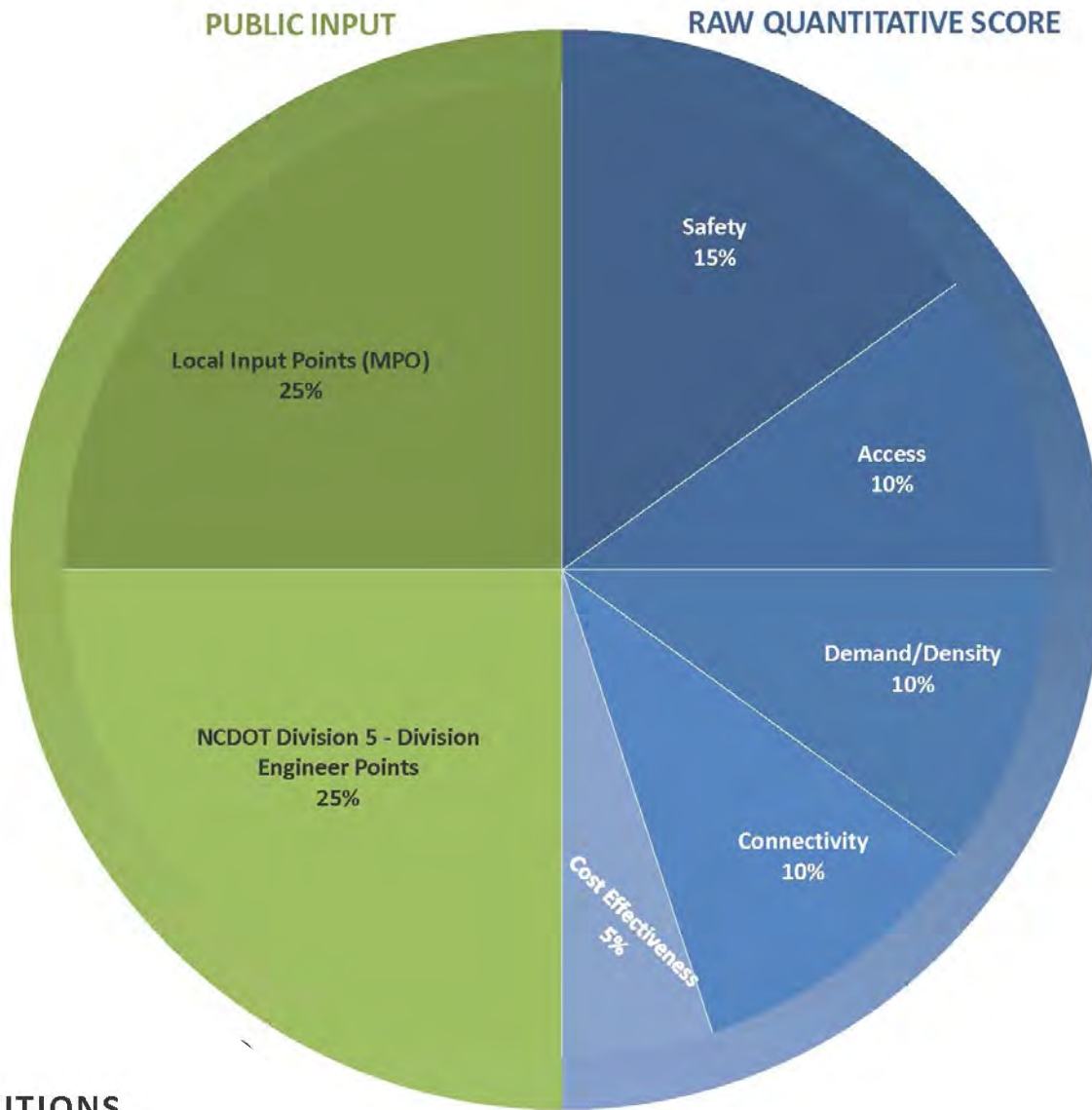
### *Recent City of Durham Shared Use Trail Projects Funded through the NCDOT Prioritization Process*

The City of Durham, through the DCHC MPO, has had success with having a select number of priority shared use trail projects funded through the NCDOT's Prioritization Process. The shared use trail projects that have been funded are listed below. The City hopes to continue to work with the DCHC MPO to submit priority shared use trail projects to the NCDOT's Prioritization Process for consideration of future federal funding.

- West Ellerbee Creek Trail Extension Phase II
- R. Kelly Bryant Bridge Trail
- Third Fork Creek Trail Phase I
- Third Fork Creek Trail Phase II
- Durham Belt Line
- Sandy Creek Trail Phase I



Figure 4.1. NCDOT Prioritization Process 5.0 Scoring Model (2017-2018)



## DEFINITIONS

### Safety:

(Number of crashes x 40%) + (Posted speed limit x 20%) + (Crash severity x 20%) + (Project safety benefit x 20%)

### Access:

(Destination Type x 50%) + (Distance to Prime Destination x 50%)

### Demand/Density:

# of households and employees per square mile near facility

### Connectivity:

Degree of bike/ped separation from roadway, connectivity to a similar or better project type, part of/ connection to a national/state/regional bike route

### Cost Effectiveness:

$(\text{Safety} + \text{Access} + \text{Demand} + \text{Connectivity}) / \text{Cost to NCDOT}$

### Local Input Points:

Points that the MPO assigns to a project to reflect local priorities and public input received by the MPO during the SPOT process.

### NCDOT Division Engineer Points:

Points that the NCDOT assigns to a project to reflect local priorities and public input received by NCDOT during the SPOT process.

## ***Funds from Private Foundations and Organizations***

Many communities have solicited greenway and pedestrian infrastructure funding assistance from private foundations and other conservation-minded benefactors. Below are several examples of private funding opportunities available in North Carolina.

Government and private funding can change priorities and eligibility requirements. Always check funding resources for new information and deadlines.

### **Land for Tomorrow Campaign**

Land for Tomorrow is a diverse partnership of businesses, conservationists, farmers, environmental groups, health professionals and community groups committed to securing support from the public and General Assembly for protecting land, water and historic places. The campaign was successful in 2013 in asking the North Carolina General Assembly to continue to support conservation efforts in the state. The state budget bill includes about \$50 million in funds for key conservation efforts in North Carolina. Land for Tomorrow works to enable North Carolina to reach a goal of ensuring that working farms and forests; sanctuaries for wildlife; land bordering streams, parks and greenways; land that helps strengthen communities and promotes job growth; and historic downtowns and neighborhoods will be there to enhance the quality of life for generations to come.

### **The Robert Wood Johnson Foundation**

The Robert Wood Johnson Foundation was established in 1972 and today it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:

- To assure that all Americans have access to basic health care at a reasonable cost
- To improve care and support for people with chronic health conditions
- To promote healthy communities and lifestyles
- To reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs

## **North Carolina Community Foundation**

The North Carolina Community Foundation, established in 1988, is a statewide foundation seeking gifts from individuals, corporations, and other foundations to build endowments and ensure financial security for nonprofit organizations and institutions throughout the state. Based in Raleigh, North Carolina, the foundation also manages a number of community affiliates throughout North Carolina, that make grants in the areas of human services, education, health, arts, religion, civic affairs, and the conservation and preservation of historical, cultural, and environmental resources. The foundation also manages various scholarship programs statewide.

### **KaBOOM!**

KaBOOM! is a national non-profit dedicated to bringing balanced and active play into the daily lives of all kids, particularly those growing up in poverty in America. KaBOOM! is specifically focused upon play for children. They offer several grants that can assist in the installation of new playground equipment within a park. The “Build It with KaBOOM!” grants pair a corporate funding partner with the community at KaBOOM! to install a new playground with an all-volunteer workforce. The “Build It Yourself” program offers up to \$15,000 for playground equipment to be installed by the community. The “Creative Play” program grants Imagination Playground and/or Rigamajig equipment to communities. Applications to KaBOOM! are accepted year-round. The City of Durham has received several “Build it with KaBOOM!” grants.

### **National Recreation and Park Association**

National Recreation and Park Association (NRPA) is the leading non-profit organization dedicated to the advancement of public parks, recreation and conservation. NRPA posts a significant number of funding opportunities that benefit recreation programming and parks throughout the year. These opportunities include initiatives such as “Parks Build Community” offering \$20,000 grants to make a singular improvement to a park. They also offer training grants for recreation and maintenance staff. The NRPA website is an excellent resource for funding opportunities.



## United States Soccer Foundation

The United States Soccer Foundation (USSF) provides funding for soccer fields and futsal pitches. In addition to funding these large items they have grant programs for irrigation systems, lighting and programming equipment. USSF is dedicated to growing the game of soccer. The foundation has multiple deadlines annually.

## Triangle Community Foundation

Triangle Community Foundation was established in 1983 with a single gift of \$1,000 from Dr. George Hitchings. The Foundation defines the Triangle as Durham, Chatham, Orange and Wake Counties. The Triangle Community Foundation manages over \$249 million in assets through a long term investment strategy that protects and grows the funds. The funding focus of the competitive grants is on the Arts, Community Development, Environmental Conservations and Youth Literacy. In addition they manage over 850 philanthropic funds ranging in size and focus of donor driven initiatives. TCF has many different grant deadlines throughout each year.

## North Carolina Parks and Recreation Trust Fund (PARTF)

The North Carolina Parks and Recreation Trust Fund was established by the NC General Assembly in 1994 to fund improvement in the state's park system, fund grants for local governments and increase public access to state beaches. The Parks and Recreation Authority, a fifteen-member appointed board, was also created to allocate funds from PARTF to the state parks and to the grants program for local governments. The Authority has a dedicated revenue stream from an annual 75% share of the NC real estate transfer tax. 30% of the annual funding must be used to provide local government agencies with dollar-for-dollar matched grants that may be used to acquire land and/or complete capital projects. Grants are awarded annually.

## Walmart State Giving Program

The Walmart Foundation financially supports projects that create opportunities for better living. Grants are awarded for projects that support and promote education, workforce development/economic opportunity, health and wellness, and environmental sustainability. Both programmatic and infrastructure projects are eligible for funding. State Giving Program grants start at \$25,000, and there is no maximum

award amount. The program accepts grant applications on an annual, state by state basis January 2nd through March 2nd.

## Target Corporation Grants

The Target Corporation offers youth soccer grants that can fund equipment, uniforms and training for volunteer coaches. They also have a Public Safety funding program that parks and trails may qualify for. Each Target grant program has separate deadlines. It is best to check the website for deadlines.

## The Rite Aid Foundation Grants

The Rite Aid Foundation is a foundation that supports projects that promote health and wellness in the communities that Rite Aid serves. Award amounts vary and grants are awarded on a one year basis to communities in which Rite Aid operates. A wide array of activities are eligible for funding, including infrastructural and programmatic projects.

## Z. Smith Reynolds Foundation

This Winston-Salem-based Foundation has been assisting the environmental projects of local governments and non-profits in North Carolina for many years. They have two grant cycles per year and generally do not fund land acquisition. However, they may be able to offer support in other areas of open space and greenways development.

## Bank of America Charitable Foundation, Inc.

The Bank of America Charitable Foundation is one of the largest in the nation. The primary grants program is called Neighborhood Excellence, which seeks to identify critical issues in local communities. Another program that applies to greenways is the Community Development Programs, and specifically the Program Related Investments. This program targets low and moderate income communities and serves to encourage entrepreneurial business development.

## **Waste Management Charitable Giving Program**

The Waste Management Charitable Giving Program is committed to making communities safer, cleaner, and better places to live and work. Support is provided to nonprofit organizations in communities in which the company operates. There are no posted deadlines.

## **Duke Energy Foundation**

Funded by Duke Energy shareholders, this non-profit organization makes charitable grants to selected non-profits or governmental subdivisions. Each annual grant must have:

- An internal Duke Energy business “sponsor”
- A clear business reason for making the contribution

The grant program has three focus areas: Environment and Energy Efficiency, Economic Development, and Community Vitality. Related to this project, the Foundation would support programs that support conservation, training and research around environmental and energy efficiency initiatives.

## **American Greenways Eastman Kodak Awards**

The Conservation Fund’s American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities. The Trust for Public Land

Land conservation is central to the mission of the Trust for Public Land (TPL). Founded in 1972, the Trust for Public Land is the only national nonprofit working exclusively to protect land for human enjoyment and well-being. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities.

## **National Trails Fund**

American Hiking Society created the National Trails Fund in 1998; the only privately supported national grants program providing funding to grassroots

organizations working toward establishing, protecting and maintaining foot trails in America. 73 million people enjoy foot trails annually, yet many of our favorite trails need major repairs due to a \$200 million backlog of badly needed maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America’s cherished public trails. To date, American Hiking has granted more than \$240,000 to 56 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project.

Projects the American Hiking Society will consider include:

- Securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements.
- Building and maintaining trails which will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage.
- Constituency building surrounding specific trail projects - including volunteer recruitment and support.

## **The Conservation Alliance**

The Conservation Alliance is a non-profit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. Grants are typically about \$35,000 each. Since its inception in 1989, The Conservation Alliance has contributed \$4,775,059 to environmental groups across the nation, saving over 34 million acres of wild lands.

The Conservation Alliance Funding Criteria:

- The Project should be focused primarily on direct citizen action to protect and enhance our natural resources for recreation.
- The Alliance does not look for mainstream education or scientific research projects, but rather for active campaigns.
- All projects should be quantifiable, with specific goals, objectives and action plans and should include a measure for evaluating success.
- The project should have a good chance for closure or significant measurable results over a fairly short term (one to two years).
- Funding emphasis may not be on general operating expenses or staff payroll.



## National Fish and Wildlife Foundation (NFWF)

The National Fish and Wildlife Foundation (NFWF) is a private, nonprofit, tax-exempt organization chartered by Congress in 1984. The National Fish and Wildlife Foundation sustains, restores, and enhances the Nation's fish, wildlife, plants and habitats. Through leadership conservation investments with public and private partners, the Foundation is dedicated to achieving maximum conservation impact by developing and applying best practices and innovative methods for measurable outcomes.

The Foundation awards matching grants under its Keystone Initiatives to achieve measurable outcomes in the conservation of fish, wildlife, plants and the habitats on which they depend. Awards are made on a competitive basis to eligible grant recipients, including federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Project proposals are received on a year-round, revolving basis with two decision cycles per year. Grants generally range from \$50,000-\$300,000 and typically require a minimum 2:1 non-federal match.

Funding priorities include bird, fish, marine/coastal, and wildlife and habitat conservation. Other projects that are considered include controlling invasive species, enhancing delivery of ecosystem services in agricultural systems, minimizing the impact on wildlife of emerging energy sources, and developing future conservation leaders and professionals.

## Blue Cross Blue Shield of North Carolina Foundation

Blue Cross Blue Shield (BCBS) focuses on programs that use an outcome approach to improve the health and well-being of residents. The Health of Vulnerable Populations grants program focuses on improving health outcomes for at-risk populations. The Healthy Active Communities grant concentrates on increased physical activity and healthy eating habits. Eligible grant applicants must be located in North Carolina, be able to provide recent tax forms and, depending on the size of the nonprofit, provide an audit.

## Duke University: Doing Good in the Neighborhood

Triangle nonprofits can apply for "Duke Doing Good" funding through the campaign's Community Care Fund

competitive grant making program. Since the fund was created in 2009, dozens of nonprofits have received grants for projects meeting significant community needs.

As Duke Employee contributions to the Community Care Fund grow, so does the reach and impact of this grant program. The annual grant cycle is open for applications from July 1-25. Awards range from \$1,000-\$5,000. Current funding priorities include Affordable Housing, Child Development & Education, Environment & Sustainability, Food Access & Education, Healthy Communities and Young Adult Empowerment & Education.

## Alliance for Biking & Walking: Advocacy Advance Grants

Bicycle and pedestrian advocacy organizations play the most important role in improving and increasing biking and walking in local communities. Advocacy Advance Grants enable state and local bicycle and pedestrian advocacy organizations to develop, transform, and provide innovative strategies in their communities. With sponsor support, the Alliance for Biking & Walking has awarded more than \$500,000 in direct grants, technical assistance, and scholarships to advocacy organizations across North America since the Advocacy Advance Grant program's inception. In 2009 and 2010, these one-year grants were awarded twice annually to startup organizations and innovative campaigns to dramatically increase biking and walking. The Advocacy Advance Partnership with the League of American Bicyclists also provides necessary technical assistance, coaching, and training to supplement the grants.

## Bikes Belong Grants

The Bikes Belong Grant program funds important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. These projects include greenways and rail trails accessible by pedestrians and bicyclists. Applicants can request a maximum amount of \$10,000 for their project, and priorities are given to areas that have not received Bikes Belong funding in the past three years.

A new Bikes Belong opportunity is Community Partnership Grants. These grants are designed to foster and support partnerships between city or county governments, non-profit organizations, and local businesses to improve the environment for

bicycling in the community. Grants will primarily fund the construction or expansion of facilities such as bike lanes, trails, and paths. The lead organization must be a non-profit organization with IRS 501(c)3 designation or a city or county government office.

### Corporate and Individual Donations

The Durham Parks Foundation was formed in 2015 to preserve, strengthen and expand parks, trails, open space and recreational opportunities in Durham through diverse community involvement, fundraising, partnerships and education. The Foundation works with neighborhoods and groups to raise funds for projects and programming and serves as the fiscal agent for these funds. Donations to the Foundation are tax-deductible to the extent law allows. The Foundation can hold funds donated for a specific project until there is enough to complete the project. In addition to working with neighborhoods and partners, the Foundation initiates its own projects to benefit the community.

### Local Trail Sponsors

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Valuable in-kind gifts include donations of services, equipment, labor, or reduced costs for supplies.

### Corporate Donations

Corporate donations are often received in the form of liquid investments (i.e. cash, stock, bonds) and in the form of land. Municipalities typically create funds to facilitate and simplify a transaction from a corporation's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented.

### Private Individual Donations

Private individual donations can come in the form of liquid investments (i.e. cash, stock, bonds) or land. Municipalities typically create funds to facilitate and simplify a transaction from an individual's donation to the given municipality. Donations are mainly received

when a widely supported capital improvement program is implemented.

### Fundraising / Campaign Drives

Organizations and individuals can participate in a fundraiser or a campaign drive. It is essential to market the purpose of a fundraiser to rally support and financial backing. Often times fundraising satisfies the need for public awareness, public education, and financial support.

### Volunteer Work

Residents and other community members are excellent resources for garnering support and enthusiasm for a greenway corridor or pedestrian facility. Furthermore volunteers can substantially reduce implementation and maintenance costs. Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fund-raising, maintenance, and programming needs.

DPR's Adopt-a-Park, Adopt-a-Trail program is a program allowing individuals or groups the opportunity to adopt a portion of trail or a park and provide a commitment to complete clean ups and/or other projects. In return, the department installs signage recognizing the adopter.



# P ublic Engagement



## **Purpose**

Public support for the Lyon Park Plan and neighborhood collaboration for the prioritization of project recommendations are crucial to the long term success of the Lyon Park Plan. DPR provided various mediums and resources so that all members of the Study Area for Lyon Park had the opportunity to participate in decisions that would guide the future development of the park.

The components of public engagement for the Lyon Park Plan were as follows:

- Creation of the Friends of Lyon Park Group
- Creation of the Project Prioritization Subcommittee of the Friends of Lyon Park Group
- Project prioritization process led by the Subcommittee of the Friends of Lyon Park for recommendations in the Lyon Park Plan
- Events: List all of the public events held in the park, PAC meetings that DPR attended, etc.
- Adjacent property owner involvement
- Project information cards
- *Section Under Development: Content will be updated as planning process and collaboration with neighborhood continues*

## **Friends of Lyon Park**

The Friends of Lyon Park Group was formed to guide and influence the implementation of the recommendations in this Lyon Park Plan.

*Section Under Development: Content will be updated as planning process and collaboration with neighborhood continues.*

## **Prioritization Criteria**

*Section Under Development: Content will be*

*updated as planning process and collaboration with neighborhood continues. The Prioritization Criteria developed by Friends of Lyon Park Group will be added to this section.*

## **Project Prioritization and Suggestions**

*Section Under Development: Content will be updated as planning process and collaboration with neighborhood continues. The List of Prioritized Projects developed by Friends of Lyon Park Group will be added to this section.*

## **Opinion of Probable Costs for Project Recommendations**

*Section Under Development: Content will be updated as planning process and collaboration with neighborhood continues. The List of Prioritized Projects developed by Friends of Lyon Park Group will be evaluated and opinions of probable costs for each project will be added to this section.*

APPENDIX TO BE UPDATED TO INCLUDE PUBLIC PRIORITIZATION PROCESS  
INFORMATION



# Action Plan



## ***Purpose***

An Action Plan helps guide DPR and the City through the execution of the recommendations presented in the Lyon Park Plan. An Action Plan presents the recommendations as a prioritized phasing plan based on short, mid, and long term project development timelines and available funding opportunities. The Action Plan is a quick reference document to assist DPR and the City with decisions during funding and grant cycles.

## ***Phasing Plan***

### **Prioritized Phasing Plan for Project Recommendations**

Section Under Development: Content will be updated as planning process and collaboration with neighborhood continues.

Summary Table on page B-3 will be updated to reflect finalized Action Plan.

APPENDIX TO BE UPDATED TO INCLUDE ACTION PLAN TABLE - SHORT, MID,  
AND LONG TERM PROJECT PHASING PLAN



Figure B.1. Action Plan for Lyon Park Improvements

PROPOSED TIMELINE

SHORT TERM  
(1 - 3 YEARS)

MID TERM  
(3 - 7 YEARS)

LONG TERM  
(7 - 15 YEARS)

FUNDING STRATEGY			
OPERATIONS BUDGETS	CAPITAL IMPROVEMENT PROGRAM	GRANTS (federal, state, local, non-profit)	VOLUNTEERS/DONATIONS
<ul style="list-style-type: none"><li>• Perform selective vegetation clearing along stream and steep slopes (pgs. 3-5, 3-16)</li><li>• Perform vegetation clearing throughout park (pgs. 3-9, 3-18)</li><li>■ Deploy additional DPR activities and events in Lyon Park (pg. 3-20)</li><li>■ Develop Lyon Park-specific performance measures for maintenance (pg. 3-20)</li><li>■ Update the Comprehensive Park and Trail Maintenance Plan (CPTMP) (pg. 3-20)</li><li>■ Work with Friends of Lyon Park to develop Public Art Program (pgs. 3-15, 3-17)</li></ul>	<ul style="list-style-type: none"><li>• Replace bathroom building (pg. 3-18)</li><li>• Install pedestrian-scale lighting (with timers) along pathways and for the bathroom building (pg. 3-18)</li><li>• Install public art program in Space #4 “Art &amp; Programming” Area (pg. 3-19)</li></ul>	<ul style="list-style-type: none"><li>• Install all ages fitness equipment in Space #2 “Fitness &amp; Canopy Trail” Area (pg. 3-9)</li><li>• Install stepping stones in defined/well worn footpaths near parking lot and playground area (pg. 3-12)</li><li>• Install outdoor sculptural/musical equipment, stepping stones, signage, and seating for Space #3 “Music Garden &amp; Canopy Trail” Area (pg. 3-12)</li><li>• Install new and replacement seating and tables throughout the park (pgs. 3-12, 3-13)</li></ul>	<ul style="list-style-type: none"><li>• Construct additional bicycle parking areas (pg. 3-20)</li><li>■ Work with neighborhood to design two celebrated entryways for the park (pg. 3-19)</li><li>■ Create opportunities for volunteer projects such as adopt a bench or kiosk and park clean-up/vegetation management assistance (pg. 3-19)</li></ul>
<ul style="list-style-type: none"><li>• Close diagonal section of Wells Street to automobile traffic (pg. 3-15)</li><li>• Remove pavement from Wells Street area (pg. 3-15)</li><li>■ Develop programs to support existing and future assets (pg. 3-19)</li><li>■ Add stormwater clean-up to weekly park maintenance schedules (pg. 3-21)</li><li>■ Develop and implement vegetation management program that includes creating additional Maintenance Staff positions for Lyon Park that addresses slopes, lawn areas, tree species, etc. (pgs. 3-18, 3-19)</li><li>■ Create additional Maintenance Staff positions and funding for on-going maintenance and management of New Recreational Spaces #1, #2, #3, and #4 (pgs. 3-20, 3-21)</li></ul>	<ul style="list-style-type: none"><li>■ Develop a plan for PE/design and R/W acquisition to construct a shared use trail that connects Lyon Park to Forest Hills Park and the American Tobacco Trail (pgs. 3-5, 3-19)</li><li>• Widen select pathways that will become part of the Trail Network to minimum ten feet in width and add pavers or pavement markings (pgs. 3-5, 3-18)</li><li>• Redesign and renovate picnic shelter (pg. 3-19)</li><li>• Construct celebrated entryways (with seating) designed in collaboration with neighborhood (pgs. 3-13, 3-19)</li></ul>	<ul style="list-style-type: none"><li>• Develop comprehensive signage program for Lyon Park that can be implemented throughout the City’s park and trail system (pg. 3-19)</li></ul>	
	<ul style="list-style-type: none"><li>• Create multi-purpose athletic and activity space in New Recreation Space #1 (pg. 3-5)</li><li>• Develop canopy trail/tree line walkway for Space #2 “Fitness &amp; Canopy Trail” Area to connect to Space #3 “Music Garden &amp; Canopy Trail” Area with celebrated ascent/descent areas (pgs. 3-9, 3-13)</li></ul>	<ul style="list-style-type: none"><li>• Reconstruct existing pathway connection for New Recreation Space #1 (pg. 3-5)</li><li>• Construct new pathway, possibly in conjunction with redevelopment of Armory site to connect to New Recreation Space #1 (pgs. 3-5, 3-17, 3-19)</li><li>• Construct new shared use trail to connect Lyon Park to Forest Hills Park (pgs. 3-5, 3-17, 3-19)</li></ul>	

- KEY:
- Construction or maintenance project
  - Planning, systematic, or programmatic/operational project

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