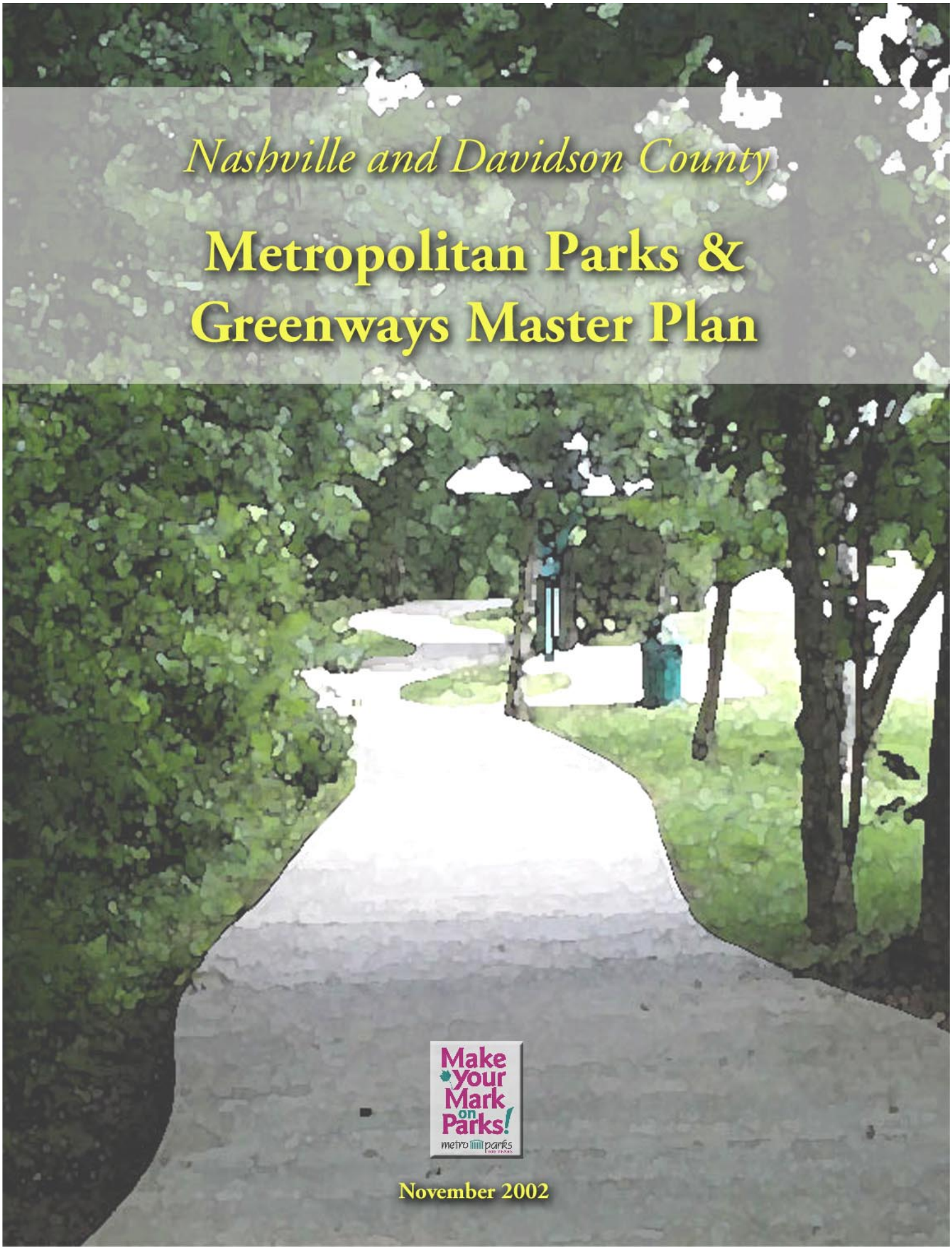
Nashville and Davidson County
Metropolitan Parks &
Greenways Master Plan
Make your Mark on Parks!
metro parks
November 2002

Nashville and Davidson County

Metropolitan Parks & Greenways Master Plan

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Metropolitan Greenways Commission
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Nashville and Davidson County

Metropolitan Parks & Greenways Master Plan

November 2002

Make your Mark on Parks!

metro parks 100 YEARS

EXECUTIVE SUMMARY

INTRODUCTION

Nashville marked the 100th anniversary of its parks system in 2001. In recognition of this milestone, and to guide the system well into the future, Mayor Bill Purcell commissioned the first-ever parks and greenways master plan. A consultant team, led by Wallace Roberts & Todd, LLC, was hired to evaluate existing parks and greenways, and prepare a plan for the future development of the system. The recommendations within the Plan were developed through extensive public input, an assessment of existing conditions, and a review of demographic projections as well as recreational trends. The Master Plan is designed to guide the maintenance of existing resources, as well as plan for the development of new parks, greenways, athletic activities, cultural activities, and recreational programs within the community for the next 20 years.

The projected population and commercial growth of Nashville over the next 20 years will challenge the city to provide adequate recreational opportunities and park facilities for its citizens. This plan provides the community with a guide to meet future recreational needs. The population growth and the accompanying land development will continue to reduce options available to Metro regarding additions and improvements to the parks and greenways system. Therefore, it is an important time to consider and assess the current state of Metro's parks, and to map out a guide to preserving and adequately maintaining the city's land and facilities and providing for the future parks and facilities. Ultimately, the quality of life for all citizens in 2020 will reflect the early, aggressive actions taken to implement this Plan.

While the Plan reflects extensive research, facility assessment and public involvement, including 9 public meetings resulting in more than 1,100 comments, Metro Parks is encouraged to reassess and to update the plan as needed over time to reflect changing community desires, values and anticipated uses. This plan reflects a great deal of public input and careful study. Any future adjustments should ensure this same level of commitment to generating a public dialogue and realizing community consensus.

THE EXISTING PARKS AND GREENWAYS SYSTEM

A significant component of this plan is an assessment of the existing system, which includes regional, community, neighborhood, and mini-parks, as well as greenways,

athletic facilities, community centers, and cultural programming. The existing system has a wide variety of programs and facilities. Among the highlights of Metro Parks:

- 100 Parks and Greenways encompassing more than 10,200 acres
- 53 playgrounds
- 21 community centers
- 2 senior centers
- Cultural programming including arts, dance
- Centennial Sportsplex, including two ice rinks, aquatics, and tennis
- The Parthenon
- Warner Parks, including Steeplechase and equestrian facilities
- 7 Golf Courses, including "The Vinny Links," a junior course and learning center
- Wave Country
- Athletic facilities, including baseball, softball and soccer fields, tennis and basketball courts

Assessments were separately conducted on the General Condition of all of Metro's Parks, Architectural Facilities, and Playgrounds.

General Condition of Parks- Every park was rated based on evaluation criteria including pedestrian and vehicular condition and accessibility, active and passive recreation facilities, signage:

- 2 - Parks rated "Dilapidated"
- 21 - Parks rated "Poor"
- 31 - Parks rated "Fair"
- 28 - Parks rated "Good"
- 3 - Parks rated "Excellent"

Architectural Facility Assessment- All structures were evaluated based on their physical condition, life cycle expectancies, and needed repairs. Overall:

- 60% were in satisfactory condition
- 33% were in need of repair
- 7% recommended for complete replacement

Playground Assessment- Findings indicated that a number of playgrounds were in good condition and met safety standards. However, the majority was either in need of repair or total replacement to meet current safety and ADA standards:

- 8% of playgrounds were in satisfactory or good condition
- 19% were in need of repair or alterations
- 73% need to be replaced
- Most play equipment was over ten years old and failed to meet current standards

Benchmarking the Existing System

The existing parks and greenways system serves a population of approximately 570,000, which equates to a ratio of 19.9 acres of parkland per 1,000 residents. This ratio of acres per resident is quite low for a parks system serving a city of this size, and in comparison to cities of similar geographic areas.[1] More significantly, parkland as a percentage of land area (3.3%) ranks well below the national average of 7.7% for major cities. The plan recommends maintaining a minimum ratio of 17.5 acres of parkland per 1,000 residents. Based on population projections, without additional parkland Nashville will have a deficit of roughly 2,000 acres of parkland by the year 2020.

Acres of Park/Open Space per thousand residents	
Jacksonville, FL	45.4
Austin, TX	38.9
Charlotte/Mecklenburg County, NC	20.9
Louisville/Jefferson County, KY	20.1
Nashville/Davidson County, TN	19.9
Memphis, TN	17.0
Indianapolis, IN	16.7

Parkland as a percentage of land area	
Austin, TX	15.9
Jacksonville, FL	6.9
Memphis, TN	5.7
Indianapolis, IN	5.7
Louisville/Jefferson KY	5.6
Charlotte/Mecklenburg County, NC	4.3
Nashville/Davidson County, TN	3.3

WHAT IS PROPOSED?

The Master Plan proposes improvements to every park within the parks and greenways system. The improvements vary by location, but include upgrades, repair or

replacement of existing playgrounds, buildings, sport fields, sidewalks, signage, fencing, etc., identified in the assessments.

A major goal of the plan is to provide green space and recreational opportunities to better serve neighborhoods.

- **Majority of population should be within ½ mile of a park;**
- **All residents within 2 miles of a greenway**

Additional highlights of the plan include:

- **Adding 2,000 acres of new parklands;**
- **Building a new state of the art youth sports complex;**
- **Enhancing Wave Country and constructing a skate park;**
- **Reinvigorating the partnership with Metro Schools, providing playgrounds at all elementary schools and creating adjacent "community campuses," to increase public recreation space;**
- **Building the greenway system to link parks, neighborhoods, and schools, ultimately achieving nearly 200 miles of greenway trails;**
- **Constructing new regional scale community centers at the following parks:**
  1. East Park
  2. Hadley Park
  3. Richland Park area
  4. Coleman Park
  5. Sevier Park
- **Making all facilities compliant with the requirements of the Americans with Disabilities Act;**
- **Expanding educational, environmental, teen and cultural programming;**
- **Improving revenue generating facilities;**
- **Improving operation and maintenance of the park system.**

WHAT WILL IT COST?

The cost estimate for the improvements to the parks and greenways system have been divided into two categories: Deferred Maintenance and Recommended Enhancements.

The Deferred Maintenance costs are for improvements that are needed to keep existing parks and facilities in a condition where they can fulfill their useful life cycle, their recreational viability, and to conduct repairs as needed to ensure public safety and accessibility. Implementation of the recommended Deferred Maintenance items will keep the existing parks and greenways system in a proper and reasonable working condition.

The minimum recommended average annual cost over the next ten (10) years is approximately $ 3.27 million per year. The recommended phasing in over time of the most immediate and necessary improvements places a higher annual amount within the first five (5) years – approximately $ 5.9 million per year.

The Recommended Enhancements costs are for new and significantly enhanced community centers, recreational facilities, substantial general accessibility improvements, an expanded greenways system, parkland acquisition, and a variety of other regional and community projects. These enhancements are projected to provide the facilities needed to meet the needs of the population as it grows over the next 20 years. The estimated average annual cost over the next ten (10) years, as recommended, is approximately $23.02 million per year.

While these Deferred Maintenance and Recommended Enhancement costs may seem very large, they represent a combined commitment of less than thirteen (13) cents per day for the current residents of Nashville and Davidson County

CONCLUSION

This master plan is an ambitious guide for the future development of the park system. The quality of life for the current and future citizens of Nashville will be enhanced by a strong commitment to implement the plan. This study is designed to act as a living document to guide future development of the parks and greenways system to meet the changing recreation needs of Nashville and Davidson County residents and will help to protect and enhance important natural and cultural resources and valuable open spaces throughout the county. The public will benefit from a parks system that will be poised to advance and adapt to the changing demographics and participation trends in an increasingly diverse and growing county. As Nashville's park system begins its second century, the city has the potential to achieve the vision embodied in this plan.

[1] Peter Harnik, Inside City Parks (Washington: The Trust for Public Land, 2000) – updated in 2001.

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1.0 INTRODUCTION

In celebration of the 100th Anniversary of Nashville's park system, the Metropolitan Government of Nashville and Davidson County has initiated development of a Metropolitan Parks and Greenways Master Plan. This Master Plan represents the first effort to comprehensively document the existing park and recreation resources and facilities as well as the current greenway efforts. The Master Plan will guide future development of the parks and greenways system to meet the changing recreation needs of Nashville and Davidson County residents and will help to protect important natural and cultural resources and valuable open spaces throughout the County.

1.1 THE BENEFITS OF PARKS AND GREENWAYS

An integrated network of parks and open spaces linked by greenways provides Nashville and Davidson County with numerous benefits:

Recreation – *Providing places for us to play*
Parks and recreational programs provide opportunities for exercise and participation in organized sports, offer a place for social gatherings among community residents, and encourage constructive activities for children.

Water Quality and Stormwater Management – *Cleaning our water*
Conservation of forest and woodland areas around stream corridors provides important buffers that help prevent erosion of streambanks, slow the rate of stormwater runoff, and improve the cleanliness of water bodies by filtering pollutants from water flowing from rooftops and across paved areas

Wildlife Habitat – *Nurturing our wildlife*
Parkland and open space networks provide habitat for birds and other animals and supply important corridors for wildlife migration and movement.

Air Quality – *Cleaning our air*
Trees and other vegetation in parks improve air quality by filtering pollutants from the air and absorbing carbon dioxide and other gases that may contribute to global warming.

Alternative Transportation – *Keeping us moving*
Providing networks of parks and greenways with paved trails encourages residents to consider bicycling or in-line skating as an alternative to driving their cars to work or play.

Community Appearance and Character – *Improving our neighborhoods*

Parks improve the overall appearance of neighborhoods and generally positively impact property values in adjoining areas. Parks can also serve as a gathering place for neighborhood residents and can offer a place for members of the community to express their unique cultural identity.

Education – *Connecting people to nature and our heritage*

Parks enable residents to escape from the stresses of everyday life and interact with nature. Programs on nature and the environment increase awareness about the importance of the natural world to a high quality of life and inspire residents to help protect the land. In addition, parks help preserve important cultural landscapes and historic buildings and serve to teach residents about their cultural heritage.

1.2 PLANNING PROCESS

Preparation of the Metropolitan Parks and Greenways Master Plan has relied heavily on input from residents of Nashville and Davidson County throughout the planning process. Three rounds of public meetings have been included in the process to obtain citizen input. In addition, a telephone survey was conducted to obtain input from residents who may not attend a public meeting.

A Citizens Advisory Committee, consisting of approximately 20 individuals representing diverse interests throughout Nashville and Davidson County, has helped to develop a vision with defined goals and objectives to guide the parks and greenways system in the future.

The planning process has included five major phases:

- Inventory and Analysis
- Needs Assessment
- Mission, Vision and Goals
- Recommendations and Plan Options
- Master Plan Development

Inventory and Analysis: During the inventory and analysis phase, the planning team collected and evaluated background information on natural and cultural resources; the planning and demographic conditions in the City of Nashville, Davidson County, and the region; park facilities and programs; and park administration and finance. The results of this work are presented in this document.

Needs Assessment: Following the Inventory and Analysis, an assessment of four different and complementary types of park and recreation needs was conducted:

- ***Expressed Needs*****:** Types of recreational activities already being enjoyed for which there is additional perceived need
- ***Latent Needs*****:** Activities currently not being met by the park system
- ***Comparative Needs*****:** Needs suggested by comparison with services provided in communities with similar physical, cultural and socio-economic characteristics
- ***Normative Needs*****:** Needs as defined by published standards of the National Recreation and Parks Association, Urban Land Institute, and others adjusted to the particular circumstances of Nashville and Davidson County

Each of these needs were identified through analysis of the inventory and analysis information, interviews of persons with a specific knowledge of or stake in the parks, and input received from a series of public meetings. Additionally, a telephone survey of Nashville and Davidson County residents was conducted to collect park-related information. Findings of the needs assessment have provided the foundation for standards and criteria expressed in the Master Plan that are specifically relevant to Nashville and Davidson County.

Mission Statement / Vision for the Future / Goals and Objectives: In this phase of the planning process, the existing departmental mission statement was reevaluated and revised. In addition, the planning team assisted the Citizens Advisory Committee with developing a Vision for the Future of the parks and greenways system. A policy framework composed of a series of general goals and objectives was then developed to provide broad direction for development and evolution of the parks and greenways system. This policy framework addresses parks, greenways, open space, recreation facilities, and recreation programs.

Alternative Options for the Future: After defining the new mission, vision and goals, the planning team identified various options to provide for present and future needs of Nashville and Davidson County residents for parks, recreation, and greenways.

Master Plan Development: In this phase, the recommendations and options from the previous phase were developed into the full Master Plan. Order of magnitude cost estimates for capital expenditures were developed based on the assessment of current conditions and the programmatic needs. Facilities and programs were prioritized and development actions framed according to criteria such as: under-served, existing needs; needs based on changing demographics and participation trends; and needs of special population groups.

1.3 SUPPORTING TECHNICAL STUDIES COMPLETED AS PART OF THE PLANNING PROCESS

Collecting and analyzing background information on park facilities and programs; natural and cultural resources; and other topics relevant to the Nashville and Davidson County parks and greenways system was the first component of the master planning process. This provided the foundation needed to guide development of the Vision for the Future, the goals, recommended actions, and an implementation program. In the future, it will continue to serve as a resource for use by decision-makers to guide management of the parks and greenways system. Findings are compiled in the ***Existing Conditions Report***. This report provides a "snapshot" of existing conditions and issues associated with the parks system as of the summer of 2001.

Additional technical studies completed as part of the Master Plan process that were used to complete the ***Existing Conditions Report*** are bound separately in the ***Background Materials*** document. They include:

- ***Recreation Needs Assessment***
- ***Park Facility Assessment***
- ***Architectural Assessment***
- ***Playground Assessment***
- ***Market Research Study***
- ***Park Facility Sheets (Existing Conditions, Assessment and Recommendations for Specific Parks)***
- ***Public Meeting Summaries***

2.0 EXISTING PARKS AND GREENWAYS SYSTEM

The Nashville and Davidson County Metropolitan Parks and Greenways system is currently composed of 100 parks (Figure 1). Parks range in size from ¼ acre to over 2,000 acres. Complementing the parks system, are approximately 13.8 miles of greenway trails. In 2003, construction will begin on another 19 miles of greenway trails. Metro Parks offers a variety of athletic and cultural programming, with its Community Centers serving as the focus of programming for youth and seniors, and a range of concerts, theatre performances, and special events.

2.1 PARKS, GREENWAYS AND RECREATION FACILITIES

2.1.1 Metro Parks

Four main types of parks currently compose the Nashville and Davidson County Metro Parks system:

- regional parks (50 to 500 acres)
- community parks (20 to 50 acres)
- neighborhood parks (5 to 20 acres)
- mini-parks (< 5 acres)

A. Regional Parks

Regional Parks (more than 500 acres)
Four large park regional parks are located in the County. These parks provide large undisturbed tracts of land that are important for the protection of wildlife habitats and ecological communities and that provide passive use recreation experiences, including hiking and picnicking.

Shelby Bottoms Greenway serves the downtown Nashville area. This *Greenway* was developed and opened to the public in the late 1990s and offers miles of paved trails through wetland habitats along the Cumberland River.

Hamilton Creek Park serves the eastern part of the County. It is located on the western shore of the Percy Priest Lake and offers the park system's only active marina for non-motorized sailing vessels. Hamilton Creek also offers a BMX track and mountain biking trails.

The Warner Parks serve the southern and southwestern part of the County. These parks are viewed by many as the "crown jewel" of Nashville and Davidson County's park system. The Warner Park Nature Center is located here, providing nature and environmental education programming for the entire Metro Park system. In addition to miles of scenic roads, hiking trails, and bridle paths, the Warner Parks also offer active recreational facilities, including two golf courses, a model airplane field, and ball fields.

Beaman Park is currently undeveloped. Ultimately it will serve the northern part of the County. A master plan has been completed and a stone column gateway entrance has been constructed along the south side of the park property. Beaman Park will be a passive-use park, developed as a component of the County's greenway system.

Regional Parks (200 to 500 acres)

Regional parks include McCabe, Cedar Hill, Ted Rhodes, Shelby, Two Rivers, Cane Ridge, and E.N. Peeler Parks. Four of these parks, McCabe, Ted Rhodes, Shelby, and Two Rivers, offer golf courses and other active recreation facilities.

Regional Parks (50 to 200 Acres)

These regional parks represent a diversity of park uses across Nashville and Davidson County:

- Ezell Road, Buena Vista, and Seven Oaks Parks offer active recreation facilities, including soccer fields, baseball/softball diamonds, basketball courts and swimming pools
- Sevenmile, Trinity Hills, and Cockrill Bend Parks are either undeveloped or have not been maintained for public use
- Centennial, Grassmere, and Fort Negley Parks are all considered showpieces of the Metro Parks system and have significant cultural and historic resource value

B. Community Parks (20 to 50 acres)

Community Parks serve several neighborhoods and typically focus on providing intensive active recreational facilities, including tennis and basketball courts, soccer/football fields, and community centers with indoor gymnasiums. Nashville and Davidson County's community parks include:

- Sevier Park
- Fred Douglas Park
- E.S. Rose Park
- Richard Hartman Park
- Charlotte Park
- Oakwood Park
- William A. Pitts Park
- Thompson Lane / Mill Creek Greenway
- City Cemetery
- Madison Park
- West Park
- Hadley Park
- Paragon Mills Park
- Harpeth River Park
- Heartland Park

C. Neighborhood Parks (5 to 20 acres)

Neighborhood Parks are designed to serve the surrounding neighborhood only. These areas typically include playgrounds, tennis or basketball courts, ball fields, and picnic/sitting areas for passive recreation. Nashville and Davidson County's neighborhood parks include:

- Bicentennial Park
- County Cemetery
- Louise and Rebecca Dudley Park
- Morgan Park
- C.R. Crawford Park
- Granbery Park
- Clinton B. Fisk Park
- Riverfront Park
- Fannie Mae Dees Park
- Antioch Park
- Bellevue Greenway
- Bellevue Park
- Kirkpatrick Park
- Watkins Park
- H.G. Hill Park
- Parmer Park
- Lock II Park
- William Coleman Park
- Hermitage Park
- Whites Creek Park
- Harpeth Knoll Park
- East Park
- Parkwood Park
- Richland Park
- McFerrin Park
- William Whitfield Park
- Willow Creek Park
- Bordeaux Gardens Park
- Elmington Park
- Green Hills Park
- Boyd-Taylor Park
- Joelton Park
- Bordeaux Timothy Park
- Reservoir Park
- Cleveland Park
- South Inglewood Park

D. Mini-Parks (fewer than 5 acres)

Mini-parks or "pocket" parks are fewer than 5 acres in size and typically include urban plazas, playgrounds, and other small-scale open spaces usually found in a dense urban setting where available acreage for park or open space development is limited. The mini-parks in the Nashville and Davidson County system include:

- Bass Park
- Commerce Street Park
- Church Street Park
- Hope Gardens Park
- Mildred Shute Minipark
- Stones River Greenway
- Shelby Walk
- Monroe St. Playground
- Owen Bradley Park
- Dallas H. Neil Park
- South Park
- William Edmondson Park
- McKissick Park
- Elizabeth Park
- St. Bernard's Park
- Litton School Park
- Eastland Park
- Tom Joy Park
- J.C. Napier Park
- Tony Rose Park
- Bicentennial Greenway
- Hilton Suites Park
- Woodmont Park

2.1.2 Greenways

In 1991, Nashville and Davidson County embarked on a new program to develop a greenway system. This decision was motivated by the desire to capture for the region some of the many benefits that greenways offer to communities. Experiences throughout the country reveal that greenways are increasingly popular elements of the American landscape due to their multi-faceted purposes and benefits, including:

- Opportunities for increased physical activity
- Reduced healthcare cost
- Reduced traffic congestion
- Reduced air pollution
- Improved water quality
- Open space conservation
- Reduced transportation cost
- Increased property values
- Competitive advantage (economic development benefits)

The Greenways program began in 1991 with formation of the Nashville Greenway Commission and Advisory Board. The expressed purposes of this group were to:

- Identify areas appropriate for greenways
- Develop a comprehensive greenway plan
- Develop criteria for selecting and prioritizing potential greenway projects
- Recommend pilot projects
- Identify funding resources
- Involve citizens in the planning process

The Joint Greenways Commission and Advisory Board held their first meeting March of 1992. The Commission published *GREENWAYS for Nashville and Davidson County* in 1993. This articulated an action plan for developing the greenway system.

Since 1993 Nashville has made great strides in the development of a greenways system. There are potentially 210 miles of greenways within Nashville-Davidson County. Of this total, 13.8 miles of trails have been constructed, much of which is located in the Shelby Bottoms Greenway (Figure 2). By 2003, another 19 miles will be constructed on various routes.

The proposed greenway system is based primarily on the Davidson County's network of rivers, lakes and streams. By locating greenway corridors along this water-based

network, it utilizes land that would not otherwise be available to development due to flood hazard. Greenways also provide a vegetative buffer that protects water quality.

Due to the nature of the County's drainage network, the Cumberland River provides a great opportunity to serve as the primary connection for all the greenways. However, cross-community connectivity is somewhat limited between greenway corridors without using the Cumberland River, which does not connect with all of Nashville-Davidson County's neighborhoods. These two drawbacks reduce the network's ability to provide a complete alternative transportation network. Therefore, additional greenway corridors in combination with sidewalk and on road bicycle facilities will need to be considered in order to improve the effectiveness of the network.

Cumberland Greenway

The Cumberland River Greenway is proposed to be the central spine of the current countywide greenway network. It will connect Nashville's major existing and planned greenways exclusive of the Harpeth River Greenway. The greenway has the potential to encompass nearly 65 miles of multi-use trails as it winds through Davidson County connecting 9 of the City's 14 subareas. These include Subareas 3, 4, 5, 6, 7, 8, 9,11, and 14. Only 12.8 miles have been constructed, primarily composed of the Shelby Bottoms Greenway. Another 4 miles is expected to be completed by the year 2003.

The following built projects and those that will be completed in the near future are included in the Cumberland River Corridor:

Shelby Bottoms Greenway and Nature Preserve. Shelby Bottoms is an 810-acre park located in Subarea 5, a few miles south of Nashville's Central Business District. It is adjacent to Shelby Park and is easily accessible by many East Nashville neighborhoods. The trail system includes 12 miles of high-use trails. Trailheads are located at Shelby Park, Forest Green Drive, Shadow Lane, and Fortland Drive.

Eastbank Greenway. The Eastbank Greenway is located in Subarea 9 at the Adelphia Coliseum site directly across the Cumberland River from Riverfront Park. It is approximately one-half mile in length and includes a series of sculptures that conjure up images of the East Bank's industrial heritage. It offers spectacular views of Nashville's skyline. A combination of a bike route and bike lanes along Davison Road connect this greenway to Shelby Park and Shelby Bottoms. The greenways location is not easily accessible to non-motorized travel.

Shelby Street Bridge. The Shelby Street Bridge, located in Subarea 9, has been an important connector between downtown and East Nashville for almost 100 years. It is currently being renovated as a pedestrian bridge with limited trolley traffic. It will provide an essential, safe connection between the Riverfront Greenway and the East Bank Greenway in downtown Nashville.

Riverfront Greenway. The Riverfront Greenway (Downtown Greenway) is a 2.3-mile trail that will connect Riverfront Park to the Metro Center Greenway and include a spur to Bicentennial Mall. One mile of this segment is currently under development and is expected to be completed in 2003. The greenway will connect residential and commercial development in the downtown area. The majority of this greenway route is found in Subarea 9. A small portion that connects to the Metro Center Greenway is in Subarea 8.

Metro Center Greenway. Located in Subarea 8, the Metro Center Greenway is being developed as a part of the Metro Center Levee Project in conjunction with the U.S. Army Corps of Engineers. It encompasses approximately three miles of multi-use trails and will incorporate various sculptural elements, trailheads, and shade structures. The greenway is easily accessible to the working population within the Metro Center development. The project is expected to be completed in 2002.

Old Hickory Nature Trail. This trail is located in Subarea 14 adjacent to the Old Hickory Dam and is comprised of .3 miles of paved multi-use trails and 1.2 miles of unpaved hiking trails. The site is a part of a U.S. Army Corps of Engineers property. It is not easily accessible by non-motorized travel.

Brookmeade Park / JDN Greenway. As part of the Wal-Mart development on Charlotte Pike in Subarea 6, a greenway was planned. The first phase of this project is approximately one-half mile in length. It is expected to be constructed by 2002.

Richland Creek Greenway. The Richland Creek Greenway connects Subarea 7 and 10, following Richland Creek to the Cumberland River. The corridor is approximately 5 miles in length and has the ability to connect many West Nashville Neighborhoods to the Cumberland River Greenway and the Lionshead Commercial area on White Bridge Road. The route is easily accessible by the adjacent neighborhoods. A two-mile portion of the Greenway is currently under development and is expected to be completed in 2002.

Whites Creek Greenway. The Whites Creek Greenway is located along Whites Creek as it passes through subareas 3 and 2. The corridor comprises nearly 11 miles of multi-

use trails that connect Whites Creek and Bordeaux neighborhoods with the greater greenway system.

The Whites Creek Greenway Alliance, a community-based non-profit group, has proposed a 2-mile pilot project within the corridor. The greenway will run from the Ashland City Highway to Hartman Park to the north. A trailhead will be located at each end. The route will provide easy access to the Bordeaux and Whites Creek neighborhoods. It will provide a connection between the neighborhoods, Hartman Park, and the commercial areas along Clarksville Pike. Funding is currently being raised for the development of the park. Construction of this segment is anticipated by 2003.

Eatons Creek Greenway. The Eatons Creek Greenway parallels Eatons Creek Road. It is located within Subarea 2. This greenway route provides an important connection between the Whites Creek Greenway, the Cumberland River Greenway, Bordeaux Neighborhoods and Beaman Park. The greenway includes nearly 6.4 miles of multi-use paths.

Several additional projects are envisioned in the Cumberland River Greenway Master Plan, but have not been scheduled for further development at the time of this writing. These projects include:

Bells Bend Open Space and Greenway. An 8.7-mile greenway is proposed along the banks of Bells Bend. It is located within Subarea 3. A portion of this greenway route would occupy the large Metro-owned parcel that was to become a future landfill. In recent years there has been growing support to build a large nature park, similar to the Shelby Bottoms Greenway, on this parcel.

Cockrill Bend Open Space and Greenway. Approximately 6.1 miles of river frontage within the Cockrill Bend's flood plain has been targeted for a future greenway route. This greenway would offer excellent connections to West Nashville Neighborhoods via the Richland Creek Greenway. This route is within Subarea 7.

TSU Greenway. The river frontage of Tennessee State University property comprises nearly 2 miles within Subarea 8. A future greenway is proposed to utilize this frontage which will connect the TSU campus, TSU's marina, and adjacent neighborhoods to the Metro Center Greenway and Davidson-Cheatham County Rail-with-Trails Route.

Bordeaux Greenway and Open Space. This project would be located within Subarea 3 on the former city landfill. A three-mile trail system would follow the banks of the Cumberland River. A one-mile connector would connect the Bordeaux Greenway to the TSU greenway through the conversion of the Bordeaux Railroad Bridge to a pedestrian

bridge and/or the enhancement of pedestrian facilities on the Martin Luther King Bridge. This project offers opportunities to connect Bordeaux Neighborhoods and the Whites Creek Greenway to the entire greenway network.

Lock One Greenway. The Lock One Greenway is 0.9 miles in length and is located within Subarea 3. It would link Lock One Park to the American Baptist Theological Seminary Campus. This greenway is not easily accessible by non-motorized travel.

Pennington Bend Open Space and Greenway. Nearly 6 miles of potential riverfront could incorporate a multi-use trail that would connect Lock Two Park, Opry Mills, a potential conservation area, and inland neighborhoods. This route is located within Subarea 14.

Seven-Mile Creek Greenway. The Seven-Mile Creek Greenway is located within Subareas 12 and 13. The corridor comprises approximately 5.5 miles of multi-use trails as it extends from Old Hickory Boulevard to its confluence with Mill Creek. Its connects many south Nashville Neighborhoods to Paragon Mills Park, Seven Mile Park, Ellington Agricultural Center and the Mill Creek Greenway. No segment of this greenway has been completed at this time. This corridor has also been designated as worthy of conservation by the State and various environmental organizations because of the presence of many rare plants and animals.

Stones River Spur Trail. A spur trail of the Stones River Greenway is identified along Two Rivers Court. It offers spectacular views of Shelby Bottoms as it rises above the river. It provides a critical connection within Subarea 14 between the Stones River Greenway, Opry Mills, and the Nashville-to-Lebanon Rails-with-Trails facility.

Neelys Bend Open Space and Greenway. A 12-mile multi-use trail loop in Subarea 4 has been identified. Peeler Park would serve as the anchor to the greenway. This greenway offers excellent opportunities to connect existing and future neighborhoods on Neelys Bend to Peeler Park.

Hermitage Greenway. A 5-mile greenway trail within Subarea 14 would connect the Hermitage, an historic landmark, and area neighborhoods with the Stones River Greenway.

Old Hickory Greenway. A nine-mile multi-use trail in Subarea 14 has been identified as the Old Hickory Greenway. It connects the Old Hickory Lock and Dam and existing nature trail to Old Hickory, the Hermitage neighborhood, and the Stones River Greenway.

Rails-with-Trails. The Cumberland River Greenway Master Plan identified 17.5 miles of railroad corridors along the Cumberland River as potential Rails-with-Trails facilities. The first segment runs 7.5 miles through Subareas 8 and 14, connecting Tennessee State University, North Nashville Neighborhoods, Bordeaux Neighborhoods to Whites Creek, the western edge of the County, and beyond to Ashland City. This route is an important component for creating a continuous greenway from Nashville to the City of Clarksville. A second route parallels the Nashville-to-Lebanon commuter rail line connecting Subareas 9, 11, and 14. Approximately 10.5 miles in length, this route will ultimately connect downtown Nashville to the Wilson County Line and beyond to the City of Lebanon.

Other Proposed Greenways – Partially Completed

Harpeth River Greenway. The Harpeth River Greenway is located within Subarea 6, extending from the Warner Parks system to the Cheatham County Line along the banks of the Harpeth River. The entire greenway encompasses nearly 14 miles of trails, of which only a one-half mile segment on Morton Mill Road has been constructed. This greenway also provides an important connection between Davidson County and Williamson County.

The Harpeth River is considered one of the most ecologically diverse rivers within Tennessee. Because the greenway is located within a fast growing area of the city, it offers a wonderful opportunity to protect this valuable aquatic resource for an increasingly dense population.

In the near future, the built segment of the greenway is expected to be extended one-half mile south to Old Harding Pike where a trailhead will be located. A second extension will extend one-mile north to Harpeth River Park and the commercial area at Highway 70 and Interstate 40.

A second segment is expected to be built in the near future along the Harpeth's southern banks on the Veterans Administration Cemetery property. It will include approximately one-mile of multi-use trails.

Mill Creek Greenway. The Mill Creek Greenway comprises 18 miles of multi-use trails connecting Subareas 11, 12, 13 and 14. The greenway route extends south from the Williamson/Davidson County Line to the Cumberland River, passing through a wide variety of natural and urban conditions. Because development has encroached upon its northern segments between I-24 and the Cumberland River, the area experiences significant flooding problems during major events.

Due to the abundant wildlife found within the corridor, the State of Tennessee and various environmental groups have identified Mill Creek as important environmental resource that is worthy of conservation. The most significant of these is the endangered Nashville Crawfish.

Of the 18 miles that comprises the greenway, a one-mile segment located within Ezell Park has been completed. Two trailheads for this segment can be found along the route. One is located within the park and the other is just outside the park's entrance along Harding Place.

Four additional projects will complete another nine miles. The first is a 3-mile extension of the existing segment at Ezell Park to Blue Hole Road where it will connect with the Antioch Community Center. This segment is expected to be completed in 2002. (It will later be extended three miles north to Seven Oaks Park and the Thompson Lane Mill Creek Segment.)

The second project is a one-mile segment located between Thompson Lane and Briley Parkway. It is approximately one mile in length and will connect many of the neighborhoods and businesses in the area. This project is expected to be completed by 2003.

A planned segment along Culbertson Road will add an additional 2 miles to the system. It will follow Culbertson Road from the Davidson-Williamson County line to Old Hickory Blvd. There is growing public support within the surrounding neighborhoods for this route. No date has been set for the completion of this segment.

Stones River Greenway. The Stones River Greenway located in Subarea 14 comprises nearly 57 miles of trails. Seven of the 57 miles is currently under development and is expected to be completed in 2002.

The 7-mile segment under construction starts at the Percy Priest Dam and follows the Stones River until it empties into the Cumberland River. It then extends west through Two River Park until it reaches Opry Mills along the banks of the Cumberland River. From this point a ferry or pedestrian bridge will connect the Stones River to Shelby Bottoms. The majority of the length of this segment is easily accessible by the local neighborhoods.

The balance of the greenway is nearly 50 miles in length. It will extend south from Percy Priest Dam along the edges of Percy Priest Lake until it reaches Rutherford County, where it will connect with the City of LaVergne at Hurricane Creek. The Greenway would further extend past the City of Smyrna where it would connect to the Stones River in

Rutherford County. This segment provides a critical regional connection between the greenway networks of Davidson County's and Rutherford County. It also connects the numerous federal, state and local recreational facilities around the lake.

The greenway route is home to many rare plants and animals. Because of these resources the State of Tennessee and various environmental groups have designated the area comprising the corridor as worthy of conservation.

Beaman Park. Beaman Park is a 1,500-acre park located within Subarea 3 along the border of Subarea 1. The master plan for the park includes approximately 2 miles of paved trails and 12 miles of unpaved hiking trails. It is home to many rare plants and animals and has been identified by the State of Tennessee and various environmental organizations as worthy of conservation. Officially the park is not open, but The Friends of Beaman Park organize guided hiking tours of the park on a regular basis. No date for completion has been determined.

Other Proposed Greenways - Not Yet Partially Completed

Browns Creek Greenway. The Browns Creek Greenway traverses an industrial section of Subarea 11 near downtown Nashville. It will comprise approximately two miles of multi-use trails of which no segment has been built. It is an important greenway corridor because it connects Trevecca Nazarene University, several south Nashville neighborhoods, and the Tennessee State Fair Grounds to the Cumberland River Greenway and the rest of the greenway network.

2.1.3 Recreation Facilities

The parks and greenways that currently compose the Nashville and Davidson County system offer a wide variety of recreational facilities. These are mapped, described and assessed in the *Existing Conditions Report* that accompanies this Master Plan. Following is an overview of the facilities in the system

- Golf Courses *(at 7 parks)*
- Wave Country *(wave pool and water slides)*
- Centennial Sportsplex *(aquatics center with 2 swimming pools, fitness center and exercise classes, 2 ice arenas, and a 19-court tennis complex)*
- Community/Recreation Centers *(22)*
- Swimming Pools *(at 11 parks)*
- Baseball/Softball Fields *(at 25 parks)*
- Soccer/Football Fields *(at 3 parks)*
- Basketball Courts *(at 23 parks)*

- Tennis Courts *(at 32 parks)*
- Playgrounds *(at 52 parks)*
- Restrooms *(at 47 parks)*
- Trails *(within individual parks and along greenway corridors)*
- Boat Launches *(at 4 parks)*
- Picnic Shelters *(at 16 parks)*
- Other Features *(Amphitheaters/Band Shells, Model Airplane Fields, Disc Golf Courses, Nature Centers, Equestrian Facilities)*

2.1.4 Other Park and Recreation Facilities

A. Schools

Relationship between Metro Parks and the Board of Education

Metropolitan Board of Parks and Recreation and the Board of Education have acknowledged that developing and using schools and recreational areas jointly will eliminate unnecessary duplication of facilities and result in savings to the community. Together with the Metro Planning Commission, they have endorsed the policy of establishing a neighborhood park facility adjacent to a school wherever practicable. There are 21 parks in the Metro Parks system which have either a school within a park or a school adjacent to the park. In these cases, park facilities are frequently utilized by the school system (Table 2-1)

The Parks and Recreation Board and the School Board have drafted a policy for sharing facilities. This policy recommends that both boards cooperatively plan for new programs and facilities including their financing, operation, and maintenance.

The policy clearly requires that each Board be responsible for maintenance, supplies, equipment, and staffing of their activities and programs. It states that the Metro Parks and Recreation Board is responsible for all park facilities and that the Metro School Board is responsible for all school facilities. It further requires a written memorandum of understanding outlining specific guidelines to be followed by the staff of the park program and school faculty. The Memorandum of Understanding addresses the following:

- use of buildings or parts of buildings
- use and maintenance of equipment
- use of site facilities
- use, maintenance and custodial care of swimming pools
- coordination of scheduling
- communication among staff at the school and the recreation department

- supervisory responsibilities of school faculty and recreation staff when sharing use of facilities
- sharing of equipment

Table 2-1. Parks Associated with School Facilities

Park Facility	Associated School
Buena Vista Park	Hull-Jackson Montessori
Boyde-Taylor Park	Moses-McKissack Middle
E.S. Rose Park	Rose Park Middle/ Carter Lawrence Middle
Fannie Mae Dees Park	Harris-Hillman Special Facilities/ Eakin Elementary
Elmington Park	West End Middle
J.C. Napier Park	Napier Primary
Richland Park	Cohn Adult Learning Center
Green Hills Park	J.T. Moore Middle
Bellevue Park	Bellevue Elementary
McCabe Park	Marth Vaught/ Sylvan Park Elementary
Whites Creek Park	Whites Creek High
Watkins Park	Martin Luther King Magnet High
Litton School Park	Isaac Litton Middle
Oakwood Park	Jere Baxter Middle
Fred Douglas Park	Meigs Magnet
East Park	Warner Elementary
Kirkpatrick Park	Kirkpatrick Elementary
Two Rivers Park	McGavok High/Two Rivers Middle
Antioch Park	Antioch Middle
Granbery Park	Granberry Elementary
South Inglewood Park	Inglewood Elementary

Source: Nashville-Davidson County Planning

School Facilities

Nearly all Metro schools have some type of recreation facility associated with them *(see Existing Conditions Report for more details.)* Elementary schools in Metro-Davidson County offer a unique opportunity, by virtue of their proximity to neighborhood centers, to help satisfy the demand for small recreation-oriented open space in each neighborhood, since most elementary school properties offer playgrounds. Middle and high schools offer additional passive and active facilities that may be available for use by the general community. It is important to note, however, that none of the Metro school properties were subjects of this park assessment.

Other Public Park and Recreation Areas

Radnor Lake State Natural Area. Radnor Lake State Natural Area is a state-managed park located in south Nashville. It offers many scenic views, and a diversity of natural habitats, making it a prime spot for wildlife viewing, especially for bird enthusiasts. The uses of this park center on passive recreational activities, including hiking and nature education.

Long Hunter State Park. Long Hunter State Park is located on the southeastern shore of the Percy Priest Lake in the southeastern corner of Davidson County. Picnicking, swimming, hiking, backpacking, boating, sailing, fishing, and nature education are the major activities. The park offers complete "barrier-free" facilities, including programs for persons with disabilities and the elderly.

Other state and federal park and recreation facilities include **Natchez Trace Parkway** (National Park Service), **Hermitage Lands State Historic Area** (TDEC), **Marrow Bone Lake** (TDEC), and **Percy Priest Lake** (TDEC and Army Corps of Engineers).

C. Private Park and Recreation Areas

Private recreation facilities are also available throughout the County *(see Existing Conditions Report for more details.)*. These facilities have been identified through the survey of Nashville and Davidson County residents conducted while preparing the Parks and Greenways Master Plan. This survey identified YMCAs and health/fitness clubs as the most heavily used private recreation outlets. An inventory of these facilities based on secondary data sources identified a total of 33 such facilities. The number of YMCAs is large compared to other communities of a similar size, while the offering of health and fitness clubs is relatively low.

2.2 PROGRAMS AND SPECIAL EVENTS

2.2.1 Programs

The Recreation Division of Metro Parks administers and staffs the diverse program offerings and activities throughout the system. Program offerings include traditional athletic leagues, environmental education programs, girl and boy scouts, senior programs and a variety of classes in art, dance, and music. The *Existing Conditions Report* provides an overview of the various recreation programs offered, including a summary of the following:

- community center programs
- cultural arts programs (dance, museums, music, theatre, visual arts)
- Warner Nature Center programs
- Other Program (Walk/Run, Junior Park Rangers, Metro Parks Magic Club)

The Recreation Division has received several awards for its community center programs, including a National Recreation and Parks Association (NRPA) first place award for

Class I in the National Dorothy Mullen Arts and Humanities Awards Competition for two wall murals and a mosaic wall design installed by youth participants in the McFerrin and the E.S. Rose Park community centers.

Partnerships between Metro Parks and the Metropolitan Development and Housing Authority (MDHA) have succeeded in securing grant funding to support staff, equipment, facility renovations, and programs and activities at several of Metro's community centers.

2.2.2 Special Events

Metro Parks coordinates or sponsors many special events, including concerts, theatre performances, storytelling, cultural celebrations, festivals, street fairs, dances, and art exhibits. These are described in the *Existing Conditions Report.*

2.3 FACILITY CONDITION ASSESSMENT

As part of the parks and greenways master planning process, the planning team assessed conditions at each of the parks in the Metro Parks system during the summer of 2001 (Figure 3). Three types of assessments were completed:

- **Park Facility General Condition Assessment**
- **Architectural Facility Assessment**
- **Playground Assessment**

The *Existing Conditions Report* includes a description of the methodology used for completing the assessment and a discussion of conclusions. A detailed assessment for each park in the Metro Parks system can be found in the *Parks and Greenways Master Plan Background Materials Notebook*. Following is a general discussion of findings from each of the three assessments. Figure 3 graphically illustrates findings.

2.3.1 Park Facility General Condition Assessment

A. General Condition Assessment Methodology

The General Condition Assessment included all outdoor facilities and features, excluding architectural and playground features. The assessment criteria ranged from general to specific, including:

- General Condition
- Pedestrian Facilities
  - user accessibility to park
  - provision of accessible parking
  - pedestrian circulation: accessibility within park
  - circulation: general condition
- Vehicular Facilities
  - vehicular circulation: general condition
  - vehicular circulation: traffic pattern
- Recreation Facilities
  - active recreation: courts
  - active recreation: fields
  - active recreation: special facilities
  - passive recreation
- Signage
  - site signage: general condition
  - site signage: presence of signage

During the course of the assessment each park in the park system was visited. A numerical rating was assigned for each criterion. Categories were either scored based on physical conditions or performance. The ratings ranged from poor to excellent.

B. Summary of Findings – Parks General Condition Assessment

Assessment findings indicated that the average general condition of Metro Parks ranged from "dilapidated" (Hadley, Mildred Shute, and Napier Parks) to "excellent" (Shelby Bottoms Greenway, Owen Bradley Park) with the majority rating as "fair" (Figure 3). One critical issue evident from the assessment is that Metro parks, as a whole, offered inadequate accommodations for pedestrian users, especially in terms of accessible facilities. Findings suggested major issues associated with accessibility to the park and within the park, and available accessible parking spaces. Also, in some types of parks, passive recreation facilities did not score well.

Private Park and Recreation Areas General Condition Assessment

The regional parks scored well in general conditions compared to the other park types. However, regional parks appeared to cater very heavily towards the presence of the automobile. Vehicular road conditions and circulation rated fair to good with no major replacement issues identified. Within the regional park, pedestrian facilities were in need of repair. Pedestrian general conditions, accessibility within the park, accessibility to the park and accessible parking categories rated poorly and were in need of improvement. Passive recreation conditions and wayfinding signage were not amenable to the pedestrian park user in this park type.

Golf Courses General Condition Assessment

As part of the regional park type, Metro Parks offered excellent public golf courses to Nashville residents and neighboring communities. Overall ratings were good to excellent with only a few specific low scoring categories. As with many golf courses, the Metro golf courses offered very limited access along the fairways and greens. (This issue may be inherent to the sport of golf.) However, the parking lots and clubhouses needed improved user accessibility to these facilities. Slightly over half of the golf courses offered wayfinding signage.

Community Parks General Condition Assessment

Nashville community parks did not rate well in many categories, especially with regard to pedestrian related facilities. Pedestrian walkways and passive recreation facilities rated 85 percent, and 84 percent, respectively, in need of some form of replacement. Half or more of the parks rated poorly for accessibility to the park, accessibility within the park and for provision for accessible parking spaces. One would expect higher pedestrian related scores for community parks because they are smaller than regional parks and service smaller demographic areas for users travelling by other means than a vehicle. Active recreation facilities were split among the higher rated specialty facilities, active fields, and the lower rated active courts. Although wayfinding signage was generally not present in community parks, their need must be based on a case by case basis depending on park complexity and need for clarity.

Neighborhood Parks General Condition Assessment

Like community parks, neighborhood parks did not rate well throughout the categories, especially with regard to pedestrian related facilities. Pedestrian walkways and passive recreation facilities rated poorly, with many in need of some form of replacement. The majority of the parks rated poorly for accessibility to the park, accessibility within the park, and provision for accessible parking spaces. Understandably, many neighborhood parks did not offer certain types of facilities (including vehicular routes) nor both active and specialty recreation facilities, due to size constraints and intended park use. Relieved of the need to provide many of these costly facilities, one would expect higher pedestrian related ratings for neighborhood parks that serve smaller demographic areas

for users travelling by other means than an automobile. Although wayfinding signage was generally not present in neighborhood parks, their need must be addressed on a case-by-case basis depending on park complexity and needs.

Mini-Parks General Condition Assessment

Mini-parks also did not rate well throughout the categories, especially with regard to pedestrian related facilities. Pedestrian walkways and passive recreation facilities rated poorly and were in need of some form of replacement. The majority of the mini-parks rated poorly for accessibility to the park, accessibility within the park, and provision for accessible parking spaces.

Greenways General Condition Assessment

Overall the rating for Nashville-Davidson County's greenways was fair to excellent, with only specific issues related to particular categories. The greenways were relatively newly constructed, which might explain the high rating. However, greenways rated low for accessible facilities when approaching the park. Half of the greenways rated low in accessible routes to their boundaries. They also received a poor rating for not offering accessible parking. Greenways rated well for accessibility for users within their designated facilities. Three-quarters of the greenways offer wayfinding signage, which is a critical component because this park type is usually long and linear and not easily viewed or understood at any given point along a trail or walkway.

Non-Rated Items

Many non-rated observations were made during park assessment visits. The most obvious condition was the positive effect of volunteer support on individual park quality. On several occasions volunteer individuals voiced their concerns regarding particular facilities. In all cases observed, the particular facility such as baseball fields or a Frisbee golf course was better maintained and used more often than without the volunteer support. In some cases, local suppliers donated necessary materials with which volunteers maintained the facility.

2.3.2 Architectural Facility Assessment

A. Architectural Assessment Methodology

The Architectural Facility Assessment utilized four criteria to evaluate the condition of buildings and other structures within Metro Parks:

- facility description
- physical conditions rating
- recommendation
- costs for remediation

The description portion of the evaluation criteria began when the assessment team visited all park facilities. During the visits the assessors took photographs, notes and dimensions. The team evaluated the apparent physical condition of the roofs, walls and floors to determine if deterioration of materials or possible differential settlement of the structure were of concern. The team gathered additional information from personnel at the facilities as well as from Metro Park maintenance personnel to ascertain the current and historical state of the facility. Lifecycle expectancies were then used to project the expected longevity of certain building elements, such as the roof system and building equipment.

After the description phase of the evaluation, the facilities were rated utilizing a three point rating system as follows:

- Rating 1 – Satisfactory Condition
- Rating 2 – Repairs Required
- Rating 3 – Complete Replacement of the Facility

Rating 1 means that the facility is in satisfactory condition and no significant repairs beyond normal maintenance are required. Rating 2 means that the facility has items or systems that need to be repaired or replaced. Rating 3 is reserved for facilities that are in such significant disrepair that the most cost-effective alternative is to replace the facility.

The rating then determined what kind of recommendation should be made, if any. The recommendation listed the specific elements of the building that need to be repaired or replaced. In some cases recommendations included new roof systems, finishes, interior and exterior doors, and new HVAC equipment.

The final portion of the evaluation criteria was the cost estimate. Costs were assigned to items called out in the recommendation. Costs were based on a per unit basis (i.e. square feet or linear feet) or on a lump sum basis. Unit and lump sum costs were derived from currently published industry standards.

B. Summary of Findings – Architectural Assessment

With the Metro Parks system, there are a significant number of facilities that are in satisfactory condition (Figure 3). However, most of the facilities are in need of some repair. All facilities are heavily used and certain elements (i.e., finishes, roofing systems, and HVAC equipment) are nearing the end of their life expectancy. A small number of facilities are rated for replacement. This is due to the overall age of the facility and general disrepair of significant building features.

The Architectural Assessment evaluated a total of 371 facilities in the Metro Parks System. Overall the facilities scored as follows:

- 60 percent were in satisfactory condition (receiving a Rating 1)
- 33 percent were in need of repair (receiving a Rating 2)
- 7 percent were recommended for complete replacement (receiving a Rating 3)

When considered separately, the Community Centers and Golf Clubhouses had significantly different percentages by rating. Due to the intensity of use and age of the facilities, these facilities had the following percentages by rating:

- 21 percent were in satisfactory condition
- 70 percent are in need of repair
- 9 percent are recommended for complete replacement

The majority of the park facilities that were found to be in satisfactory condition were located outside the urban core of Davidson County, such as Subareas 6, 7 and 14 (Figure 4). Within these areas a number of the parks, particularly clubhouses at the golf courses, had relatively new or recently renovated facilities. Most of the facilities were adequately maintained.

The parks that had facilities that require repair or replacement of particular building features were evenly dispersed throughout Metro Park system. However, a large number of facilities that need significant repairs were older and typically located in the inner city areas such as Subareas 5, 8 and 10 (Figure 4).

The parks that have facilities that were recommended for complete replacement were typically located in the larger and heavily used parks. These facilities were recommended for replacement because of structural and safety concerns as well as the cost feasibility considerations for repairs, and not due to proposed program changes.

2.3.3 Playground Assessment

A. Playground Assessment Methodology

There are 64 playgrounds in the Metro Parks system. Many of the parks in the system have several playgrounds. Some have no playgrounds. The play facilities at the playgrounds range from a single metal play structure, to large play areas with protective subsurfacing and many play structures, such as swingsets, teeters, rockers, and climbers. The majority of the playgrounds are located in parks within a five-mile radius from the center of Nashville. The complete inventory of playground facilities is included in the *Parks and Greenways Master Plan Background Materials Notebook*.

As part of the park master planning process, two Certified Playground Safety Inspectors assessed conditions at each of the playgrounds in the Metro Parks system. Equipment at each playground was inventoried and playground equipment and play areas were compared to playground safety and accessibility standards. The Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities were used to determine the accessibility of playgrounds. Criteria for determining the safety of the play area and playground equipment were those from *The Handbook For Playground Safety* by the United States Consumer Safety Commission and *Standard Consumer Safety Performance Specification for Playground Equipment for Public Use* by the American Society of Testing Materials (ASTM).

After inspecting the playgrounds each one was rated on a three point rating system (Figure 3).

- Rating 1 – indicates that the playground is in “good condition”
- Rating 2 – indicates that the playground is in need of “repair or alterations”
- Rating 3 – indicates that the playground is in need of “replacement”

B. Summary of Findings – Playground Assessment

Findings of the Playground Assessment indicated that a number of playgrounds in the Metro Parks system were in good condition and met safety standards. However, the majority of playgrounds was either in need of repair or total replacement and did not meet ADA standards for accessibility.

In general, the Playground Assessment showed that:

- 8 percent of playgrounds were in satisfactory or good condition
- 19 percent were in need of repair or alterations
- 73 percent needed to be replaced

Following are a number of major findings from the Playground Assessment:

- Most of the play equipment was over ten years old and failed to meet current standards
- Much of the equipment in the parks was similar and had similar problems
- Many of the current safety problems could be addressed through actions of the Parks Board
- Regular maintenance appeared to occur in many, but not all of the parks
- New playground equipment was found to have been constructed incorrectly, creating safety issues
- New playground equipment that was designed for greater accessibility had been constructed without an ADA access route or with a route that did not meet minimum accessibility standards
- In most play areas, sand was used as surface material. (If the depth and condition of the sand play area were correct it could be an adequate surface material for safety. However, it is generally not a good surface material for accessibility. The play areas that used sand ranged from adequate to very inadequate.)
- Some play areas did not have protective surfacing (which is a very serious safety issue)
- Only one play area fully met the complete criteria for accessibility as set by the ADA

3.0 ASSESSMENT OF NEEDS

Estimation of recreation demand generated by Davidson County residents is a critical factor in developing the Nashville and Davidson County Metropolitan Parks and Greenways Master Plan. In order to quantify and qualify demand, input from various sources was examined including:

- review of national and statewide recreation trends
- analyses of existing (year 2000) and projected (year 2020) levels of service
- a survey of Davidson County residents
- review of comments received at public meetings during the park planning process
- observations gathered during the project's fieldwork.

3.1 NATIONAL AND STATEWIDE RECREATION TRENDS

Trends in recreation participation at the national and state levels were examined to understand the changing patterns and their implications for Davidson County. This analysis enabled a look beyond the expected growth and aging of the population to identify those activities that could be expected to become more popular or are currently under-served, or even over-served within the foreseeable future.

3.1.1 National Recreation Trends

Several surveys have been completed over the past thirty years that shed some insight into changing demand patterns for recreation at the national and regional levels. Table 3-1 demonstrates the changes in recreation patterns that occurred in the United States between 1972 and 1997. Picnicking - the single most popular activity in the United States from 1972 to 1997 – was replaced by walking in 1997 as the number one activity

Table 3-1. Top Ten Recreational Pursuits in the United States

Rank	1972 [1]	1997 [2]
1	Picnicking	Walking
2	Sightseeing	Sightseeing
3	Driving for Pleasure	Picnicking
4	Walking for Pleasure	Attending Outdoor Sports Event
5	Swimming (non-pool)	Swimming (pool)
6	Visiting Zoos, Fairs, and Amusement Parks	Swimming (non-pool)
7	Other Activities	Wildlife Viewing
8	Fishing	Boating (any)
9	Playing Outdoor Games or Sports	Fishing (any)
10	Outdoor Pool Swimming	Bicycling

[1] *A Summary of Outdoor Recreation in America, Bureau of Outdoor Recreation, 1974*
[2] *Americans at Play, 1997*

in the country. Sightseeing continued to be the second most popular activity. However, the importance of the car clearly diminished as a part of recreational pursuits. Between 1972 and 1997, outdoor swimming in pools moved from the tenth most popular recreation activity to the fifth.

Other surveys reveal similar trends in recreation participation. The National Sporting Goods Association tracks annual changes in participation among sports that require athletic equipment. The annual frequency of the survey makes it very useful in understanding both the long term, and perhaps more importantly, the near term trends in changing demand for recreation.

On-road use of bicycles has been the most quickly growing activity during the past several years (Table 3-2). But, exercise walking continues to be the most popular recreation activity in terms of overall participation in the United States. The more subtle trends, however, indicate that walking participation decreased during the first half of the decade, but grew at a fairly good pace in the latter half. Conversely, bicycle riding was the third most widely participated-in activity throughout the 1990s. However, participation in bicycling decreased throughout the 1990s and its rank fell to sixth, replaced by camping in the 1999 survey. Recreation sports such as hiking, camping, hunting with firearms, and in line skating were ranked higher in 1999 than they were throughout the 1990s. Other activities such as volleyball, soccer, and tennis appear to be waning in their relative popularity at the national level.

When considering changing recreation patterns, it is worth noting that those activities that are both the fastest growing *and* the most widely participated-in represent the best candidates for potential development or expansion, as they demonstrate the broadest market appeal. Activities that are experiencing rapid growth, but rank low in participation should be considered accordingly.

Table 3-2. National Sporting Goods Association Recreation Participation Survey

Avg. Rank 1990 to 1999	Rank 1999	Sport	Avg. Change 1995 to 1999	Avg. Change 1990 to 1994
24	19	Mountain Biking (on road)	9.5%	n/a
5	3	Camping (Vacation/Overnight)	4.0%	(1.8%)
1	1	Exercise Walking	3.5%	(0.2%)
11	12	Aerobic Exercising	3.2%	(0.1%)
12	11	Golf	3.0%	1.7%
13	10	Hiking	3.0%	3.6%
25	21	Soccer	2.4%	3.5%
14	15	Running/Jogging	2.1%	(3.5%)
4	4	Fishing	1.4%	(0.1%)
20	18	Baseball	0.9%	(0.8%)
8	8	Billiards/Pool	0.8%	4.9%
6	5	Exercising with Equipment	0.5%	5.5%
15	16	Dart Throwing	0.5%	6.6%
17	14	Roller Skating (in-Line)	0.2%	52.6%
7	7	Bowling	(0.2%)	(1.7%)
9	9	Basketball	(0.4%)	1.8%
19	17	Hunting with Firearms	(1.2%)	(3.0%)
2	2	Swimming	(1.5%)	(2.8%)
23	22	Target Shooting	(1.7%)	(1.2%)
10	13	Boating, Motor/Power	(2.3%)	(2.0%)
22	24	Tennis	(3.6%)	(10.9%)
18	20	Softball	(4.4%)	(2.6%)
3	6	Bicycle Riding	(6.8%)	(2.6%)
16	23	Volleyball	(10.2%)	(6.9%)
21	25	Roller Skating (2x2)	(13.1%)	(6.1%)

Source: National Sporting Goods Association, Sports Participation in 1999.

Table 3-3. Top Ten Recreational Pursuits(by Number of Participants)

Rank	Tennessee	United States
1	Exercise Walking	Exercise Walking
2	Swimming	Swimming
3	Fishing (Fresh Water)	Camping (Vacation/Overnight)
4	Camping (Vacation/Overnight)	Fishing
5	Exercise w/Equipment	Exercising w/ Equipment
6	Bowling	Bicycle Riding
7	Boating Motor/Power	Bowling
8	Hiking	Billiards/Pool
9	Football (Touch)	Basketball
10	Billiards/Pool	Hiking

Source: National Sporting Goods Association, 1999.

3.1.2 Tennessee Recreation Trends

While national data provide useful insight into the broader spectrum of changing recreation demand, local tastes, geography, and socioeconomic characteristics also influence recreation choices.

Recreation trends tracked by the U.S. Sporting Goods Association specific to the State of Tennessee provide some insight into these regional variations. The ten most widely participated-in recreational activities in the U.S. are ranked somewhat differently in Tennessee. Activities such as bowling billiards, golf and aerobic exercise rank much higher. Conversely fishing ranks slightly lower.

Table 3-4 presents the top 25 Tennessee recreation activities ranked by their relative significance and participation index. The index of participation is the measure of per capita sports participation in Tennessee relative to that in the United States. A value over 100 indicates a relatively higher level of participation in that sport when compared to the average in the United States Index values less than 100 indicate a lower relative level of participation.

The significance value was calculated by multiplying the total number of participants by Tennessee's index of participation, then dividing by 100. By multiplying the index and the participation levels, those activities were identified that could potentially have the greatest market impact or the broadest market appeal. Thus, a recreation activity such as roller skating (2x2) that has a participation index of 153 and a participant level at 153 (thousand) people would generate a significance value of 387 (253 x 153 / 100 = significance value of 387). In spite of the higher index of participation, roller skating (2x2) would not be considered as significant an activity in terms of market impact as exercise walking, which has a lower participation index of 89, but a participant level of 1,432 (thousand) people that generates a much higher significance value of 1,274 (1,432 x 89 / 100 = significance value of 1,274).

As shown in Table 3-4, outdoor activities generate the highest significance value. Lower ranked activities that generate high indices of participation include step aerobics, 2x2 roller skating (as opposed to inline skating), hunting with firearms, and target shooting.

Table 3-4. Tennessee Sports Participation (Ranked by Significance Value)

Participant Rank	Sport	Participants (000's)	Index of Participation	Significance Value*	Significance Rank
1	Exercise Walking	1,432	89	1,274	1
3	Fishing (Fresh Water)	974	120	1,169	2
2	Swimming	1,050	91	956	3
4	Camping (Vacation/Overnight)	803	80	642	4
7	Boating Motor/Power	532	109	580	5
6	Bowling	614	74	454	6
5	Exercise w/Equipment	618	68	420	7
21	Roller Skating (2x2 Wheels)	253	153	387	8
13	Hunting w/ Firearms	347	104	361	9
18	Target Shooting	305	118	360	10
8	Hiking	440	78	343	11
12	Dart Throwing	365	90	329	12
9	Football (Touch)	431	74	319	13
11	Roller Skating (In Line)	386	80	309	14
23	Step Aerobics	217	132	286	15
10	Billiards/Pool	418	65	272	16
15	Workout at Club	343	71	244	17
18	Running/Jogging	305	68	207	18
14	Basketball	346	59	204	19
16	Golf	327	60	196	20
22	Backpack/Wideness Exercise	238	78	186	21
27	Football (Tackle)	160	92	147	22
24	Mountain Bike (On road)	207	68	141	23
30	Table Tennis	146	89	130	24
25	Baseball	206	63	130	25
20	Bicycle Riding	303	36	109	27
17	Aerobic Exercise	322	34	109	26
28	Volleyball	156	67	105	28
26	Softball	171	58	99	29
28	Calisthenics	156	62	97	30
32	Tennis	92	42	39	31
31	Soccer	96	36	35	32
33	Fishing (Salt Water)	75	31	23	33

*Calculated by multiplying participation index by number of participants divided by 100.
Source: National Sporting Goods Association, Sports Participation in 1999.

3.1.3 Tennessee State Recreation Plan

The *1995-1999 State Recreation Plan* is a quintennial document that identifies relevant issues regarding Tennessee's open space, recreation, and development of facilities and programs. The Plan, prepared by the Department of Environment and Conservation, includes an overview of recreation demand derived from public input at eighteen separate forums held throughout the State. And as with the public forums held as part of this master plan process, the results of the State Recreation Plan reflect a fairly small, and sometimes disproportionately vocal, subset of the general population.

The findings of this most recent Recreation Plan shown in Table 3-5 present some similarities to the input received in Davidson County public meetings. Trails and environmental issues were both recognized as high priority items. In contrast, facilities for persons with disabilities was a high priority in the State Plan, yet underrepresented in the Davidson County public meetings. Again, this highlights the limitations of public meetings and specific subject's lack of due attention if it is never introduced, as perhaps may have been the case in the local meetings.

Table 3-5. Tennessee State Recreation Plan Priorities

	Priority		Priority
Activities		**Trails**	
Teen Programs	Medium	Greenways	High
Cultural Programs	Low	Off-road Vehicle Trails	High
Increased General Programming	Low	Hiking Trails	High
Senior Programs	Low	Maintenance and Education	High
		Bicycle Trails	Medium
Facilities		Multi-use Trails	Medium
Ball fields	High		
Community Centers	High	**Environmental Issues**	
Facilities and Activities for People with Disabilities	High	Environmental Education	High
Picnic and Support Facilities	Medium	Natural Area Preservation and Conservation	High
Soccer Fields	Medium	Wildlife Viewing Areas	Medium
Staffing and Security	Medium	Fly Fishing Brochure	Low
Tennis Courts	Medium		
Frisbee Golf	Low	**Management & Planning**	
Large Group Camp Sites	Low	Services for People with Disabilities	High
Neighborhood Parks	Low	Education and Networking	High
Passive Recreation Areas	Low	Increased Recreation Staff	High
Public Golf Courses	Low	Need for Additional Revenue and Resources	High
Revenue Producing Facilities	Low	Recreation Planning	High
Shooting Ranges	Low	State Trails Administrator	Low
Small Theaters/ Band Shell	Low	Broader Representation on Recreation Boards	Low
Year-Round Camp Sites	Low		
Water Activities			
Aquatic Facilities	Medium		
River and Lake Access	Medium		

Source: Tennessee State Recreation Plan, 1995 to 1999

3.2 PARKLAND LEVELS OF SERVICE ANALYSIS

The National Recreation and Park Association (NRPA) has developed guidelines for the level of service (LOS) for different categories of park facilities. While LOS standards can vary from community to community, the NRPA's overall recommendations represent a set of standardized guidelines that should be considered by communities as they develop their own guidelines. The establishment of guidelines helps to quantify in general terms the areas of the community that are underserved by park facilities based upon their existing or anticipated population.

The NRPA LOS recommendations by park type are listed in Table 3-6, along with the standard that is recommended for the Metro Parks system

Table 3-6. NRPA Level of Service

Park Classification	NRPA Parkland Guidelines	Recommended Metro Parks Standards
Regional Park	5-10 ac. / 1,000 residents	10 ac. / 1,000 residents
Community/High-Use Urban Park	5-8 ac. / 1,000 residents	5 ac. / 1,000 residents
Neighborhood Park	1-2 ac. / 1,000 residents	2 ac. / 1,000 residents
Mini-Park	0.25-0.5 ac. / 1,000 residents	0.5 ac. / 1,000 residents
Greenway	Variable	variable
Special Facility	Variable	variable

3.2.1 Level of Parkland Service Today *(based on Year 2000 Population)*

A. Neighborhood Parks and Mini Parks (Year 2000 LOS)

Table 3-7 presents findings of the LOS analysis for neighborhood parks and mini-parks. These indicate that in 2000 only two of the 14 subareas within the Metro Parks system had a surplus of land in neighborhood parks and mini-parks – Subareas 1 and 9. Five of the subareas had deficits of less than 50 acres, while seven of the subareas had deficits ranging from 54 to 130 acres.

Table 3-8 presents findings of the LOS analysis for neighborhood parks and mini-parks, adjusted to include the positive effects of including land in elementary schools (as shown in Figure 9) of this Parks and Greenways Master Plan). Addition of this acreage improved the level of service. The overall parkland deficit was reduced by slightly over 163 acres. The parkland deficit in one subarea was eliminated, are nearly eliminated in two other subareas. Subareas 1, 3 and 9 are the only subareas that have a surplus of parkland. Of the subareas having a deficit, six had deficits of less than 50 acres, while five had deficits between 62 and 108 acres.

B. Community Parks (Year 2000 LOS)

The surpluses and deficits for community parks are shown in Table 3-9. Six subareas have surpluses for the year 2000 population – Subareas 2, 5, 7, 8, 12, and 14. Of the remaining subareas, two have deficits of less than 30 acres, while the remaining six have deficits ranging from 100 to 182 acres.

C. Regional Parks (Year 2000 LOS)

Table 3-10 shows the existing surpluses and deficits for regional parks in the Metro Parks system. Regional Parks are in surplus system-wide, and specifically in Subareas 3, 5, 6, 10 and 13. Of those subareas with deficits, 1 and 9 have deficits of less than 60 acres, while the remaining 7 have deficits of from 140 to 774 acres.

Table 3-7. Year 2000 Neighborhood / Mini-Park - Level of Service

Planning Subarea	Existing Acreage	2000 Actual Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	15.39	5,597	2.75	2.00	11.19	4.20
SA 2	22.82	17,717	1.29	2.00	35.43	(12.61)
SA 3	39.14	25,066	1.56	2.00	50.13	(10.99)
SA 4	-	41,229	-	2.00	82.46	(82.46)
SA 5	74.11	64,427	1.15	2.00	128.85	(54.74)
SA 6	25.68	33,718	0.76	2.00	67.44	(41.76)
SA 7	27.67	42,385	0.65	2.00	84.77	(57.10)
SA 8	39.89	23,299	1.71	2.00	46.60	(6.71)
SA 9	20.90	3,617	5.78	2.00	7.23	13.67
SA 10	62.15	71,394	0.87	2.00	142.79	(80.64)
SA 11	18.92	31,581	0.60	2.00	63.16	(44.24)
SA 12	25.44	77,377	0.33	2.00	154.75	(129.31)
SA 13	7.71	60,619	0.13	2.00	121.24	(113.53)
SA 14	19.04	71,865	0.26	2.00	143.73	(124.69)
TOTALS	**398.86**	**569,891**	**0.70**	**2.00**	**1,139.78**	**(740.92)**

Table 3-8. Year 2000 Neighborhood / Mini-Park - Level of Service, including Elementary Schools*

Planning Subarea	Existing Acreage	2000 Actual Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	15.39	5,597	2.75	2.00	11.19	4.20
SA 2	34.96	17,717	1.97	2.00	35.43	(0.47)
SA 3	50.58	25,066	2.02	2.00	50.13	0.45
SA 4	20.51	41,229	0.50	2.00	82.46	(61.95)
SA 5	90.50	64,427	1.40	2.00	128.85	(38.36)
SA 6	33.97	33,718	1.01	2.00	67.44	(33.47)
SA 7	38.85	42,385	0.92	2.00	84.77	(45.93)
SA 8	43.43	23,299	1.86	2.00	46.60	(3.17)
SA 9	20.90	3,617	5.78	2.00	7.23	13.67
SA 10	68.05	71,394	0.95	2.00	142.79	(74.74)
SA 11	28.40	31,581	0.90	2.00	63.16	(34.76)
SA 12	46.43	77,377	0.60	2.00	154.75	(108.33)
SA 13	25.04	60,619	0.41	2.00	121.24	(96.20)
SA 14	45.03	71,865	0.63	2.00	143.73	(98.70)
TOTALS	**562.03**	**569,891**	**0.99**	**2.00**	**1,139.78**	**(577.75)**

* Available park acreage on elementary school properties was calculated by multiplying the total property acreage by 0.25, assuming that the available area on school property would be approximately one-quarter of the total property area.

Table 3-9. Year 2000 Community Park - Level of Service

Planning Subarea	Existing Acreage	2000 Actual Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	-	5,597	-	5.00	27.99	(27.99)
SA 2	221.44	17,717	12.50	5.00	88.59	132.86
SA 3	24.50	25,066	0.98	5.00	125.33	(100.83)
SA 4	30.58	41,229	0.74	5.00	206.15	(175.57)
SA 5	410.46	64,427	6.37	5.00	322.14	88.32
SA 6	46.00	33,718	1.36	5.00	168.59	(122.59)
SA 7	317.83	42,385	7.50	5.00	211.93	105.91
SA 8	366.93	23,299	15.75	5.00	116.50	250.44
SA 9	-	3,617	-	5.00	18.09	(18.09)
SA 10	175.27	71,394	2.45	5.00	356.97	(181.70)
SA 11	27.80	31,581	0.88	5.00	157.91	(130.11)
SA 12	395.11	77,377	5.11	5.00	386.89	8.22
SA 13	159.08	60,619	2.62	5.00	303.10	(144.02)
SA 14	424.84	71,865	5.91	5.00	359.33	65.52
TOTALS	**2,599.84**	**569,891**	**4.56**	**5.00**	**2,849.46**	**(249.62)**

Table 3-10. Year 2000 Regional Park - Level of Service

Planning Subarea	Existing Acreage	2000 Actual Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	-	5,597	-	10.00	55.97	(55.97)
SA 2	-	17,717	-	10.00	177.17	(177.17)
SA 3	2,293.27	25,066	91.49	10.00	250.66	2,042.61
SA 4	271.45	41,229	6.58	10.00	412.29	(140.84)
SA 5	809.20	64,427	12.56	10.00	644.27	164.93
SA 6	625.62	33,718	18.55	10.00	337.18	288.44
SA 7	-	42,385	-	10.00	423.85	(423.85)
SA 8	-	23,299	-	10.00	232.99	(232.99)
SA 9	-	3,617	-	10.00	36.17	(36.17)
SA 10	2,058.10	71,394	28.83	10.00	713.94	1,344.16
SA 11	-	31,581	-	10.00	315.81	(315.81)
SA 12	-	77,377	-	10.00	773.77	(773.77)
SA 13	790.00	60,619	13.03	10.00	606.19	183.81
SA 14	-	71,865	-	10.00	718.65	(718.65)
TOTALS	**6,847.64**	**569,891**	**12.02**	**10.00**	**5,698.91**	**1,148.73**

3.2.2 Level of Parkland Service Tomorrow *(based on Year 2020 Population Projections)*

By the year 2020, the population of the Metro Parks service area – Nashville and Davidson County – is projected to grow by nearly 140,000 people. The growth in population will result in a corresponding need for additional parks, open space, facilities, and greenways. The distribution of the population growth will not, however, be equal throughout the subareas. Because of the projected unequal growth in population, some of the subareas will actually develop parkland surpluses by 2020, while the others will have worsening parkland deficits.

A. Neighborhood Parks and Mini Parks (Year 2020 LOS)

Figure 5 illustrates the neighborhood and mini-park surpluses and deficits by subarea within Davidson County anticipated in the year 2020 given the current park system, and including elementary school sites. Specific surpluses and deficits are presented in Tables 3-11 and 3-12, assuming no use of elementary school land in Table 3-11 and including use of elementary school land in Table 3-12. With either scenario, Subareas 1, 8 and 9 are projected to have surpluses in 2020. Subarea 3 is projected to have a slight surplus if elementary schools are successfully integrated into the Metro Parks system. Even when including elementary school land, six subareas will have deficits of from 73 to 198 acres, while four will have deficits of less than 50 acres.

B. Community Parks (Year 2020 LOS)

The projected year 2020 surpluses and deficits for community parks are presented in Table 3-13. Four subareas – Subareas 2, 5, 7 and 8 – are projected to have surpluses by 2020. However, seven subareas are projected to have deficits of between 90 and 400 acres, and three will have deficits of between 14 and 62 acres. Figure 6 illustrates the Community Park surpluses and deficits by subarea within Davidson County.

C. Regional Parks (Year 2020 LOS)

In the year 2000, the system-wide surplus of Regional Parks was nearly 1,150 acres. By the year 2020, the system-wide surplus is projected to shift to a deficit of approximately 250 acres (Table 3-14). Four subareas – areas 3, 5, 6, 10 – are projected to have surpluses of from 63 to 2,062 acres. Two subareas will have deficits of from 29 to 64 areas, while eight will have projected deficits of between 199 and 1,111 acres.

Table 3-11. Year 2020 Neighborhood / Mini-Park - Level of Service

Planning Subarea	Existing Acreage	2020 Projected Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	15.39	6,400	2.40	2.00	12.80	2.59
SA 2	22.82	20,900	1.09	2.00	41.80	(18.98)
SA 3	39.14	23,100	1.69	2.00	46.20	(7.06)
SA 4	-	47,100	-	2.00	94.20	(94.20)
SA 5	74.11	60,500	1.22	2.00	121.00	(46.89)
SA 6	25.68	56,200	0.46	2.00	112.40	(86.72)
SA 7	27.67	44,000	0.63	2.00	88.00	(60.33)
SA 8	45.59	21,700	2.10	2.00	43.40	2.19
SA 9	20.90	2,900	7.21	2.00	5.80	15.10
SA 10	62.15	77,700	0.80	2.00	155.40	(93.25)
SA 11	18.92	29,600	0.64	2.00	59.20	(40.28)
SA 12	25.44	111,100	0.23	2.00	222.20	(196.76)
SA 13	7.71	111,100	0.07	2.00	222.20	(214.49)
SA 14	19.04	97,400	0.20	2.00	194.80	(175.76)
TOTALS	**404.56**	**709,700**	**0.57**	**2.00**	**1,419.40**	**(1,014.84)**

Table 3-12. Year 2020 Neighborhood / Mini-Park - Level of Service, including Elementary Schools*

Planning Subarea	Existing Acreage	2020 Projected Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	15.39	6,400	2.40	2.00	12.80	2.59
SA 2	34.96	20,900	1.67	2.00	41.80	(6.84)
SA 3	50.58	23,100	2.19	2.00	46.20	4.38
SA 4	20.51	47,100	0.44	2.00	94.20	(73.70)
SA 5	90.50	60,500	1.50	2.00	121.00	(30.50)
SA 6	33.97	56,200	0.60	2.00	112.40	(78.43)
SA 7	38.85	44,000	0.88	2.00	88.00	(49.16)
SA 8	43.43	21,700	2.00	2.00	43.40	0.03
SA 9	20.90	2,900	7.21	2.00	5.80	15.10
SA 10	68.05	77,700	0.88	2.00	155.40	(87.35)
SA 11	28.40	29,600	0.96	2.00	59.20	(30.80)
SA 12	46.43	111,100	0.42	2.00	222.20	(175.78)
SA 13	25.04	111,100	0.23	2.00	222.20	(197.16)
SA 14	45.03	97,400	0.46	2.00	194.80	(149.77)
TOTALS	**562.03**	**709,700**	**0.79**	**2.00**	**1,419.40**	**(857.37)**

* Available park acreage on elementary school properties was calculated by multiplying the total property acreage by 0.25, assuming that the available area on school property would be approximately one-quarter of the total property area.

Table 3-13. Year 2020 Community Park - Level of Service

Planning Subarea	Existing Acreage	2020 Projected Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	-	6,400	-	5.00	32.00	(32.00)
SA 2	221.44	20,900	10.60	5.00	104.50	116.94
SA 3	24.50	23,100	1.06	5.00	115.50	(91.00)
SA 4	30.58	47,100	0.65	5.00	235.50	(204.92)
SA 5	410.46	60,500	6.78	5.00	302.50	107.96
SA 6	46.00	56,200	0.82	5.00	281.00	(235.00)
SA 7	317.83	44,000	7.22	5.00	220.00	97.83
SA 8	366.93	21,700	16.91	5.00	108.50	258.43
SA 9	-	2,900	-	5.00	14.50	(14.50)
SA 10	175.27	77,700	2.26	5.00	388.50	(213.23)
SA 11	27.80	29,600	0.94	5.00	148.00	(120.20)
SA 12	395.11	111,100	3.56	5.00	555.50	(160.39)
SA 13	159.08	111,100	1.43	5.00	555.50	(396.42)
SA 14	424.84	97,400	4.36	5.00	487.00	(62.16)
TOTALS	**2,599.84**	**709,700**	**3.66**	**5.00**	**3,548.50**	**(948.66)**

Table 3-14. Year 2020 Regional Park - Level of Service

Planning Subarea	Existing Acreage	2020 Projected Population	Current LOS (AC/1000 pop.)	Recommended Standard AC/1000 pop.	Recommended Parkland Acreage	Surplus / (Deficit)
SA 1	-	6,400	-	10.00	64.00	(64.00)
SA 2	-	20,900	-	10.00	209.00	(209.00)
SA 3	2,293.27	23,100	99.28	10.00	231.00	2,062.27
SA 4	271.45	47,100	5.76	10.00	471.00	(199.55)
SA 5	809.20	60,500	13.38	10.00	605.00	204.20
SA 6	625.62	56,200	11.13	10.00	562.00	63.62
SA 7	-	44,000	-	10.00	440.00	(440.00)
SA 8	-	21,700	-	10.00	217.00	(217.00)
SA 9	-	2,900	-	10.00	29.00	(29.00)
SA 10	2,058.10	77,700	26.49	10.00	777.00	1,281.10
SA 11	-	29,600	-	10.00	296.00	(296.00)
SA 12	-	111,100	-	10.00	1,111.00	(1,111.00)
SA 13	790.00	111,100	7.11	10.00	1,111.00	(321.00)
SA 14	-	97,400	-	10.00	974.00	(974.00)
TOTALS	**6,847.64**	**709,700**	**9.65**	**10.00**	**7,097.00**	**(249.36)**

3.2.3 Parkland Level of Service Summary

The projected population growth to approximately 710,000 people in year 2020 will challenge many aspects of the Metro government system: the park and greenways system will be no exception. Failure to provide sufficient park resources will result in a degradation of existing resources due to overuse and overcrowding, and a mismatch between the location of existing resources and the growth of the population.

Every category of parks – neighborhood/mini-parks, community parks, and regional parks – is anticipated to be in a deficit situation by 2020. The most critical deficits will be in the neighborhood/mini-Parks (857 acres, when including elementary school land as recommended in Section 4.0 of this Master Plan – Figure 9) and community parks (949 acres). These two park types are the most critical because they provide the highest level of daily connection with the residents of Nashville and Davidson County, and thus are the most frequently used park resources. Furthermore, these park types help to provide "green" breaks in the urban and suburban fabric of development that exists now, and will be expanding over the next 18 years. These park types are critical for maintaining and improving the perceived quality of life for the region, and, consequently, maintaining the region as a favorable place for businesses seeking to relocate somewhere in the southeastern United States.

3.3 PARK NEEDS EXPRESSED BY CITIZENS IN THE TELEPHONE SURVEY

Another measure of need was based on the level of expressed demand, as indicated by the countywide telephone survey. The survey yielded insights into the recreation trends and desires of the resident population. The entire set of survey results is included in the Market Research Section of the *Background Materials Notebook.* A more detailed analysis of findings is also included in the Recreation Needs Assessment in the *Background Materials Notebook*.

The following summary of findings interprets survey response to questions from park users that provided an expressed need and/or perceptions of Metro Parks. Six survey questions are used to provide this insight:

- **Question 3** in the survey addressed the general perception of Metro Parks. Responses provided an indication of how residents regard the park system. While the responses do not provide an explicit indication of utilization or demand, they provide some insight into how current efforts to attract users are perceived.

- **Question 6** asked whether residents have used any of the facilities or programs offered by Metro Parks. Responses indicated the degree to which local residents are aware of Metro Parks and Metro Parks' activities.

- **Question 5** asked residents about the general types of activities that Metro Parks offers. The responses provided general insight into resident beliefs of how Metro Parks affects their lives.

- **Question 7** asked residents to identify the frequency and purpose for using Metro Parks offerings. Potential responses were general, however they provided insight into the various uses and frequency of use by different user groups.

- **Question 15** asked residents to identify those activities for which they would like to have increased or improved facilities.

- **Question 17** asked residents which organizations they use for recreational facilities and programming, besides Metro Parks. This provided insight into what types of facilities could be offered by Metro Parks to improve resident usage.

Responses from these questions have been categorized to better understand the range of comments relative to the broader types of recreation opportunities and functions.

Question: Have you ever used anything offered by Metro Parks?

Seventy-one percent of the people surveyed answered this question in the affirmative, while 28 percent said they did not use Metro Parks. Seven other people were unsure of whose facility they actually used. These latter two points provide an indication that some demand has not been captured, and that a portion of the public that does not currently use Metro Parks represents potential future users of park facilities.

Examining more closely those who have not used Metro Parks, 21 percent of the non-user respondents indicated that they did not have time and 13 percent indicated they were not interested. The remaining 66 percent provided a variety of responses that did not specifically exclude future use. Translated across a population of approximately 560,000 county residents, these potential future users total approximately 100,000 people. Even a small capture of these non-users, say 10 percent, could result in a significant increase in overall utilization levels.

Question: When I say "Metro Parks" what does that make you think of?
What do you know about Metro Parks and what it has to offer?
What are your overall impressions of Metro Parks?

Perception of Metro Parks is predominately one of activity. Activities were identified in four of ten responses. Golf and swimming were the most frequently identified activities, a result that perhaps highlights their marketing emphasis. Programmed events followed. Concerts and the desire for young adult/teen activities were the two most frequently mentioned items among the responses that were related to programming. Controllable management comments were focused on pricing, maintenance, and availability. Safety comments - both the perception and lack of - were noted in 11 percent of the comments, providing a further indication that users do consider safety as part of their decision to use Metro Parks facilities. Last, numerous “other” comments that described a variety of qualitative issues provide some indication of base expectations.

Question: What does Metro Parks offer?

When asked to rate three specific attributes of Metro Parks, respondents generally indicated that the variety of offerings was an attribute of the system. In terms of providing an indication of need, the question provided only limited insights, as a follow up question could not be offered due to the length limitations of the survey instrument.

Question: How frequently do you participate in certain activities?

This question provided valuable insight into how people are currently using Metro Parks. Roughly two-thirds of the respondents used parks frequently or sometimes for fitness or recreation activities. Approximately one-half used Metro Parks for programs, but on a

less frequent basis than fitness or recreation activities. Similarly, nearly one-half of the respondents indicated use of Metro Parks for nature and environmental activities, but fewer were frequent than occasional users. Respondents that participated in team sports tended to be frequent users. Winter sports were participated in the least frequently.

Question: What should Metro Parks provide more of?

When questioned as to what facilities or programs respondents would most like to have, the most commonly named item was playgrounds. The significance of this response is underscored by the fact that only 38 percent of the households surveyed contained children. Further examination of the list indicated that, with the exception of nature/environmental education, most of the items at the top of the list were related to non-organized activities. Thus, these respondents were not seeking for someone to provide a specific activity, but rather were wanting a place to participate in a self-motivated activity.

Question: What Other Organizations besides Metro Parks do you Frequently use for Recreational Facilities or Programs?

Examination of the responses to this question provided some indication of the lesser-served recreation needs, and perhaps opportunity to better satisfy the recreational needs and desires of Nashville/Davidson County residents. While 40 percent of the respondents indicated use of no other organizations in the area, 17 percent indicated use of YMCAs. The top five reasons for use of the YMCAs included swimming (68 percent), general fitness/exercise equipment (48 percent), weight training (35 percent), cardio-vascular exercise (24 percent), and basketball courts (17 percent). Users of health clubs indicated similar reasons including general fitness/exercise equipment (37 percent), weight training (27 percent), cardio-vascular exercise (22 percent), swimming (22 percent), and jogging/walking (15 percent). Users of State Parks indicated a continuing pattern of seeking physical exercise opportunities at other locations, as nearly half of the respondents that used these facilities indicated the reason was for walking, jogging, or hiking.

3.4 PARK NEEDS EXPRESSED BY CITIZENS AT PUBLIC MEETINGS

The Metro Parks master planning process afforded opportunities for citizens of the county to attend public meetings and provide direct feedback regarding the current park system. Consistently heard comments identified activities, issues, or opportunities to enhance the recreational programs and/or facilities within the County. The process for identifying the items categorized in this summary began with the items noted in the Tennessee State Recreation Plan. The list was then augmented with the recurring comments received at the public meetings.

Of the 1,140 comments recorded during the public meetings, nearly one-third related to facility offerings. "Other" comments, including safety concerns, park design, comments regarding the general promotion of parks, and model airplane fields to name a few, demonstrated the diversity of issues that are on the minds of Davidson County residents. Importantly, this diversity also revealed the nature of public meetings and their tendency to present a slightly skewed picture of the broader market. For instance, not a single mention was made in the telephone survey regarding model airplane flying. However, twenty such comments were made in the public meetings. As such, the reader should be careful to consider the results of these meetings as valid, yet representative of mobilized constituencies. These results, for the purposes of this analysis, include only the source of input for the indication of the need. Greenways and preservation of existing parklands and natural areas represented the most significant percentage of comments made.

Table 3-15. Categories of Public Meeting Comments

	Number of Comments	Percentage of Total Comments
Facility Related Comments	299	32.1%
Other Related Comments	178	19.1%
Trails Related Comments	141	15.1%
Environmental Related Comments	135	14.5%
Management Related Comments	91	9.8%
Activity Related Comments	62	6.7%
Water Related Comments	25	2.7%
Total	**931**	**100%**

Source: Davidson County Public Meetings and Economics Research Associates

Examination of the comments that totaled at least 7 responses revealed both expected and unexpected results. Soccer fields, which are a known concern, generated an expected larger numbers of comments. The desire for neighborhood parks and community centers was also strongly voiced. As noted earlier, safety was a significant concern in the "other" category, representing four percent of total comments

Table 3-16. Public Meeting Comment Summary (Subjects Receiving 7 or More Comments)

	Number of Comments	Percentage of Total Comments
Facility Related Comments		
Soccer Fields	63	6.8%
Neighborhood Parks	61	6.6%
Community Centers	46	4.9%
Picnic and Support Facilities	39	4.2%
Small Theaters/Band Shell	29	3.1%
Ball Fields	16	1.7%
Passive Recreation Areas	12	1.3%
Public Golf Courses	10	1.1%
Playgrounds	9	1.0%
Tennis Courts	7	0.8%
Other Related Comments		
Safety	38	4.1%
Park Design	36	3.9%
Promotion	25	2.7%
Model Airplane Flying	20	2.1%
Historic Preservation	18	1.9%
Dance Programs	15	1.6%
Dog Park	10	1.1%
Trails Related Comments		
Greenways	85	9.1%
Multi-use Trails	25	2.7%
Bicycle Trails	21	2.3%
Hiking Trails	9	1.0%
Environmental Related Comments		
Natural Area Preservation and Conservation	95	10.2%
Environmental Education	38	4.1%
Management Related Comments		
Need for Additional Revenue and Resources	34	3.7%
Increased Recreation Staff	29	3.1%
Recreation Planning	21	2.3%
Activity Related Comments		
Teen Programs	45	4.8%
Cultural Programs	8	0.9%
Increased General Programming	9	1.0%
Water Related Comments		
Aquatic Facilities	17	1.8%
River and Lake Access	8	0.9%

Source: Davidson County Public Meetings and Economics Research Associates

made. Management related items presents some indication of the community's desire to preserve the current park assets through appropriate funding levels and adequate staffing. Water-related activities generated only minor comments from the public.

Comments totaling fewer than seven related to education, ice hockey, and the need for new revenue producing facilities. Comments listed in Table 3-17 are those that appeared as item in the Tennessee State Recreation Plan for the middle Tennessee, but received limited comment in the public meetings.

Table 3-17. Public Meeting Comment Summary (Subjects Receiving Fewer than 7 Comments)

	Number of Comments	Percentage of Total Comments
Education and Networking	6	0.6%
Gardening Programs	4	0.4%
Red Caboose Park	3	0.3%
Computer Training	3	0.3%
Wildlife Viewing areas	2	0.2%
Summer Camps	2	0.2%
Bright Beginnings	2	0.2%
Ice Hockey Needs	2	0.2%
Facilities and Activities for People with Disabilities	2	0.2%
Staffing and Security	2	0.2%
Services for People with Disabilities	1	0.1%
Maintenance and Education	1	0.1%
Large Group Camp Sites	1	0.1%
Revenue Producing Facilities	1	0.1%
Year-Round Camp Sites	1	0.1%
Senior Programs	-	0.0%
State Trails Administrator	-	0.0%
Broader Representation on Recreation Boards	-	0.0%
Off-road Vehicle Trails	-	0.0%
Frisbee Golf	-	0.0%
Shooting Ranges	-	0.0%

Source: Davidson County Public Meetings and Economics Research Associates

3.5 RECREATION NEEDS OBSERVED IN LOCAL RECREATION TRENDS

3.5.1 Recreation Trends among Key Activities

Examination of local trends of both recreation supply and demand provide perhaps the truest measure of the need for additional recreation facilities. While it would be desirable to examine every activity at the microeconomic level, the realities of this endeavor would clearly be beyond the scope of this planning effort. As such, the competitive environment of vital elements of the park system was the focus, as measured by their contribution to the overall financial health. These activities include golf, water parks, marinas, and ice skating. Metro Parks expressed strong interest in understanding the market for these facilities, given their importance to the fiscal well being of the department.

A. Golf Operations

Metro Parks' seven golf courses contribute just over 60 percent of total system earned income. Relative to their competitors, these courses are generally well located with respect to population concentrations. Performance of these courses is more fully described in the *Existing Conditions Report*.

Existing Golf Supply

The supply of publicly accessible golf within 25 miles of downtown Nashville (covering all of Davidson County and slightly beyond) includes 26 golf facilities totaling 450 holes of play, offering 25 18-hole equivalent golf courses. Of this total, 23 facilities are positioned as public courses, offering primarily daily fee golf opportunities, while four offer membership programs and are self-described as "semi-private".

Among these 26 publicly-accessible facilities, nine 18-hole equivalent golf courses, including all courses in the Metro Park system, offer a round of golf with a cart during the peak season for less than $30. Another fourteen 18-hole equivalents are priced at $30 to $50 during the peak season, while the remaining two 18-hole equivalents are priced over $50.

Calculation of Market Demand for Golf

Market demographics are important indicators when assessing the underlying demand for golf. Studies conducted by the National Golf Foundation (NGF) demonstrate a consistent pattern of play characteristics when measured by both age and income variables. Generally, the wealthier the individual, the rate at which one participates in golf (plays at least one round a year) increases. Age has a similar effect, demonstrated

by rising participation rates until the age of 50. Thereafter, participation decreases steadily through the older age groups.

Counteracting this trend is the fact that average annual golf rounds tend to increase as one gets older. This is generally regarded as a function of available time. This trend, however, does not hold true for number of rounds played annually as annual rounds varies little with household income. A small increase is noted in the highest incomes (over $125,000), a fact attributed to increased private golf participation and increased play levels demonstrated by the private golfer (private golfers generally play from 1.5 to 2.0 times the average number of public golfer rounds). Participation rates and rounds are indexed to provide an easy reference to the national average. This is done by taking the average and assigning that number an index of 100. Then, all of the other categories are assigned a number in proportion to that average.

Using a proprietary model developed by Economics Research Associates that applies age and income variables to the 25-mile market area population to calculate demand, the supply of golf has been compared to demand within the 25 mile area. Refining the analysis using household income as an indicator for the likely prices that an area golfer would pay, the supply was compared to the demand at the three price points.

Findings of this analysis indicate the market demonstrates excess theoretical demand (under supply) of 8.3 18-hole equivalent courses (Table 3-18). Examining this over supply on a pricing basis, the middle market price points appear over supplied while the high-end is relatively balanced. The excess demand at the lower end accounts for nearly all the market under supply. This observation is critical in that it is highly unlikely that any new supply would be able to tap into this demand pool, given the cost to develop and return expectations of developers.

Thus, it can be concluded that the market is relatively well balanced within the overall 25-mile area. This conclusion, however, does not suggest that there are no market opportunities to develop new golf. Rather, niche developments would be the most likely golf development, but likely at the expense of courses with competitive disadvantages. Further, courses currently positioned at the lower price levels, such as those owned by Metro Parks, would be expected to maintain better flexibility in changing economic times.

Table 3-18. Relative Balance of Supply and Demand of Golf within 25 Miles of Nashville

		Facilities	Holes	18-Hole Equivalents
Supply by Holes				
9-Hole		5	45	2.5
18-Hole		19	342	19.0
27-Hole		1	27	1.5
36-Hole		1	36	2.0
	Total	**26**	**450**	**25.0**
Supply by Positioning				
Public		22	369	20.5
Semi Private		4	81	4.5
	Total	**26**	**450**	**25.0**
Supply by Pricing				
< $30 w/ Cart		12	162	9.0
$30-$50		14	252	14.0
>$50		1	36	2.0
	Total	**27**	**450**	**25.0**
Estimated Demand (18-Hole Equivalents @ 35,000 Rounds)				
< $30 w/ Cart (HH Inc. < $75,000)				21.9
$30-$50 (HH Inc. $75,000-$125,000)				8.4
>$50 (HH Inc. > $125,000)				3.0
	Total			**33.3**
Excess Demand				
< $30 w/ Cart				12.9
$30-$50				(5.6)
>$50				1.0
	Total			**8.3**

Source: Economics Research Associates

Operator Interviews

While this analysis is a useful tool to understand the theoretical nature of the market, a better indication of the condition of the golf market was gained through inspections of facilities and interviews with course managers at all Metro Park golf courses and several competitive facilities. The general findings of this research included:

- A general softening of golf demand that is consistent with national trends
- Increases in golf supply in areas outside of Davidson County pulling some demand away
- Flat or limited price increases year-to-year (Nashboro Village actually decreased peak pricing for the 2001)

These comments are consistent with the results of operations at Metro golf courses, adding substantiation that the golf market is relatively well served from a demand perspective. Pricing and product positioning at this time, represents the most likely variable to modify revenue capture.

B. Marina Operations

Hamilton Creek Marina

Located on J. Percy Priest Lake, Metro Parks' Hamilton Creek Marina provides 283 slips for sailboats and other non-motorized watercraft.

Slip rates are based on boat sizes, ranging from $107 per month for a large slip (boat size 26' to 36') to $16 for rack storage for wind surfers and sea kayaks. Customers wishing to prepay for the entire year are provided a discount of one month's rent.

Wait lists for dock space are 6 to 8 months for dry storage space, 3 years for a standard wet slip, and 8 years for large wet slips. Beach slips and rack space is typically available either immediately or within a very short period.

Other Publicly Accessible Marinas

In addition to Metro Parks' Hamilton Creek Marina, J. Percy Priest Lakes has four publicly accessible marinas. Brief interviews with marina operators indicate that the marina market continues to be somewhat under served. All operators reported wait lists, either formally maintained or not maintained at each marina due to overwhelming demand. Pricing at the competitor facilities was quite similar to Metro Parks'. This suggests that market competitors are sensitive to the pricing of the lowest cost provider. Therefore, opportunities to enhance revenues through increased pricing exist.

Elm Hill Marina. Constructed in the late 1950s, Elm Hill is J. Percy Priest Lake's largest marina. It provides 680 wet slips, covered and uncovered. Monthly slip rates range from $84 to $400, depending on the size of the boat. Annual pre-paid lease agreements receive one month's rent discount. For houseboats and larger boats ranging from 30 to 60 feet, there is a wait period.

Fate Sanders Marina. A 1999 renovation added new concrete and steel slips to this 290-slip marina. The facility does not provide any dry storage, but has wet covered and uncovered slips ranging from 24 to 60 feet. Rental rates range from $75 to $425 (for boats larger than 60 feet). Annual pre-paid leases get a one-month discount. The marina maintains a consistent 100 percent occupancy. Management does not maintain a wait list.

Four Corners. This 286-slip marina does not provide any dry storage. Most of its slips are covered. Monthly rentals rates are as follows: 20' - $105, 24' - $125, 30' - $180, 40' - $235, and 50' - $320. Annual pre-paid rentals receive one month free. There are approximately 80 boats on the wait list.

Nashville Shores Yacht Club and Marina. The Nashville Shores Marina provides 323 slips and there is a waiting list. Annual pre-paid rentals receive one month free and also do not require a security deposit.

Conclusions Regarding Marina Demand

Overall, the market for additional boat slips appears strong. Area marinas report demand that exceeds available supply, and trends in ownership and use of non-trailered boats suggest that the need for slips will continue to grow. In short, from a market feasibility perspective, expansion of Hamilton Creek Marina appears to be justified. This conclusion, however, needs to be tested to ensure that the profit potential and required level of investment will yield a positive return on investment for Metro Parks.

C. Water Park Operations

Metro Parks' Wave Country continues to be the only wave pool in the metropolitan area. In 1998, however, Wave Country experienced a simultaneous increase in competition with the opening of Nashville Shores, and a decrease in visitor utilization when the Opryland theme park closed.

Wave Country

Wave Country is a seasonal aquatic facility featuring a wave pool, a water slide, a children's pool (which was under repair at the time of the consultant's site visit), picnic areas, and concessions. Admission is $6.00 for adults, $5.00 for children 12 and under, and free for children 4 and under.

Over the past four years, visitation increased overall, albeit at a rate that suggests stabilization in the market place. Wave Country hosted 75,446 visitors in FY 2000, an increase of over 6,000 people when compared to FY 1999. Historically, however, Wave Country hosted significantly more people. Results from FY 1998 provide a clearer indication of the facility's capacity when 110,141 people were hosted. Significant events in the history of the facility include the closing of the theme park at Opryland and the opening of the competitive facility Nashville Shores. Consultant discussions with management indicated a shift to a less affluent customer base with the opening of Nashville Shores.

Nashville Shores

Nashville Shores opened in 1998 on the banks of J. Percy Priest Lake. In addition to the yacht club, marina, and cabin rentals, this mixed-use complex offers a water park that features seven water slides, pools, beaches, volleyball courts, and activities such as jet skiing, paddle boating, and para-sailing. Admission rates are $15.95 for adults, $12.95 for seniors, and $12.95 for children between the ages of 3 and 12. Children under two receive free admission. Season pass prices for weekdays are $69.95 for adults and $59.95 for seniors and children; and everyday passes are $89.95 for adults and $79.95 for seniors and children. A family season pass, which includes 2 adults and 2 children is $279.00.

The park opened the same year that Opryland closed, so the direct impact of the closure on Metro Parks' Wave Country could not be assessed. The resulting reliance on local market support diminished performance in the first two years of operation. Subsequently, capture of local market has improved, bolstered by the operators' impression of limited competition from other entertainment facilities, including Wave Country.

Conclusions Regarding Water Park Operations

As a market indicator, Nashville Shores demonstrates an ability to draw a local customer to an aquatic feature at a much higher price than charged at Wave Country. Their success is tied to several factors, including the diversity of offerings and the relative newness in the market place. As many operators of themed attractions have learned, there must be a programmed series of updates and improvements to maintain customer interest. Nashville Shores has just begun to enter the period where new attractions will be required and have addressed this issue by adding the Tsunami Raft Slide. As such, Nashville Shores is anticipated to continue as the market aquatic attraction leader and that any improvement to operations at Wave Country will likely depend on reinvigorating the experience there.

With regard to Wave County, it appears that Metro Parks has two options for revitalization of the facility. The first option would involve an upgrade to the existing product, with the goal of supporting increased admissions pricing. The level of investment would be constrained. The second option would require a much higher level of investment, and would seek to re-establish Wave County as the premier aquatic park in the market. This greater investment should result in both greater attendance and higher per capita admissions revenue. It could also result in higher per capita expenditures in other categories, by promoting a longer length of stay.

D. Ice Skating Operations

Prior to the opening in 2000 of Southern Ice in Franklin, Tennessee, the ice rink at the SportsPlex enjoyed a market without competition. While pricing has always been maintained at affordable levels as a public offering, the consultants believe that future competitive challenges and the success of the facility will hinge more heavily than previously on service delivery.

The location of Southern Ice provides more convenient access to more affluent portions of the market area. Management has already noted the interception of demand that previously used the SportsPlex for certain skating activities. Despite this shift in demand, the relative strength of the overall ice market appears to be in good health, but also relatively well served at this time.

Southern Ice

The facility houses two full-sized (200'x 85') ice rinks, a full-service pro-shop, a dance studio, and a snack bar. The facility is open seven days a week, predominantly providing programs in hockey and figure skating. The facility also has three party rooms that are available for rental.

Adult admission is $5.50, admission for children (12 and under) is $4.50, skate rental is $2.50, and children four and under are charged only for the skate rental. Current pricing positions Southern Ice as a slightly less expensive alternative than the SportsPlex ($0.50 less in each price category). It is surmised that Southern Ice is using this pricing to ensure that the facility captures all nearby demand. Over the longer term, however, the consultants anticipate a pricing strategy that maintains price parity with Metro Parks and eliminates this element of the purchase decision.

3.5.2 Geographic Distribution of Existing Recreation Activities

Analysis of the supply of recreation activities per population by planning area affords the opportunity to measure the relative availability of activities in different areas of the County. As demonstrated in Table 3-19, not all areas are served equally. Planning areas with supply of a specific facility greater than 100 percent, such community pools (379 percent) in Planning Area 3 possess a supply that is 3.79 times the market average per 10,000 people. Conversely, Planning Area 10's supply of community centers is (53 percent) is approximately one-half of the market average.

Planning Subareas 1 and 2 (northwest Davidson County) contain none of the recreation offerings listed, while Subarea 5 (just northwest of Downtown) contains at least one of

each. Planning Subarea 9 (Downtown) contains nearly 360 times the number of YMCA's per 10,000 people compared to the rest of the County. This speaks directly to the relationship of fitness facilities and their physical location close to places of employment.

While this analysis presents a relative distribution of certain recreation facilities, it will become more useful as a tool to identify and target under-served areas in the recommendation section of this Parks and Greenways Master Plan.

Table 3-19. Recreation facilities by Planning Area (per 10,000 Population)

	Planning Area														
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**Total**
Population (1990)	5,131	16,013	25,621	37,835	65,212	25,615	40,789	23,683	3,993	67,125	32,012	63,327	43,899	60,529	510,784
	1.0%	3.1%	5.0%	7.4%	12.8%	5.0%	8.0%	4.6%	0.8%	13.1%	6.3%	12.4%	8.6%	11.9%	100.0%
Population (2000)	5,597	17,717	25,066	41,229	64,427	33,718	42,385	23,299	3,617	71,394	31,581	77,377	60,619	71,865	569,891
	1.0%	3.1%	4.4%	7.2%	11.3%	5.9%	7.4%	4.1%	0.6%	12.5%	5.5%	13.6%	10.6%	12.6%	100.0%
Number of Facilities															
Community Center	0	0	0	1	5	1	2	3	0	1	0	0	1	1	15
Community Pool	0	0	2	0	2	0	1	3	0	1	2	0	1	0	12
Metro Golf	0	0	0	0	2	0	2	1	0	1	0	0	0	1	7
Public Golf	0	0	0	0	2	0	2	1	0	0	0	0	1	2	8
YMCA	0	0	1	1	2	0	0	0	3	2	0	1	2	1	13
Total	0	0	3	2	13	1	7	8	3	5	2	1	5	5	55
Facilities Per 10,000 Residents															
Community Center	-	-	-	0.2	0.8	0.3	0.5	1.3	-	0.1	-	-	0.2	0.1	0.3
Community Pool	-	-	0.8	-	0.3	-	0.2	1.3	-	0.1	0.6	-	0.2	-	0.2
Metro Golf	-	-	-	-	0.3	-	0.5	0.4	-	0.1	-	-	-	0.1	0.1
Public Golf	-	-	-	-	0.3	-	0.5	0.4	-	-	-	-	0.2	0.3	0.1
YMCA	-	-	0.4	0.2	0.3	-	-	-	8.3	0.3	-	0.1	0.3	0.1	0.2
Total	-	-	1.2	0.5	2.0	0.3	1.7	3.4	8.3	0.7	0.6	0.1	0.8	0.7	1.0
Relative Supply of Facilities by Type															
Community Center	-	-	-	92%	295%	113%	179%	489%	-	53%	-	-	63%	53%	100%
Community Pool	-	-	379%	-	147%	-	112%	611%	-	67%	301%	-	78%	-	100%
Metro Golf	-	-	-	-	253%	-	384%	349%	-	114%	-	-	-	113%	100%
Public Golf	-	-	-	-	221%	-	336%	306%	-	-	-	-	118%	198%	100%
YMCA	-	-	175%	106%	136%	-	-	-	3636%	123%	-	57%	145%	61%	100%
Total	-	-	124%	50%	209%	31%	171%	356%	859%	73%	66%	13%	85%	72%	100%

Source: CACI Marketing Systems, Inc. and Economics Research Associates

3.6 IDENTIFICATION OF POTENTIAL USES

The primary goal of the Needs Analysis was to identify candidate uses that provide the best opportunity to satisfy recreation needs of the community and the mission statement of Metro Parks.

Evaluation of need consolidates general and regional recreation trends and the three inputs of need: expressed, stated, and observed. As presented in Table 3-20, candidate uses were evaluated for each of the four inputs and marked with either a "+" or an “o.” A “+” indicates that the facility is responsive to a recreation trend and/or meets an expressed, stated, or observed need. Conversely, an "o" indicates that the facility is not supported by recreation trends or does not meet one of the three types of need.

As shown, activities such as education programs and environmental programs received four “+’s,” indicating strong input as a state recreation trend, strong public support from both the public meetings and survey, and an identified need based on the consultants observations in the market. Senior programs, identified in the State Recreation Plan as a low priority, received no "+'s" as the defined thresholds were not crossed in any one of the categories. Top-rated facilities included ball fields, aquatic facilities, and passive recreation opportunities. Trails, which are a highly visible subject in Davidson County, received significant support across all categories.

Table 3-20. Potential Uses for Metro Parks

	Recreation Trends		Stated Needs	Expressed Needs	Observed Needs	Total +'s
	State Recreation Plan Priorities	Top TN Activities/NSGA Data	Public Meeting Comments	Telephone Survey Results	Consultant Observations / Existing Operations	
Programs						
Educational Programs	+	o	+	+	+	4
Environmental Programs	+	o	+	+	+	4
Teen Programs	+	o	+	+	+	4
Cultural Programs	o	o	+	+	+	3
Increased General Programming	o	o	+	+	o	2
Senior Programs	o	o	o	o	o	---
Facility Activities						
Ballfields	+	+	+	+	+	5
Aquatic Facilities	+	+	o	+	+	4
Passive Recreation Areas	o	+	+	+	+	4
Soccer Fields	+	+	+	o	+	4
Water Activities	+	+	o	+	+	4
Picnic and Support Facilities	+	+	+	o	o	3
Public Golf Courses	o	+	+	+	o	3
Recreation/Community Centers	+	o	+	+	o	3
River and Lake Access	+	o	o	+	+	3
Neighborhood Parks	o	o	+	+	o	2
Play Grounds	o	o	o	+	+	2
Revenue Producing Facilities	o	o	+	o	+	2
Tennis Courts	+	o	o	+	o	2
Facilities and Activities for People with Disabilities	+	o	o	o	o	1
Small Theaters/ Band Shell	o	o	o	+	o	1
Year-Round Camp Sites	o	+	o	o	o	1
Frisbee Golf	o	o	o	o	o	---
Camp Sites	o	o	o	o	o	---
Shooting Ranges	o	o	o	o	o	---
Trails						
Bicycle Trails	+	+	+	+	+	5
Greenways	+	+	+	+	+	5
Multi-use Trails	+	+	+	+	+	5
Hiking Trails	+	+	o	+	+	4
Off-road Vehicle Trails	+	+	+	+	o	4
	o=low +=medium or high	o=>20th rank +=<20th rank	o=<10 comments +=>10 comments	o=<15 respondents +=>15 respondents	o=no observed +=observed	

Source: Economics Research Associates

3.7 IDENTIFICATION OF PROGRAMS AND FACILITIES WITH SIGNIFICANT NEED/PREFERRED USES

The process of reducing the list of candidate uses to a meaningful level began by identifying those activities that demonstrated "significant" need. This term was defined as those activities that generated at least three sources of positive input, or "+'s" as identified in Table 3-20. Activities that received less than three "+'s" were not examined further in the analysis. Table 3-21 shows programs and facilities that received three or more "+'s." The identified programs and facilities with significant need are those that would have the highest levels of apparent community support and/or address a growing recreation trend.

Table 3-21. Potential Uses for Metro Parks that Demonstrated Significant Need

	Recreation Trends		Stated Needs	Expressed Needs	Observed Needs	Total +'s
	State Recreation Plan Priorities	Top TN Activities/NSGA Data	Public Meeting Comments	Telephone Survey Results	Consultant Observations / Existing Operations	
Programs						
Educational Programs	+	o	+	+	+	4
Environmental Programs	+	o	+	+	+	4
Teen Programs	+	o	+	+	+	4
Cultural Programs	o	o	+	+	+	3
Facility Activities						
Ballfields	+	+	+	+	+	5
Aquatic Facilities	+	+	o	+	+	4
Passive Recreation Areas	o	+	+	+	+	4
Soccer Fields	+	+	+	o	+	4
Water Activities	+	+	o	+	+	4
Picnic and Support Facilities	+	+	+	o	o	3
Public Golf Courses	o	+	+	+	o	3
Recreation/Community Centers	+	o	+	+	o	3
River and Lake Access	+	o	o	+	+	3
Trails						
Bicycle Trails	+	+	+	+	+	5
Greenways	+	+	+	+	+	5
Multi-use Trails	+	+	+	+	+	5
Hiking Trails	+	+	o	+	+	4
Off-road Vehicle Trails	+	+	+	+	o	4
	o=low +=medium or high	o=>20th rank +=<20th rank	o=<10 comments +=>10 comments	o=<15 respondents +=>15 respondents	o=no observed +=observed	

Source: Economics Research Associates

4.0 PLAN FOR THE FUTURE

4.1 PLANNING CONTEXT

Mission Statement

"It is the mission of the Metropolitan Board of Parks and Recreation to provide every citizen of Nashville and Davidson County with an equal opportunity for safe recreational and cultural activities within a network of parks and greenways that preserves and protects the region's natural resources"

Vision for the Future

"The parks and recreation programs of Metropolitan Nashville and Davidson County will significantly enhance the quality of life in the community. Regardless of race, income or physical ability, citizens will have equal access to parks and recreation programs with a sense of personal safety. Citizens will enjoy an interconnected system of greenways, trails, natural areas, open spaces, and recreation facilities, distributed in response to need throughout the metropolitan region. The parks and greenways system will benefit the community by helping to stabilize and enhance neighborhoods and historic places, to protect sensitive natural resources, to link adjacent neighborhoods, and to promote community interaction. Facilities and programs will be responsive to the needs and interests of citizens, with a diversity of activities emphasizing physical well-being as well as appreciation of natural resources, cultural resources, and arts. Professional staff working within a supportive work environment will ensure high quality, cost-effective recreational programming and instruction. The public will recognize and appreciate many benefits – recreation, education, economic, cultural, and environmental – derived from diverse, well-maintained facilities, recreation programs, and open spaces. A well-organized network of non-profits, joint venture partners, corporate sponsors, and volunteers will assist Metro Parks in accomplishing its mission. Financial needs to support capital improvements and operations will come from a variety of sources without relying solely upon public funds."

Goals for the Future

GOAL 1. METROPOLITAN SYSTEM OF PUBLIC PARKS AND GREENWAYS

Establish and maintain a regional system of public parks and greenways that provides recreational, educational, ecological, and aesthetic benefits to enhance the quality of life for all citizens of Nashville and Davidson County

GOAL 2. RECREATION FACILITIES AND PROGRAMS

Offer all citizens opportunities to participate in cultural, athletic and environmental education programs

GOAL 3. PARK AND GREENWAY PLANNING, OPERATION AND MAINTENANCE

Design, operate and maintain safe parks and greenways

GOAL 4. FINANCING THE PARKS AND GREENWAYS SYSTEM

Meet the financial needs of the regional parks and greenway system through a variety of public and private funding sources and strategies

GOAL 5. PUBLIC SUPPORT FOR THE PARKS AND GREENWAYS SYSTEM

Generate public support for the parks and greenways system as measured by high levels of visitation, volunteer support activities, and a willingness to commit the funds needed to establish and maintain facilities and programs

GOAL 6. REGIONAL OPEN SPACE SYSTEM

Encourage development of a network of open space throughout Nashville and Davidson County that complements the network of public parks and greenways owned by the Metropolitan Board of Parks and Recreation

4.2 SYSTEM-WIDE RECOMMENDED ACTIONS

GOAL 1. METROPOLITAN SYSTEM OF PUBLIC PARKS AND GREENWAYS

Establish and maintain a regional system of public parks and greenways that provides recreational, educational, ecological, and aesthetic benefits to enhance the quality of life for all citizens of Nashville and Davidson County

Objective 1.1 ***Provide parks and recreation facilities of varying sizes and functions***

Action 1.1.1 Utilize the following parks classification system and standards as a general guide for future development of park and recreation facilities:

Park Classification	Park Function	Park Size	Parkland Standard
Regional Park	Large, predominantly natural reserve serving entire metropolitan area	>200 acres	1 0 ac. / 1,000 residents
Community/High-Use Urban Park	Serving several surrounding communities Large, offering a variety of active recreation facilities (golf, ballfields, etc.)	20 –200 acres	5 ac. / 1,000 residents
Neighborhood Park	Serving nearby neighborhood	5 – 20 acres	2 ac. / 1,000 residents
Mini-Park	Serves densely populated neighborhoods	< 5 acres	0.5 ac. / 1,000 residents
Greenway	County-wide trail system and riparian corridor protection	variable	variable
Special Facility	Historic Sites, Nature Preserves, Sports Complexes	variable	variable

Action 1.1.2 Utilize the following general guide for locating future park and recreation facilities in the Metro region.

- Focus efforts on neighborhood transects as defined in the Metro Planning Department Transect Zone Plan
- Relate facility development to population density, and spatial relationships with other facilities and service providers.

Objective 1.2 ***Locate parks and recreation facilities throughout the metropolitan area in response to need while also considering opportunities for natural and cultural resource protection. Provide all residents living within neighborhood transects with access to a park or greenway within one-half mile of their homes.***

Action 1.2.1 Utilize service area radii as a general guide for locating park and recreation facilities, as follows:

Facility	Service Radius Standard
Regional Park	30 Minute Drive
Community Park	½ to 3 miles
Neighborhood Park	¼ to ½ mile
Mini-Park	<¼ mile
Greenway	2 miles
Special Facility	Variable

Action 1.2.2 Adopt the criteria in Objective 3.4 for determining the specific location of new park and recreation facilities that consider the following, at a minimum:

- the need for service (as measured by adopted service standards in Action 1.2.1)
- opportunity for logical and efficient connections between parks, neighborhoods, and commercial centers, schools, and other public spaces
- opportunity to preserve and protect significant natural and cultural resources *(see Goal 6, Objective 6.1 and related Actions)*

- consistency with growth management policies of the Nashville and Davidson County Department of Planning

Action 1.2.3 Utilize existing elementary school properties as a cost efficient method to improve access to parks in transect areas identified with this plan as being underserved. Use of elementary schools should be developed in phases, with the first phase addressing the areas with the most serious deficiencies.

Agreements to utilize school properties will be required between Metro Parks and Metro Schools. As such, Metro Parks should strengthen the Memorandum of Understanding with Metro Schools to designate 63 elementary school properties as neighborhood parks.

- Designate the following 35 elementary school properties as Metro Parks in the first phase:

  Subarea 2 – Old Center, Haynes
  Subarea 3 – King's Lane, Bordeaux, Cumberland
  Subarea 4 – Amqui, Neely's Bend, Madison
  Subarea 5 – Dan Mills, Shwab, Rosebank, Ross
  Subarea 6 – Harpeth Valley
  Subarea 7 – Charlotte Park
  Subarea 8 – Hull-Jackson, Jones Paideia
  Subarea 11 – Glencliff, Johnson
  Subarea 12 – Norman Binkley, Paragon Mills, Tusculum, Cole, Maxwell
  Subarea 13 – Glenview, J.E. Moss, Una, Lakeview, Mt. View
  Subarea 14 – Andrew Jackson, Hermitage, Hickman, McGavock, Tulip Grove, Dodson, DuPont

- Designate the following 12 elementary school properties as Metro Parks in the second phase:

  Subarea 5 – Cora Howe, Glenn, Hattie Cotton, Tom Joy
  Subarea 7 – Cockrill, Park Avenue, Sylan Park
  Subarea 10 – Carter-Lawrence
  Subarea 11 – Fall-Hamilton, Napier, Whitsitt
  Subarea 14 – Stanford

- Designate the following 16 elementary school properties as Metro Parks in the third phase:

  Subarea 2 – Bellshire, Chadwell
  Subarea 3 – Alex Green
  Subarea 4 – Gateway, Stratton
  Subarea 6 – Brookmeade, Gower
  Subarea 7 – Westmeade
  Subarea 10 – Julia Green, Percy Priest
  Subarea 12 – Crieve Hall, Granbery, Haywood
  Subarea 13 – Glengarry
  Subarea 14 – Old Dodson, Pennington

- Facilitate the joint use of school facilities during non-school hours for general public use and recreation programs
- Upgrade playgrounds at all elementary school sites selected to be a part of the parks/schools joint system

Action 1.2.4 Adopt a policy regarding the design and development of special interest / memorial uses in public parks. Special interest/ memorials uses in public parks should generally be avoided and only be approved in exceptional cases.

Special interest memorials (where determined by the Parks Board to be appropriate) should be designed to enhance the overall parks system, and as such, it is recommended that memorials be limited to the following elements:

- Specimen single tree
- Specimen tree grove
- Other natural enhancements, such as:
  - Meadow or woodlands restoration
  - Stream or wetlands restoration
  - Ornamental plantings or landscaping
- Functional and artistic elements, such as:
  - Lawns, open space, and plazas
  - Trails or bridges
  - Shelters
  - Benches
  - Paving
  - Public art/statues/sculptures

Memorial features, such as those listed above, may be signed with a stone, brass or bronze plaque set into the ground for ease of maintenance. Metro Parks should determine the appropriate size for such signage.

To facilitate the development of memorials, it is suggested that Metro Parks develop and maintain a list of specific elements available for memorial dedication and sponsorship.

Objective 1.3 ***Strive to make parks and recreation facilities accessible to all residents***

Action 1.3.1 Coordinate efforts with other agencies to integrate recommendations of the *Metro Strategic Plan for Sidewalks and Bikeways* into planning of parks, greenways, and other public and private development, emphasizing linkages to the parks system, neighborhoods, schools and urban centers.

Action 1.3.2 Ensure that all new park and recreation facilities comply with requirements of the Americans with Disabilities Act (ADA), and strive to achieve ADA compliance in all existing facilities in accordance with the most recent accessibility guidelines and standards of the U.S. Access Board.

Action 1.3.3 Continue to provide elderly and disabled individuals with paratransit service to public parks and recreation facilities

Action 1.3.4 Strive to provide transit access to existing and future parks and recreation facilities

Objective 1.4 ***Connect parks and recreation facilities in Davidson County with parks and recreation facilities in adjacent counties***

Action 1.4.1 Coordinate parkland acquisition and trail planning functions with adjacent counties

Action 1.4.2 Where possible, acquire parkland that will enable connections to parks and recreation facilities in adjacent counties

Objective 1.5 ***Strengthen coordination with other Metro Government Agencies to ensure a comprehensive approach to the improvement of the Parks and Greenways system.***

Action 1.5.1 Coordinate park and greenway planning efforts with the Metro Planning Department plans, and with existing and emerging urban development patterns

Action 1.5.2 Strengthen relationship with Schools, Metro Development and Housing Authority (MDHA), Public Works, Metro Police and Police Athletic League, Public Libraries, Metro Social Services, Metro Action Commission, Juvenile Court, Metro Arts Commission, Metro Historical Commission, and the Metropolitan Fair Board

Action 1.5.3 Aggressively pursue coordinated park and greenway planning efforts with the Metro Water Services Department / Stormwater Division in order to strengthen the mutual benefit of multi-functional park, greenways, and open space

Action 1.5.4 When other agencies develop facilities that are to be maintained by Metro Parks, ensure that the facilities are built to Master Plan Design Guidelines standards

Objective 1.6 ***Establish a safe comprehensive greenway network that provides recreation and transportation opportunities for citizen's and visitors.***

Action 1.6.1 Plan for critical connections between existing projects that will maximize the current system:

- Connection between Metro Center Levee Greenway and Riverfront Greenway
- Connection between Shelby Bottoms and the East Bank Greenway

Action 1.6.2 Establish a significant East-West Greenway through the City that will connect major existing and future greenways

- Develop the Cumberland River Greenway

Action 1.6.3 Increase access to greenways via non-motorized modes of transportation,

- Establish a hierarchical network of pedestrian facilities, inclusive of multi-use greenway corridors, that provide the opportunity for non-motorized travel throughout the community and into surrounding communities
- Develop a greenway within two miles of all neighborhoods, centers and core areas within Davidson County

Action 1.6.4 Provide open space and passive recreational opportunities within greenway corridors

- Establish loops within each corridor

Action 1.6.5 Expand the greenway system beyond the current water-based network

- Develop secondary tier greenways that provided east-west connection that connect stream-based greenways

Action 1.6.6 Take advantage of regional greenway network opportunities as neighboring Counties develop greenway networks

- Coordinate with neighboring Counties

Action 1.6.7 Improve public access (visual and/or direct) to rivers and streams

Action 1.6.8 Establish a comprehensive safety program to patrol and maintain greenways, trailheads, and parking areas.

GOAL 2. RECREATION FACILITIES AND PROGRAMS

Offer all citizens opportunities to participate in athletic, cultural, and environmental programs.

Objective 2.1 ***Provide a diversity of facilities and programs to meet the need of Davidson County residents***

Action 2.1.1 Develop the short term core focus of Metro Parks to support the following programs, activities and facilities as identified in *Section 3.0 – Assessment of Needs* (the focus should be periodically reevaluated to ensure that programs, activities and facilities are provided to reflect changing recreational trends):

- **Programs**
  Educational Programs
  Environmental Programs
  Teen Programs
  Cultural Programs

- **Facility Activities**
  Ballfields
  Aquatic Facilities
  Passive Recreation Areas
  Soccer Fields
  Water Activities
  Picnic and Support Facilities
  Public Golf Course
  Recreation/Community Centers
  River and Lake Access

- **Trails**
  Greenways
  Multi-use Trails (i.e., bikes, in-line skates, pedestrians)
  Hiking Trails
  Mountain Bike Trails
  Equestrian Trails

Action 2.1.2 Understand program lifecycles and develop mechanisms to evaluate programs annually.

To understand how to market more effectively, knowing where each program is positioned in its life cycle will help. Typically, there are four stages in a life cycle:

- Introduction/New – more marketing is necessary, because department is entering new markets
- Growth – demands are exceeding supply, physical expansion is necessary (more space, times, instructors, etc.)
- Mature – supply and demand are stabilizing, building customer loyalty is necessary
- Decline – losing market share, hard decisions are necessary (drop program or contract out)

Criteria for evaluating programs should be developed to determine where each program stands within its lifecycle. Each phase of the lifecycle should have marketing strategies associated with it, how this program should be positioned in the future or whether it should be terminated. Criteria can be revenue, participation minimums and maximums, marketing and promotion efforts, terms, lengths, seasonality, etc.

Action 2.1.3 Develop age-segmented programs.

Keep age groups for children to similar physical and mental development stages:

- 2-3 years
- 3-5 years
- 6-8 years
- 9-11 years
- 12-13 years
- 14-15 years
- 16-18 years

Break down ages for adult and senior programming, targeting especially those 40-59 years old.

- 19-21 years
- 21-29 years
- 30-39 years
- 40-49 years
- 50-59 years

- 60-69 years
- 70+ years

Action 2.1.4 Expand program offerings and utilize contractual instructors to assist in meeting demands of the community for a variety of programs

Contractual instructors to assist with programming the Regional Centers should be part of the system and expanded as new facilities are built. Contractual instructors' standards and agreement forms that articulate revenue expectations as well as quality programming should be developed.

Action 2.1.5 Increase the positive economic impact within the community of the Metro Parks system through expanded festivals and events that have a regional draw

Future expansion of festivals and events that can be marketed locally and regionally could have a great impact on reaching much of the community. Through aggressive marketing, good word of mouth, and vendors' positive evaluations of sales and exposure can grow a festival and event exponentially. Festivals and events can have a synergistic economic impact on a community, especially when coupled with key partnerships and sponsorships.

Objective 2.2 ***Provide a system of regional and neighborhood centers that offer space and programming for all ages and abilities***

Action 2.2.1 New Regional Centers

The new concept of Regional Centers in Nashville and Davidson County expands the traditional footprint of existing community centers to provide large, diverse activity centers in key locations in the Metro region. The New Regional Centers could be designed to include:

- Magnet Feature: The concept is that each of the five proposed Community/Rec Centers could offer a specialized feature that would act as a regional draw. For example: Hadley - indoor tennis; East – performing arts space and small theatre;

Coleman – teaching kitchen for ethnic cooking classes; Richland – library; Sevier – visual arts classrooms and studios

- Administrative Offices
- Aerobics Room
- Arts and Crafts Room
- Concessions Area
- Community Room/Classroom
- Computer Room
- Dance and Performing Arts Room
- Day Care
- Fine Arts Lab
- Fitness Center
- Game Room
- Gymnasium
- Indoor Swimming Pool (5-lane, 25m)
- Kitchen
- Library
- Locker Rooms
- Multi-purpose room – for special events, parties, wedding receptions, etc.
- Music Room
- Senior Lounge and Activity Room
- Sewing Room

PHASE 1 Regional Center Recommendations:

- Consolidate East Park and Douglas Senior Center in a new center located at East Park
- Build new center at Hadley Park. Preserve existing gymnasium but rebuild the rest of the center to include a senior center. Consider joint use of the facility with the Metro Library Board in order to maximize the use of the facility and park.

PHASE 2 Regional Center Recommendations:

- Build new center in Richland Park area. Consider joint use of the facility with the Metro Library Board in order to maximize the use of the facility and park.
- Replace existing center at Coleman Park. Consider joint use of the facility with the Metro Library Board in order to maximize the use of the facility and park.

- Expand/renovate center at Hartman Park

PHASE 3 Regional Center Recommendations:

- Replace existing center at Sevier Park with new center
- Expand/renovate center at Madison Park

Action 2.2.2 New and Enhanced Neighborhood Centers:

The following centers are recommended for enhancement and follow the traditional Community Center footprint. New facilities, such as indoor walking tracks and other recreational amenities listed below, might be added to these centers in response to need:

- Community Room/Classroom
- Game Room
- Gymnasium
- Locker Rooms
- Multipurpose Room
- Senior Lounge

New Centers:

- Parkwood area
- Paragon Mills
- South Inglewood
- Tennessee Youth Center – explore the feasibility of leasing the Tennessee Youth Center property from the State of Tennessee to provide neighborhood center space for the Joelton area. If a cost effective agreement cannot be reached, consider the development of a new neighborhood center in the area.

Enhanced Centers:

- Antioch
- Bellevue
- Hermitage
- Kirkpatrick*
- Looby/Buena Vista
- McFerrin*
- Morgan
- Watkins

* Should the public housing developments that are served by the Kirkpatrick and McFerrin Centers be redeveloped under a program such as Hope VI, new centers should be provided.

Action 2.2.3 Maintenance of Existing Centers

The following centers are recommended to be maintained in their existing state and re-evaluated over the next 10-20 years for their utilization and service to the community. If areas currently served by these centers are subsequently served by new centers (Neighborhood or Regional), or if use declines significantly, these centers should be phased out.

- Cleveland
- Elizabeth
- Green Hills
- McCabe
- Napier
- Rose
- Shelby
- West

Action 2.2.4 Metro Parks should target the inclusion of sustainable building and design techniques, where appropriate, into new architectural and landscape architectural projects. Application of a sustainable building process will help Metro Parks develop buildings and landscapes that improve environmental and economic performance by addressing the following criteria (see checklist in Appendix C for additional information):

- Site sustainability
- Water use efficiency
- Energy consumption and atmospheric impact
- Materials and resource use and efficiency
- Indoor environmental air quality
- Design innovation

Action 2.2.5 Metro Parks, as part of its efforts to maximize the recreational, cultural, social, environmental benefits of the current parks system and future improvements, should explore joining the U. S. Green Building Council (USGBC).

The USGBC is a *"coalition of leaders from across the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live and work."*

Objective 2.3 ***Provide a range of aquatic facilities including indoor pools, family aquatic centers, therapeutic pools, spray pools, and spray playgrounds***

Action 2.3.1 Develop new indoor pools at select Regional Centers with therapeutic aquatics program

Action 2.3.2 Enhance Wave Country to include upgraded slides, lazy river, a skate park, and other enhanced play features

Action 2.3.3 Develop spray parks in selected neighborhood and community parks across the Metro area currently not served by swimming facilities

Objective 2.4 ***Provide baseball and softball complexes and fields for tournament-level play, league play, and practice***

Action 2.4.1 Acquire land for new baseball/softball complex in underserved areas

Action 2.4.2 Upgrade baseball/softball complex in Warner Park and continue to provide the facilities unless acquisition of land serving the southwest Davidson County area permits the development of new facilities at an alternative site

Action 2.4.3 Upgrade and expand baseball/softball facilities at existing West Park or at new locations in the West/Northwest

Objective 2.5 ***Provide soccer and multi-use fields for soccer, football, rugby, lacrosse, and ultimate Frisbee to accommodate tournament-level play, league play, and practice***

Action 2.5.1 Expand Harpeth Valley Soccer to parcel across Harpeth River and add amenities

Action 2.5.2 Phase out Ezell Park, adjacent to the correctional facility, as additional fields are available elsewhere. Maintain adult programs as an interim use.

Action 2.5.3 Acquire land for new soccer facilities in Southeast to replace those in Ezell Park

Action 2.5.4 Upgrade fields at Heartland and add amenities

Action 2.5.5 Provide amenities at Rhodes Park soccer fields

Action 2.5.6 Evaluate, and develop if appropriate, soccer facilities at the Fair Grounds

Objective 2.6 ***Upgrade existing tennis facilities and offer programs at courts in neighborhood and community parks across the County***

Action 2.6.1 Maintain existing courts where demand is greatest

Action 2.6.2 Provide an adequate number of courts in neighborhood and community parks to serve the nearby population

Action 2.6.3 Expand youth tennis program to locations around the county as needed

Objective 2.7 ***Upgrade existing basketball facilities and offer programs at courts in neighborhood and community parks across the County***

Action 2.7.1 Develop 1-2 basketball courts in all neighborhood parks

Objective 2.8 ***Replace playground equipment that is outdated and unsafe and provide new playgrounds in all neighborhood parks currently without playgrounds***

Action 2.8.1 Upgrade playgrounds in all neighborhood parks to current standards outlined in Section 3.0.

Action 2.8.2 Replace playgrounds on Elementary School properties once sites are formally designated as parks

Objective 2.9 ***Through coordination with the Environment and Beautification Commission and private or non-profit interests, create a privately operated Community Gardens program in densely populated areas of Davidson County***

Action 2.9.1 Pursue partnership opportunities to develop privately run community gardens

Action 2.9.2 Identify vacant parcels in dense neighborhoods and develop community gardens as a grassroots effort with the residents to provide open spaces and improve visual quality while offering the opportunity for urban gardening programs

Action 2.9.3 Designate areas of appropriate neighborhood parks as community garden sites.

Objective 2.10 ***Upgrade golf facilities to remain competitive and offer programs to teach new golfers***

Action 2.10.1 Expand youth instructional golf program as demand increases

Action 2.10.2 Explore possible future land acquisition in Davidson County for golf course development if or when market demands justify such development. Development should be located geographically to satisfy prevailing market demands.

Action 2.10.3 Upgrade, replace, or build new clubhouse facilities at the following locations:

- Two Rivers Clubhouse
- Warner Clubhouse
- Shelby Clubhouse

Action 2.10.4 Upgrade existing golf courses with golf cart storage facilities, golf cart paths, and irrigation as follows:

- Warner Cart Storage and paths
- Harpeth Hills Clubhouse (new golf cart storage)
- Irrigation improvements at Rhodes, Two Rivers, McCabe, Percy Warner, Harpeth Hills and Shelby

Action 2.10.5 Explore the revenue generating opportunities of adding driving ranges to public golf courses, and implement if feasible (Two Rivers and McCabe)

Objective 2.11 ***Develop open play fields in neighborhood and community parks for practice, free play, and informal games***

Action 2.11.1 Provide multi-purpose open play areas in all parks

Objective 2.12 ***Expand environmental education programming in neighborhood/community centers throughout Davidson County to offer programming developed through the Warner Park Nature Center to all Davidson County residents***

Action 2.12.1 Develop Nature Centers at bends of Cumberland River – Bells Bend, Shelby Bottoms, Peeler Park

Action 2.12.2 Develop new Nature Center at Beaman Park

Action 2.12.3 Develop satellite environmental education programs at all Regional and Neighborhood Centers

Action 2.12.4 Develop additional environmental education programs utilizing the green house facilities located at Two Rivers Park

Objective 2.13 ***Enhance and promote the following signature facilities in the Parks and Greenways system:***

Action 2.13.1 Develop interpretive trail system and small-scale visitors center at Fort Negley

Action 2.13.2 Maintain Parthenon as a cultural destination and the center of the system's art collection by completing the air conditioning, lighting, and other enhancements necessary to provide for an inviting viewing environment

Action 2.13.3 Maintain and enhance cultural facilities and programming at the Centennial Arts Center and Arts Activity Centers

Action 2.13.4 Expand cultural programming throughout the County to Regional and Neighborhood Community Centers

Action 2.13.5 Expand Centennial Sportsplex to add fitness center, aerobics/dance rooms, and additional parking

Action 2.13.6 Enhance Warner Park Equestrian Center and consider expanding the public horse rental opportunities to all residents of Davidson County, and explore opportunities for equestrian trails in other parks where appropriate

Action 2.13.7 Create new Regional Sports Complex to offer tournament-level facilities

The regional sports complex may include, but is not limited to, the following recreational amenities:

- 12-16 field lighted tournament-quality soccer complex
- 4-plex or 8-plex baseball/softball facility
- Outdoor basketball and volleyball facility
- Indoor gymnasium facility for volleyball, basketball, indoor soccer leagues
- In-line hockey
- Skate Park

Action 2.13.8 Develop a boathouse for sculling/rowing activities at an appropriate and accessible location

Action 2.13.9 Expand the facilities at the Hamilton Creek Marina, as warranted by user demand, and by the ability to improve the revenue generation of the facility

Action 2.13.10 Improve Hall of Fame Park across from the new Symphony Hall, once construction of Symphony Hall is complete, including outdoor performance facilities

Action 2.13.11 Continue to enhance Centennial Park as a center for cultural arts, and explore the feasibility for new arts facilities

Objective 2.14 ***Continue initiatives to expand the greenways system throughout Nashville and Davidson County:***

Action 2.14.1 Implement greenways program according to the following development recommendations, and as additional opportunities and corridors are identified or developed *(refer to Figure 2, the Existing and Proposed Greenways map, in Section 2.0)*:

First Priority:

- Beaman Park Development, including nature/visitors center
- Complete existing Stones River, Mill Creek, and Downtown Greenway projects, with emphasis on connecting neighborhoods and activity centers
- Cumberland River Pedestrian Bridge connecting Shelby Bottoms and Stones River Greenway
- Harpeth River Greenway, expansion beyond current Bellevue Greenway
- Shelby Bottoms nature/visitors center and Cooper Creek bridge
- Whites Bend/Cumberland River Greenway (Brookmeade Park)
- Bells Bend Greenway and Nature Park
- Neely's Bend/Peeler Park Greenway and Nature Park

Second Priority:

- Downtown Greenway to MetroCenter Levee connector Greenway
- Hermitage Greenway Spur on Stones River, connecting to the community center at Hermitage Park
- Richland Creek Greenway Expansion
- Shelby Bottoms to East Bank Greenway Riverfront connector Greenway
- Whites Creek Greenway Expansion
- Eaton's Creek Corridor (from Whites Creek to Beaman Park)

Third Priority:

- Cumberland River Bridge connecting Bells Bend to Whites Bend Greenways (Brookmeade Park)
- Cumberland River Bridge connecting Neely's Bend to Stone's River Greenway
- Mill Creek Greenway Expansion
- Seven Mile Creek Greenway – Pilot Project

Fourth Priority:

- Bordeaux Greenway

- Browns Creek Greenway
- Cockrill Bend Greenway
- Cumberland River Greenway Rails-With-Trails
- Cumberland River/Jefferson Street Connector
- Indian Creek Corridor
- Old Hickory Greenway
- Pennington Bend Greenway
- Second Tier East-West Connections

Objective 2.15 ***Explore the feasibility of offering several programs for new recreational activities in the parks and greenways system:***

Action 2.15.1 Skate Park at Wave Country, and potentially at the Fair Grounds

Action 2.15.2 Dog Park pilot projects at Shelby and Warner Parks

Action 2.15.3 Adventure sports activities incorporated into existing parks, greenways or the new sports complex (including, for example, kayaking facilities, climbing walls, mountain bike courses, etc.)

Action 2.15.4 Provide opportunities for Overnight Camping in suitable and appropriate locations

Objective 2.16 ***Implement improvements recommended by park-specific master plans***

Action 2.16.1 Implement the recommendations contained within the park-specific master plan prepared for Centennial Park

GOAL 3. PARK AND GREENWAY PLANNING, OPERATION AND MAINTENANCE

Design, operate and maintain safe parks and greenways

Objective 3.1 ***Design and operate safe parks and greenways, increase efficiency, seek program and funding opportunities, and deliver quality service***

Action 3.1.1 Strengthen policies and procedures for the park ranger program, providing specialized law enforcement on all Metro parks and greenways

Action 3.1.2 Evaluate the current ranger staffing for deficiencies, and increase staffing levels as appropriate as the system expands

Action 3.1.3 Expand the use of bike patrols as appropriate

Action 3.1.4 Explore integrating safety devices such as call boxes, and other security technology in the design and operation of parks, greenways, trailheads, and parking lots, for the benefit of visitors and employees

Action 3.1.5 Enhance user safety of multi-use trails and reduce user conflicts through education of trail users, and the adoption of guidelines for the use of trails within the Metro Parks system.

Educational programs for trail users, by Metro Parks or by a coalition of user groups, helps to build the trail community as a whole, rather than as disparate elements. Positive interaction between pedestrians, bicyclists, in-line skaters, equestrian users and other interest groups can be fostered in a manner that helps to resolve potential conflict issues on shared trail facilities.

Trails determined to be subject to high levels of user conflict (due to the physical design of the trail or the level of traffic on the trail) should be evaluated to determine if continued shared use is appropriate or if a change in trail design can mitigate conflicts.

Trail use guidelines, with input from user groups, should be developed. The "Rules of the Trail," developed by the International Mountain Biking Association, and reproduced below, are a set of

model guidelines which may be adapted in response to local needs and conditions:

1. Ride On Open Trails Only. *Respect trail and road closures (ask if uncertain); avoid trespassing on private land; obtain permits or other authorization as may be required. Federal and state Wilderness areas are closed to cycling. The way you ride will influence trail management decisions and policies.*

2. Leave No Trace. *Be sensitive to the dirt beneath you. Recognize different types of soils and trail construction; practice low-impact cycling. Wet and muddy trails are more vulnerable to damage. When the trailbed is soft, consider other riding options. This also means staying on existing trails and not creating new ones. Don't cut switchbacks. Be sure to pack out at least as much as you pack in.*

3. Control Your Bicycle! *Inattention for even a second can cause problems. Obey all bicycle speed regulations and recommendations.*

4. Always Yield Trail. *Let your fellow trail users know you're coming. A friendly greeting or bell is considerate and works well; don't startle others. Show your respect when passing by slowing to a walking pace or even stopping. Anticipate other trail users around corners or in blind spots. Yielding means slow down, establish communication, be prepared to stop if necessary and pass safely.*

5. Never Scare Animals. *All animals are startled by an unannounced approach, a sudden movement, or a loud noise. This can be dangerous for you, others, and the animals. Give animals extra room and time to adjust to you. When passing horses use special care and follow directions from the horseback riders (ask if uncertain). Running cattle and disturbing wildlife is a serious offense. Leave gates as you found them, or as marked.*

> ***6. Plan Ahead.*** *Know your equipment, your ability, and the area in which you are riding -- and prepare accordingly. Be self-sufficient at all times, keep your equipment in good repair, and carry necessary supplies for changes in weather or other conditions. A well-executed trip is a satisfaction to you and not a burden to others. Always wear a helmet and appropriate safety gear.*

Action 3.1.6 Enhance the basic safety of the trail and greenway system by implementing a consistent, system-wide signage system that clearly identifies permitted trail users (equestrian, pedestrian, bicyclist, etc.) for each trail, as well as basic guidelines for the use of the trail system.

A signage system that clearly delineates a trail for a specific user group or groups (such as a hiking only trail) helps to set the parameters for trail use enforcement by Metro Parks staff, user groups and other enforcement agencies. Where Metro Parks (and perhaps a user coalition) has determined that trail uses should be segregated, the implementation of a clear signage system is necessary to help ensure a high level of user knowledge and cooperation.

Signage can also be used to indicate recommended speeds, when users should dismount bicycles/horses, or when obstacles may be ahead that cannot be seen due to limited sight distances.

Objective 3.2 ***Develop written policies and procedures for a comprehensive parks and greenways maintenance program***

Action 3.2.1 Establish maintenance standards for recreation facilities and landscaping based on NRPA guidelines for every park and greenway in the system and develop costs to maintain them to that standard. Evaluate every park and greenway annually to update the existing inventory and amenity information in each park against the asset life.

Action 3.2.2 Establish a CIP cost to upgrade the existing amenities.

Action 3.2.3 Seek a funding source to pay for the upgraded parks over a period of time.

Action 3.2.4 Seek neighborhood support for keeping parks maintained through annual clean up, fix up, painting days in every park and greenway in the system.

Action 3.2.5 Select and improve - to the standards outlined in this plan - an existing park (or parks) within the Metro region to demonstrate to the community and staff what a quality upgraded and maintained park looks like and continue to improve existing parks until all parks have reached the standards for maintenance

Action 3.2.6 Evaluate all park equipment for its useful life cycle, cost and need within the system

Action 3.2.7 Evaluate the effectiveness of contracted construction work as it relates to protecting sensitive or unique natural or architectural resources during construction, versus the development of in-house skilled crews as appropriate

Action 3.2.8 Explore the development of a skilled in-house masonry crew to maintain the extensive existing masonry resources within the system, and construct new masonry features as appropriate

Action 3.2.9 Initiate improved or enhanced maintenance activities for parks and facilities that will prevent the early replacement, or later more costly repairs, due to poor maintenance or deferred maintenance related to inadequate funding

Objective 3.3 ***Enhance department operations to maintain strong representation to appropriate boards, promote staff development and training to create a positive, energetic work environment, promote safety, and nurture lifetime customers***

Action 3.3.1 Train staff on creating lifetime customers

Creating a lifelong customer is achieved through relationship marketing. This means instead of selling one program or service at a

time to as many customers as possible in a season, the strategy is to use customer databases (registration systems) and targeted and interactive communications to sell one customer at a time to as many programs and services as possible over the lifetime of that customer's patronage. It requires programmers to manage customers individually, rather than just manage the programs and services. The strategy boils down to a focus on not just being participants, but keeping them as valuable customers and not just customers.

Action 3.3.2 Develop an evaluation system for parks, greenways, and recreation services through citizens' surveys, pre-and post-evaluations, focus groups, and inspections

Action 3.3.3 Track performance measures for all outcomes to be determined as it applies to cost per experience, cost per task, and cost per unit

Action 3.3.4 Develop a GIS system to incorporate all assets and resources into a database to manage for the future

Action 3.3.5 Maintain strong representation within the department from the Metro Parks Board to the Metro Greenways Commission and Environment and Beautification Commission

Objective 3.4 ***Develop a clear system for effectively acquiring lands to meet the objectives of the Metropolitan Parks and Greenways Master Plan***

Action 3.4.1 Adopt objective criteria, such as those listed in Action 3.4.5 - specific to greenways and the different types of parks, for evaluating properties identified for potential acquisition

Action 3.4.2 Develop mechanisms within Metropolitan Government to capitalize on unique or limited opportunities for land acquisition when property meets criteria listed in Action 3.4.5.

Action 3.4.3 Coordinate parkland acquisition and development with the Metro Planning Commission's neighborhood plans to ensure that such criteria as identified in Action 3.4.1 are considered

Action 3.4.4 Minimize the addition of new *mini-parks* to the Metro Parks system. Where population density, demand and need outweigh cost and operational inefficiencies, the criteria listed in Action 3.4.5 under "local parkland acquisition" should be used.

Action 3.4.5 Utilize the following checklist of factors in assessing the suitability of properties for acquisition in three categories: local (neighborhood and community), regional, and greenways

LOCAL PARKLAND criteria for acquisition (neighborhood and community parks):

- Size (less than 5 acres for mini-parks, 10-20 acres for neighborhood parks, 20-200 acres for community/high-use urban parks)
- Suitability for active recreation facility development, including considerations of topography, soils, parcel configuration, availability of infrastructure, effects on sensitive environmental resources, effects on adjacent land uses.
- Present and future recreational demand, based on demographics
- Accessibility to surrounding neighborhoods
- Connectivity to other parkland and greenway corridors
- Natural resource value of land not to be used for active recreation, including location on riparian corridor, presence of 100-year floodplain, geology and soils, presence of steep slopes, presence of wetlands, location within groundwater recharge areas, natural habitat/wildlife value, presence of unique plant communities or rare, threatened, or endangered species
- Value of land for managing stormwater within the goals of the Metro comprehensive stormwater management program
- Presence of representative examples of ecosystems and/or physiographic regions
- Cultural resource value of land not to be used for active recreation, including the presence of historic site or landscape features, presence of archaeological resources, and visual quality
- Suitability for passive recreation of land not to be used for active recreation, including potential for trail development, potential for

development of interpretive facilities, access to water, effects on sensitive environmental resources
- Cost
- Availability on the market, not listed but with willing seller, potential for life estate
- Pending development threat
- Liability concerns including presence or proximity to hazardous materials
- Maintenance considerations

REGIONAL PARKLAND criteria for acquisition (in addition to those listed under "local parkland acquisition"):
- Connectivity to other regional parkland and relationship to greenway corridors
- Suitability for passive recreation, including potential for trail development, potential for interpretive facilities, access to water, and effects on sensitive environmental resources
- Natural resource value, including location on riparian corridor, presence of 100-year floodplain, geology and soils, presence of steep slopes, presence of wetlands, location within groundwater recharge areas, natural habitat/wildlife value, presence of unique plant communities or rare, threatened, or endangered species, presence of representative examples of ecosystems and/or physiographic regions within the Metro region, presence of prime agricultural soils or productive woodlands
- Cultural resource value including the presence of historic site or landscape features, presence of archaeological resources, and visual quality
- Suitability for active recreational development, including considerations of topography, soils, parcel configuration, availability of infrastructure, effects on sensitive environmental resources, effects on adjacent land uses

GREENWAY criteria for acquisition (in addition to those listed under "local parkland acquisition" and "regional parkland acquisition"):
- Connectivity – ability of land to function as a linkage in the Metro-wide greenway and open space system, especially connections between parks and neighborhoods, and commercial centers, schools, and other public spaces

- Suitability for linear trail development, including relationship to sensitive environmental resources, relationship to adjacent land uses, particularly residential areas
- Availability by easement

CONSERVATION and **PRESERVATION PARKLAND** criteria for acquisition:

- Natural resource value, including location on riparian corridor, presence of 100-year floodplain, geology and soils, presence of steep slopes, presence of wetlands, location within groundwater recharge areas
- Natural habitat/wildlife value
- Presence of unique plant communities or rare, threatened, or endangered species
- Presence of representative examples of ecosystems and/or physiographic regions within the Metro region
- Presence of prime agricultural soils or productive woodlands
- Cultural resource value including the presence of historic site or landscape features, presence of archaeological resources, and visual quality
- Condition of the resource – intact versus in need of restoration
- Size of resource site
- Development pressure on or adjacent to the site

Objective 3.5 ***Establish a "Designated Natural Areas Program" within the parks and greenways system to identify, protect, preserve, and provide stewardship for our local natural biological diversity and heritage, significant natural communities and features, and scenic beauty***

Action 3.5.1 Establish a Natural Areas Program Committee (NAPC), appointed by the Director of the Parks and Recreation Department

The purpose of the NAPC would be draft criteria for natural areas designation, to lead in policy development, habitat identification/designation, natural resource program grant applications, program management, and to conduct the business of the program. Suggestions for committee appointments include

representatives from the staff of Recreation (Warner Parks), Greenways, Planning, and Maintenance. Professionals and volunteers from outside the Department could also serve in an advisory capacity.

Action 3.5.2 Direct the NAPC to identify the parks, sections of parks, and specific sites that are worthy of natural areas designation. Inventory the flora, fauna, and other natural features of these areas, and develop management plans for appropriate protection and stewardship. Potential natural areas for consideration include but are not limited to the Warner Parks, Beaman Park, Peeler Park, Bells Bend, and Shelby Bottoms.

Action 3.5.3 Seek natural area designation for appropriate habitats and consider other state and federal recognition that would aid in protection

Action 3.5.4 Assign responsibilities to specific staff to oversee the resource management, programming, and other business of the designated natural areas.

Action 3.5.5 Designate the natural resource manager

Objective 3.6 ***Develop park-specific master plans to guide the development of facilities within individual parks***

Action 3.6.1 Develop a park-specific master plan for Hadley Park

Action 3.6.2 Develop a park-specific master plan for Morgan Park

Action 3.6.3 Develop a park-specific master plan for Shelby Park

GOAL 4. FINANCING THE PARKS AND GREENWAYS SYSTEM

Meet the financial needs of the regional parks and greenway system through a variety of public and private funding sources and strategies

An identified goal of Metro Park's master plan is to maintain an appropriate balance among affordability, sustainability, and a diverse and expanding array of recreation opportunities for the citizens. The targeted balance point is clearly a community decision, for which there is no single correct answer. Every community is different. A review of National Parks and Recreation Association (NRPA) Gold Medal winners indicated that recreation costs are typically offset by two primary funding sources – general fund contributions and income earned from fees and charges. To a lesser degree, grants and donations help defray the overall cost. Maintaining affordable recreation opportunities embodies the notion that either general fund contributions or revenues from cash positive activities make up the deficit between the actual cost and the cost absorbed by the consumer. Absent this balance, recreation systems often find themselves in difficult situations where the quantity of programs or facilities are eliminated or reduced, the quality of services diminishes, maintenance is deferred, or earned income is increased through pricing or utilization to achieve the desired financial balance.

Metro Parks has achieved the desired balance between general fund support and income generated from user fees. This, however, may not always be the case. Decreased municipal revenues due to economic cycles, public demand for new or alternative recreation venues, changing recreation patterns, increased operating costs, development of new facilities, and other forces could alter this balance. Future efforts to maintain the balance may require that the earned income component of funding be reexamined.

In response to these issues, the following is a list of broad Objectives and Actions should be targeted for continued implementation by Metro.

Objective 4.1 ***Continue to develop and manage the parks and greenway system in a fiscally responsible manner that ensures that funding will be available for the design, construction and maintenance of parks and greenways***

Action 4.1.1 Monitor the effectiveness of expenditures for capital improvements, system operations and user benefits

Action 4.1.2 Provide professional staff within the department to implement recommended capital improvements

Action 4.1.3 Measure fulfillment of plan goals against impacts to existing system resources – avoid undermining current services unless plan goals or a revised system analysis indicate such a need

Objective 4.2 ***Continue efficient cost recovery for revenue-generating facilities, and increase efficiency if possible***

Action 4.2.1 Maintain and enhance, as appropriate, revenue generating facilities to continue their competitive fiscal self-sufficiency

Action 4.2.2 Increase the fiscal self-sufficiency of revenue-generating facilities and their economic benefits to the rest of the Metro system

Objective 4.3 ***Continue to secure long-term financing of the parks and greenways system***

Action 4.3.1 Maintain and expand links to existing long-term funding sources to ensure their continued availability

Action 4.3.2 Explore and apply for other potential funding sources and vehicles on a regular basis to maintain a diversity of sources

Objective 4.4 ***Maintain and expand the network of partnerships that share similar goals and resources***

Action 4.4.1 Continue existing partnerships with organizations that have proven effective in assisting Metro in system growth, operations and positive publicity

Action 4.4.2 Develop new partnerships with organizations that can benefit Metro in system growth, operations and positive publicity

GOAL 5. PUBLIC SUPPORT FOR THE PARKS AND GREENWAYS SYSTEM

Generate public support for the parks and greenways system as measured by high levels of visitation, volunteer support activities, and a willingness to commit the funds needed to establish and maintain facilities and programs

Objective 5.1 ***Educate the public about the benefits of parks and greenways and solidify a foundation of support for them within the community through public relations, education, and outreach.***

Action 5.1.1 Continue to support and expand Metro Parks public relations program to update and maintain marketing plans and outreach efforts

Action 5.1.2 Enhance volunteer efforts to support Metro Parks programming

Objective 5.2 ***Develop a clear marketing plan and outreach materials to raise awareness of Metro Parks and Greenways facility and program offerings.***

Action 5.2.1 Create targeted marketing pieces to inform and attract the appropriate audiences to the programs and facilities

Action 5.2.2 Develop program guides or catalogs of programs that are age-specific and can be targeted to appropriate audiences.

Create catalogs for the following targets: kids and families, youth and teens, young adults and adults or by programming categories: sports and fitness, the arts (cultural), kids activities (under age 12), extreme sports, etc.

GOAL 6. REGIONAL OPEN SPACE SYSTEM

Encourage development of a network of public and private open space throughout Nashville and Davidson County that complements the network of public parks and greenways owned by the Metropolitan Board of Parks and Recreation

Objective 6.1 ***Identify and preserve open space areas to protect valuable natural, cultural, and historic resources and provide critical linkages in the greenway system***

Action 6.1.1 Strengthen the partnership with State and Federal agencies, local universities and environmental non-profits groups to develop a comprehensive survey of habitats, plants and animals within Davidson County, and work with historic and tourism agencies and interest groups to develop history and culture-based recreational opportunities

Action 6.1.2 Develop an evaluation process to prioritize for protection the areas that have been identified as having environmental, cultural or historical significance

Action 6.1.3 Actively seek to protect the highest priority parcels (see Action 6.1.2)

Action 6.1.4 Engage in partnerships with various land trusts, such as the Land Trust for Tennessee, Tennessee Parks and Greenways Foundation, The Nature Conservancy, Greenways for Nashville, and/or other private organizations, in order to secure conservation easements or cooperative management agreements on high priority sites identified in Action 6.1.2 where direct purchase by Metro, or where agreements between landowners and Metro, are not possible

Action 6.1.5 Explore the establishment of a land bank or land trust to undertake the role envisioned in Action 6.1.4 if existing land trusts serving the Nashville / Davidson County area are not able to do so

Action 6.1.6 Identify future greenway corridors as development patterns change, and target for greenway development

Action 6.1.7 Work with the neighboring counties of Robertson, Cheatam, Williamson, Rutherford, Wilson, and Summer to develop habitat and

water quality protection programs for multi-county watersheds that effect Nashville-Davidson County, including the watersheds of Sycamore Creek, the Cumberland River, Stones River, Mill Creek, the Harpeth River, and the South Harpeth River

Action 6.1.8 Explore preparation and adoption of revisions to the Metro Nashville-Davidson County Stormwater Management Manual that provides increased levels of protection (over existing regulations) for lands within the 100-year floodplain

Action 6.1.9 Advocate increasing stormwater buffer requirements in the Metro Nashville-Davidson County Stormwater Management Manual, and work to strengthen the buffer easement regulations

Action 6.1.10 Coordinate various easement acquisitions among Metro departments to allow greenway and public access of right-of-way, water, sewer, and other utility easements where appropriate for trail development

Objective 6.2 ***Identify and prepare plans for the protection of environmentally significant natural features and ecosystems***

Action 6.2.1 Ensure that Metro Parks development plans are sensitive to the function of natural systems in specific parks

Action 6.2.2 Lead or assist in the preservation of ecologically unique areas (containing specific flora or fauna) or ecosystems (containing habitats that support complex flora and fauna interactions) within and outside of the Metro system, such as the Cedar Glades.

Objective 6.3 ***Encourage private protection of open space in Davidson County***

Action 6.3.1 Advocate the use of the following strategies to encourage private land owners to preserve open space:

- Conveyances of conservation easements
- Bargain sales of land with reserved life estates
- Gifts of land with reserved life estates
- Limited development

Action 6.3.2 Maintain open communications with area non-profits that specialize in land conservation, and understand their specific conservation objectives and how they relate to protecting private open space

Action 6.3.3 Identify, develop, and distribute (with the assistance of Codes, Planning, Public Works and Water Services) a brochure explaining the various public and private financing mechanisms available to privately preserve open space in Davidson County

Action 6.3.4 Advocate the use of Conservation Development and other techniques in land development, and work with Codes, Planning, Public Works and Water Services to educate their staff about the benefits of such developments

Conservation Development is a site planning approach that mixes the provision of permanently protected open space with development. Generally, housing units are grouped on the most developable portions of a tract of land, allowing other areas to remain undeveloped. Also known as clustering, conservation development results in the same number of total units on a site as normal development, but usually on smaller lots sizes. The undeveloped land is then placed in a publicly, non-profit, or privately owned conservation easement that typically provides tax benefits, and the legal tools necessary to ensure permanent protection.

Action 6.3.5 Advocate the modification of existing development ordinances to permit Conservation Development

Action 6.3.6 Coordinate with Codes, Planning, Public Works and Water Services in the marketing of Conservation Development techniques (and the strategies in Action 6.3.1) to the private development community and major land owners in the Nashville/Davidson County area

Action 6.3.7 Develop and distribute an informational brochure or presentation documenting the economic benefits of parks and open space to the Metro government and the development community

Action 6.3.8 In coordination with the Metro Planning Department, explore the use of transfer of development rights (TDR) and purchase of

development rights (PDR) techniques as potential methods for encouraging sensitive lands protection through private development

Action 6.3.9 Explore, in coordination with the Metro Planning Department, the potential for incentives that encourage developers to include the provision of significant parks and open space as part of the development process

4.3 COST ESTIMATES

Many of the Goals, Objectives and Actions identified in Section 4.2 include specific recommended improvements that will require expenditures of public funds. The Consultant Team in coordination with Metro Parks administrative staff has estimated these costs. They fall into two broad areas: Deferred Maintenance and Recommended Enhancements. The tables that follow in Sections 4.3.1 and 4.3.2 represent costs for specific improvements, as well as more generalized improvements spread across the parks. Each park within the Metro Parks system will receive some level of improvement if the recommendations within the Master Plan are undertaken, even if no "specific" improvement is indicated on the following tables.

4.3.1 Deferred Maintenance Cost Estimates

Estimated deferred maintenance costs are presented in Table 4.1. Deferred Maintenance costs address the following needs:

- Maintenance for Existing Centers
- Architectural Improvements
- General Park Improvements
- Specific Facility Improvements

Maintenance for existing centers covers those costs that keep the listed neighborhood centers in a condition that will permit their continued use. The total estimated cost for these improvements is $ 1.49 million over ten years.

Architectural improvements include the renovation of buildings (not covered elsewhere) to meet Americans with Disability Act accessibility requirements, as well as other general improvements to existing facilities that will facilitate continued maintenance or operational activities. The total estimated cost for these improvements is $ 6.4 million over ten years.

General park improvements include six basic areas of park improvements: court improvements, field improvements, passive recreation improvements, general pedestrian condition improvements, general signage improvements, and general vehicular condition improvements. Every park within the Metro Parks system was evaluated for these areas, and costs were assigned to cover improvements determined necessary to maintain the parks in a safe, usable condition. The total estimated cost for these improvements is $18.9 million over ten years.

Specific facility improvements include improvements to three facilities that have been identified to be in need of improvements. These facilities are: the BMX track at Hamilton Creek Park, all golf courses in order to comply with accessibility requirements of the Americans with Disabilities Act, and the City Cemetery. The total estimated cost for these improvements is $5.97 million over ten years.

Table 4-1 Estimated Deferred and Ongoing Maintenance Costs *(shown in 2002 constant dollars)*

Plan Action	Recommendation	Cost Estimate	* Phasing	Total Years 1 & 2	Total Years 3-5	Total Years 6-10
	COMMUNITY CENTERS: Maintenance					
2.2.3	West	$ 186,550	1	$ 186,550	$ -	$ -
2.2.3	Elizabeth	$ 86,432	1	$ 86,432	$ -	$ -
2.2.3	Rose	$ 300,610	1	$ 300,610	$ -	$ -
2.2.3	Cleveland	$ 307,500	1	$ 307,500	$ -	$ -
2.2.3	Green Hills (Phase Out)	$ 127,798	1	$ 127,798	$ -	$ -
2.2.3	Napier	$ 329,200	1	$ 329,200	$ -	$ -
2.2.3	Shelby (Enhance Existing)**	$ 22,000	1	$ 22,000	$ -	$ -
	General Maintenance to Existing Centers	$ 130,000	1	$ 130,000	$ -	$ -
		$ 1,490,090		**$ 1,490,090**	**$ -**	**$ -**
	ARCHITECTURAL IMPROVEMENTS					
1.3.2	ADA Architectural Compliance Improvements***	$ 1,667,954	all	$ 667,182	$ 1,000,772	$ -
1.3.2	ADA Compliant Pool Lifts (14 pools)	$ 100,000	1	$ 20,000	$ 30,000	$ 50,000
3.2.5	Concessions/Booths	$ 152,393	all	$ 60,957	$ 91,436	$ -
3.2.5	Equestrian Center	$ 119,240	all	$ 47,696	$ 71,544	$ -
3.2.5	Maintenance Building Improvements	$ 661,831	all	$ 264,732	$ 397,099	$ -
3.2.5	Golf Maintenance	$ 22,616	all	$ 9,046	$ 13,570	$ -
3.2.5	Picnic and Other Shelters	$ 230,312	all	$ 92,125	$ 138,187	$ -
3.2.5	Pool Houses	$ 389,930	all	$ 155,972	$ 233,958	$ -
3.2.5	Restrooms	$ 35,243	all	$ 14,097	$ 21,146	$ -
3.2.5	Special Features	$ 812,182	all	$ 324,873	$ 487,309	$ -
3.2.5	Storage Buildings	$ 109,560	all	$ 43,824	$ 65,736	$ -
	Recurring General Architectural Maintenance	$ 2,100,000	all	$ 300,000	$ 300,000	$ 1,500,000
		$ 6,401,261		**$ 2,000,504**	**$ 2,850,757**	**$ 1,550,000**
	GENERAL PARK IMPROVEMENTS					
3.2.5	Active Recreation: Courts	$ 1,931,000	all	$ 772,400	$ 1,158,600	$ -
3.2.5	Active Recreation: Fields	$ 3,035,000	all	$ 1,214,000	$ 1,821,000	$ -
3.2.5	Passive Recreation	$ 7,816,585	all	$ 3,126,634	$ 4,689,951	$ -
3.2.5	Pedestrian: General Condition	$ 419,570	all	$ 167,828	$ 251,742	$ -
3.2.5	Signage: General	$ 298,500	all	$ 119,400	$ 179,100	$ -
3.2.5	Vehicular: General Condition	$ 3,309,055	all	$ 1,323,622	$ 1,985,433	$ -
	Recurring General Park Maintenance	$ 2,100,000	all	$ 300,000	$ 300,000	$ 1,500,000
		$ 18,909,710		**$ 7,023,884**	**$ 10,385,826**	**$ 1,500,000**
	SPECIFIC FACILITY IMPROVEMENTS					
3.2.8	BMX Track Renovation at Hamilton Creek	$ 250,000	1	$ 250,000	$ -	$ -
1.3.2	ADA Compliant Golf Course Renovation	$ 5,616,000	all	$ 2,246,400	$ 3,369,600	$ -
3.2.8	City Cemetery Renovations	$ 100,000	all	$ 50,000	$ 50,000	
		$ 5,966,000		**$ 2,546,400**	**$ 3,419,600**	**$ -**
	TOTAL	**$ 32,767,061**		**$ 13,060,878**	**$ 16,656,183**	**$ 3,050,000**
				or	or	or
	AVERAGE ANNUAL EXPENDITURE			**$ 6,530,439** per year	**$ 5,552,061** per year	**$ 610,000** per year

*** Phasing: 1= Expenditures in Years1 to 2; 2= Expenditures in Years 3 to 5; all= Expenditure through all years.**

** This investment may not be needed if new investment at East Park covers demand

*** ADA Compliance Improvements derived from a March 15, 2002 facility survey prepared by the Department of Law, Metropolitan Government of Nashville and Davidson County

4.3.2 Recommended Enhancements

Estimated costs for recommended enhancements to the park system are presented in Table 4.2. Enhancements include ten types of capital improvements. These improvements will significantly enhance the recreational experience of existing and future users throughout Metro Parks' service area as the improvements are undertaken. The ten categories are as follows:

- Regional Centers
- Neighborhood Centers
- Golf Courses
- Recreational Facilities
- Circulation, Access, and Signage Improvements
- Greenways
- Parkland Acquisition and Development
- Implementation of Master Plans
- Special Projects
- Planning Studies

The capital costs depicted in Table 4.2 represent the estimated cost of the proposed improvements, but not necessarily the general fund expenditure. Funding from other sources, such as grants, private, state and Federal sources will offset some of these estimated costs.

Costs include seven new regional community centers. These centers will contain state of the art facilities, and may offer Metro Parks with revenue generating opportunities. Their total estimated capital cost over ten years is $ 32.0 million.

Four new and nine enhanced existing neighborhood centers are proposed. The neighborhood centers are smaller than the proposed regional centers, and generally have fewer facilities available for use by the community. The total estimated capital cost for the new and enhanced neighborhood centers is $ 14.7 million over ten years.

Golf courses represent one of the prime revenue producing facilities that can be owned and operated by a public parks system. Several new clubhouses, new driving ranges, as well as irrigation and golf cart storage improvements are proposed under this category. The total estimated ten-year capital cost is $ 9.05 million.

Recreational facilities encompasses a wide range of facilities within the Metro Parks system. A partial list includes expansion of the Hamilton Creek Marina, adding a new skate park to Wave Country, incorporating selected elementary schools into the

neighborhood park system, and upgrading playgrounds throughout the system. The total estimated capital cost of the proposed facilities is $ 49.26 million over the next ten years.

The circulation, access, and signage improvements category encompasses provision of improved pedestrian accessibility within existing parks, the provision of ADA compliant parking, new signage for parks and facilities, and improvements to and/or new vehicular circulation within existing parks. The total estimated capital cost for these improvements is $ 35.08 million over the next ten years.

Capital cost estimates for greenways include 16 projects in the next ten years, and 11 more from 2012 to 2027. Implementation of the 27 projects over the next 25 years will result in a 210-mile coordinated, connected and continuous system of greenways, paths and trails throughout Davidson County. The total estimated capital cost of all of the projects proposed over the next 25 years is $ 176 million. The estimated capital cost of the projects proposed for the first 10 years is $ 62.6 million.

Additional parkland acquisition costs are estimated at $ 10.6 million over the next ten years. Parkland acquisition is necessary for Metro Parks to meet the recommended level of service for the anticipated population growth over the next 20 years. (Action 1.1.1 identifies the recommended levels of service upon which the need for additional parkland is based.) Without new parkland, existing parks will suffer from overuse, and existing and future park users will experience increasingly crowded conditions, or have no access to parks due to a lack of availability.

Costs for implementing the Master Plan includes the cost associated with preparing individual park or facility master plans that are already being implemented, or will be shortly. The estimated ten year cost is $ 12.75 million.

Special projects include three projects: an interpretive walk and visitor's center for Fort Negley, improvements to the Parthenon, and improvements to the Hall of Fame Park, across from the new Symphony Hall. The proposed improvements are estimated to cost $ 4 million over the next ten years.

Planning studies include three master plans that will provide Metro Parks with overall master plans for Hadley Park, Morgan Park, and Shelby Park. The combined cost of these planning efforts is estimated at $ 200,000 over the next ten years.

Table 4-2 Estimated Costs for Recommended Enhancements *(shown in 2002 constant dollars)*

Plan Action	Recommendation	Cost Estimate	*Phasing	Years 1 and 2	Years 3 to 5	Years 6 to 10	TOTAL 10 Year Plan	TOTAL Years 11-25
	COMMUNITY CENTERS							
	Regional Centers							
2.2.1	East Park (consol. W/Douglas)	$ 5,000,000	1	$ 5,000,000	$ -	$ -		$ -
2.2.1	Hadley Park	$ 5,000,000	1	$ 5,000,000	$ -	$ -		$ -
2.2.1	Richland Park Area (replace McCabe)	$ 5,000,000	2	$ -	$ 5,000,000	$ -		$ -
2.2.1	Coleman Park	$ 5,000,000	2	$ -	$ 5,000,000	$ -		$ -
2.2.1	Sevier Park	$ 5,000,000	3	$ -	$ -	$ 5,000,000		$ -
2.2.1	Hartman Park	$ 2,000,000	3	$ 2,000,000	$ -	$ -		$ -
2.2.1	Madison Park	$ 5,000,000	3	$ -	$ -	$ 5,000,000		$ -
		$ 32,000,000		**$ 12,000,000**	**$ 10,000,000**	**$ 10,000,000**	**$ 32,000,000**	**$ -**
	Neighborhood Centers							
2.2.2	McFerrin (Enhance Existing)	$ 1,000,000	1	$ 1,000,000	$ -	$ -		$ -
2.2.2	Parkwood Area (New)	$ 3,000,000	1	$ 3,000,000	$ -	$ -		$ -
2.2.2	Watkins (Enhance Existing)	$ 500,000	1	$ 500,000	$ -	$ -		$ -
2.2.2	Bellevue (Enhance Existing)	$ 1,000,000	2	$ -	$ 1,000,000	$ -		$ -
2.2.2	Kirkpatrick (Enhance Existing)	$ 500,000	2	$ -	$ 500,000	$ -		$ -
2.2.2	Paragon Mills (New)	$ 1,500,000	2	$ -	$ 1,500,000	$ -		$ -
2.2.2	South Inglewood (New)	$ 2,000,000	2	$ -	$ 2,000,000	$ -		$ -
2.2.2	Antioch (Enhance Existing)	$ 353,000	3	$ -	$ -	$ 353,000		$ -
2.2.2	Hermitage (Enhance Existing)	$ 350,000	3	$ -	$ -	$ 350,000		$ -
2.2.2	Looby/Buena Vista (Enhance Existing)	$ 1,000,000	3	$ 110,913	$ -	$ 889,087		$ -
2.2.2	Morgan (Enhance Existing)	$ 519,347	all	$ 117,000	$ 117,000	$ 285,347		$ -
2.2.2	Tennessee Youth Center (New)	$ 3,000,000	3	$ -	$ -	$ 3,000,000		$ -
2.2.3	Shelby (Enhance Existing) / 1	$ 1,000,000	4	$ -	$ -	$ -		$ 1,000,000
		$ 15,722,347		**$ 4,727,913**	**$ 5,117,000**	**$ 4,877,434**	**$ 14,722,347**	**$ 1,000,000**
	GOLF COURSES							
2.10.4	Harpeth Hills Clubhouse (Golf Cart Storage)	$ 300,000	1	$ 300,000	$ -	$ -		$ -
2.10.4	Irrigation (50 acres @ $1.00/SF) & Water Tank Replacement	$ 2,500,000	1	$ 1,250,000	$ 1,250,000	$ -		$ -
2.10.3	Two Rivers Clubhouse	$ 1,300,000	1	$ 1,300,000	$ -	$ -		$ -
2.10.4	Warner Cart Storage and Paths	$ 500,000	2	$ -	$ 500,000	$ -		$ -
2.10.3	Warner Clubhouse	$ 1,000,000	2	$ -	$ 1,000,000	$ -		$ -
2.10.5	Driving Range Development	$ 2,150,000	3	$ 100,000	$ 50,000	$ 2,000,000		$ -
2.10.3	Shelby Clubhouse	$ 1,300,000	3	$ -	$ -	$ 1,300,000		$ -
		$ 9,050,000		**$ 2,950,000**	**$ 2,800,000**	**$ 3,300,000**	**$ 9,050,000**	**$ -**
	RECREATIONAL FACILITIES							
2.13.9	Hamilton Creek Marina Expansion	$ 1,000,000	1	$ 500,000	$ 500,000	$ -		$ -
2.5.1	Harpeth Valley Soccer	$ 1,000,000	1	$ 500,000	$ 500,000	$ -		$ -
2.5.4	Heartland Soccer Complex	$ 1,000,000	1	$ 500,000	$ 500,000	$ -		$ -
2.3.2	Skate Park at Wave Country (20,000 SF)	$ 500,000	1	$ 500,000	$ -	$ -		$ -
2.3.2	Wave Country Enhancements	$ 4,000,000	1	$ 2,000,000	$ 2,000,000	$ -		$ -
2.13.5	Centennial Sportsplex - Fitness/Aerobics/Dance Rooms	$ 1,000,000	2	$ -	$ 1,000,000	$ -		$ -
2.4.2 & 2.4.3	Youth Sports Fields Upgrades in SW & New Fields in W/NW	$ 2,000,000	2	$ -	$ 2,000,000	$ -		$ -
2.13.8	Boathouse	$ 2,000,000	3	$ -	$ -	$ 2,000,000		$ -
2.5.6	Fair Grounds Development	$ 3,000,000	3	$ -	$ -	$ 3,000,000		$ -
1.2.3 & 2.8.2	Elementary School-Park Playgrounds (67 sites)	$ 6,030,000	all	$ 1,206,000	$ 1,809,000	$ 3,015,000		$ -
2.13.7	Outdoor Sports/Field Complex	$ 20,000,000	all	$ 5,000,000	$ 10,000,000	$ 5,000,000		$ -
2.8.1	Playground Upgrades	$ 4,732,000	all	$ 1,892,800	$ 2,839,200	$ -		$ -
2.13.6	Warner Park Equestrian Center	$ 500,000	1	$ 250,000	$ 250,000	$ -		
2.3.3	Spray Parks (10 @ $250,000 ea)	$ 2,500,000	all	$ 500,000	$ 750,000	$ 1,250,000		$ -
		$ 49,262,000		**$ 12,848,800**	**$ 22,148,200**	**$ 14,265,000**	**$ 49,262,000**	**$ -**
	CIRCULATION, ACCESS, AND SIGNAGE IMPROVEMENTS							
3.2.5	Pedestrian Circulation: Accessibility within Park	$ 14,575,710	all	$ 2,915,142	$ 4,372,713	$ 7,287,855		
3.2.5	Provision of Accessible Parking	$ 48,000	all	$ 9,600	$ 14,400	$ 24,000		$ -
3.2.5	Site Signage: Presence of Signage	$ 2,596,500	all	$ 519,300	$ 778,950	$ 1,298,250		$ -
3.2.5	Vehicular Circulation: Traffic Pattern	$ 17,857,951	all	$ 3,571,590	$ 5,357,385	$ 8,928,976		$ -
		$ 35,078,161		**$ 7,015,632**	**$ 10,523,448**	**$ 17,539,081**	**$ 35,078,161**	**$ -**

Table 4-2 Estimated Costs for Recommended Enhancements *(shown in 2002 constant dollars)* ***Continued...***

Plan Action	Recommendation	Cost Estimate	*Phasing	Years 1 and 2	Years 3 to 5	Years 6 to 10	TOTAL 10 Year Plan	TOTAL Years 11-25
	GREENWAYS							
2.12.1 & 2.14.1	Peeler Park with Nature Center	$ 3,000,000	all	$ 1,000,000	$ 1,000,000	$ 1,000,000		$ -
2.14.1	Coopers Creek Bridge at Shelby Bottoms	$ 200,000	1	$ 200,000	$ -	$ -		$ -
2.14.1	Cumberland R. Ped Bridge (existing funds)	$ -	1	$ -	$ -	$ -		$ -
2.14.1	Harpeth River Greenway	$ 15,000,000	1	$ 1,000,000	$ 6,000,000	$ 5,000,000		$ 3,000,000
2.14.1	Downtown Greenway	$ 5,500,000	1	$ 500,000	$ 1,000,000	$ 4,000,000		$ -
2.14.1	Downtown Greenway Extension	$ 1,635,000	1	$ 1,635,000	$ -	$ -		$ -
2.14.1	Whites Bend - Cumb R. (JDN/Wal-Mart)	$ 300,000	1	$ 300,000	$ -	$ -		$ -
1.6.1 & 2.14.1	Downtown to MetroCenter Levee Connector - I mile	$ 1,000,000	2	$ -	$ 1,000,000	$ -		$ -
2.14.1	Richland Creek Expansion	$ 6,300,000	2	$ -	$ 4,000,000	$ 2,300,000		$ -
1.6.1 & 2.14.1	Shelby Btms to East Bank Greenway Connector	$ 5,000,000	2	$ -	$ 5,000,000	$ -		$ -
2.14.1	Stones River Expansion	$ 500,000	2	$ -	$ 500,000	$ -		$ -
2.14.1	Whites Creek Expansion	$ 8,800,000	2	$ -	$ 4,800,000	$ 4,000,000		$ -
2.14.1	Eakins Creek - Whites Creek to Beaman Park	$ 3,200,000	2	$ -	$ -	$ 3,200,000		$ -
2.14.1	Bells Bend to Whites Bend Bridge	$ 2,000,000	3	$ -	$ -	$ 2,000,000		$ -
2.14.1	Mill Creek Greenway	$ 12,300,000	3	$ 500,000	$ -	$ 7,800,000		$ 4,000,000
2.14.1	Neelys Bend to Stones R Bridge	$ 2,000,000	3	$ -	$ -	$ 2,000,000		$ -
2.14.1	Seven Mile Creek - pilot project	$ 2,850,000	3	$ -	$ -	$ 2,850,000		$ -
2.14.1	Bordeaux Greenway	$ 1,950,000	4	$ -	$ -	$ -		$ 1,950,000
2.14.1	Bordeaux Greenway Bridge	$ 2,000,000	4	$ -	$ -	$ -		$ 2,000,000
2.14.1	Brown's Creek Greenway	$ 2,250,000	4	$ -	$ -	$ -		$ 2,250,000
2.14.1	Cockrill Bend Greenway	$ 13,500,000	4	$ -	$ -	$ -		$ 13,500,000
2.14.1	Cumb R - Jefferson St Connector	$ 1,100,000	4	$ -	$ -	$ -		$ 1,100,000
2.14.1	Cumb R Greenway - Rails with Trails	$ 14,000,000	4	$ -	$ -	$ -		$ 14,000,000
2.14.1	Hermitage Greenway Spur on Stones River	$ 2,500,000	4	$ -	$ -	$ -		$ 2,500,000
2.14.1	Indian Creek Corridor	$ 4,000,000	4	$ -	$ -	$ -		$ 4,000,000
2.14.1	Old Hickory Greenway	$ 6,400,000	4	$ -	$ -	$ -		$ 6,400,000
2.14.1	Pennington Bend Greenway	$ 3,750,000	4	$ -	$ -	$ -		$ 3,750,000
2.14.1	2nd Tier East-West Connections	$ 55,000,000	4	$ -	$ -	$ -		$ 55,000,000
		$ 176,035,000		**$ 5,135,000**	**$ 23,300,000**	**$ 34,150,000**	**$ 62,585,000**	**$ 113,450,000**
	PARKLAND ACQUISITION AND DEVELOPMENT							
3.4	New Parks	$ 25,000,000	all	$ 3,600,000	$ 4,000,000	$ 3,000,000		$ 14,400,000
		$ 25,000,000		**$ 3,600,000**	**$ 4,000,000**	**$ 3,000,000**	**$ 10,600,000**	**$ 14,400,000**
	IMPLEMENTATION OF MASTER PLANS							
2.12.1	Shelby Bottoms Nature Center	$ 750,000	2	$ -	$ 750,000	$ -		$ -
2.12.2	Beaman Park and Nature Center	$ 4,000,000	all	$ 1,500,000	$ 2,500,000	$ -		$ -
2.12.1 & 2.14.1	Bells Bend Park with Nature Center	$ 4,000,000	all	$ 1,500,000	$ 2,500,000	$ -		$ -
2.16.1	Centennial Park Master Plan	$ 4,000,000	all	$ 1,000,000	$ 3,000,000	$ -		$ -
		$ 12,750,000		**$ 4,000,000**	**$ 8,750,000**	**$ -**	**$ 12,750,000**	**$ -**
	SPECIAL PROJECTS							
2.13.1	Fort Negley - Interpretive Walk/Visitor's Center	$ 2,000,000	1	$ 2,000,000	$ -	$ -		$ -
2.13.2	Parthenon (existing funds)	$ -	1	$ -	$ -	$ -		$ -
2.13.10	Hall of Fame Park	$ 2,000,000	3	$ -	$ -	$ 2,000,000		$ -
		$ 4,000,000		**$ 2,000,000**	**$ -**	**$ 2,000,000**	**$ 4,000,000**	**$ -**
	PLANNING STUDIES							
3.6.1	Hadley Park Master Plan	$ 50,000	1	$ 50,000	$ -	$ -		$ -
3.6.2	Morgan Park Master Plan	$ 50,000	2	$ -	$ 50,000	$ -		$ -
3.6.3	Shelby Park Master Plan	$ 100,000	2	$ -	$ 100,000	$ -		$ -
		$ 200,000		**$ 50,000.00**	**$ 150,000.00**	**$ -**	**$ 200,000**	**$ -**
	TOTAL	**$ 359,097,508**		**$ 54,327,345**	**$ 86,788,648**	**$ 89,131,515**	**$ 230,247,508**	**$ 128,850,000**
				or	or	or	**or**	or
	AVERAGE ANNUAL EXPENDITURE			**$ 27,163,673** per year	**$ 28,929,549** per year	**$ 17,826,303** per year	**$ 23,024,751** per year	**$ 25,770,000** per year

***Phasing: 1 = Expenditure in Years1 to 2; 2 = Expenditure in Years 3 to 5; 3 = Expenditure in Years 6 to 10;**
4 = Expenditure in Years 11 to 25; all = Expenditure in all years

/ 1 Improvements to Shelby Neighborhood Center may not be necessary if new center at East Park satisfy service area demand

4.4 PLAN SUMMARY

The projected growth of the Nashville and Davidson County region over the next two decades, along with the anticipated geographic location of the growth, and aging parks and recreational facilities, will greatly challenge Metro Parks. This Master Plan provides Metro Parks, elected officials, and the citizens they serve with a guide to meet the recreational needs and demands that will be faced in the future. It provides a recommended course of action to maintain and enhance the network of parks and greenways, a community resource that the public has clearly stated is vital to the quality of life in Nashville and Davidson County.

The Master Plan is complex and multi-faceted, yet such a plan is needed to cover the multiple issues that Metro Parks will be facing in the future. The complexity or simplicity of the Plan, or any plan, however, is irrelevant if Metro Parks cannot count on support from elected officials and the community in implementing the recommendations contained within the Plan.

As such, the Plan is a guide for Metro Parks. It is intended to be followed as much as possible, yet Metro is encouraged to update and change the plan as needed to reflect changing community desires and values. The changes should not be undertaken lightly. Instead, Metro should ensure that there is community consensus regarding proposed changes to the plan, and because of this should be sure to engage the community in a dialogue before any changes are made.

The Nashville and Davidson County region has many wonderful parks, greenways, and recreational facilities. The citizens should act now to preserve these assets and ensure that the future is secured for the many new parks and facilities that will be needed. Ultimately, their quality of life in 2020 will reflect the early, aggressive actions taken to implement this plan.

5.0 OPERATING BUDGET IMPACT OF CAPITAL IMPROVEMENT PLAN

The development and enhancement of facilities and the acquisition of additional parklands as presented in the recommended Capital Improvement Plan (CIP) will impact Metro Parks' operating budget. Specific recommendations to develop new facilities, enhance existing facilities, develop new regional community centers, consolidate or replace existing neighborhood centers, and the acquisition of additional parklands and greenways will also provide both new revenue opportunities as well as new expenses.

The following paragraphs frame the potential operating impacts of such developments. These estimates of economic performance are intended to inform decision-makers as to the broader financial implications (i.e., net positive or net negative) that should be considered with the development of new recreation assets. They do not consider the qualitative or quantitative investment value of the developments (i.e., return on capital or return on investment).

Table 5-1. Average Annual Revenue and Expenses

Revenues	**FY 1997-2000 Average**
Revenue Producing Facilities	$ 7,438,000
Other Revenues	$ 832,000
Total Revenue	**$ 8,270,000**

Expenses	**FY 1997-2000 Average**
Revenue Producing Facilities	$ 8,222,000
Undistributed Expenditures	$ 16,967,000
Other Expenditures *	$ (1,248,000)
Total Expenditures	**$ 23,941,000**
Funding Deficit	$ 15,671,000
Average General Fund Contribution	$ 5,671,000
Earned Income Percentage	35%

* Difference between expenditures distributed to revenue producing activities and total reported expenditures

Source: Metro Parks and Economics Research Associates

The basis of financial comparison is the three year average for both revenues and expenses, presented in Table 5-1. Over this time period, Metro Parks averaged total revenue of $ 8.27 million, with the majority arising from revenue generating activities of the Special Services Division. Total expenditures averaged just under $ 24 million. The $ 15.6 million deficit between earned income and expenditures is provided for through general fund contributions. Overall, the system generates just over one-third of its budget from earned income sources.

5.1 IMPACT TO REVENUE

Under the recommended CIP, much of the existing base of revenue producing facilities and activities will remain unchanged. These facilities should continue to generate revenues near historic averages.

Several projects, however, will have direct impact on Metro Parks' operating budget. CIP recommendations with revenue generating capacity include the Skate Park, expansion of Hamilton Creek Marina, the addition of practice ranges at McCabe and Two Rivers Golf Courses, and enhancements to Wave Country. The new regional community centers will contribute the most significant source of new revenue to operations.

5.1.1 Skate Park

The development of a new skate park adjacent to Wave Country in Two Rivers Park will provide an additional venue for skateboarders, in-line skaters, and bike riders. The proposed location coincides well with the addition of a pedestrian bridge from Shelby Bottoms to Two Rivers Park and the improved accessibility this should provide. The skate park's location adjacent to Wave Country should provide some economies of scale as well as improve the overall destination appeal of the park.

Presented in Table 5-2 is an illustrative income statement for a Skate Park. Anticipated revenue sources would include daily fee passes, a multi-use pass to encourage repeat visitation, food and beverage sales, and rental sales. The location next to Wave Country should provide opportunities to cross utilize food and beverage outlets, thus increasing the productivity of the outlet.

Staffing represents the largest expense item for a skate park. Other expense items include utilities, materials and supplies, and other miscellaneous costs. The model assumes that insurance would be provided through the department's policy. However, should additional coverage be required, this could impact operating performance.

ERA research indicates that skate parks that are municipally developed often range from a no-fee, no fencing, use-at-your-own-risk facility to a fenced, for fee, supervised activity. In many instances these more heavily operated facilities generate positive net incomes. The ability to generate profits, however, is always predicated on maintaining relatively small payrolls, a situation that may or may not be suitable in every situation and ultimately should be reviewed by Metro Parks and the County's risk manager.

Table 5-2. Illustrative Economics – Skate Park

Revenues		
Multi-Use Pass Price (Buy 8 Get 10)	$	52
Multi-Use Passes Sold		800
Membership Revenue -	**$**	**41,600**
Daily Passes		3,500
Daily Pass Price	$	6.50
Non-Member Daily Pass Revenue -	**$**	**22,750**
Total User-Days		11,500
F&B Per Capita Spending	$	2.50
F&B Revenue -	**$**	**28,750**
Equipment Rentals (15 percent of non-members)		525
Average Rental Cost (pads, equipment, etc.)	$	4.00
Equipment Rental Revenue -	**$**	**2,100**
TOTAL REVENUE -	**$**	**95,200**
Expenses		
Payroll (2.5 FTE's @ $20,000)	$	50,000
Burden @20%	$	10,000
Utilities	$	3,000
Materials & Supplies	$	5,000
Misc.	$	2,500
TOTAL EXPENSES -	**$**	**70,500**
NET INCOME POTENTIAL -	**$**	**24,700**

Note: Model depicts the distribution of revenue and expenses for a prototypical lighted skate park. Actual results will vary.

Source: Economics Research Associates

5.1.2 Hamilton Creek Marina

Hamilton Creek Marina continues to generate the highest percentage of net income among the system's income producers. During the past three years, profit margins have consistently ranged above 40 percent of operating revenue. As presented in Table 5-3, slip rentals represent the single largest source of revenue, typically generating over 95 percent of the annual total.

Previous expansions of Hamilton Creek Marina were accomplished using three years of prepaid slip rentals to fund the project. This unique form of public-private partnership should be explored again as a means to fully capitalize on the continued levels of pent up demand. Wait lists for dock space are 6 to 8 months for dry storage space, 3 years for a standard wet slip, and 8 years for the large wet slips. Given that beach slips and rack space are typically available, either immediately or within a very short period, any expansion should focus on wet slip and dry storage opportunities.

As presented in Table 5-4, a one-finger pier expansion would provide 28 additional large wet slips. A reconfiguration of the existing dry storage would accommodate eight additional large boats. Combined, these changes could add nearly $38,000 in additional slip rental revenue. Ancillary revenues from rentals, equipment sales, and food sales would generate another $ 830 per year. Based on a 30 to 40 percent profit margin, the $38,626 in additional revenue would equate to new net operating income of $ 11,588 to $15,450 per year, respectively.

Table 5-3. Hamilton Creek Marina - Recent Operating Performance

Revenues	**FY 1998**	**FY 1999**	**FY 2000**
Slip Rental	$ 176,092	$ 178,585	$ 187,037
Rental Receipts	$ 93	$ 37	$ 56
Equipment Sales	$ 1,745	$ 1,654	$ 1,029
Food Sales	$ 5,682	$ 5,597	$ 5,441
Total Revenue -	**$ 183,612**	**$ 185,873**	**$ 193,563**
Total Expenses -	**$ 102,705**	**$ 108,937**	**$ 115,685**
Net Operating Income -	**$ 80,907**	**$ 76,936**	**$ 77,878**
NOI Percentage -	44.10%	41.40%	40.20%
Revenue per Slip (all slips)			
Slip Rental	$ 622.23	$ 631.04	$ 660.91
Rental Receipts	$ 0.33	$ 0.13	$ 0.20
Equipment Sales	$ 6.17	$ 5.84	$ 3.64
Food Sales	$ 20.08	$ 19.78	$ 19.23
Total Revenue Per Slip	**$ 648.81**	**$ 656.80**	**$ 683.97**

Source: Metro Parks

Table 5-4. Illustrative Economics - Marina Expansion

Revenue	#	Monthly Rent	Prepaid Rent Potential
Dry Slips (26'-36')	8	$ 55	$ 4,840
Large Wet Slips (26'-36')	28	$ 107	$ 32,956
Total/Weighed Average -	36	$ 1,145	$ 37,796
New Slip Revenue -		**$ 37,796**	

Other Revenues	$/Slip		
Rental Receipts	$ 0.20	$ 7	
Equipment Sales	$ 3.64	$ 131	
Food Sales	$ 19.23	$ 692	
Subtotal Other Revenues -		**$ 830**	
Total Additional Revenue -		**$ 38,626**	
NET INCOME POTENTIAL -	**30 - 40%**	**$11,588 - $15,450**	

Source: Economics Research Associates

Discussions with the Hamilton Creek Marina manager indicated that the addition of another pier of wet slips or expansion of the dry storage area would likely require Corps of Engineer approval. Further, the pier expansion would possibly require modifications to the anchoring system of the floating piers.

5.1.3 Wave Country

Built in the mid-1970s, Wave Country opened as a state-of-the-art aquatic facility. Since then, the addition of a water slide in the 1990s represents the most significant change to the facility. Market factors, the most prominent being the opening of Nashville Shores and the closing of the Opryland theme park, have created competitive alternatives and diminished sources of demand, respectively. These two factors, combined with the lack of any new facility attributes, have led to lackluster performance during the past several operating seasons. Visitation during the past three years averaged just over 85,000 users, and more recently was closer to 71,000 users, both of which are well below historic highs of well over 100,000 users.

Much like attractions at theme parks that are updated or expanded on a typical three-year cycle, Wave Country is in need of new investment to reinvigorate its appeal. The timing is appropriate given the planned construction of a pedestrian bridge from Shelby Bottoms to Two Rivers Park and the potential addition of a skate park detailed in this master plan.

Creating a modern water park would require that certain features be added or expanded including: a children's play area, three water slides with unique features, upgrading of support facilities, implementation of a coordinated theme, and overall improvement to facility aesthetics.

As many communities have realized, effectively upgrading older and tired aquatic facilities can have a dramatic impact on both utilization and financial performance.

As detailed in Table 5-5, Wave Country generated average annual revenue of $ 555,044 between 1998 and 2000, attracting 85,115 users on average, and generating per capita income of $ 6.52. This utilization represents a 15 percent penetration rate of the county's 2000 population.

Assuming the facility improvements generated new interest and yielded a penetration rate of 20 percent, just under 114,000 potential users would visit the facility annually. Given the planned improvements to access and the skate park addition, these estimates may even be conservative. Generating per capita total revenue equal to 70 percent of the adult ticket price (presented in an $ 8 to $ 10 range), annual revenue would increase from $ 83,000 to $ 243,000 *above* the three-year average. Potential net operating income, at a 25 percent profit margin not atypical for modern aquatic facilities, would equate to between $ 159,000 and $ 199,000 per year.

Table 5-5. Illustrative Economics - Enhanced Wave Country*

1998-2000 Wave Country Averages	**Dollars**	
Revenue	$ 555,044	
Paid Attendance	85,115	
Per Capita Revenue -	**$ 6.52**	
Marginal Attendance Estimate		
Market Population 2000	569,891	
Average Penetration Rate 1998-2000	15%	
Market Penetration Rate w/ Enhanced Wave Pool	20%	
Potential Wave Pool Attendance	113,978	
Current Attendance	85,115	
Marginal Wave Pool Attendance Increase -	28,863	
Adult Ticket Price	$ 8.00	$ 10.00
Per Capita Revenue @ 70 percent of Adult Ticket Price	$ 5.60	$ 7.00
Total Revenue Potential at Enhanced Wave Pool -	**$ 638,000**	**$ 798,000**
Change in Revenue Over 1998-2000 Average -	**$ 83,000**	**$ 243,000**
Expenses (75%) -	**$ 479,000**	**$ 599,000**
Net Operating Income Potential at Enhanced Wave Pool	**$ 159,000**	**$ 199,000**

* Includes, for example, such features as a diverse offering of slides, kid's play area, refurbished support structures, introduction of a more cohesive theme, and improvements to facility aesthetics

Source: Economics Research Associates

5.1.4 Golf Practice Ranges

Golf practice facilities at McCabe and Two Rivers Golf Courses will assist Metro Parks in maintaining their market share of area golfers while providing a new source of net income. Based on the historical performance of the range facility at Harpeth Hills at $0.74 per 9-hole start ($ 70,000 in range revenue based on 94,276 starts), the combined revenue impact is estimated at $ 188,000. A 15 percent revenue premium was attributed to the McCabe facility due to the expectation that the facility will be lighted and provide longer hours of operation. Combined expenditures are estimated at $ 82,500 per year, providing net positive cash flow of $ 105,500 in a stabilized year. ERA's estimates for practice range revenues, expenses, and departmental profit are presented in Table 5-6.

Table 5-6. Illustrative Economics - Golf Practice Range Additions

Revenues	Two Rivers	McCabe	Total
Annual 9-Hole Starts	$ 92,000	$ 140,000	$ 232,000
Range Revenue per Start */**	$ 0.74	$ 0.85	$ 0.81
Total Range Revenue -	**$ 68,000**	**$ 120,000**	**$ 188,000**
Expenses			
Seasonal Incremental Labor Costs	$ 15,000	$ 25,000	$ 40,000
Range Balls	$ 10,000	$ 15,000	$ 25,000
Utilities	$ 2,000	$ 7,000	$ 9,000
Repairs and Maintenance	$ 3,500	$ 5,000	$ 8,500
Total Range Expenses -	**$ 30,500**	**$ 52,000**	**$ 82,500**
Departmental Profit -	$ 37,500	$ 68,000	$ 105,500
Profit Margin -	55.10%	56.70%	56.10%

* Based on Harpeth Hills range performance of $70,000 per 94,276 9-hole starts.

** McCabe range revenue per round provided a premium of 15 percent due to lighted facilities.

Source: Economics Research Associates

5.1.5 Regional Community Centers

The model proposed for the regional community centers is a 40,000-sf shell (on average) that would house a variety of community and recreation functions. The financial potential of such assets is, as expected, clearly linked to the balance between fee activities and non-fee activities. More specifically, the level of programming versus non-programmed activities, and the fees charged to participate will directly impact the financial potential.

The fees that programs generate magnify their impact on financial performance. Thus, a community center with a limited focus on programming, but equal numbers of daily fee and pass users, might indeed generate a net operating deficit on an annual basis. Conversely, a heavily programmed facility could generate an operating surplus.

The degree to which these new community centers could add or subtract from financial operating performance of the Metro Parks system will depend not only upon the degree to which programming is emphasized, but also the established pricing.

5.2 IMPACT TO EXPENSES

Under the recommended CIP, the unchanged existing base of revenue producing facilities and activities should continue to generate expenses near historic averages. Further, current overhead and undistributed costs associated with operations should not change substantially under the plan.

The additional expenses associated with new or enhanced revenue-producing facilities were discussed previously. Several items, however, will contribute to Metro Parks' expenses with limited or no potential for cost recovery. They include the addition of several smaller neighborhood community centers, acquisition of new parklands and greenways, and the reduction/elimination of future deferred maintenance.

5.2.1 Neighborhood Community Centers

In addition to the regionally serving community centers, the master plan identified several opportunities for new smaller-scale neighborhood community centers as well as the consolidation or elimination of existing centers. In total, four of these neighborhood-scale centers are planned for openings while two facilities are identified for closing/consolidation. The net gain of two facilities will add new expenditures. These expenses were calculated by dividing the average community center expense of $3.6 million across the existing 22 community centers that Metro Parks operates. An appropriate expense reduction was made in the time frame that the plan identified for facility closings; and increases to expenses were made as the new facilities were added. This timing reduced expenses by $ 165,000 during the first two years of the CIP (two facilities were removed and only one added), and increased expenses by $ 330,000 over the historic base thereafter as the remaining three neighborhood centers are added.

5.2.2 New Parkland Greenway Acquisition

The acquisition of parklands by Metro Parks will contribute operating expenditures to the annual budget. The current experience is that Metro Parks incurs virtually no expenses for its undeveloped holdings. Parks with minimal development will incur charges for mowing, trash removal, and some sanitary facilities. The most heavily developed parklands will likely require some permanent staffing, equipment investment, and an overall higher level of maintenance over and above what minimally maintained parkland

would require. To improve the financial planning capabilities of Metro Parks, these items should be considered in the decision to acquire additional lands. The cost allocation presented in Table 5-7 represents the actual cost to maintain parklands and greenways in today's dollars.

The addition of new parkland, greenways, and athletic fields, etc. are anticipated to add just over $1.0 million in annual operating costs in the first two years of the plan, $2.1 million per year over the next three years, and nearly $3.4 million per year thereafter.

Table 5-7. Annual Cost Allocation for Newly Acquired Parkland and Greenways

Level of Development (excludes facilities)	Cost (per acre / mile)
Low (limited active use of land)	$ 1,000
Medium (play ground, ball fields, primitive sanitary)	$ 3,000
High (fields, trails, permanent restrooms, developed facilities)	$ 5,000
Greenways (cost per mile)	$ 1,000

Source: Metro Parks and Economics Research Associates

5.2.3 Elimination of Current Maintenance Deficit

The process of developing this master plan provided the opportunity to identify deferred maintenance items. Over time some of these items have converted from deferred maintenance to capital requirements as the cost to rehabilitate exceeded the cost to develop new. Eliminating deferred maintenance is a major component of this plan. Reduction of future deferrals, however, will require that daily operating maintenance be adequately funded. Based on an internal review by Parks' staff, $2.5 million in increased spending is included to bring operating and maintenance deficit budgets to levels that reduce the amount of deferred maintenance that converts to future capital expense.

5.3 SUMMARY OF BUDGET IMPACT

The combined effect of the improvements and additions will be evaluated for its impact on the operational budget. Metro Parks must determine an acceptable percentage of earned income, and an analysis of fees for revenue producing facilities and enhancements must be completed to fully evaluate cost recovery opportunities.

Nashville and Davidson County

Metropolitan Parks & Greenways Master Plan

Appendix A – Metropolitan Parks and Greenways Design Guidelines

November 2002

Make your Mark on Parks!

metro parks 100 YEARS

Nashville and Davidson County

Metropolitan Parks & Greenways

Design Guidelines for Metro Parks

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Design Guidelines for Metro Parks

1.0 INTRODUCTION

As the implementation of the Parks and Greenways Master Plan is undertaken, Metro has the opportunity to fundamentally change the relationship of the parks and greenways system to the community, the natural environment, and how specific parks and greenways respond to the influences of each element.

Historically, many parks across the country were developed without substantial public input. Instead, these parks were developed using standardized approaches developed by a centralized administrative body. Thus, parks were not necessarily responsive to the needs of the community of potential users of the park, or reflective in terms of detailed design features of the naturally or culturally influenced setting.

Greenways, on the other hand, have primarily been created using a higher level of public involvement. This is primarily due to the fact that greenways are generally a more recent addition to most parks systems, and also somewhat due to the initial community opposition to proposed greenways. Public involvement helps to educate participants as well as provide them with the opportunity to understand and contribute to the design of the greenway, and therefore eventually support the project. The public involvement has resulted in the development of an interactive, participatory process that has become a standard method of engaging the public during the planning and design process.

To better serve the community, and as a way to a better protect and enhance the understanding and appreciation of natural resources, the WRT team recommends the adoption of a system-wide context sensitive design policy by Metro. The premise of the context sensitive design policy is the realization that each park is subject to a myriad of cultural and natural factors and influences. Since parks do not exist in isolation, the design of the park and its constituent elements should reflect these influences in some way, whether it is through the design and provision of specific facilities, furnishings, art, programming, or activities. To select, refine and shape these varying influences, the

context sensitive design policy would have, as its basis, an interactive participatory process that engages the citizens in the design of the park.

Thus, as has been more recently experienced in the public process of greenway planning and design across the country, the design of specific parks within the community would become yet another way to provide citizens with the opportunity to interact and establish a sense of ownership of new or revitalized park facilities.

Below are the three major categories of facilities – Parks, Regional and Neighborhood Centers, and Greenways – and lists of their specific program elements that can be modified to address contextual issues for specific parks. An identification of general management issues follows the facilities discussion.

2.0 DESIGN GUIDELINES FOR PARKS

2.1 MINI PARKS

As most Mini parks in the Metro system are located in develop urban areas, their surroundings can reflect a variety of manmade materials and influences. Victorian mansions, craftsman bungalows, Gothic revival stone churches, Federal style brick commercial buildings – the potential architectural influences are many and varied. Thus, the appropriate context sensitive materials will also be varied.

- **Architectural Features** – The contextual relationship between any structure and its environment is essential in creating a facility that is harmonious with the neighborhood. Materials used should be complementary with materials used on adjacent structures, but should be able to withstand intensive use and provide good thermal and moisture properties. Mini park architectural features are typically limited to covered picnic structures. Features should provide a clean and safe environment that complies with all adopted code and zoning regulations.

- **Fencing** – The purpose of fencing in a Mini park is generally to provide a physical barrier or access control, and materials appropriate to an urban environment would include cut stone, metal, wrought iron, and finished wood. Ornamentation of fencing materials through medallions, filigree, finials, applied art work, or other devices would be appropriate in an urban environment.

- **Furnishings** – Benches, water fountains, trash receptacles and other site amenities in Mini parks will be exposed to high use, and thus high wear. Use of substantial materials is recommended, and these include metal, wrought iron, stone, and concrete.

- **Lighting** – Parks in urban areas will need lighting, even if there is no intention to permit or encourage evening use. Safety is the key concern. Lighting fixtures, like other site amenities, will need to be substantial enough to withstand the rigors of the urban environment, while fitting into the context of the site and the community. Appropriate materials include metal, wrought iron and wood.

- **Non-Motorized and Non-Vehicular Access and Circulation** – In-line skate, skateboard and other forms of non-motorized and possibly low speed non-vehicular access (electric wheel chairs, electric scooters, etc.) should be

considered for all parks. All parks should be accessible by bicycle, and should provide bike racks, or other bicycle parking facilities. In some instances, sharing pedestrian facilities may be possible if those facilities have adequate width and smooth surfaces. Appropriate materials for wheeled, non-vehicular access and circulation includes poured concrete, asphalt, brick, stone, and concrete and asphalt pavers.

- **Paving** – There are many paving materials appropriate for parks in urban areas, including brick, stone, concrete and asphalt pavers, poured concrete, and decomposed granite. All paving materials should meet ADA accessibility requirements.

- **Pedestrian Access** – Mini parks will primarily be accessed by foot, and thus pedestrian connections to the neighborhood will be important, as well as within the park. This type of access is even more important when considering that the service radius standard for Mini parks is usually ¼ mile or less. Paving, fencing and lighting, mentioned above, as well as signage below will be critical to clearly delineating access points. Appropriate materials include poured concrete, asphalt and concrete pavers, brick, packed decomposed granite, and wood (for deck walks).

- **Play Structures** – The safety of children has become a paramount issue to many parents, and thus the material choices for play structures and shock absorbent surfaces are somewhat limited. Structural materials include metal, plastic and wood. Shock absorbent, accessible materials include rubber mats, interlocking rubber tiles, loose wood mulch or rubber crumbles, and wood fibers. The contextual design of play structures could include custom feature designs, logos, or thematic playgrounds.

- **Restrooms** – Since Mini parks tend to be in urban areas, the provision of restroom facilities may not be necessary. However, if provided, the structure and the fixture materials should be durable. Wood, stone, concrete, brick and metal would be appropriate in urbanized areas. Artistic enhancements should also be considered.

- **Signage** – Metro will need to determine if they prefer system-wide consistency in signage materials and design, or if they prefer contextual signage for each park – which could share color schemes and Metro logos throughout the system, but use unique materials for each park. Materials appropriate to urban

situations include stone, metal, wrought iron, concrete and brick. Wood may be appropriate in areas that primarily consist of wood architecture.

- **Special features** – Unique elements for a park, which might include art, interpretive displays, or interactive features, should utilize context sensitive materials where appropriate, but it should also be ensured that the materials are appropriate for the special feature.

- **Vegetation** – Trees, shrubs and groundcovers in Mini parks are likely to experience higher levels of physical wear and tear by users, as well as stress from growing in urban conditions – pollution, limited soil areas, and heat island effects. Choosing plant materials that can withstand these conditions will reduce short and long term maintenance, but there are context sensitive vegetation issues to be considered as well. Some areas of Nashville are defined by their distinctive tree canopies, or the variety of plant materials. Thus, individual park design should be responsive to these issues, while also keeping in mind the overall goal of achieving a higher level of sustainability through the use of low maintenance, non-invasive native plants wherever possible.

2.2 NEIGHBORHOOD PARKS

These parks primarily, though not exclusively, serve residential areas. The service area standard for Neighborhood parks is ¼ to ½ mile. The typical leafy green appearance of the neighborhoods, as well as the materials typically associated with residential development, should be incorporated into the parks as appropriate.

- **Architectural Features** – The contextual relationship between any structure and its environment is essential in creating a facility that is harmonious with the neighborhood. Materials used should be complementary with materials used on adjacent structures, but should be able to withstand intensive use and provide good thermal and moisture properties. Architectural features for Neighborhood parks typically include picnic structures, restroom facilities, and community buildings. The facilities should provide a clean and safe environment that complies with all adopted code and zoning regulations.

- **Fencing** – Materials appropriate to Neighborhood parks include wood, metal, wrought iron, stone, brick and concrete. Modern residential areas may support the use of metal, wood, brick and concrete, while older areas might provide a design palette that includes wood, wrought iron, stone, and brick.

- **Furnishings** – Site amenities in Neighborhood parks may not be subject to the physical stresses of urban sites, yet these items still need to be substantial enough to be safe, long lasting, and low maintenance. Appropriate materials include metal, wood, brick, stone, wrought iron, and concrete. Plastic "wood" may be appropriate for some applications.

- **Lighting** – Use of the Neighborhood parks at night is generally not desirable, primarily due to security. Lighting, however, should be provided at minimal levels in order to curb unwanted evening use. Where the parks will be used at night, and where high levels of lighting will be required, care should be taken to minimize the lighting that spills into adjacent residential areas. Materials appropriate for lighting fixtures in Neighborhood parks include stone, wood, metal, glass, plastic, and wrought iron.

- **Non-Motorized and Non-Vehicular Access and Circulation** – In-line skate, skateboard and other forms of non-motorized and possibly low speed non-vehicular access (electric wheel chairs, electric scooters, etc.) should be considered for all parks. All parks should be accessible by bicycle, and should provide bike racks, or other bicycle parking facilities. In some instances, sharing pedestrian facilities may be possible if those facilities have adequate width and smooth surfaces. Appropriate materials for wheeled, non-vehicular access and circulation includes poured concrete, asphalt, brick, stone, and concrete and asphalt pavers.

- **Pedestrian Access** – Pedestrian access may be the prime mode of transportation into and throughout Neighborhood parks, especially due to the normal service radius of ¼ to ½ mile, or about a 10 minute walk. Connections from the park to the surrounding area are critical to ensuring safe access, and encouraging use by the community. Furthermore, the pedestrian access system leading to the park, and circulating throughout the park should be ADA compliant. Appropriate materials include poured concrete, asphalt and concrete pavers, brick, packed decomposed granite, and wood (for deck walks).

- **Play Structures** – The safety of children has become a paramount issue to many parents, and thus the material choices for play structures and shock absorbent surfaces are somewhat limited. Structural materials include metal, plastic and wood. Shock absorbent, accessible materials include rubber mats, interlocking rubber tiles, loose wood mulch or rubber crumbles, and wood

fibers. The contextual design of play structures could include custom feature designs, logos, or thematic playgrounds.

- **Restrooms** – The location of Neighborhood parks in more residential areas may make the provision of restroom facilities not as high a priority as they may be in Community and Regional parks. However, if provided, the structure and the fixture materials should be durable. Wood, stone, concrete, brick and metal would be appropriate in most residential areas.

- **Signage** – Metro will need to determine if they prefer system-wide consistency in signage materials and design, or if they prefer contextual signage for each park – which could share color schemes and Metro logos throughout the system, but use unique materials for each park. Materials appropriate to residential area situations include wood (finished and rusticated), stone, metal, wrought iron, concrete and brick.

- **Special features** – Unique elements for a Neighborhood park, which might include art, interpretive displays, or interactive features, should utilize context sensitive materials where appropriate, but it should also be ensured that the materials are appropriate for the special feature.

- **Vegetation** – Trees, shrubs and groundcovers in Neighborhood parks will generally have better growing conditions than those located in Mini parks or urbanized park sites. As such, the opportunity for large trees, lush plantings, and large turf areas is possible. Plant materials reflective of the adjacent neighborhood, as well as those indigenous to the site and the area would be appropriate. Use of native vegetation would facilitate short and long term maintenance and result in cost savings, especially if the less manicured vision that usually results from the use of native vegetation is acceptable within the park context. Individual park design should be responsive to the variety of issues and factors appropriate to the site, while also keeping in mind the overall goal of achieving a higher level of sustainability through the use of low maintenance, native plants wherever possible.

- **Vehicular Access and Parking** – Access to Neighborhood parks will likely be a combination of several forms of transportation, including automobiles. Parking areas and access drives should provide good access to the park but should not intrude into the park. Ideally, these facilities will be located on the periphery of the park. Materials appropriate to parking and access drives include poured concrete, asphalt and concrete pavers, brick, porous pavement,

compacted crushed stone, and grasscrete or similar open structure, modular paving systems. ADA compliant surface areas should be provided as appropriate.

2.3 COMMUNITY PARKS

These parks typically serve a larger area than a single neighborhood. The service area standard for Community parks is ½ to 3 miles. Because of the larger size of Community parks, their locations can vary from residential areas to commercial and industrial areas. Because of the variety of locations, the possible design palette is quite large.

- **Architectural Features** – The contextual relationship between any structure and its environment is essential in creating a facility that is harmonious with the neighborhood. Materials used should be complementary with materials used on adjacent structures, but should be able to withstand intensive use and provide good thermal and moisture properties. Architectural features for Community Parks typically include Community Centers, Pool Houses, Picnic Shelters as well as unique features like band shelters and tennis structures. The facilities should provide a clean and safe environment that complies with all adopted code and zoning regulations.

- **Fencing** – Materials appropriate to Community parks include wood, metal, wrought iron, stone, brick and concrete. More commercial and industrial areas may lean towards metal, brick and concrete, while residential areas might utilize wood, wrought iron, stone, and brick.

- **Furnishings** – Site amenities in Community parks will likely experience high usage due to the variety and scale of activities normally programmed in such parks. Thus furnishings need to be substantial enough to be safe, long lasting, and low maintenance. Appropriate materials include metal, wood, plastic, brick, stone, wrought iron, and concrete.

- **Lighting** – Use of the Community parks at night is very likely due to the nature and scale of the typically programmed recreational activities. High levels of lighting, especially for the sports fields, will be needed. The impact of such lighting on adjacent residential areas should be minimized through the use of light baffles, cut-offs, vegetative screens or other devices. Materials appropriate for lighting fixtures in Community parks include wood, metal, and concrete.

- **Non-Motorized and Non-Vehicular Access and Circulation** – In-line skate, skateboard and other forms of non-motorized and possibly low speed non-vehicular access (electric wheel chairs, electric scooters, etc.) should be considered for all parks. All parks should be accessible by bicycle, and should provide bike racks, or other bicycle parking facilities. In some instances, sharing pedestrian facilities may be possible if those facilities have adequate width and smooth surfaces. The sizes of Community parks may permit the development of multi-use trail systems, and users could include pedestrians, cyclists, in-line skaters, etc. Appropriate materials for wheeled, non-vehicular access and circulation includes poured concrete, asphalt, brick, stone, and concrete and asphalt pavers.

- **Pedestrian Access** – Pedestrian access will probably be a secondary mode for reaching Community parks, but will be the primary mode within the park. Connections from the park to the surrounding area should be provided, and should be designed to provide safe access and encourage non-vehicular access by the community. The pedestrian access system circulating throughout the park should be ADA compliant, and provide functional and aesthetic path options wherever possible. Appropriate materials include poured concrete, asphalt and concrete pavers, brick, packed decomposed granite, and wood (for deck walks).

- **Play Structures** – The safety of children has become a paramount issue to many parents, and thus the material choices for play structures and shock absorbent surfaces are somewhat limited. Structural materials include metal, plastic and wood. Shock absorbent, accessible materials include rubber mats, interlocking rubber tiles, loose wood mulch or rubber crumbles, and wood fibers. The contextual design of play structures could include custom feature designs, logos, or thematic playgrounds.

- **Restrooms** – The size, service radius, location, and programming of Community parks indicate that the provision of restroom facilities will be a requirement. Design of these facilities, either as freestanding structures, or incorporated into regional and neighborhood centers or sport venue facilities, should be vandal resistant, and able to sustain high use and high volume. At a minimum, lighting should be provided in all restroom facilities, and some facilities should be considered for heating and air conditioning. Wood, stone, concrete, brick and metal are appropriate materials for restroom facilities in Community parks.

- **Signage** – As with Neighborhood and Mini parks, Metro will need to determine if they prefer system-wide consistency in signage materials and design, or if they prefer contextual signage for each park – which could share color schemes and Metro logos throughout the system, but use unique materials for each park. Materials appropriate to Community parks include wood (finished and rusticated), stone, metal, concrete and brick.

- **Special Features** – Unique elements for a park, which might include art, interpretive displays, or interactive features, should utilize context sensitive materials where appropriate, but it should also be ensured that the materials are appropriate for the special feature.

- **Sports Facilities** – Community parks will contain the majority of baseball, softball, football, and soccer fields, as well as tennis facilities, basketball courts, and other active sports facilities. Many of these facilities must conform to certain design requirements in order to meet applicable sports standards. Details, or accessory items such as bleachers, fencing, logos in turf or pavement, can provide opportunities for thematic or contextual design expression. Materials appropriate to such expressions will be extremely varied, and should be explored on a site by site basis as design opportunities arise.

- **Vegetation** – Trees, shrubs and groundcovers in Community parks will have, due to the size of the parks, healthy growing conditions. As such, the opportunity for large trees, lush plantings, and large turf areas is possible. Plant materials reflective of the adjacent neighborhoods, the community as a whole, as well as those indigenous to the site would be appropriate. Use of native vegetation would facilitate short and long-term maintenance and result in cost savings due to decreased maintenance, fertilization and pesticide needs. High maintenance turf areas will still be required for many of the active sports field activities. Individual park design should be responsive to the variety of issues and factors appropriate to the site, while also keeping in mind the overall goal of achieving a higher level of sustainability through the use of low maintenance, native plants wherever possible.

- **Vehicular Access and Parking** – Access to Community parks will primarily be auto-based, and non-motorized modes of access should be provided to every Community park. Parking areas and access drives should provide good access to the park, and will need to enter into the park to provide reasonable access to active sports fields and facilities. The design of the access roads

and parking areas should minimize modal conflicts, and not disrupt the aesthetic, environmental and recreational nature of the park. Materials appropriate to parking and access drives include poured concrete, asphalt and concrete pavers, brick, porous pavement, compacted crushed stone, and grasscrete or similar open structure, modular paving systems. ADA compliant surface areas should be provided as appropriate.

2.4 REGIONAL PARKS

These parks typically have unique sports, cultural or educational facilities, or distinct natural resources that serve the community at large or the region. The service area standard for Regional parks is a 30-minute drive. The Regional parks that are developed around natural resources are generally located in outlying or undeveloped areas. Regional parks so designated due to the presence of sports, cultural or educational facilities, on the other hand, may be integrated into the urban or suburban fabric. Beaman and Centennial Parks are examples of Regional parks based on nature and on cultural/educational facilities. Because of the generally large size of Regional parks, the design palette is less influenced by architectural resources, and more by natural or cultural resources.

- **Cultural and Educational Facilities** – Some Regional parks may be so designated by the facilities contained within them. The Parthenon, for example, is not only an architectural marvel, but is also the city's art museum. Any park with this type of facility, regardless of size, would be providing a region wide service. Thus, new cultural and education facilities should be sited with service area in mind, as well as programming and architectural design. While new facilities will probably not utilize classic Greek architectural models, they should be designed to be visually and experientially engaging. Specific material choices should be made on a facility by facility basis, with long term maintenance and operation costs kept in mind.

- **Equestrian Facilities** – The raising, training, and love of horses has a long history in Tennessee. Because of the regional equestrian history, a fairly defined palette of materials and styles has been developed. Even with a defined palette, there is still a range of materials and styles available to the designer. Typical materials include wood, concrete and metal, but can also include stone and brick for higher end developments.

- **Fencing** – Materials appropriate to Regional parks include wood, metal, wrought iron, stone, brick and concrete. Regional parks that primarily oriented

towards a naturalistic theme or experience should lean towards the use of rough-cut wood (split rails), and fieldstone or rough-cut stone.

- **Furnishings** – Site amenities in Regional parks will need to respond to a wide variety of design influences, from man-made to natural. As such, the range of materials appropriate within such a park is quite wide. Furthermore, the furnishings need to be substantial enough to be safe, long lasting, and low maintenance. Appropriate materials for more naturalistic settings include wood, stone and in some cases metal. Regional parks that are "regional" due to the active sports or cultural facilities that they provide, rather than the naturalistic features, may also utilize brick, plastic, stone and concrete materials for furnishings.

- **Lighting** – Use of the Regional parks at night will be dependent upon the specific programming for the parks. Naturalistic parks that have overnight programming, such as camping, will need some level of rudimentary lighting for restroom facilities and other key features. Overall lighting is discouraged, however, as it can take away from the camping experience and, perhaps, encourage more active uses late into the evening. Regional parks that have active sports facilities or cultural/educational facilities will need lighting appropriate to the venues being supported. Thus sports fields, tennis courts, tracks, etc., will need to meet industry accepted standards for lighting that meets criteria for the level of recreation taking place. Cultural and educational facilities will need lighting to meet the level of use, as well as to promote the perception of safety and act as an architectural accent. Where high-intensity lighting is provided, care should be taken to minimize the impact to adjacent residential areas, and to minimize any unnecessary illumination of the night skies. Materials appropriate for lighting fixtures in Regional parks include wood, metal, stone and concrete.

- **Non-Motorized and Non-Vehicular Access and Circulation** – In-line skate, skateboard and other forms of non-motorized and possibly low speed non-vehicular access (electric wheel chairs, electric scooters, etc.) should be considered for all parks. All parks should be accessible by bicycle, and should provide bike racks, or other bicycle parking facilities. In some instances, sharing pedestrian facilities may be possible if those facilities have adequate width and smooth surfaces. The sizes of many Regional parks will permit the development of a variety of trail systems, including natural surface trails for hiking, mountain biking or equestrian use, paved surface trails for multi-use (pedestrian, bicycle, in-line skate, scooters, etc.), and cycle or pedestrian

specific paved trails. The specific programming of each park will determine the nature and extent of the trails to be provided. In all cases, however, linkages to the greenway and trails systems outside of the park are critical to providing a coherent system throughout Nashville and Davidson County. Appropriate materials for wheeled, non-vehicular access and circulation includes poured concrete, asphalt, brick, stone, wood, and concrete and asphalt pavers. Natural surface materials include dirt, decomposed granite, crushed limestone, wood chips, and bark. Natural surfaces should be regularly monitored, maintained, and sometimes closed (temporarily due to wet conditions, for example) to guard against erosion and excessive soil compaction.

- **Pedestrian Access** – Pedestrian access will likely be a secondary mode for reaching Regional parks. Connections from the park to the surrounding area should be provided, and should be designed to provide safe access and encourage non-vehicular access by the community. The pedestrian access system circulating throughout the park should be ADA compliant, and provide functional and aesthetic path options wherever possible. Appropriate materials include poured concrete, asphalt and concrete pavers, brick, packed decomposed granite, and wood (for deck walks).

- **Play Structures** – The safety of children has become a paramount issue to many parents, and thus the material choices for play structures and shock absorbent surfaces are somewhat limited. Structural materials include metal, plastic and wood. Shock absorbent, accessible materials include rubber mats, interlocking rubber tiles, loose wood mulch or rubber crumbles, and wood fibers. The contextual design of play structures could include custom feature designs, logos, or thematic playgrounds.

- **Restrooms** – The size, service radius, location, and programming of Regional parks indicate that the provision of restroom facilities will be a requirement. Design of these facilities, either as freestanding structures, or incorporated into regional or neighborhood centers or sport venue facilities, should be vandal resistant, and able to sustain high use and high volume. In some cases where primitive facilities are desired and are environmentally appropriate, such as in camping areas, composting toilet facilities can be provided. At a minimum, lighting should be provided in all non-primitive restroom facilities, and some facilities should be considered for heating and air conditioning. Wood, stone, concrete, brick and metal are appropriate materials for facilities in Regional parks.

- **Signage** – Metro will need to determine if they prefer system-wide consistency in signage materials and design, or if they prefer contextual signage for each park – which could share color schemes and Metro logos throughout the system, but use unique materials for each park. Materials appropriate to Regional parks include wood (finished and rusticated), stone, metal, concrete and brick.

- **Special Features** – Unique elements for a park, which might include art, interpretive displays, or interactive features, should utilize context sensitive materials where appropriate, but it should also be ensured that the materials are appropriate for the special feature.

- **Sports Facilities** – Regional parks, like Community parks, may contain baseball, softball, football, and soccer fields, as well as tennis facilities, basketball courts, and other active sports facilities. A Regional Park may also contain a signature, or magnet facility that is such a unique resource that it draws people from throughout the metropolitan area. An example of such a resource, although not a sports facility, would be the existing Warner Park Nature Center. Many of the sports facilities must conform to certain design requirements in order to meet applicable sports standards. Details, or accessory items such as bleachers, fencing, logos in turf or pavement, can provide opportunities for thematic or contextual design expression. Materials appropriate to such expressions will be extremely varied.

- **Vegetation** – Trees, shrubs and groundcovers in Regional parks will likely have, due to the extreme size of the parks, healthy growing conditions. As such, the opportunity for large trees, lush plantings, and large turf areas is possible. Regional parks in particular will in most cases be composed of large areas of native, relatively undisturbed areas. Thus the plant materials will be reflective of the indigenous region as a whole, but may also include unique plant materials reflecting unique growing conditions. Use of native vegetation would facilitate short and long term maintenance and result in cost savings. High maintenance turf areas will be needed for many of the active sports field activities, but otherwise should be minimized within the Regional park. Individual park design should be responsive to the variety of issues and factors appropriate to the site, while also keeping in mind the overall goal of achieving a higher level of sustainability through the use of low maintenance, native plants wherever possible.

- **Vehicular Access and Parking** – Access to Regional parks will generally be primarily auto-based, and non-motorized modes of access should be provided to every Regional park. Regional parks in more urbanized areas will have higher levels of pedestrian access. Parking areas and access drives will need to be brought into the park to provide reasonable access to sports fields, trails, boat launches, nature centers, and other facilities. The design of the access roads and parking areas should minimize modal conflicts, and not disrupt the aesthetic, environmental and recreational nature of the park. Materials appropriate to parking and access drives include poured concrete, asphalt and concrete pavers, brick, porous pavement, compacted crushed stone, and grasscrete or similar open structure, modular paving systems. ADA accessibility should be considered and provided in compliance with prevailing regulations.

- **Water-Based Recreation Facilities** – The Old Hickory and Percy Reservoirs, as well as the Cumberland River and the smaller rivers and creeks, provide multiple opportunities for water-based recreation activities, including boating, water skiing, fishing, sailing, canoeing, and swimming. Materials adjacent to or in the water should be non-skid, low maintenance, and able to withstand extreme exposure. Thematic development based around cultural icons could be possible, for example incorporating visual or interpretive signage references to President Andrew Jackson in the facilities at the Old Hickory Reservoir.

2.5 URBAN PARKS

The urban parks within the Metro system are located in surroundings that reflect a variety of manmade materials and cultural influences. They may fulfill any of the needs of a typical park, in that they may range from a neighborhood to a regional context. The diverse cultural influences in the greater Nashville area include Greek antiquities, grand Victorian homes, craftsman bungalows, brick Federal style commercial buildings, gleaming modern towers, African-American folk art, French-Canadian culture, and the music and culture associated with the Grand Ole Opry. The design or renovation of urban parks will have the greatest need to be contextual. Urban parks have the highest exposure to existing developed areas, and therefore are the greatest candidates for context sensitive design during renovation, or for new development. Urban parks are and will continue to be the places that host festivals, events that express civic pride, or offer opportunities for free speech. They provide the city and the region with a place to review its history as well as look to the future. Thus, the appropriate context sensitive materials and cultural designs will need to be chosen deliberately, meeting not only the cost and maintenance needs of Metro, but also appropriately expressing, reflecting and enhancing the local character.

- **Architectural Features** – The contextual relationship between any structure and its environment is essential in creating a facility that is harmonious with the neighborhood. Materials used should be complementary with materials used on adjacent structures, but should be able to withstand intensive use and provide good thermal and moisture properties. Architectural features for Urban Parks require close evaluation to the needs of the community and may require security solutions. The facilities should provide a clean and safe environment that complies with all adopted code and zoning regulations.

- **Fencing** – The purpose is generally to provide a physical barrier or access control, and materials appropriate to an urban environment include cut stone, metal, wrought iron, and finished wood. Ornamentation of fencing materials through medallions, filigree, finials, or other devices would be appropriate in an urban environment, especially as they allow for artistic expression of cultural or architectural resources and themes.

- **Furnishings** – Benches, water fountains, trash receptacles and other site amenities in urban parks will be exposed to high use and high wear. Use of substantial materials is recommended, and these include metal, wrought iron, stone, and concrete. Again, detailing of these items to reflect specific themes, history or cultural references should be considered.

- **Lighting** – Urban parks in will need lighting, and are likely to need lighting levels to support evening use and special lighting. Safety is also a key concern. Lighting fixtures, like other site amenities, will need to be substantial enough to withstand the rigors of the urban environment, while fitting into the context of the site and the community. Appropriate materials include stone, metal, wrought iron, plastic, glass and wood. Special lighting, or seasonal lighting, should be planned for and utilized where appropriate.

- **Non-Motorized and Non-Vehicular Access** – In-line skate, skateboard and other forms of non-motorized and possibly low speed non-vehicular access (electric wheel chairs, electric scooters, etc.) should be considered for all parks. All parks should be accessible by bicycle, and should provide bike racks, or other bicycle parking facilities. In some instances, sharing pedestrian facilities may be possible if those facilities have adequate width and smooth surfaces. Encouraging such a diversity of uses within an urban park may result in pedestrian conflicts, and thus may not be a good combination of uses. Where greenways or trail facilities feed into an urban park, special

consideration should be given regarding to how to integrate pedestrian and wheeled traffic. Multi-mode facilities will need adequate width, continuous paths, and smooth surfaces to ensure the safety of all users.

- **Paving** – Urban parks, unlike any of the other general park types, will likely have the highest amount of paved area, or hardscape. Where a nature-based regional park might be primarily composed of trees and turf, the urban park (of any type – regional, community, neighborhood, etc.) will use paving patterns, changing materials, thematic designs and other surfacing treatments to help create and define the space. There are many paving materials appropriate for urban parks, including brick, stone, concrete and asphalt pavers, poured concrete, and decomposed granite. All paving materials should meet ADA accessibility requirements, and should be durable and low maintenance.

- **Pedestrian Access** – Urban parks will primarily be accessed by foot, and thus pedestrian connections to the greater urban context will be important, as well as within the park. The programming of urban parks will primarily determine the intensity of the activities in the park – whether throngs of people will utilize the parks at once, or if the uses will be low key, and not as crowded. Paving and lighting, mentioned above, as well as signage below will be critical to clearly delineating access points and controlling movement through the park. Appropriate materials include poured concrete, asphalt and concrete pavers, brick, packed decomposed granite, and wood (for deck walks).

- **Play Structures** – An urban park, if a plaza or promenade along the Cumberland River, is less likely to include facilities for children. However, where those facilities are provided, the safety of children should be taken into account. Thematically designed structures may be more appropriate in urban parks, especially where historic or cultural expression can be undertaken. Structural materials include metal, plastic and wood. Shock absorbent, accessible materials include rubber mats, interlocking rubber tiles, loose wood mulch or rubber crumbles, and wood fibers.

- **Restrooms** – Urban parks will need restroom facilities that are durable and that can be secured. The structure and the fixture materials should be substantial, easily maintained, and able to withstand the rigors of urban abuse. Restroom facilities and their adjacent areas should be well lit, and should be regularly monitored to reduce crime, vandalism, and misuse. Closure of the facilities during evening hours is recommended, unless specific events require extend operating hours. Placement of restroom facilities next to staffed kiosks,

or near other areas of high pedestrian activity is strongly recommended. Wood, stone, concrete, brick and metal would be appropriate in urban parks.

- **Signage** – Metro will need to determine if they prefer system-wide consistency in signage materials and design, or if they prefer contextual signage for each park – which could share color schemes and Metro logos throughout the system, but use unique materials for each park. Urban parks offer the opportunity to have very unique signage because of their contexts, programming and adjacent uses. Materials appropriate to urban parks include stone, metal, wrought iron, neon, plastic, fiberglass, concrete and brick. Wood may be appropriate in areas that primarily consist of wood architecture.

- **Special Features** – Unique elements for an urban park, which might include interpretive displays or interactive features should utilize context sensitive materials where appropriate, but it should also be ensured that the materials are appropriate for the special feature. As such, the list of possible materials is not definable – instead, the prime criteria is that the resulting special feature should be safe for the public. Public art, an important element in helping a community define itself and create context, should be encouraged in all urban parks.

- **Vegetation** – Trees, shrubs and groundcovers in urban parks are likely to experience higher levels of physical wear and tear by users, as well as stress from growing in urban conditions – pollution, limited soil areas, and heat island effects. Choosing plant materials that can withstand these conditions will reduce short and long term maintenance, but there are context sensitive vegetation issues to be considered as well. Some areas of Nashville are defined by their distinctive tree canopies, or the variety of plant materials. Thus, individual urban park design should be responsive to these issues, while also keeping in mind the overall goal of achieving a higher level of sustainability through the use of low maintenance, non-invasive native plants wherever possible.

- **Vehicular Access** – Urban parks, especially those parks utilized to support festivals or celebratory events, will need to be designed to permit the access of trucks and maintenance vehicles into, or immediately adjacent to the portion of the site that is the main focus of event programming. Access into the site will require that the paved surfaces be designed to support the weight and width of vehicles delivering items for specific events. Additionally, parking for the

handicap should be provided adjacent to the urban park. Other parking may not be needed, but this decision should be made on a park by park basis.

3.0 DESIGN GUIDELINES FOR REGIONAL AND NEIGHBORHOOD CENTERS

The following design guidelines address regional and neighborhood center buildings and the park site within which they are located. These guidelines are meant for new centers as well as those scheduled for renovation. The level to which the guidelines can be applied to renovated centers is likely to be more restrictive due to limiting conditions that currently exist at these centers. However, every effort should be made to maximize the integration of the guidelines within the design process for the rehabilitated centers.

3.1 DESIGN PROCESS

Successful regional and neighborhood center design or rehabilitation depends upon an interactive dialogue with the community and center staff in order to best understand their needs and desires. Community participation should begin at the commencement of each project with citizens and Metro Parks staff who represent the full range of potential program interests. Involved Metro Parks staff should include the center director, program staff, and maintenance personnel.

Public outreach efforts during the design process should focus on seeking input from two specific sectors of the population: those who actively and currently participate in Metro Parks programs and those who, for whatever reason, have not or do not take advantage of existing programs. By soliciting feedback from these two groups, the design of the centers and the associated programming can be tailored to the needs of the community.

In addition to soliciting input from the two specific sectors of the population mentioned above, public input sessions/workshops should be held during the design process to disseminate information about the projects and invite comments from a cross-section of the potential user-base for each regional and neighborhood center.

The creation of a design committee for each center is also recommended in order to serve as an oversight body and to represent the user constituency. The committee should be consulted throughout the design process so that progress can be kept on track, reflecting the various input groups.

The new and renovated regional and neighborhood centers should be, through this process, a source of community pride. The early and continued input from the community and the staff in the design process should ensure that the resulting center

truly reflects the needs and desires of the community. Furthermore, the involvement will nurture the long-term stewardship of the center by the community and the staff.

3.2 SITE ISSUES

3.2.1 General Site Issues

Each regional and neighborhood center site presents a unique set of opportunities and constraints which will influence the facility's physical form as well as the types of programs offered. Some sites, for example, may have access to an adjacent structure or open area with which uses can be shared. Others may possess natural features that suggest a specific use or existing buildings that merit reuse. Some sites may also have physical limitations such as an unsightly adjacent parcel or flooded areas requiring some form of corrective mitigation. Whatever the individual characteristics of each site are, they must be assessed and addressed during the design process to ensure the long-term success of the facility.

The following guidelines are recommended to address general site issues:

- The site should be easily seen, accessible, and easy to find
- Where space permits, areas of the site should be reserved for future expansion of the structure and outdoor program space for both passive and active recreation areas
- The site should be designed to encourage a wide variety of activity patterns and provide a recreational setting that is challenging to all ages, abilities, and developmental stages
- Activity areas should take advantage of existing site features such as microclimate, topography, hydrology, and vegetation. The incorporation of natural features into the recreational experience is encouraged.
- Activity areas should be designed to avoid conflicts amongst user groups
- The center site should comply with the standards set forth by the Americans with Disabilities Act (ADA). Activity areas should include features that provide recreational and educational experiences for the handicapped.

3.2.2 Parking and Circulation

An efficient internal circulation system for vehicles and pedestrians and adequate parking facilities are necessary components of any successful regional or neighborhood center. Inadequate parking can cause reduced usage of the facility, and conflicts with neighbors can occur if parking for the center is forced onto adjacent properties or streets due to insufficient on-site parking spaces. A well-structured on-site system of roadways for vehicular traffic will maximize pedestrian safety and effective use of the facility. Similarly, a well-designed internal path system for pedestrians will pull the site together, enhance the user experience, and facilitate use by the full spectrum of user groups.

The following parking and circulation guidelines recommended:

- An adequate number of parking spaces shall be provided to satisfy programming needs and meet local code requirements. Parking for disabled users shall be provided as close to the building entrance as possible and as dictated by Federal, state, and local code requirements.

- Bicycle access and parking should be provided at all facilities. Access includes linkages to areas within the park containing the regional or neighborhood center, as well as linkages to the surrounding neighborhoods and the countywide greenway system. Parking facilities include bicycle racks or lockers. Bicycle parking should be located in close proximity to the main entrance of the facility, but should not be located in a manner that would impede pedestrian, mobility-impaired or emergency personnel access.

- Off-street parking should be to the side and rear of the structure where feasible in order to avoid the prominence of the parking area, reduce glare along the building frontage, and emphasize the building rather than the autos. Views into parking areas from adjacent streets and the center should be maintained for security surveillance.

- Pedestrian safety within parking areas should be addressed through the use of features such as crosswalks, sidewalks, and signage for both pedestrians and motorists. Pedestrian visibility and sight lines within parking areas should be maximized.

- Staff parking should be located near the building for added security. Staff parking areas should be visible from staff offices to facilitate supervision of

those vehicles by staff and improve the safety of the staff when walking to their vehicles.

- Drop-off zones should be provided at the regional or neighborhood center entrance and close to high-activity play areas

- Access must be considered for emergency vehicles as well as service and delivery vehicles. Service vehicle areas should be separated from activity areas when possible. Provisions for stabilized turf and widened pathways should be made for emergency vehicle access to facilitate access to playground and high activity areas.

- Play areas should be designed to minimize conflicts between play area users and vehicular traffic.

- A clear, structured, and accessible path system connecting the various site elements within the park should be provided. Paths to main facilities should be handicapped accessible. Secondary paths may be included that are not necessarily accessible to all users.

3.2.3 Safety & Security

The importance of creating a recreational environment that is safe and secure cannot be overemphasized. If people do not feel safe in the areas surrounding a regional or neighborhood center, whether due to antiquated play equipment or activity areas that are dark and overgrown, use will be limited.

The following safety and security guidelines are recommended:

- Site safety can be enhanced though design that maximized supervision by staff and police, provides adequate lighting and open visibility, and easy access to emergency call stations. It is recommended that a limited access, drive-through loop be provided for police and/or security cars.

- Activity areas should be clearly visible to parents and children. Areas concealed or hidden from view should be avoided to discourage deviant, inappropriate, or criminal activities.

- Play equipment should meet current standards for safety, including the provision of safety surfaces in all play equipment fall zones according to national, state, or local standards

- Perimeter site security fencing with limited entrances is recommended to provide controlled access, after-hours security and protection of adjacent properties. Vines and/or dark green or black vinyl coating should be considered as a means to reduce the visual obtrusiveness of site security fencing.

3.2.4 Accessibility

Today's recreational facilities are used by a wide range of user groups, including the elderly and those with physical limitations such as the mobility and visually challenged. In the effort to maximize access to the City's recreational facilities, the outdoor environment should be "barrier-free," providing wide-spread access to site elements for the mobility challenged, and design details such as raised planters to accommodate wheelchair-bound users.

3.2.5 Noise

Noise generated at a regional or neighborhood center property is a potential threat to adjacent neighborhoods and can cause conflicts between user groups utilizing adjacent activity areas within the center property.

Site activities should be organized to keep noisy activities such as basketball courts and swimming pools away from adjacent residences and away from quiet activity areas on the site. Noisy activities such as basketball may be inappropriate for some sites with limited area and noise sensitive neighbors. Noise concerns can be mitigated to some degree through the appropriate scheduling of activities.

3.2.6 Linkages

Public access opportunities to regional and neighborhood center sites will greatly enhance their use and popularity. Opportunities to improve or create new opportunities for public access should be assessed and developed.

The following linkage guidelines are recommended:

- **Linkages to Greenways.** Linkages to adjacent greenways and path or trail systems should be improved or created. In situations where adjacent neighborhoods have expressed a desire for connections to the site, accessways connecting the neighborhood and the center property should also be developed.

- **Connections to Transit.** Connections between the site and public transportation routes should be explored and developed if possible. If an existing transit stop is located near the regional or neighborhood center site, potential connections to that stop should be explored. If a center is located along a public transportation route, but no transit stop is located within one-quarter of a mile, consideration should be given to providing a transit stop at the center.

3.2.7 Landscaping

The integration of existing vegetation and the addition of new plant material (and where possible, native vegetation) can greatly enhance a site's appearance, screen undesirable views, and provide shade and wind protection. It can also be a valuable learning tool that instills an intrinsic respect for the environment. The need for and degree of landscaping should be reviewed on a site-by-site basis.

The following landscaping guidelines are recommended:

- Landscaping and existing vegetation should be utilized to provide shade, create wildlife habitat, separate and create activity spaces, and serve as an interactive educational tool for users. Plants should be an integral part of the outdoor play environment.

- Landscape plantings should not restrict visibility in such a way as to create security hazards

- Trees and other plantings should be provided to shade parking lot surfaces and walkways

- Allergenic, toxic, and physically dangerous plant materials should be avoided

- Plant materials should be selected for easy care and high durability

- Native plant materials should be utilized wherever possible in order to minimize maintenance, fertilization, and pest control requirements

3.2.8 Lighting

Light for the exterior spaces of the regional and neighborhood centers is critical to the safety and security of the sites. Overall site safety can be enhanced by illuminating

potentially hazardous areas such as steps and internal roads. Lighting along pedestrian paths and in parking lots improves site security and will result in greater center usage.

The following lighting guidelines are recommended:

- The size and type of selected fixtures should be appropriate to the scale of the space that they are illuminating. In addition, light fixtures used on the site should be consistent in style and reflect context sensitive design.

- Parking lot, major vehicular roadway, and major pedestrian pathway lighting should be designed/rehabilitated to provide a safe environment for users at night (if Metro Parks policy is to permit night use of regional and neighborhood centers and adjacent areas). A minimum average foot-candle illumination of 1.0 is recommended for parking lots and pathways utilized by seniors. All other pathways should have a minimum average illumination of 0.5 foot-candles.

- Glare directed towards adjacent neighborhoods and the open sky should be minimized. "Backshields" and "cut-offs" should be placed on free-standing and attached light fixtures when necessary to prevent the overflow of light into adjacent residential areas or into open sky.

3.2.9 Signage

In conjunction with a well-designed circulation system, appropriate signage will tie a site together, improve safety for the visitor, and provide the necessary information regarding programs and site components. Signage for the regional and neighborhood centers should be integrated with the overall Metro Parks signage policy.

The following signage guidelines are recommended:

- Signage should communicate to people of all abilities and ages

- Signs should provide permanent interpretive information about the site and programs

- Signage should be readable, clean, durable and secure. International characters and standards should be utilized as much as possible.

- Regulatory, directional, identification and informational signage should be provided where necessary

- Directional, identification, and informational signage should be consistent in graphic convention, and regulatory signage shall adhere to published standards regarding size, color, etc.

- Identifying signs should reflect the unique character of the surrounding community, display the Metro Parks logo, and be visible from a distance for the visually challenged

- Signs that alert users to the special features of equipment and the appropriate use of the equipment should be provided

3.2.10 Maintenance

A properly maintained regional or neighborhood center will improve safety, reduce long-term maintenance costs, and boost pride in the surrounding community by promoting a spirit of stewardship. On the other hand, facilities that have fallen into a state of disrepair are viewed as dangerous, undesirable places that tend to attract illicit and criminal activities. From a long-range maintenance perspective, graffiti and vandalism should be cleaned and repaired immediately to discourage additional damage, and to impart a sense of dedication to the local community through proactive countermeasures.

The following maintenance guidelines are recommended:

- Site amenities and landscaping should be selected and located in ways that will minimize their maintenance requirements. Site amenities and signage should be durable, easily cleaned, and vandal resistant. Low maintenance plant materials, such as native plants and groundcovers, should be selected wherever possible.

- Accessways to play equipment and other high maintenance areas should be sufficiently wide and structurally capable of permitting maintenance vehicle traffic in order to facilitate maintenance operations

- Regular maintenance practices should be established to ensure outdoor play settings that are safe and accessible

3.3 BUILDING ISSUES

The following guidelines focus on general issues related to the regional and neighborhood center structures. Topics addressed include materials, utilities, and safety / control / security. These guidelines are applicable to both rehabilitated neighborhood

centers and the new regional and neighborhood centers proposed for East Park, Hadley Park, Richland Park, Coleman Park, Sevier Park, Hartman Park, Madison Park, the Parkwood area, Eakin School, Paragon Mills, and South Inglewood.

The intent of these guidelines is to provide a general, functional framework in which the architectural team developing the actual designs for the rehabilitated or new regional and neighborhood centers can operate. The ultimate design of each center should reflect the unique character of the community it serves.

3.3.1 Building Materials

The following building issue guidelines are recommended for buildings at neighborhood and regional centers:

- **Durability.** Building materials must be durable, functional, low maintenance, comfortable and appropriate for the intended use. Construction materials as well as furniture, fixtures and equipment must be able to withstand the extreme wear and tear and occasional misuse associated with public facilities, yet be inviting and non-threatening. The proper selection and use of building materials can provide for low building maintenance and resistance to vandalism, without being visually harsh or unappealing.

- **Exterior Materials.** Exterior materials and building forms should be chosen to lessen the institutional or warehouse image often associated with these types of centers

- **Interior Materials.** Low cost and durable interior materials such as concrete block walls, concrete or vinyl tile floors and steel doors are common in recreation and community centers. These commonly used materials can be used successfully if attention is paid to color, texture, pattern and light, which can soften the harshness normally associated with these materials. Sound absorbing materials such as acoustical wall and ceiling panels should be incorporated in out-of-reach locations for noise control.

- **Appropriate Materials.** Materials must be appropriate for the intended use of the space. For example, concrete or vinyl tile floors are desirable for some types of multi-purpose rooms, but gymnasium floors should be wood. Vinyl flooring should be used in all rooms (kitchen, multipurpose, senior, arts and crafts, etc.) where food and beverages may be served. Concrete block walls offer inexpensive, long lasting, low maintenance interior walls, but are inflexible

and costly to change. Conversely, gypsum board and metal stud interior walls are easily removable, offering flexibility for future program changes, but lack the durability and security of block walls.

- **Reducing Vandalism.** Public facilities have a tendency to attract vandalism. A deterrent is the use of durable, graffiti resistant and easily cleaned materials that allow immediate cleanup and repairs.

- **Use of Glass.** Careful consideration should be given to the use of glass. Windows are important for natural light, views into and out of the building and between spaces within the building, but is subject to damage in activity areas and is inviting to vandalism and crime. Alternatives to standard glass, that are more resistant to breakage and enhance security, are Lexan, glass block, wireglass and laminated glass with a polycarbonate core. Skylights and clerestory windows offer a good source of natural light where views are not important and are less vulnerable to vandalism than ground level windows, but require careful detailing and flashing to minimize water infiltration.

- **Metal Finishes.** All metal finishes should be galvanized or otherwise treated to be non-corrosive. Painted surfaces, especially on the exterior of the buildings, should be limited to reduce maintenance.

- **Accessories.** Exterior and interior accessories should of be extra heavy duty quality and inaccessible where possible. Examples include recessed mailboxes, basketball rims designed to "break-away," out-of-reach signage, and light fixtures with unbreakable lens covers or protective screens.

- **Roofs.** The use of pitched metal or shingle roofs is preferred over flat membrane or built-up roofing because of lower maintenance, longer life-span, and less potential for leakage. In lieu of placing mechanical equipment on the roof, units located on the ground in secured enclosures should be considered.

- **Energy Efficiency.** Utility costs will be minimized by the selection of energy efficient building materials, energy conscious design, and efficient heating and air conditioning equipment. Examples include well insulated walls, roofs, windows and doors, air-lock vestibules at main entrances, and the orientation of the buildings and exterior spaces to take advantage of the winter sun and summer shade. Deciduous trees planted on the south and southwest side of buildings will assist in reducing cooling costs by providing summer shade, while allowing sunlight to warm the building in winter.

3.3.2 Utilities/Services

Adequate utilities and services should be considered to allow for anticipated uses and flexibility for other possible future uses. Foresight in utility planning when the facilities are designed will save money over future renovations. However, not all future needs can be anticipated. Therefore, the buildings should be as flexible as possible to accommodate program changes without requiring major expense.

Utilities and services that should be incorporated include:

- Building heat and air-conditioning in all occupied spaces to allow for year-round use
- Proper building ventilation and exhaust for toilet/locker rooms, activity spaces, and for any special uses such as a kiln in the arts and crafts area
- Hot and cold water and drains (including floor drains) for toilet/locker rooms, kitchens and activity areas
- Generous electrical, telephone and/or digital telephone, digital cable, satellite, and fiber optic connections for computer use
- Proper levels of lighting with flexible controls to allow dimming and spot lighting
- Fire protection and security systems
- A public address system
- Cable, satellite and digital television connections

3.3.3 Security/Control/Safety

The facility should allow easy implementation of the center's policies regarding security and safety controls. The buildings and site must consider safety for employees, staff, and users.

Safety and security considerations should include:

- Control and prevention of conflicts between users, outsiders and staff

- Devices for quickly contacting police, fire and paramedic (if not present in the building) by panic alarms or automatic dialing. Telephones and panic alarm stations should be well marked and located for easy access by staff and the public.

- Two-way intercom service or telephone service should be provided in each classroom, activity or assembly space

- First aid and emergency services should be available for onsite attention to injuries and illnesses

- Protection should be provided to prevent the transmission of infectious diseases between users and staff, and should include infectious/hazardous materials handling and disposal

- Telephone, electrical, security and other utility connections to the site and the buildings should be located in secure spaces

- Securable restroom facilities should be considered on a site by site basis. Where considered necessary, women's restrooms should be locked, with keys kept at the central control desk. In all cases, restrooms should be in close proximity to the center's control desk.

- Where possible, the design of the regional and neighborhood centers should include pitched roofs, and should be designed to only be accessible by authorized personnel

- Fire and life safety code issues, including alarms, pull stations, sprinkler systems, numerous well-marked exits, etc., must be addressed in the building and site design. Special consideration should be given for the safety of children, the disabled and the elderly.

- A police mini-station or precinct office in the regional or neighborhood centers, and the use of the facility for police sponsored activities would help improve security and safety of the center and improve community relations

3.4 MAJOR BUILDING COMPONENTS

Programs and the physical spaces required to accommodate them should be determined on a center by center basis, and in close coordination with surrounding neighborhoods in order to determine specific community needs and desires. At a minimum, however, each regional and neighborhood center should provide the following building components:

- Main entrance and lobby
- Control center
- Administrative offices
- Gymnasium
- Multipurpose rooms (large, medium, small)
- Activity/specialty rooms (e.g., arts and crafts, dance, exercise, computer)
- Kitchen
- Storage

The size and number of multipurpose and activity rooms will vary from center to center.

3.4.1 Main Entrance and Lobby

This space will be used primarily for arrival, orientation, and waiting for pickup.

The following guidelines are recommended:

- The entry area should be sized to accommodate small group gatherings
- The site and building entrances should be easily identifiable, inviting, and accessible without steps or abrupt grade changes
- The lobby area should be in direct view of the control desk
- The space should include comfortable furniture and wall space for bulletin boards describing activities, programs and announcements
- A vestibule space should be provided at the main entrance doorways to maximize energy conservation

3.4.2 Control Center

The control center should be comprised of a desk or open office to serve as an information and security center.

The following guideline is recommended:

- The control center, which may be a central office or desk, should be located with a direct view of the main entrances, and into as many of the activity spaces as possible. In smaller centers, the Director's office may fill this need.

3.4.3 Administrative Offices

The administrative offices will house the Director, full-time staff, and seasonal employees. The size of the center and required staff will determine the number and size of the offices.

The following guidelines are recommended:

- Each center should have a separate Director's office that has at minimum enough room for two people to meet privately. Other full time staff may share offices, and adequate space should be reserved for seasonal and part-time employees.

- The office area must provide a safe and secure environment for the staff, and be oriented to facilitate observation of as much of the center as possible.

3.4.4 Gymnasium

Gyms are always popular components of recreation and community centers. The Metro regional and neighborhood centers already have, or will be programmed to include gymnasiums. Due to their size, they have the ability to serve a number of functions.

The following guidelines are recommended:

- Gymnasiums should be air-conditioned

- Gymnasiums should have retractable bleachers along one side of the court. Some of the older gyms may not have enough sideline space to accommodate bleachers, and thus may not be able to meet this guideline.

- Wood floors, instead of linoleum or vinyl, should be considered for use in all gyms

- Gym areas experience high levels of usage, and as such, should be visible from the control center as a precaution against conflicts between users

- Consideration should be given to the placement of a dividing curtain down the main court centerline and the provision of basketball backboards along the sides of the main court to allow for more usable space and diversification of activities

3.4.5 Multipurpose Rooms

As the name implies, multipurpose rooms are designed to support a variety of activities, including meetings, banquets, and physical activities. They are an important part of regional and neighborhood centers because of their inherent flexibility.

The following guidelines are recommended:

- Operable partitions to divide the room into two or more smaller rooms should be integrated into the design. This will further enhance the flexibility of these rooms. Operable partitions should be full height and designed to provide some acoustical separation between spaces.

- The multipurpose room should be directly adjacent to the kitchen and large item storage room
- In cases where space restrictions limit the development of a room dedicated for specialized activities, such as dance instruction, fitness classes, or martial arts, one of the multi-purpose meeting rooms should be equipped with wood or synthetic multipurpose flooring to provide adequate cushioning for these activities. In addition, this room should be equipped with wall mirrors and dance bars to provide greater use flexibility.

3.4.6 Activity rooms

Activity rooms are smaller flexible multipurpose rooms designed to comfortably accommodate a wide variety of uses.

The following guidelines are recommended for activity rooms:

- Acoustical separation between rooms should be provided. A suspended acoustical ceiling, located high enough to avoid damage from contact, will offer some additional low cost noise control.

- Rooms typically considered a single-purpose room (e.g., arts and crafts) that require a sink or other built-in equipment can be designed for other uses by locating the equipment along one side of the room behind locking operable partitions

- The walls and floor should be easily cleaned. Carpet is not recommended in activity rooms.

- Windows for natural light and views (with shades to allow darkening) will help reduce the institutional feel and appearance of the rooms (the provision of window should be done with consideration to security and maintenance issues previously discussed)

3.4.7 Kitchens

A kitchen should be provided for public and caterer use, capable of food preparation of banquet style events, for approximately 100-150 people. The kitchen should be accessible from some of the multipurpose spaces in the facility, and it should be near the service entrance when possible.

3.4.8 Storage Rooms

The amount and type of available storage will greatly affect the flexibility of rooms for multipurpose use. Storage space should be provided for large articles such as volleyball standards, pianos, tables and chairs, or a portable stage. A lack of adequate storage will ultimately result in damage to the facility and equipment and force the inappropriate or illegal use of areas such as janitorial closets and mechanical/electrical rooms for storage. Ample outdoor recreational and maintenance equipment storage is also recommended.

3.5 BUILDING ORGANIZATION

The building spaces should be organized to allow the greatest flexibility of uses without unduly compromising the needs of individual programs. Other important organization al issues include traffic flow, control/supervision, relationship between indoor and outdoor activities, and adequate separation between programs such as locating seniors away from youth, and locating noisy activities away from quiet ones.

3.6 PROGRAM OPTIONS

Community participation is crucial in the selection of specific programs in order to ensure that the center meets their needs. The programming will differ from community to community and from center to center, at both the neighborhood and regional center levels. Some programs may emphasize sports and recreation, while others may focus more on education and cultural activities.

Below is a sampling of possible programs. Some of the programs/spaces listed below are very specialized, requiring individual dedicated spaces; others can share spaces.

Outdoor Recreational Activities

- Amphitheater performances, public speaking, and organized events
- Baseball (batting cages)
- Horse shoes
- Jogging, walking, in-line skating and biking
- Pick-up games and outdoor relaxation (open play)
- Picnicking and barbecues
- Playgrounds
- Roller hockey
- Skateboarding
- Swimming (competitive or recreational)
- Traditional sports (e.g., football, baseball, softball, soccer, field hockey, tennis)

Indoor Recreational Activities

- Basketball/volleyball
- Billiards
- Climbing
- Golf and baseball (practice cages)
- Indoor court games (e.g., handball, racquetball, squash)

- Indoor running and walking
- Multipurpose exercise (e.g., aerobics, dance, karate, self-defense, weight training)
- Swimming (competitive or recreational)
- Table board games (e.g., cards, checkers, chess)
- Weight training (free weights or machines)

Educational, Cultural and Social Activities

- Arts and Crafts
- Banquets/parties
- Classroom instruction
- Computer training
- Daycare
- Environmental education
- Film (darkroom)
- Meetings
- Music instruction and practice
- Performances (stage)
- Reading
- Senior activities/senior meals
- Summer camp programs
- Tutoring

Programs in addition to those typically found in traditional community and recreational centers should also be encouraged. Examples of programs that could require a unique space or need special support services might include a police mini-station, a community health center, or a creative discovery/experimental/interactive museum.

4.0 DESIGN GUIDELINES FOR GREENWAYS

The following Greenways Design Guidelines are to establish new or reinforce adopted 1994 Metro Greenways Design Standards that promote a comprehensive strategy for approaching the long-term development of the Metro Parks and Greenways System.

4.1 GENERAL PRINCIPLES

In general, Greenways are intended to function as the off-street component of countywide system of pathways, including sidewalks and bikeways, for use by non-motorized vehicles. Uses permitted on greenways include bicycling, walking, running, and in-line skating. They typically function as recreational corridors, though sometimes solely conservation based, and can also offer the opportunity to function as non-motorized transportation routes from destination to destination throughout the community.

4.2 CONTEXT SENSITIVE DESIGN

Though Greenways are similar in some fundamental aspects, each is unique in its contextual surroundings. Even along a single greenway corridor, variations of context may be obvious from segment to segment. For example, the corridor may traverse natural settings for a length and then pass through a completely urban setting along the same greenway corridor. Greenway design expression within Davidson County must likewise respond to the uniqueness of each segment of corridors within the county, while observing the desire to maintain a recognizable countywide design vocabulary.

4.3 PATH AND TRAIL TYPES

4.3.1 Multi-use Paths

Multi-use paths are the most commonly developed path type in the Metro system. They are to be designed to safely accommodate a variety of users at the same time, and are separated from vehicular traffic. They can be developed within highway Rights-of-Way (ROW), but are more commonly established in Metro along stream or river corridors or within railway corridors. Multi-use paths are for non-motorized travel only and are typically designed for two-way traffic movement. The width of the path surface must be

able to provide for the safe transit of all users, as well as capable of accommodating light maintenance vehicles.

The American Association of State Highway Transportation Officials (AASHTO) set standards for the development of bike lanes, paths and trails used by bicyclists in the AASHTO "Guide for the Development of Bicycle Facilities." This includes recommendations for design speed, curve radii, and signage.

According to the 1999 AASHTO "Guide for the Development of Bicycle Facilities," ten (10) feet is the standard pavement width for two directional multi-use paths. In limited circumstances, such as areas not anticipated to have high use, eight (8) feet may be adequate. Where high use is anticipated, such as in dense urban areas, the path width should be increased to twelve (12) or fourteen (14) feet. An asphalt or concrete surface should be utilized.

A two feet wide shoulder of stable material, without encroachment by signage or trees, should be provided. A shoulder cross-slope of no greater than 1:6 is required.

Ten feet of overhead clearance from obstructions should be provided for maintenance and emergency vehicles. This level of clearance will adequately accommodate all other users, including bicyclists.

Recommendations made by the federal Architectural & Transportation Barriers Compliance *Board's 1999 Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas* provide ADA path design guidance.

- Maximum running slope of multi-use paths should be 1:20 (5%)
- Slopes of up to 1:12 (8.33%) should be permitted for distances of up to 200 feet; 1:10 (10%) for up to thirty feet, and 1:8 (12.5%) for up to ten feet
- Maximum cross slope of a path shall not exceed 1:20 (5%)

4.3.2 Pedestrian Walks

Metro has a variety of Greenway contexts through which the current and planned Greenway network will extend. Many of these facilities follow river and stream corridors or other natural features across the county. Some Greenways, however, take on a decidedly different flavor and are urban in context. These require the utilization of existing or modified sidewalks to traverse the corridor. Pedestrian walks or celebrated

walks, as they are known, are integral to the total Greenway network. They can provide important pedestrian connections to neighborhoods and commercial centers, as well as throughways to other more natural Greenway corridors.

Pedestrian walks that are component parts of a designated Greenway corridor must be by necessity designed for full compliance to all users, in accordance with the ADA Guidelines and adopted Metro Sidewalk Standards for ramps, cross slopes, curb cuts, clear path-of-travel.

Additional definition to the sidewalk zone may be included to associate the sidewalk as a component of the Greenway corridor. Elements such as unique site lighting, signage, paving material, banners, artwork, and landscape treatments can combine to link the sidewalk to the Greenway.

4.3.3 Secondary Trails

Secondary, or undeveloped rustic trails, are an important means of access to natural areas that are more remote and/or not expected to be impacted by high levels of usage. Secondary trails provide loops or spurs from the primary trail or path within the corridor. The trail surfaces should be porous, such as bark chips or gravel, so as not to severely impact the natural drainage system. Some of the trails are simply mowed grass. Not all routes can be barrier free due to the physical conditions through which they traverse. Vegetative clearing to five feet on either side of the trail and ten feet vertically shall be required. Signage is still common on the secondary trail type.

4.3.4 Natural Corridors

Davidson County will develop many miles of trail within the extensive Greenway network. Some natural areas will be so environmentally important or historically significant that the open space may be deemed *Worthy of Conservation*. Natural corridors may thereby be designated as part of Metro's open space planning and be left in their natural states, without trail development.

Community benefits of designating areas as *Worthy of Conservation* include preservation of natural scenic beauty, wildlife habitat conservation, flood protection, and improved air and water quality.

Large acreage natural corridors may provide the possibility of some critical linkages or educational trail development through sections of the corridor without degrading the other benefits.

4.4 PROGRAM ELEMENTS

4.4.1 Access

Where appropriate, facilities to temporarily store user automobiles should be available at major trailhead locations. Shared use of existing parking facilities at schools, churches, or parks that are connected to the Greenway corridor may accommodate the anticipated volume of cars without the additional costs of construction. Providing automotive parking facilities may not be appropriate or desirable for all trailhead locations. In some instances, ensuring direct non-motorized accessibility from the bordering neighborhood may be sufficient. Where parking facilities for automobiles are necessary, they should follow the guidelines listed below:

- Parking lots should be appropriately sized to the Greenway facility.
- Parking lots should include parking facilities for bicycles.
- Surfacing should be durable and maintainable, and should be determined as result of anticipated levels of demand.
- Careful consideration should be given to the design impacts of location and detailing of the parking lot on storm water and water quality of the Greenway environment.

4.4.2 Trailheads

The Greenway system is primarily accessed through “portals” known as trailheads. The design of the trailhead is important to set the user’s first impression of the trail. Its size is dependent upon its location, its expected level of use, and desired visibility. The trailhead is to be composed of several key features and should always include an access point that links to the Greenway corridor, trail identifier signage, and map to provide information to the user. Where feasible and appropriate, an entry plaza area, and/or limited vehicular parking may be provided. Some facilities may include more extensive amenities such as seating, bicycle racks, trash cans, water fountains, and landscape plantings. The consistent design of trailheads will function as recognizable and comfortable points of entry into the Metro Greenway system.

The parameters for the design of signage frames for trailheads is established by the Metro Greenways Design Standards.

4.4.3 Site Amenities

The greenway corridor is not only characterized by the path or trail surface and surrounding environment, but also by accessory design elements, also known as Site Amenities. These amenities are to be fashioned so as to contribute to the entire trail segment experience, and include design elements such as structures, bridges, fences, entry gates, and landscape plantings to name a few examples.

4.4.4 Site Furniture

Site furniture can be found through the Greenway system. Trailheads, overlooks, rest stops and major path and trail intersections will incorporate furniture such as benches, bike racks, drinking fountains and waste receptacles to contribute to the users' positive trail experience. Furniture types are generally established in the 1994 Greenways Design Standards for several environmental contexts. The furniture selected should be appropriate to the scale of the space, design context, and expected level of activity for the given location.

4.4.5 Signage

Signage along the Greenway paths and trails provide valuable information to the user—location, interpretive data, regulatory restrictions, and warnings. The appearance and placement of signage throughout the Metro Greenway system should be consistently planned to display a unified style so that it becomes an easily recognizable icon of the greenway network. Signage materials should be appropriate to the surroundings, contribute in a positive way to the user experience, be cost effective, vandal resistant, and require limited maintenance.

The signage designs types identified in the adopted Metro Greenways Design Standards should be consistently applied throughout the system. Where required, adjustments to these standards should be made over time to comply with evolving national guidelines.

Guidance and Directional Signage

- Small to medium format wayside exhibits consisting of metal frame with embedded fiberglass or resin based graphic panel.

- Intended to provide locality and directional information to users with map graphic and text. Information, such as distance to connections and destinations, are also appropriate.

- The design intent for this type of sign is to be noticeable, easily accessible, but simple enough to enhance, not detract, from the Greenway experience.

Interpretive Signage

- Significant and educational aspects of the path and trail system can be identified and interpreted via this type of signage. The appropriate frequency, location, and size must be determined by the corridor design.

- Interpretive data may be displayed attractively at the trailhead to raise the users' levels of appreciation, expectations and understanding about the trail corridor, or signs may be sensitively placed as wayside exhibits along the path or trail.

- Interpretive graphics should include materials appropriate to all users and focus on site-specific aspects to enrich the Greenway experience. Cultural, environmental, and historical themes may be suitable subjects.

Regulatory Signage

- Rules of the path and trail system are identified along each Greenway corridor. Where they are universal in design, the Manual on Uniform Traffic Control Devices (MUTCD) should guide placement, shape, color, and message.

- Trailheads are natural locations to include general regulatory information to users prior to entering the system

- Common regulatory signs found along the path or trail would include restrictions on bicycle use, exclusions of motor vehicles, bicycle parking permitted, and lane designations for multi-use facilities

Warning Signage

- Warning signs identify existing conditions or potential hazards to alert users to conditions that may impact safe use of the trail or path

- Hazards, such as steep grades, slippery conditions, trail narrowing, yield and stop signs, and pavement surface changes, are among the signage types in the warning category

4.5 SITE PRESERVATION AND LANDSCAPE PLANTING

Efforts should be made to limit the amounts of native soil disturbance, grading and clearing required to implement a trail route. Preservation of the positive qualities of a path or trail corridor can enhance its unique qualities for education and interpretation. Should new plant material be introduced into the design, careful and deliberate design decisions must be made concerning vegetation types and locations.

- New plantings should be ecologically compatible with the pre-trail environment
- Species should be native and non-invasive
- Maintenance requirements and establishment needs must be carefully considered, and should be minimized where possible
- Plantings should enhance the existing character of the corridor or segment through added texture, color, fragrance, or other beneficial feature

5.0 DESIGN GUIDELINES FOR GENERAL MANAGEMENT OF PARKS

Throughout the country, many park system administrative teams are being asked to reevaluate the facility management strategies being applied to parklands and other recreation resources. The trend is to continue to realize cost savings where possible, while introducing the concept of sustainability.

Sustainability is being introduced to address two issues being faced by communities across the country. The first, cost savings, is a perennial issue. The second, environmental protection, is a concern that continues to grow due to increasing awareness of pollution, the desire for environmental preservation, and regulation at the state and Federal level.

The combination of economic and environmental sustainability is achieved through changes in system management. Park system managers have come to realize that traditional methods of park and recreation facility design and maintenance are more of a cost and environmental liability when compared to a sustainable, whole systems approach. Sustainable park system development and management is achieved through an understanding and use of native vegetation, organic systems and organic processes. Such an approach is in contrast to the high maintenance approach, which includes manicured and fertilized vegetation, non-organic engineered systems and highly manipulated and controlled processes. This is not to imply that sustainable designs are not planned or engineered – in fact they can be more so than traditional development, yet the key is the integration of natural features, systems and processes in a manner that achieves a similar, if not superior result when compared to traditional methods. Furthermore, sustainable design and management practices have resulted in substantial long-term operational cost savings when compared to traditional approaches.

The changes in system management will need to extend to field crews responsible for implementation. Training sessions should be developed to teach crews how to adapt to sustainable management strategies. These sessions should include learning how to identify the new native plant palette, and learning reduced herbicide and fertilizer needs. New vegetation management training will also be required in order to match technique to a changing plant palette. A change in perception and approach will need to be adopted by the crews and management in order for the move to sustainability to be successful. This change may be facilitated by the encouragement and rewarding of crews and individuals that submit ideas regarding how their work can be done in a more environmentally friendly manner. Finally, training of the crews should include education

about how the implementation of sustainable management strategies and techniques will directly improve their quality of life and working environment.

Examples of sustainable versus non-sustainable design and management:

- Porous concrete paving versus solid paving, allowing rainwater percolation, assisting with aquifer recharging, and reducing stormwater detention requirements

- Vegetated, meandering swales versus concrete lined channels, reducing erosion, improving water quality, providing wildlife habitat and slowing the impact of increased flows to downstream communities

- Designing buildings to take advantage of natural lighting, heating and cooling versus designing buildings to solely rely on traditional heating, air conditioning and lighting systems, saving energy and increasing indoor air quality

- Native intact or planted vegetation that is adapted to the climate, soils and pests, versus exotic vegetation that requires fertilizers, pest control, watering, excessive mowing or pruning, saving in labor, material and capital costs

- Green roofs (roofs with vegetation) versus traditional built up roofs, reducing runoff, increasing roof insulation (saving heating and cooling costs), and reducing heat absorption that contributes to the "heat island" effect of many cities

- Recycling water for irrigation versus using potable water for irrigation, reducing water costs, and reducing water needs for the Nashville metropolitan area

- Designing buildings to incorporate low energy, high output fixtures, such as compact florescent lights

- Designing thermal control systems to recycle or transfer heating or cooling through innovative exchange mechanisms

- Designing landscapes that incorporate the natural growth tendencies of plant materials, rather than forcing plant materials to conform to a preset vision

Nashville and Davidson County

Metropolitan Parks & Greenways Master Plan

Appendix B – Revenue Enhancement from Golf Operations – Illustrative Economics

November 2002

Make your Mark on Parks!

metro parks 100 YEARS

REVENUE ENHANCEMENT FROM GOLF OPERATIONS - ILLUSTRATIVE ECONOMICS

An identified goal of Metro Park's master plan is to maintain an appropriate balance among affordability, sustainability, and a diverse and expanding array of recreation opportunities for the citizens. The targeted balance point is clearly a community decision, for which there is no single correct answer. Every community is different. ERA's review of National Parks and Recreation Association (NRPA) Gold Medal winners indicated that recreation costs are typically offset by two primary funding sources – general fund contributions and income earned from fees and charges. To a lesser degree, grants and donations help defray the overall cost. Maintaining affordable recreation opportunities embodies the notion that either general fund contributions or revenues from cash positive activities make up the deficit between the actual cost and the cost absorbed by the consumer. Absent this balance, recreation systems often find themselves in difficult situations where the quantity of programs or facilities are eliminated or reduced, the quality of services diminishes, maintenance is deferred, or earned income is increased through pricing or utilization to achieve the desired financial balance.

The current consensus among the leadership of the County government and Director of Parks is that Metro Parks has achieved the desired balance between general fund support and income generated from user fees. This, however, may not always be the case. Decreased municipal revenues due to economic cycles, public demand for new or alternative recreation venues, changing recreation patterns, increased operating costs, development of new facilities, and other forces could alter this balance. Future efforts to maintain the balance may require that the earned income component of funding be reexamined.

This section presents a case example of increasing earned income through changes to the golf operations. The potential changes are not specifically recommended, but are deemed as possible based on our understanding of the Nashville golf market and our understanding of golf operating practices in other communities.

Daily Fee Pricing

The current pricing scheme for daily fee play at Metro Parks' golf courses is based on a 9-hole rate ranging from $8.50 to $9.50. An 18-hole rate is two times the 9-hole fee. Pricing places an emphasis on consistency rather than the qualitative differences in the various venues. Minor pricing variations were recently enacted to bolster play at these underutilized courses, but with limited correlation to course capacity. As presented in Table 1, Shelby Golf Course, priced at $8.50 per nine, generated 1,972 starts per hole in

Table 1. Nine-Hole Starts per Hole

	9-Hole Pricing	Round Type				
Course	FY 2000	Paid	Member	Youth	Discount	Total
Shelby	$ 8.50	968	765	35	204	1,972
Two Rivers	$ 9.50	2,411	2,366	17	240	5,033
Warner	$ 8.50	4,075	1,428	150	167	5,821
Harpeth Hills	$ 9.50	3,218	1,603	20	521	5,362
McCabe	$ 9.50	3,038	2,038	38	286	5,400
Ted Rhodes	$ 9.50	1,479	951	11	169	2,610
All Courses		**2,568**	**1,655**	**37**	**289**	**4,549**

Source: Metro Parks and Economics Research Associates

FY 2000 or the lowest production per hole in the system. Warner Golf Course, also priced at $8.50 per nine, generated the highest number of starts per hole at 5,821.

What makes one course perform so much better or worse than another? We believe that the current pricing scheme has created a series of "neighborhood" courses that serve a fairly small area, and it is the relative characteristics of each neighborhood that is dictating play levels. While some courses clearly offer better value (e.g., Harpeth Hills) due to a higher maintenance standard and course layout, we believe this has only a moderate impact on play. More important, as is the case for Harpeth Hills, is the relative affluence surrounding the course and the increased golf participation that higher household incomes produce. Or, as in the case of McCabe Golf Course, the higher numbers of nearby retirees and the number of rounds each plays on average are what most impact demand at that course. According to the National Golf Foundation, retired golfers play approximately 45+ rounds per year compared to the 20+ rounds per year played by all golfers.

As such, the minimal pricing variations at Metro Parks' courses have limited impact on demand and must be more dramatic to cause any fundamental shift. The ability to shift demand through pricing incentives has operational benefits as well. Staffing becomes more efficient and service levels are better maintained.

Refining the pricing strategy for Metro Parks' golf courses requires considering each facility's position in the broader market. As presented in Table 2, Metro Parks' golf offerings are positioned in the bottom half of the market. We believe that both Two Rivers and Harpeth Hills represent the best upward repositioning opportunity and a change that would not significantly change their value equation.

Any decision to modify pricing should reflect conscious efforts to shift demand pressure and recognize the relative level of desired maintenance (e.g., course quality). Specific opportunities could include:

- Create a premium product tier by pricing Harpeth Hills and Two Rivers at least 20 percent higher than any other course in the system

Table 2. Peak Season 18-Hole Weekend Rates with a Cart (2001)

Course Name	City	Year Built	Holes	Position	Peak w/cart
Legends Club	Franklin	1992	36	Semi	$80.00
Twelve Stones Crossing	Goodlettsville	1999	18	Semi	$49.00
Country Club of Franklin	Franklin	1964	18	Semi	$45.00
Hermitage Golf Course	Old Hickory	1985	18	Public	$45.00
Pine Creek Golf Course	Mount Juliet	1995	18	Public	$45.00
Windtree Golf Course	Mount Juliet	1991	18	Public	$44.00
Nashboro Golf Club	Nashville	1976	18	Public	$43.00
Forrest Crossing Golf Club	Franklin	1987	18	Public	$40.00
Through the Green - Highland Rim	Joelton	1998	18	Public	$39.00
Country Hills Golf Club	Hendersonville	1990	18	Public	$38.00
Sycamore Valley Golf Course	Ashland City	1968	18	Public	$36.00
Riverside Golf Center	Old Hickory	1967	18	Public	$30.50
Long Hollow Golf Course	Gallatin	1983	18	Public	$30.00
Hunters Point Golf Club	Lebanon	1960	18	Public	$30.00
Harpeth Hills Golf Course	**Nashville**	**1965**	**18**	**Public**	**$29.00**
Two Rivers Golf Course	**Nashville**	**1974**	**18**	**Public**	**$29.00**
McCabe Golf Course	**Nashville**	**N/A**	**27**	**Public**	**$29.00**
Ted Rhodes Golf Course	**Nashville**	**1954**	**18**	**Public**	**$29.00**
Smyrna Municipal Golf Course	Smyrna	1960	18	Public	$29.00
Through the Green	Franklin	1995	9	Public	$28.00
Legacy, The	Springfield	1996	18	Public	$27.00
Shelby Golf Course	**Nashville**	**1924**	**18**	**Public**	**$27.00**
Oak Hills Golf Course	Greenbrier	1968	9	Semi	$22.00
Percy Warner Golf Course	**Nashville**	**1937**	**9**	**Public**	**$17.00**
Little Course at Aspen Grove	Franklin	1995	9	Public	$16.00
The Vinney Links	**Nashville**	**1969**	**9**	**Public**	**$6.00**

Source: Economics Research Associates and Respective Courses

- Provide targeted promotions to improve play at under-performing courses, such as Shelby
- Discontinue discounting at Warner
- Continue to provide junior discounts

To demonstrate the theoretical financial impact of pricing changes, ERA recalculated FY 2000 revenue using hypothetical pricing changes presented in Table 3. As presented, all golf courses except Shelby and Ted Rhodes would be subject to a price increase ranging from $0.50 per 9-hole round at McCabe, to $2.50 at Two Rivers and Harpeth Hills. Ted Rhodes pricing would be kept static and Shelby pricing would be reduced, to increase play levels at each of these facilities. Further, for every 10 percent increase in pricing, there would be a corresponding 5 percent decrease in 9-hole rounds, and vice versa. Shelby would experience a 10 percent change in play levels for every 10 percent change in pricing, a treatment that reflects a higher degree of price sensitivity. Season pass play is unaffected in this analysis.

Rental receipts, equipment sales, food sales, and rents and commissions were adjusted to reflect the estimated new play levels (the sales figures were calculated by multiplying the actual revenue per round in FY 2000 by the calculated new play levels). Lastly, operating expenses were all maintained at the same level.

Based on these inputs, golf net operating income would have hypothetically increased from just over $106,000 to just over $500,000 in FY 2000. Further, while the increased pricing theoretically would have reduced overall demand from 491,278 to 474,661 starts, total revenue would have increased from $4.7 million to $5.1 million.

Table 3. Hypothetical Daily Fee Pricing Changes

Assumptions	Shelby	Two Rivers	Warner	Harpeth Hills	McCabe	Ted Rhodes
2000 9-Hole Rate	$ 8.50	$ 9.50	$ 8.50	$ 9.50	$ 9.50	$ 9.50
New 9-Hole Rate	$ 8.00	$ 12.00	$ 9.50	$ 12.00	$ 10.00	$ 9.50
% Increase in Green Fee Pricing/Round	-5.90%	26.30%	11.80%	26.30%	5.30%	0.00%
% Change in Demand for each 10% Green Fee Change	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%

Source: Economics Research Associates

Alternative pricing schemes could also examine peak and off-peak pricing schemes, and early and late season discounts to better manage demand and the financial performance of the golf operations. The current 9-hole pricing scheme could be replaced with separate 9-hole and 18-hole rates that would create a premium for the 9-hole golfer who consumes the same perishable supply as an 18-hole golfer without committing to an 18-hole rate. Typically, 9-hole pricing is 60 to 70 percent of an 18-hole rate.

Irrespective of any pricing modifications, an immediate change should be the reprogramming of course points-of-sale to capture the number of 18-hole, 9-hole, and replay rounds separately so that utilization patterns are better understood.

Table 4. Illustrative Economics - Daily Fee Golf Pricing Changes

	All Golf Courses	
REVENUE	**FY 2000**	**New Pricing**
Green Fees	$ 3,125,105	$ 3,523,158
Rental Receipts	$ 849,015	$ 849,015
Equipment Sales	$ 241,381	$ 241,381
Food Sales	$ 479,560	$ 479,560
Rents & Commissions	$ 19,210	$ 19,210
Total Revenue	**$ 4,714,271**	**$ 5,112,324**
EXPENSES		
Salaries - Management	$,075,837	$ 1,075,837
Salaries - Maintenance	$ 1,247,647	$ 1,247,647
Benefits	$ 557,636	$ 557,636
Sub Total Salaries	$ 2,881,120	$ 2,881,120
Benefit Ratio	24.00%	24.00%
Other Expenses		
Administrative	$ 19,041	$ 19,041
Equipment for Resale	$ 168,635	$ 168,635
Custodial	$ 11,613	$ 11,613
General Maintenance	$ 196,308	$ 196,308
Inside Equipment Maintenance	$ 5,678	$ 5,678
Utilities	$ 435,191	$ 435,191
Grounds Maintenance	$ 428,016	$ 428,016
Automotive Equip. Maintenance	$ 122,234	$ 122,234
Facility Concessions	$ 264,477	$ 264,477
Capital Outlay	$ 75,119	$ 75,119
Sub Total Other Expenses	$ 1,726,312	$ 1,726,312
Total Expenses	**$ 4,607,432**	**$ 4,607,432**
NET OPERATING INCOME	**$ 106,839**	**$ 504,892**
Paid Rounds	277,382	262,547
Member Rounds	178,772	178,772
Youth Rounds	3,957	3,818
Discount	31,167	29,524
All Rounds	491,278	474,661
Revenue per 9-hole Round	*FY 2000*	*New Pricing*
Green Fees	$ 6.36	$ 7.42
Rental Receipts	$ 1.73	$ 1.79
Equipment Sales	$ 0.49	$ 0.51
Food Sales	$ 0.98	$ 1.01
Rents & Commissions	$ 0.04	$ 0.04
Total Revenue per 9-hole Round	**$ 9.60**	**$ 10.77**

Note: Model is intended only to depict the hypothetical impact of pricing adjustments and a tiered product offering. Actual results will vary.

Source: Economics Research Associates

Season Pass Elimination

Elimination of the current season pass program would be an alternative method of enhancing revenue performance at Metro Parks' golf courses.

Between 1998 and 2000 Metro Parks sold between 1,341 and 1,384 season green fee passes per year. Approximately 8 percent of season green fee passes are sold to out of county residents. These passes generated from $574,993 to $606,550 in direct revenue, plus approximately $100,000 per year in additional surcharge revenue. A surcharge fee of $1 per 9-hole start was implemented in 1999 for high season play to provide a more equitable cost recovery from members (e.g., members playing more ultimately paid more). Approximately 60 percent of pass play occurs during the peak season.

The average member played between 127 and 132 9-hole rounds per year during the three year period, generating an average green fee revenue of $3.16 per start in 1998 and approximately $4.00 per start in 1999 and 2000 with the implementation of the surcharge fee.

Table 5. Historic Season Pass Data

	1998		1999		2000	
Pass Type	**#**	**Revenue**	**#**	**Revenue**	**#**	**Revenue**
Couple	125	$ 50,938	95	$ 38,713	92	$ 37,490
Couple (Out of County)	2	$ 1,090	19	$ 10,355	21	$ 11,445
Senior	671	$ 244,915	664	$ 242,360	624	$ 227,760
Senior (Out of County)	5	$ 2,725	39	$ 21,255	42	$ 22,890
Single	473	$ 257,785	464	$ 252,880	489	$ 266,505
Single (Out of County)	4	$ 2,900	45	$ 32,625	40	$ 29,000
Youth	61	$ 14,640	50	$ 12,000	41	$ 9,840
Youth (Out of County)	0	$ -	8	$ 2,160	6	$ 1,620
Total -	**1,341**	**$ 574,993**	**1,384**	**$ 612,348**	**1,355**	**$ 606,550**
Surcharge Rounds	**#**	**Revenue**	**#**	**Revenue**	**#**	**Revenue**
April	n/a	n/a	17,182	$ 17,182	15,838	$ 15,838
May	n/a	n/a	18,025	$ 18,025	18,467	$ 18,467
June	n/a	n/a	17,001	$ 17,001	18,630	$ 18,630
July	n/a	n/a	16,130	$ 16,130	18,633	$ 18,633
August	n/a	n/a	17,519	$ 17,519	18,018	$ 18,018
September	n/a	n/a	15,415	$ 15,415	15,422	$ 15,422
October	n/a	n/a	n/a	n/a	n/a	n/a
Total -	**0**	**$ -**	**101,272**	**$ 101,272**	**105,008**	**$ 105,008**
Percentage with Surcharge		n/a		56%		60%
Avg. 9-hole Starts per Member		136		127		132
Avg. Season Pass Revenue per Start		$ 3.16		$ 4.06		$ 3.98
Avg. Daily Fee Revenue per Start		$ 7.99		$ 8.03		$ 7.72
Out of County Passes		0.80%		8.00%		8.00%

Source: Metro Parks and Economics Research Associates

While many golf operators develop pass programs to build loyalty and improve early season operating cash flow, the latter is really not an issue for Metro Parks. Every time an average member steps onto a Metro Parks golf course, he/she generates about $4 for a revenue slot worth $8. While this is less critical during off-peak periods, member play during peak weekend and holiday periods can and probably does impact the financial performance of the golf operations significantly.

To demonstrate the impact, ERA modeled the impact of eliminating the season pass entirely and a subsequent reduction in the number of rounds converted from member play to daily fee play. As presented in Table 6, Metro Parks would have achieved approximately the same green fee revenue figure had only 50 percent of the season pass play converted to daily fee play at the average revenue per daily fee start in that year. At a 60 percent conversion rate of season pass starts into daily fee starts, Metro Parks would have achieved an increase in green fee revenue of over $100,000 in 1999 and 2000, and even more in 1998, but with a significant reduction in number of starts.

An additional benefit of the elimination of the season pass program would be a reduction of compaction during weekends and peak periods, making it easier for the for the occasional golfer to secure weekend tee times.

An alternative to the outright elimination of the season pass program would be to limit pass play to off-peak periods only, making peak holidays and weekends more revenue intensive. This would provide a source of consistent weekday play that is often more difficult to fill.

Table 6. Illustrative Economics - Elimination of Season Pass Program

Conversion Rate of Former Member Rounds *	Hypothetical Change in Starts		
	1998	1999	2000
90%	-18,202	-17,577	-17,877
80%	-36,405	-35,155	-35,754
70%	-54,607	-52,732	-53,632
60%	-72,809	-70,309	-71,509
50%	-91,012	-87,887	-89,386
40%	-109,214	-105,464	-107,263
30%	-127,416	-123,041	-125,140
20%	-145,618	-140,618	-143,018

Conversion Rate of Former Member Rounds *	Hypothetical Change in Revenue		
	1998	1999	2000
90%	$ 733,926	$ 557,378	$ 531,065
80%	$ 588,490	$ 416,156	$ 392,996
70%	$ 443,055	$ 274,934	$ 254,927
60%	$ 297,620	$ 133,712	$ 116,857
50%	$ 152,184	$ (7,510)	$ (21,212)
40%	$ 6,749	$ (148,732)	$ (159,281)
30%	$ (138,686)	$ (289,954)	$ (297,350)
20%	$ (284,122)	$ (431,176)	$ (435,420)

* Assumes member starts not "lost" are converted to daily fee revenue at the prevailing average.

Source: Metro Parks and Economics Research Associates

Nashville and Davidson County

Metropolitan Parks & Greenways Master Plan

Appendix C – U.S. Green Building Council – LEED Project Checklist

November 2002

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metro parks 100 YEARS

LEED™

LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

Rating System

Version 2.0

Including the Project Checklist

June 2001

Disclaimer

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Table of Contents

Project Checklist

Sustainable Sites

14 Possible Points

Y			Prereq 1	**Erosion & Sedimentation Control**	Required
Y	?	N	Credit 1	**Site Selection**	1
Y	?	N	Credit 2	**Urban Redevelopment**	1
Y	?	N	Credit 3	**Brownfield Redevelopment**	1
Y	?	N	Credit 4.1	**Alternative Transportation**, Public Transportation Access	1
Y	?	N	Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1
Y	?	N	Credit 4.3	**Alternative Transportation**, Alternative Fuel Refueling Stations	1
Y	?	N	Credit 4.4	**Alternative Transportation**, Parking Capacity	1
Y	?	N	Credit 5.1	**Reduced Site Disturbance**, Protect or Restore Open Space	1
Y	?	N	Credit 5.2	**Reduced Site Disturbance**, Development Footprint	1
Y	?	N	Credit 6.1	**Stormwater Management**, Rate or Quantity	1
Y	?	N	Credit 6.2	**Stormwater Management**, Treatment	1
Y	?	N	Credit 7.1	**Landscape & Exterior Design to Reduce Heat Islands**, NonRoof	1
Y	?	N	Credit 7.2	**Landscape & Exterior Design to Reduce Heat Islands**, Roof	1
Y	?	N	Credit 8	**Light Pollution Reduction**	1

Water Efficiency

5 Possible Points

Y	?	N	Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1
Y	?	N	Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1
Y	?	N	Credit 2	**Innovative Wastewater Technologies**	1
Y	?	N	Credit 3.1	**Water Use Reduction**, 20% Reduction	1
Y	?	N	Credit 3.2	**Water Use Reduction**, 30% Reduction	1

Energy & Atmosphere

17 Possible Points

Y			Prereq 1	**Fundamental Building Systems Commissioning**	Required
Y			Prereq 2	**Minimum Energy Performance**	Required
Y			Prereq 3	**CFC Reduction in HVAC&R Equipment**	Required
Y	?	N	Credit 1.1	**Optimize Energy Performance**, 20% New / 10% Existing	2
Y	?	N	Credit 1.2	**Optimize Energy Performance**, 30% New / 20% Existing	2
Y	?	N	Credit 1.3	**Optimize Energy Performance**, 40% New / 30% Existing	2
Y	?	N	Credit 1.4	**Optimize Energy Performance**, 50% New / 40% Existing	2
Y	?	N	Credit 1.5	**Optimize Energy Performance**, 60% New / 50% Existing	2
Y	?	N	Credit 2.1	**Renewable Energy**, 5%	1
Y	?	N	Credit 2.2	**Renewable Energy**, 10%	1
Y	?	N	Credit 2.3	**Renewable Energy**, 20%	1
Y	?	N	Credit 3	**Additional Commissioning**	1
Y	?	N	Credit 4	**Ozone Depletion**	1
Y	?	N	Credit 5	**Measurement & Verification**	1
Y	?	N	Credit 6	**Green Power**	1

Materials & Resources

13 Possible Points

Y		Prereq 1	**Storage & Collection of Recyclables**	Required
Y	?	N	Credit 1.1 **Building Reuse**, Maintain 75% of Existing Shell	1
Y	?	N	Credit 1.2 **Building Reuse**, Maintain 100% of Shell	1
Y	?	N	Credit 1.3 **Building Reuse**, Maintain 100% Shell & 50% Non-Shell	1
Y	?	N	Credit 2.1 **Construction Waste Management**, Divert 50%	1
Y	?	N	Credit 2.2 **Construction Waste Management**, Divert 75%	1
Y	?	N	Credit 3.1 **Resource Reuse**, Specify 5%	1
Y	?	N	Credit 3.2 **Resource Reuse**, Specify 10%	1
Y	?	N	Credit 4.1 **Recycled Content**, Specify 25%	1
Y	?	N	Credit 4.2 **Recycled Content**, Specify 50%	1
Y	?	N	Credit 5.1 **Local/Regional Materials**, 20% Manufactured Locally	1
Y	?	N	Credit 5.2 **Local/Regional Materials**, of 20% Above, 50% Harvested Locally	1
Y	?	N	Credit 6 **Rapidly Renewable Materials**	1
Y	?	N	Credit 7 **Certified Wood**	1

Indoor Environmental Quality

15 Possible Points

Y		Prereq 1	**Minimum IAQ Performance**	Required
Y		Prereq 2	**Environmental Tobacco Smoke** (ETS) **Control**	Required
Y	?	N	Credit 1 **Carbon Dioxide** (CO_2) **Monitoring**	1
Y	?	N	Credit 2 **Increase Ventilation Effectiveness**	1
Y	?	N	Credit 3.1 **Construction IAQ Management Plan**, During Construction	1
Y	?	N	Credit 3.2 **Construction IAQ Management Plan**, Before Occupancy	1
Y	?	N	Credit 4.1 **Low-Emitting Materials**, Adhesives & Sealants	1
Y	?	N	Credit 4.2 **Low-Emitting Materials**, Paints	1
Y	?	N	Credit 4.3 **Low-Emitting Materials**, Carpet	1
Y	?	N	Credit 4.4 **Low-Emitting Materials**, Composite Wood	1
Y	?	N	Credit 5 **Indoor Chemical & Pollutant Source Control**	1
Y	?	N	Credit 6.1 **Controllability of Systems**, Perimeter	1
Y	?	N	Credit 6.2 **Controllability of Systems**, Non-Perimeter	1
Y	?	N	Credit 7.1 **Thermal Comfort**, Comply with ASHRAE 55-1992	1
Y	?	N	Credit 7.2 **Thermal Comfort**, Permanent Monitoring System	1
Y	?	N	Credit 8.1 **Daylight & Views**, Daylight 75% of Spaces	1
Y	?	N	Credit 8.2 **Daylight & Views**, Views for 90% of Spaces	1

Innovation & Design Process

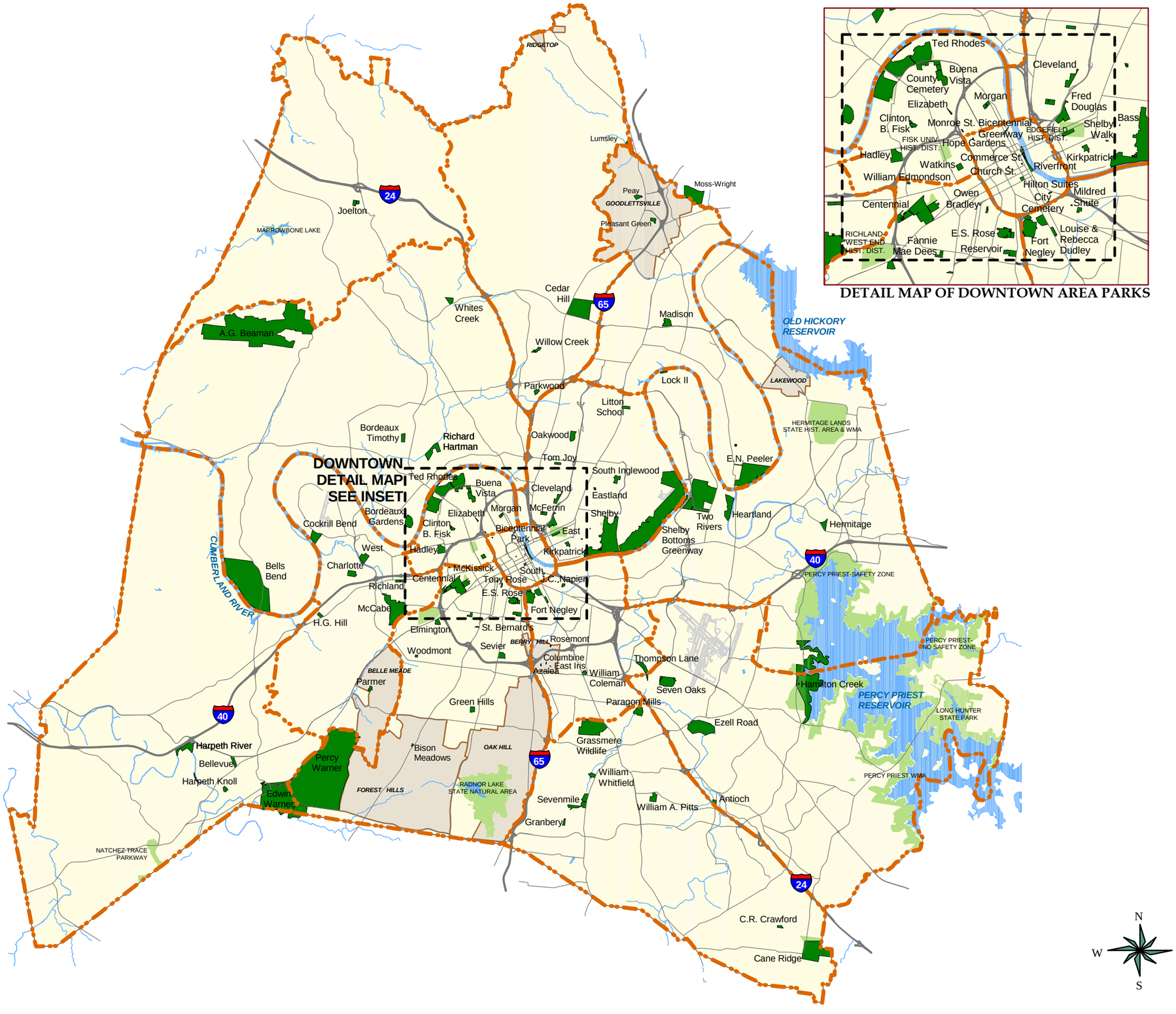
5 Possible Points

Y	?	N	Credit 1.1 **Innovation in Design**: Specific Title	1
Y	?	N	Credit 1.2 **Innovation in Design**: Specific Title	1
Y	?	N	Credit 1.3 **Innovation in Design**: Specific Title	1
Y	?	N	Credit 1.4 **Innovation in Design**: Specific Title	1
Y	?	N	Credit 2 **LEED™ Accredited Professional**	1

Project Totals

69 Possible Points

☐ ☐ ☐ **Certified** 26-32 points **Silver** 33-38 points **Gold** 39-51 points **Platinum** 52-69 points



DETAIL MAP OF DOWNTOWN AREA PARKS

NASHVILLE & DAVIDSON COUNTY

METROPOLITAN PARKS & GREENWAYS MASTER PLAN

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FIGURE 1

PUBLICLY-OWNED PARKLAND

LEGEND

- Metro Parks Parkland
- State and Federal Lands

3 0 3 Miles

MAP NOTES

DATA SOURCES:

Metro Planning Dept., Mapping Services; Tennessee Wildlife Resources Agency (TWRA); Tennessee Department of Environment and Conservation; Hawkins Partners, Inc.

MAP COMPILED BY:

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CONSULTANT TEAM:

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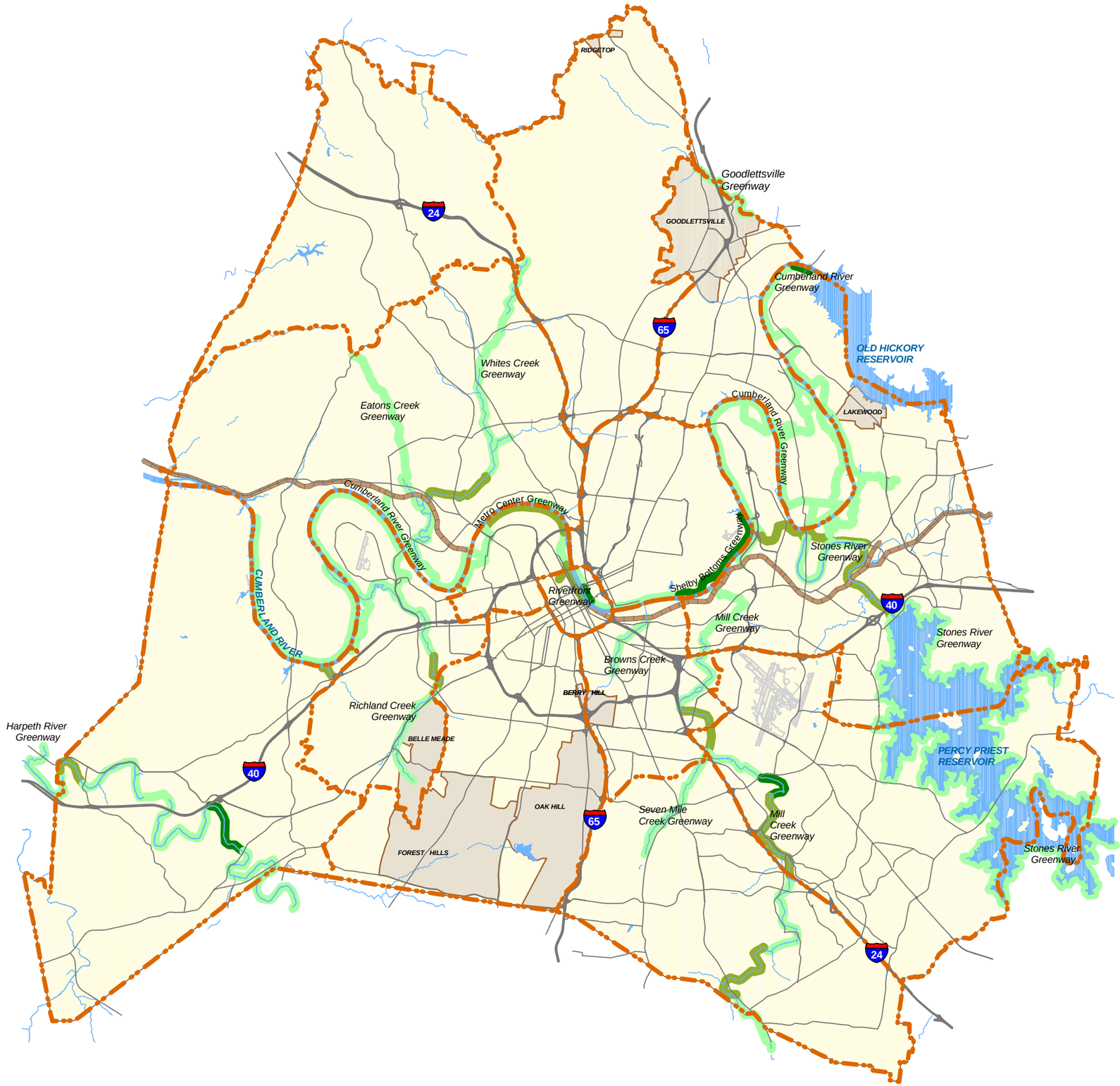
FIGURE 2

EXISTING & PROPOSED GREENWAYS



LEGEND

Greenways

- **Existing**
- **Underway**
- **Future**
- **Rails with Trails**

3 0 3 Miles

MAP NOTES

DATA SOURCES:

Metro Planning Dept., Mapping Services; Tennessee Wildlife Resources Agency (TWRA); Tennessee Department of Environment and Conservation; Hawkins Partners, Inc.

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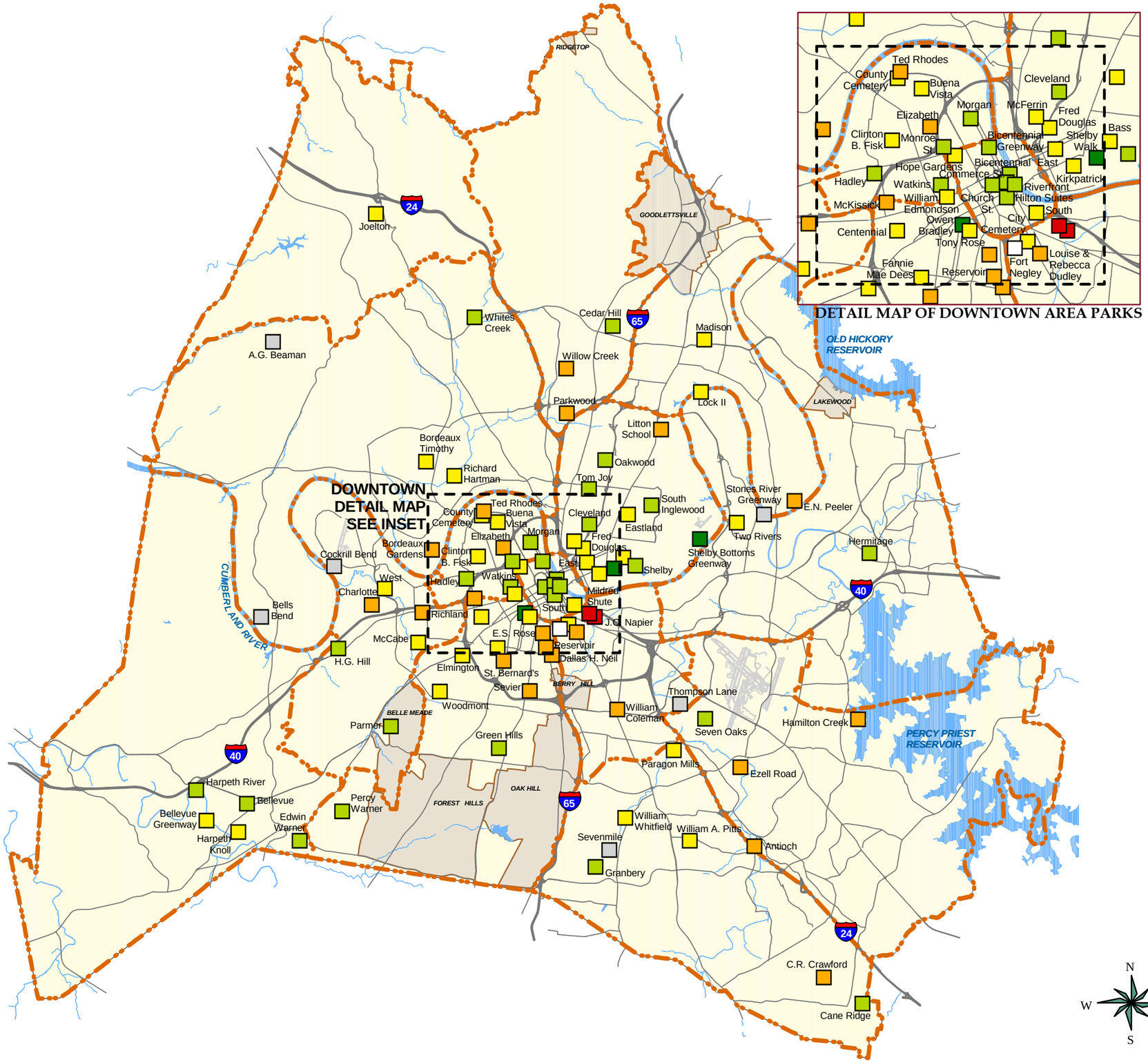

DETAIL MAP OF DOWNTOWN AREA PARKS

NASHVILLE & DAVIDSON COUNTY

METROPOLITAN PARKS & GREENWAYS MASTER PLAN

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FIGURE 3

METRO PARKS GENERAL CONDITION

LEGEND

General Condition

- **Dilapidated**
  Major maintenance needed, greater than 70 percent replacement.
- **Poor**
  Major maintenance needed, 30 to 70 percent replacement.
- **Fair**
  Major maintenance needed, 10 to 30 percent replacement.
- **Good**
  Minor maintenance needed.
- **Excellent**
  In need of no maintenance or replacement.
- **Undeveloped**
- **Under Construction (Closed to Public)**

3 0 3 Miles

MAP NOTES

DATA SOURCES:
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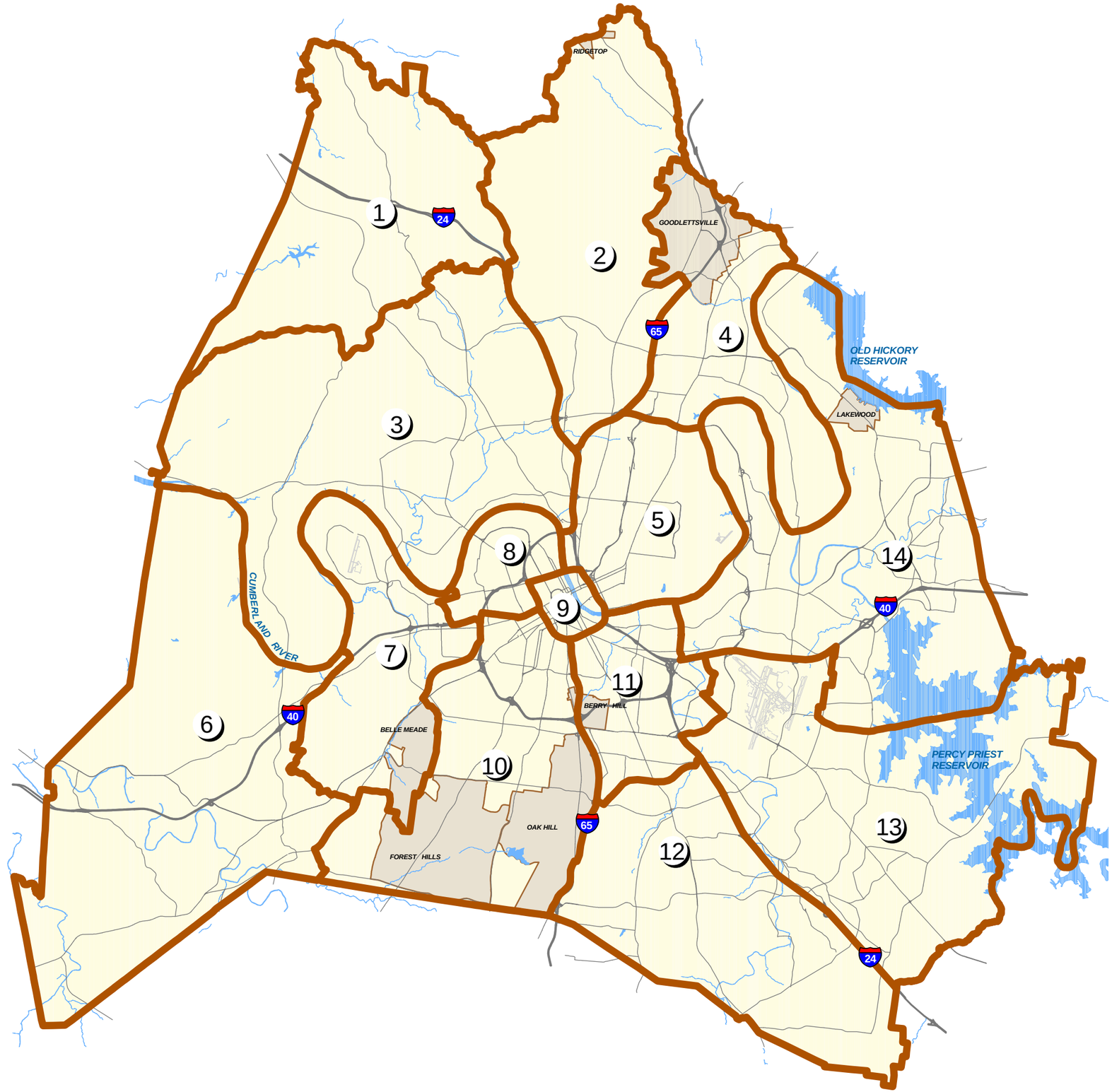
FIGURE 4

PLANNING SUBAREAS



LEGEND

- 1 Planning Subarea
- Planning Subarea Boundary

Base Data

- Surface Water Body
- Airport
- Satellite City
- Davidson County

3 0 3 Miles

N W E S

MAP NOTES

DATA SOURCES:
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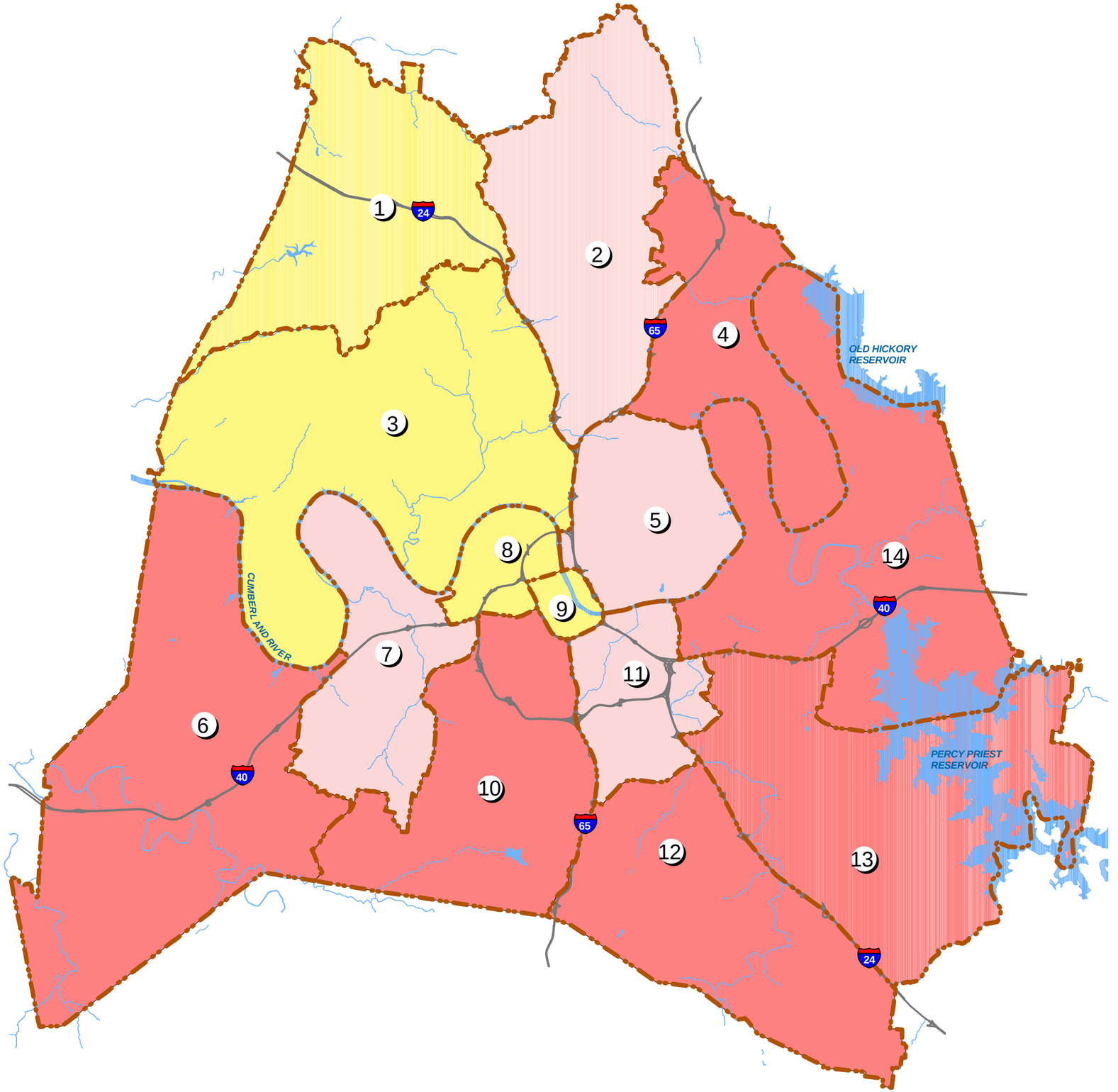
FIGURE 5

NEIGHBORHOOD PARK LEVEL OF SERVICE IN 2020



LEGEND

- **Subareas with a Neighborhood Park Acreage Surplus**
- **Subareas with a Neighborhood Park Acreage Deficit of Between 0-50 Acres**
- **Subareas with a Neighborhood Park Acreage Deficit of Greater Than 50 Acres**

NOTE: Acreage included in the determination of level of service are Metro Parks classified as Neighborhood Parks or as Mini-Parks, and 25% of Elementary School property acreage.

MAP NOTES

DATA SOURCES:
Metro Planning Department, Mapping Services

MAP COMPILED BY:
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CONSULTANT TEAM:
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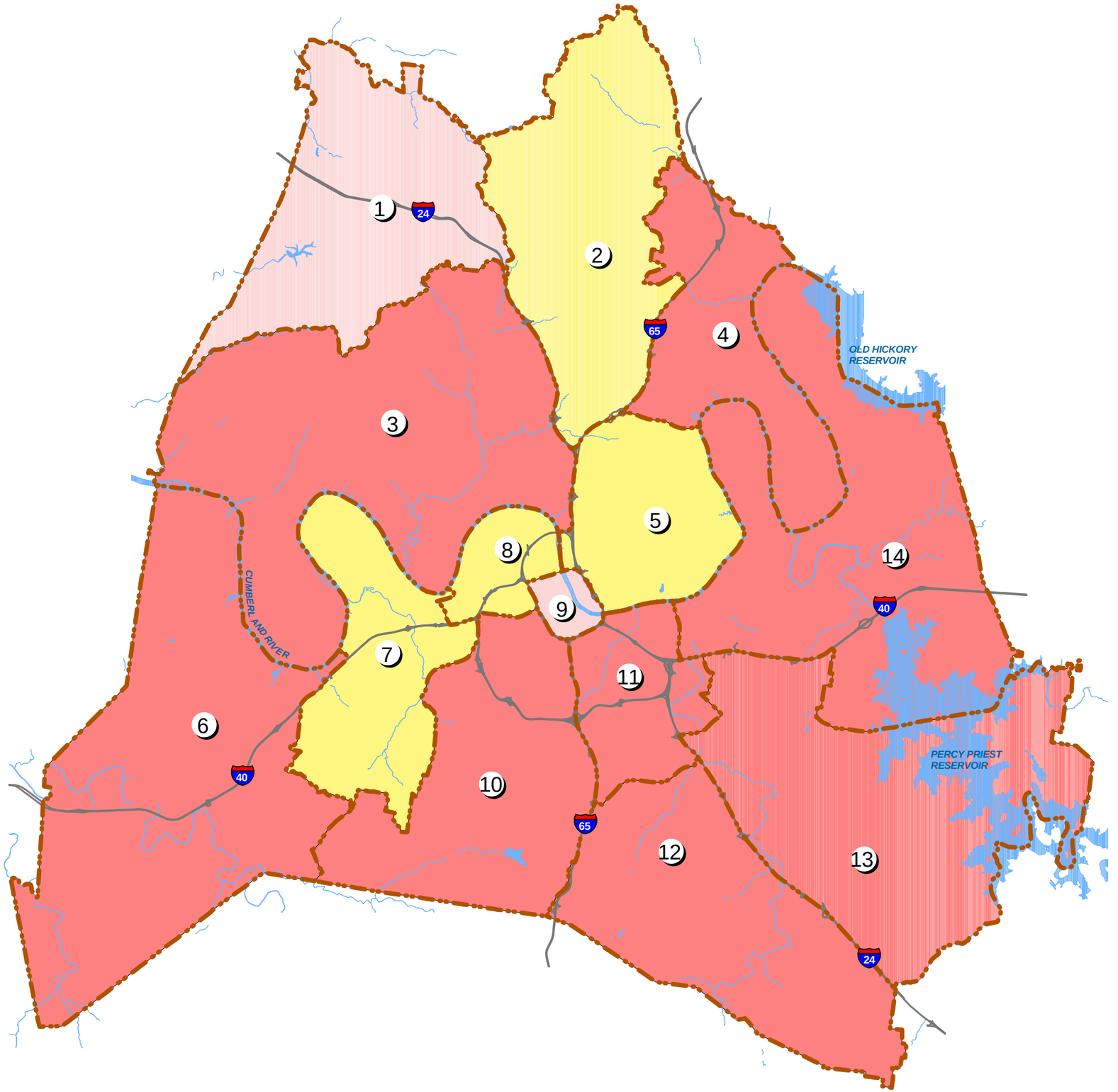
FIGURE 6

COMMUNITY PARK LEVEL OF SERVICE IN 2020



LEGEND

- Subareas with a Community Park Acreage Surplus
- Subareas with a Community Park Acreage Deficit of Between 0-100 Acres
- Subareas with a Community Park Acreage Deficit of Greater Than 100 Acres

NOTE: Acreage included in the determination of level of service are Metro Parks classified as Community Parks.

3 0 3 Miles

N W E S

MAP NOTES

DATA SOURCES:
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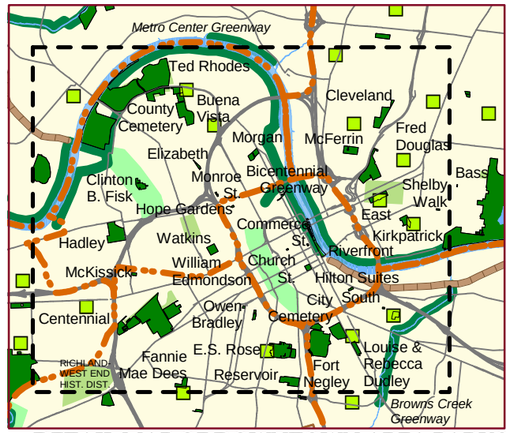
FIGURE 7

PARK AND GREENWAY CONCEPT PLAN



DETAIL MAP OF DOWNTOWN AREA PARKS

LEGEND

- Metro Parks Parkland
- Neighborhood Park at Elementary School Location
- Rails with Trails
- Greenway
- State and Federal Lands
- Potential Greenway Corridor

3 0 3 Miles

N W E S

MAP NOTES

DATA SOURCES:
Metro Planning Department, Mapping Services;
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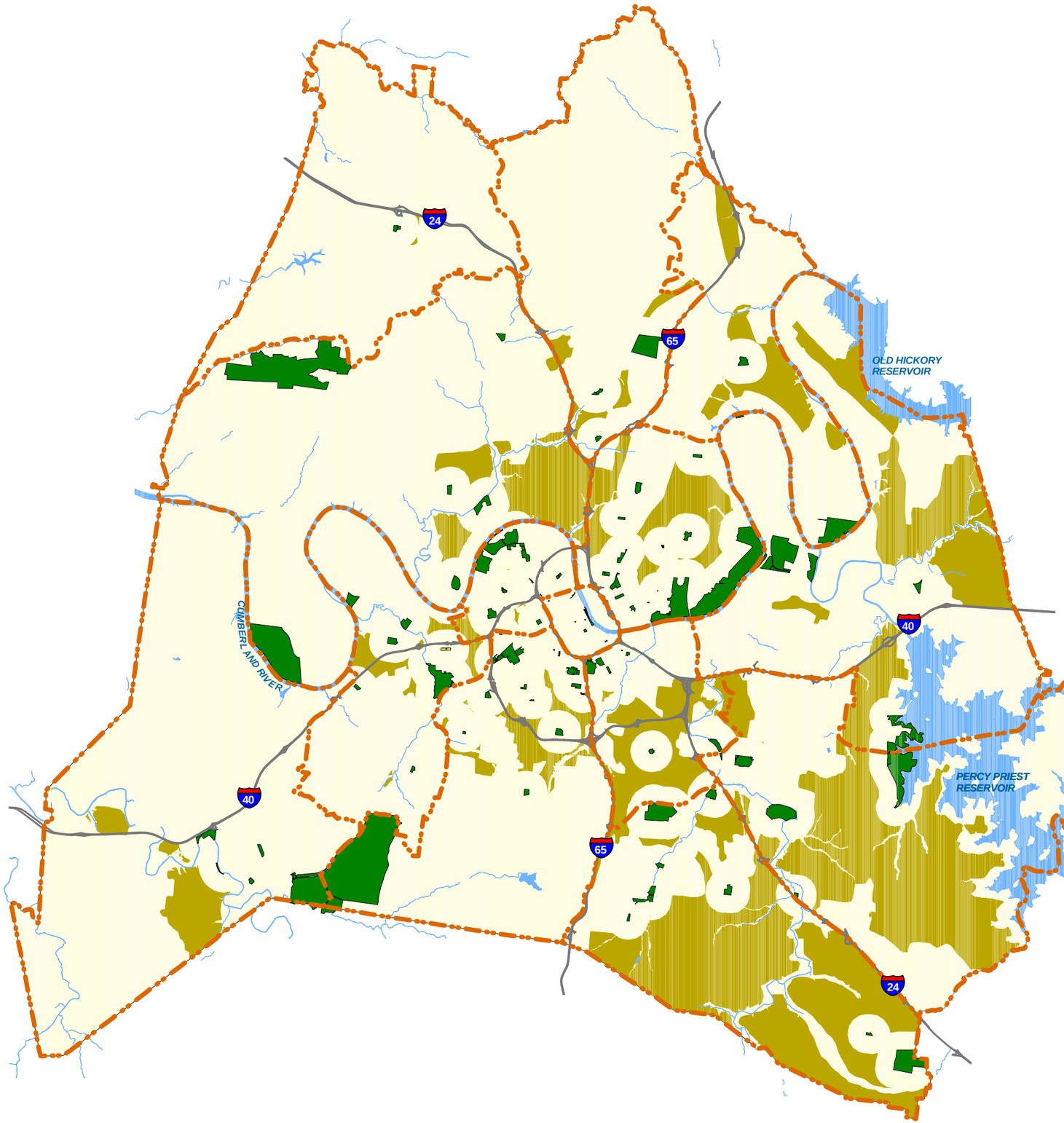
FIGURE 8

UNDERSERVED NEIGHBORHOOD TRANSECT AREAS



LEGEND

- Metro Parks Parkland
- Neighborhood Transect Areas Greater Than One-Half Mile From an Existing Park Facility

3 0 3 Miles

N W E S

MAP NOTES

DATA SOURCES:
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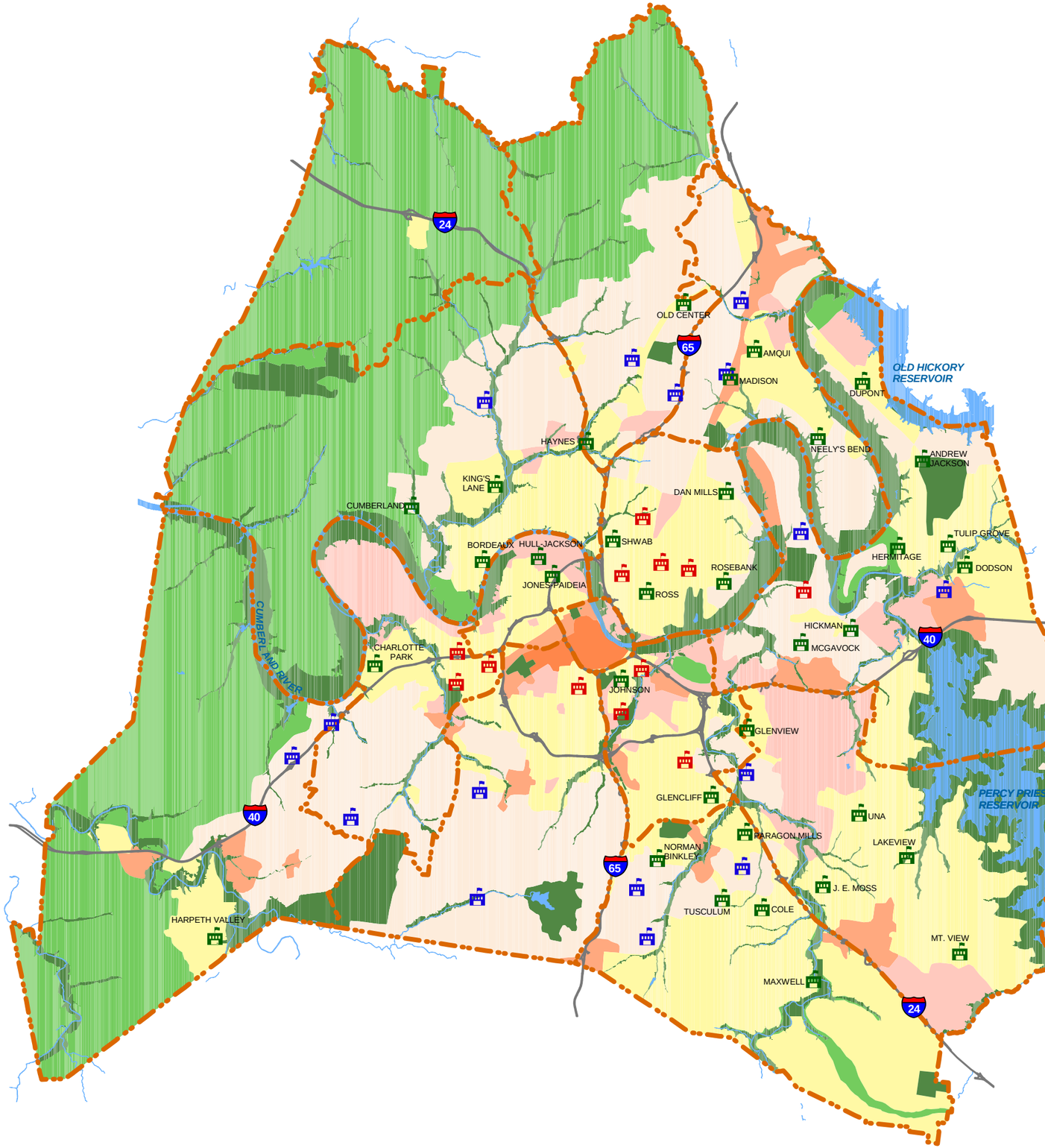
FIGURE 9

PROPOSED ELEMENTARY SCHOOL NEIGHBORHOOD PARKS



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LEGEND

- **PHASE 1:** Elementary Schools Located within a Neighborhood Transect and Greater Than One-Half Mile from an Existing Neighborhood Park
- **PHASE 2:** Elementary Schools Located within a Neighborhood Transect
- **PHASE 3:** Elementary Schools

Transect Plan Categories

- Center
- Core
- District
- Neighborhood
- Preserve
- Rural Reserve
- Sub-Urban

3 0 3 Miles

MAP NOTES

DATA SOURCES:
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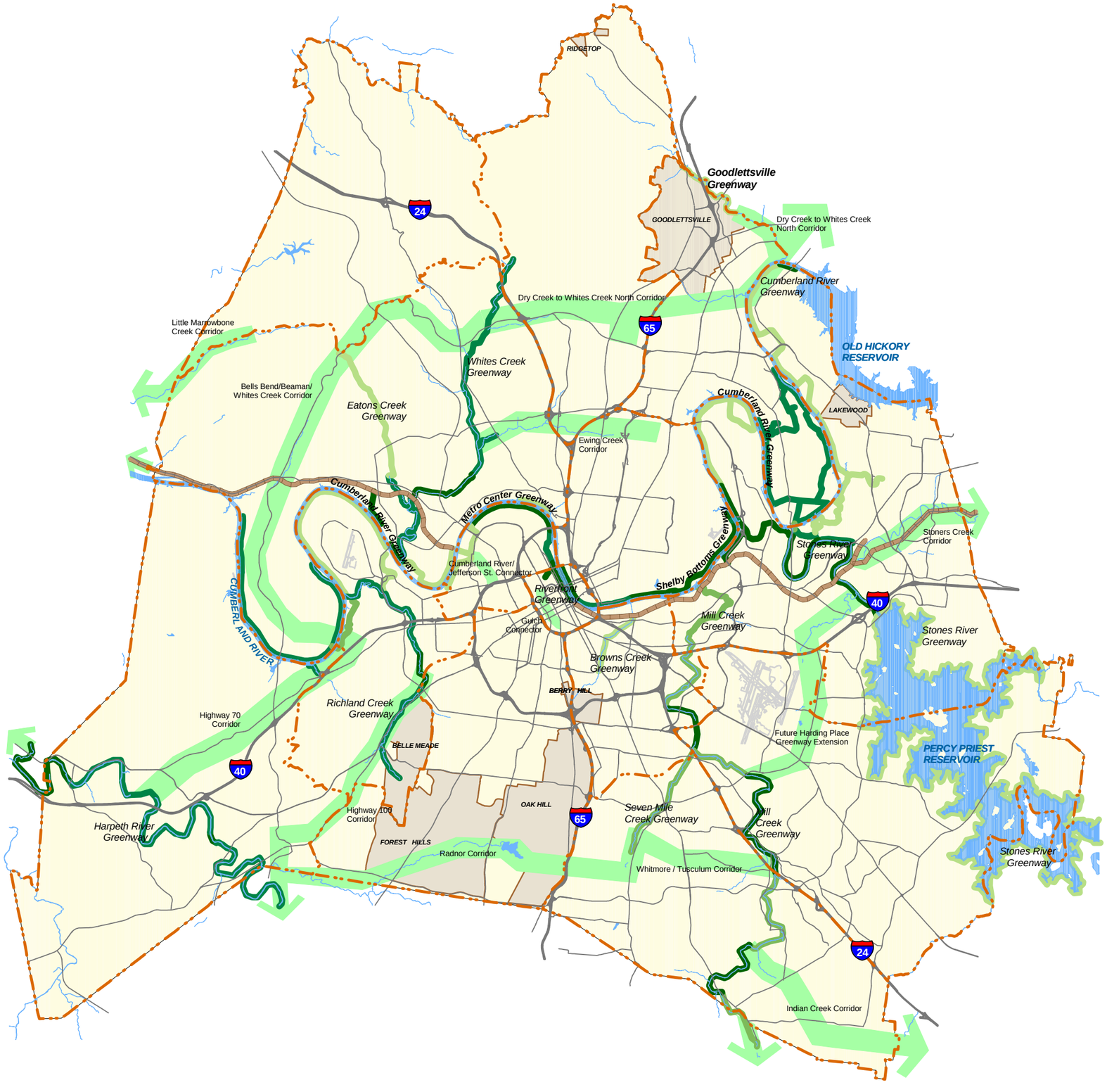
FIGURE 10

GREENWAYS CONCEPT PLAN



LEGEND

Greenways

- Existing
- Priority 1
- Priority 2
- Priority 3
- Potential Greenway Corridor
- Rails with Trails

3 0 3 Miles

N W E S

MAP NOTES

DATA SOURCES:

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