



PLAN
TO
play

The Nashville Parks & Greenways Master Plan

March 2017

Megan Barry, Mayor
Christy Smith, Chair,
Metropolitan Board of Parks
and Recreation
Tommy Lynch, Director



PLAN TO PLAY: METRO PARKS MASTER PLAN

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ACKNOWLEDGMENTS

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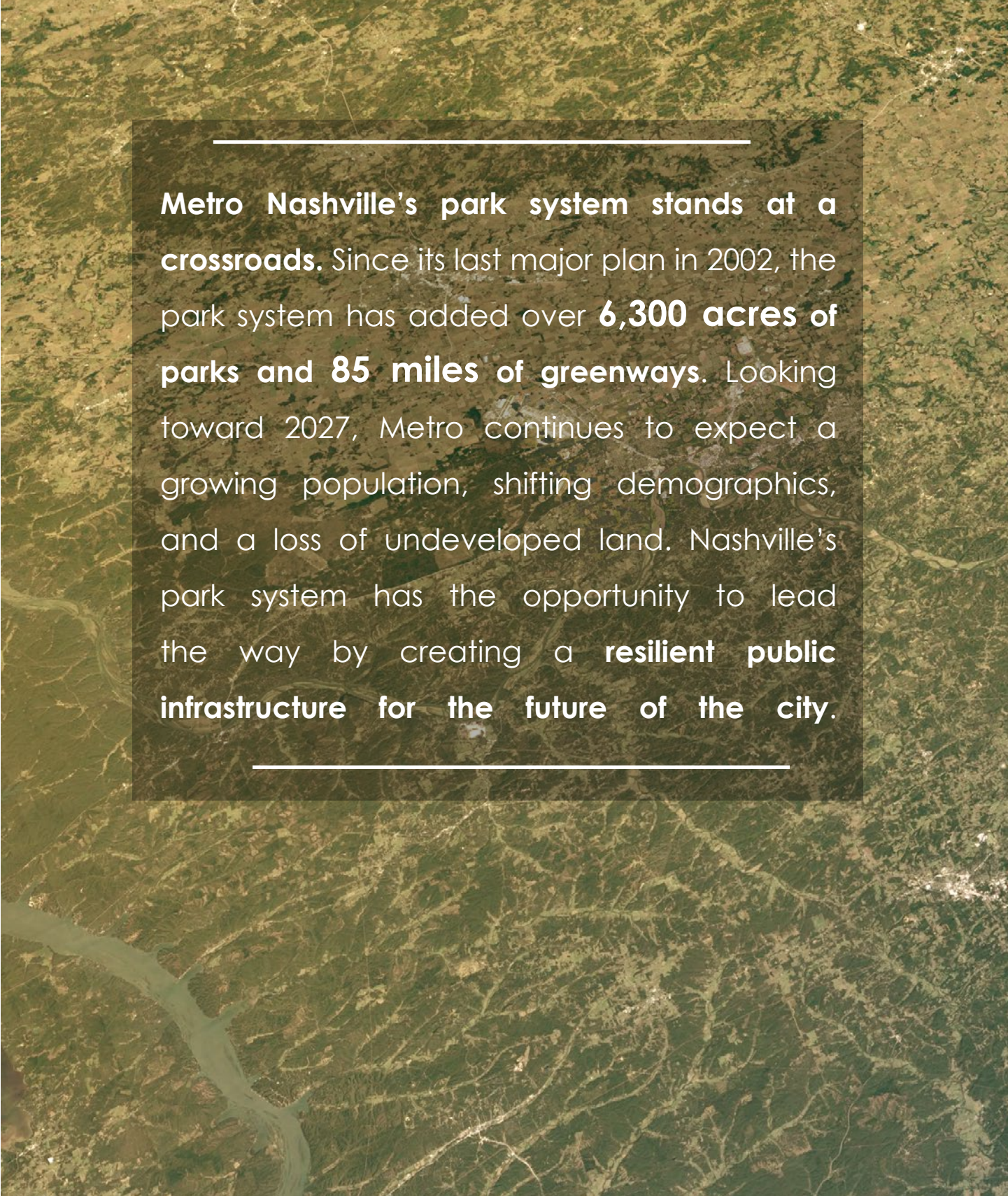


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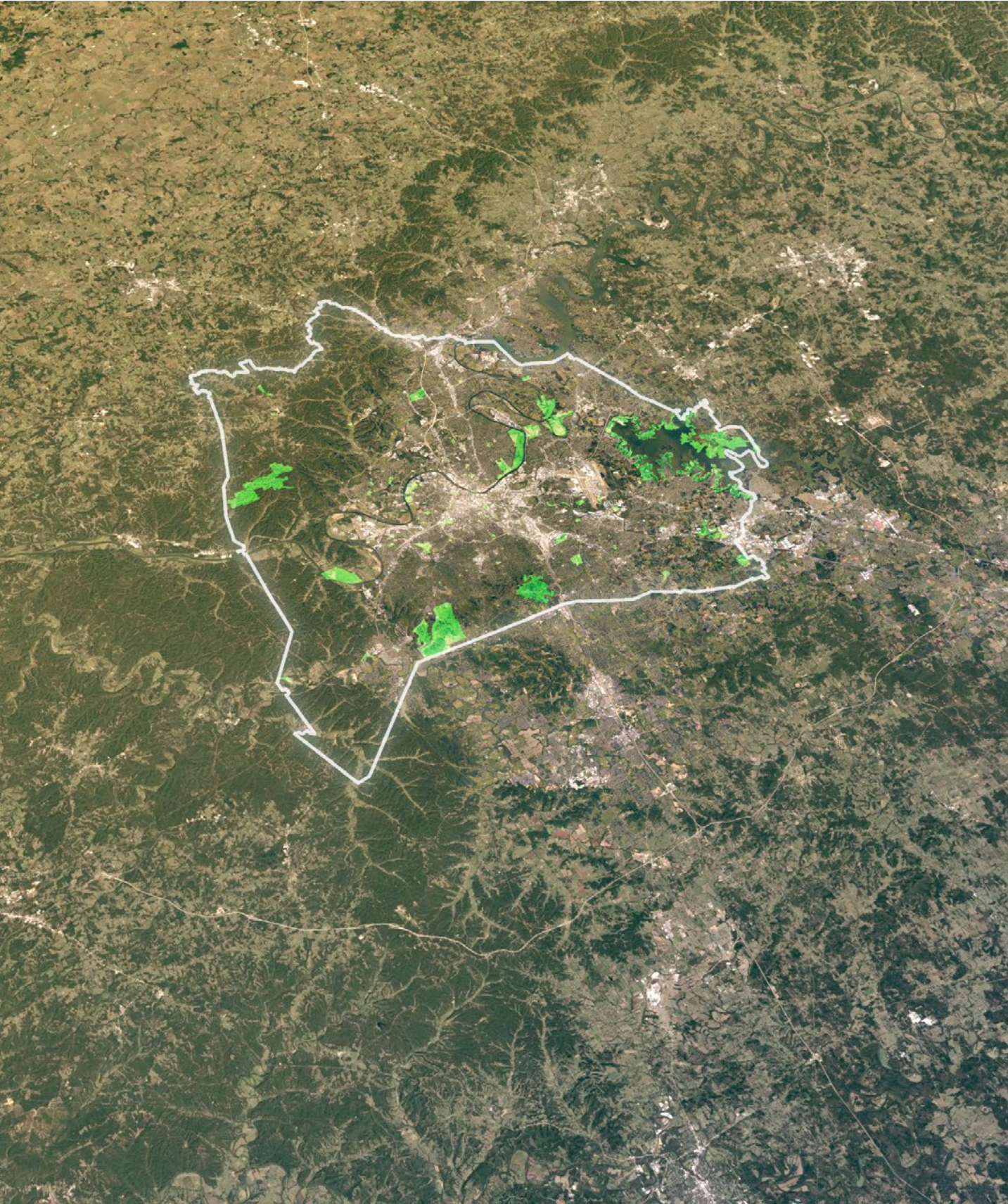
The Nashville Parks & Greenways Master Plan

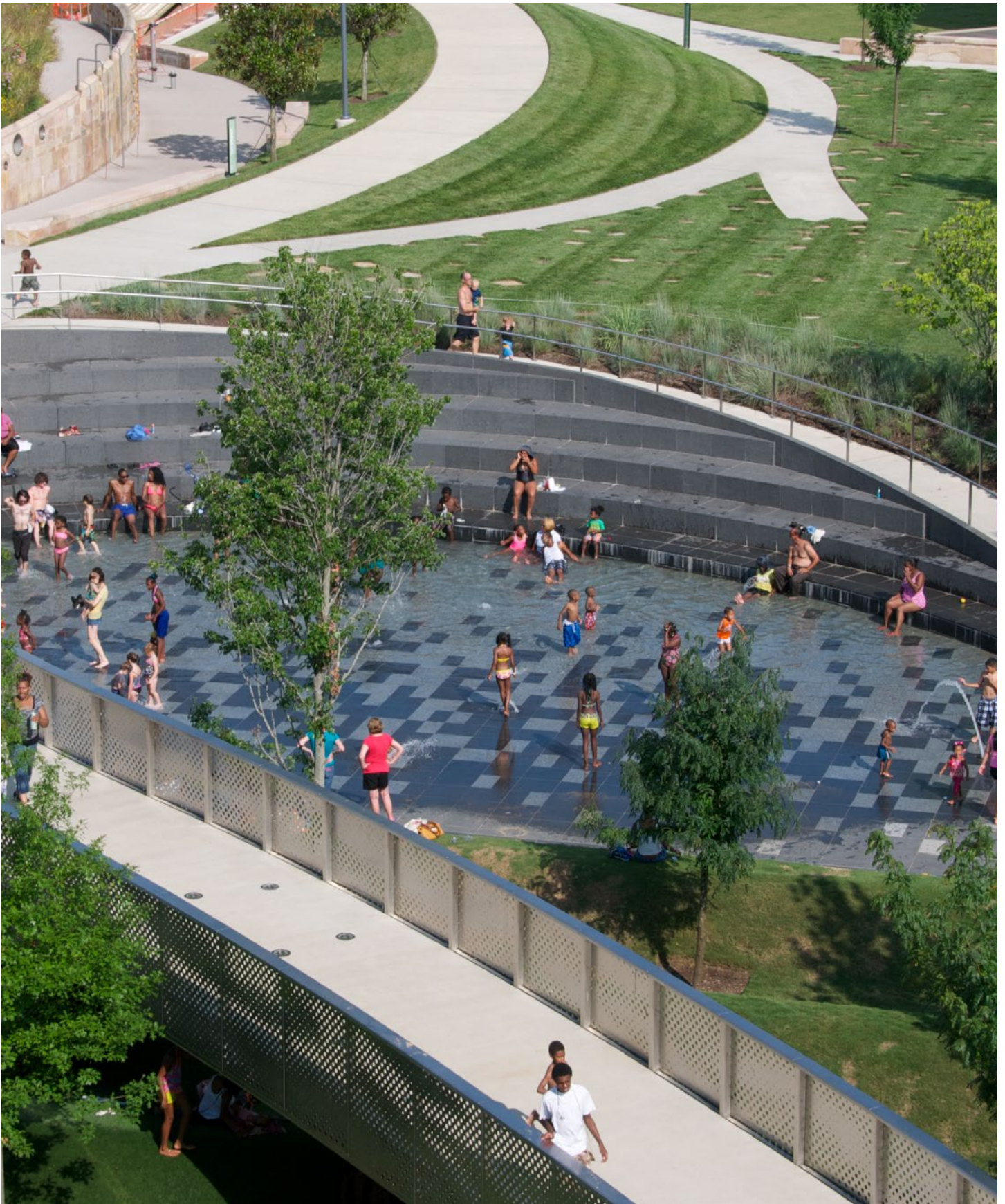
Executive Summary

Megan Barry, Mayor
Christy Smith, Chair,
Metropolitan Board of Parks
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Tommy Lynch, Director

An aerial photograph of a river valley, likely the Nashville area, showing a winding river through a landscape of green fields and some urban development. A dark grey rectangular box is centered over the image, containing white text. The text is framed by two horizontal white lines, one above and one below the main paragraph.

Metro Nashville's park system stands at a crossroads. Since its last major plan in 2002, the park system has added over **6,300 acres of parks and 85 miles of greenways.** Looking toward 2027, Metro continues to expect a growing population, shifting demographics, and a loss of undeveloped land. Nashville's park system has the opportunity to lead the way by creating a **resilient public infrastructure for the future of the city.**





EXECUTIVE SUMMARY

Nashville emerged into the 21st century as a world-class “It” city. Among its many attributes is a valuable parks and greenway system that provides residents and visitors access to great park land, natural environments, greenway trails, and varied recreation facilities and programs. Decisions by the community’s leadership have been deliberate about supporting the system to address growing demand. Those decisions have contributed to a highly prized quality of life in the region surrounding Metro Nashville.

1.1 MASTER PLAN INTRODUCTION

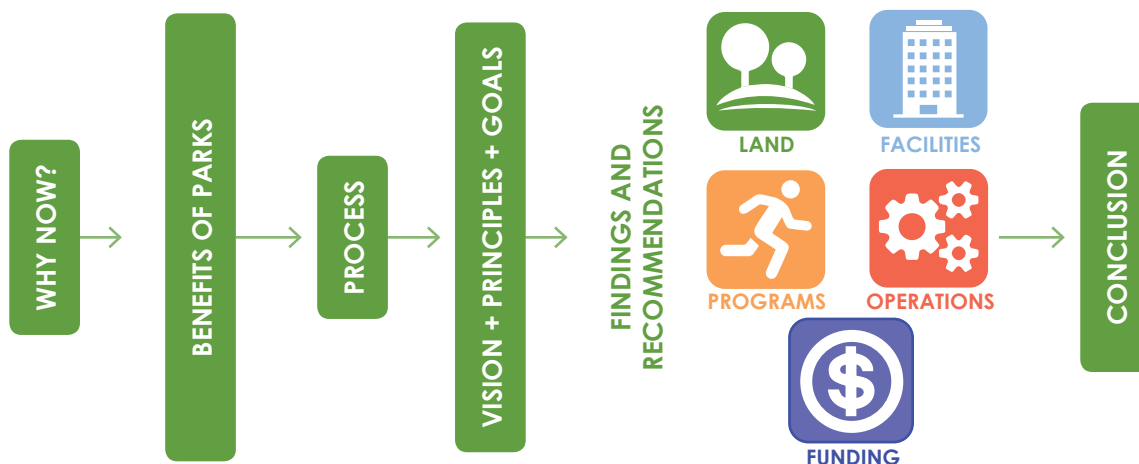
In 2015, the Department of Parks and Recreation of Metropolitan Nashville / Davidson County decided it was time for a new parks and greenways master plan. The original plan, produced in 2002 and updated in 2008, has proved to be a valuable planning roadmap to guide the growth of Metro’s recreation acreage and facilities. However, the area’s continued population growth, land development patterns, and changing demographics demand a fresh perspective.

1.2 2002 MASTER PLAN

2002	PARKS: 153	2016	PARKS: 185
	ACRES: 9,483		ACRES: 15,873
	POPULATION: 570,000		POPULATION: 678,413

The 2016 Plan to Play Master Plan is intended to offer a set of tools that will continue to guide deliberate decisions, and provide a 10-year vision to sustainably meet the community’s needs through 2027. It identifies the amazing economic, social and environmental values that a healthy park system returns on the investments made. The plan supports this vision with a series of findings and recommendations divided into the following categories: Land, Facilities, Programs, and Operations. The final section of the recommendations, Funding the Future, projects the recommended levels of investment needed to build and sustain the Metro Parks and Greenways system through 2027.

1.3 EXECUTIVE SUMMARY APPROACH



1.4 WHY NOW?

Nashville has a parks and greenways system that is among the many superlatives that draw people to this thriving community. So why was a new master plan required?

NashvilleNext, the planning process conducted over three years by the Metro Planning department provides some insight into why Plan to Play was needed. **Nashville's projected rapid population growth, demographic shifts, densification of the urban core, transportation issues and other factors present a new set of challenges and opportunities for this community.** Indeed, the extraordinary changes witnessed over the last several years are likely to continue as Nashville's economy and profile grow.

Within this context, parks and greenways are more important than ever. **No great city is without a great park system, and indeed, parks are more central to Nashville's identity than ever before.**



NashvilleNext Plan encourages growth in centers and corridors.

Another key factor in planning the future of the park system is its value to the community as **a shared space for ALL, regardless of economic status, age, race, or religious or political affiliation.** Keeping pace by managing change will ensure that there is a civic space for the entire community in the future.

With continued growth and prosperity, aspects of Nashville's park system are seeing intensified use pressure on existing parks due to the popularity of park land, facilities and programs. Improvements need to be made now and planned into the next decade to address growing demand and reduce damaging pressure.

The time to act is now. The community's leadership continues to share the perspective that parks and greenways are valuable public infrastructure. To be a world-class park system, Metro Nashville must:

- **Take care of what we have**
- **Grow the system methodically, equitably and sustainably**

1.5 **FUNDAMENTAL
QUESTIONS**

How large should our park system be by 2027?
Do we need more parks and greenways? Why?

How can Metro Parks be creative about providing
recreation opportunities to people everywhere?

Where should new park land be located so that
quality of life increases for all residents by 2027?

What do today's Nashvillians want most from their
parks? What kinds of recreation facilities? What
kinds of programs?

Where does Nashville's park system stand in
comparison to cities of similar size?

How can Metro Parks provide more parks within the fast-
growing dense areas of Nashville?

Can parks and greenways help improve connectivity within
and beyond Nashville?

How can Metro Parks anticipate future trends in activities
and sports?

How do we know what types of facilities and programs Parks
should provide for current and future residents?
Where should they be provided?

How can Nashville create sustainable sources of revenue
so that parks can last for generations?

How can Metro Parks grow in a way that offers the highest
returns on investment and returns for the dollars spent?

What does the Metro Parks department need to
successfully manage an expanded parks and
greenways system?

1.6 THE BENEFITS OF PARKS

Parks and greenways help build on the foundation of NashvilleNext guiding principles:

- Ensure opportunity for all
- Expand accessibility
- Create economic prosperity
- Foster stronger neighborhoods
- Advance education
- Champion the environment
- Be Nashville

Parks offer an array of community benefits that can often be both intangible and priceless. However, there are other metrics that allow a city to gauge the value of parks. These equally important metrics offer a quantifiable bottom line in real financial terms.



The Triple Bottom Line

Parks and greenways system investments rank extraordinarily high when assessed against the triple bottom line metrics of sustainability. Environmentally sustainable investments should meet the following metrics:

- **Create economic value**
- **Promote environmental benefits**
- **Improve social well-being**

The economic benefits of parks collectively enhance the quality of life in Nashville. **Quality of life is economic development.** Most employees in today's economy consider more than just salary when choosing places of employment. They choose to live where the quality of life is good for them and their families.



As part of Plan to Play, an economic analysis was completed that addresses six specific areas in which parks and greenways provide economic value to Metro Nashville. Using conservative methodologies, Nashville's parks and greenways generate on a mostly annual basis:

\$550,410,000 in economic benefits



PROPERTY VALUES AND TAX REVENUE

Parks and greenways raise the value of nearby residential properties in total by **\$200 million**. This translates into an additional **\$2.15 million in annual tax revenues to the city**.



TOURISM

Nashville's parks are essential to the area's ability to attract visitors. In 2015, four festivals hosted in parks attracted 378,000 attendees who spent \$96.1 million in the local economy. Each year, tournaments at the Centennial Sportsplex attract 12,700 visitors who spend \$19.6 million. **In total, these 390,000 visitors spend \$116 million annually.**



HUMAN HEALTH

Independent research shows that park use translates into increased physical activity resulting in medical cost savings. The approximately 23,000 adults who use Nashville's parks and recreation system engage in physical activity at a level sufficient to generate measurable health benefits. **This yields an annual medical cost savings of \$27.5 million.**



RECREATION USE

Residents enjoy Nashville parks, greenways, sports fields, and community centers for a variety of activities with an annual market value of \$69.5 million. This translates into a benefit of approximately \$105 per resident. **Since Metro Parks typically receives \$53 per resident annually in tax dollars, the recreational benefits alone offer an excellent return on investment.**



STORMWATER INFILTRATION

Since the percentage of impervious surfaces (pavement and roofs) in most parks and greenways is very low, they offer more stormwater benefits than most other forms of development. Parks absorb precipitation, slow its runoff and reduce the volume of water that enters the sewer system. **This is valued at \$16.9 million annually.**

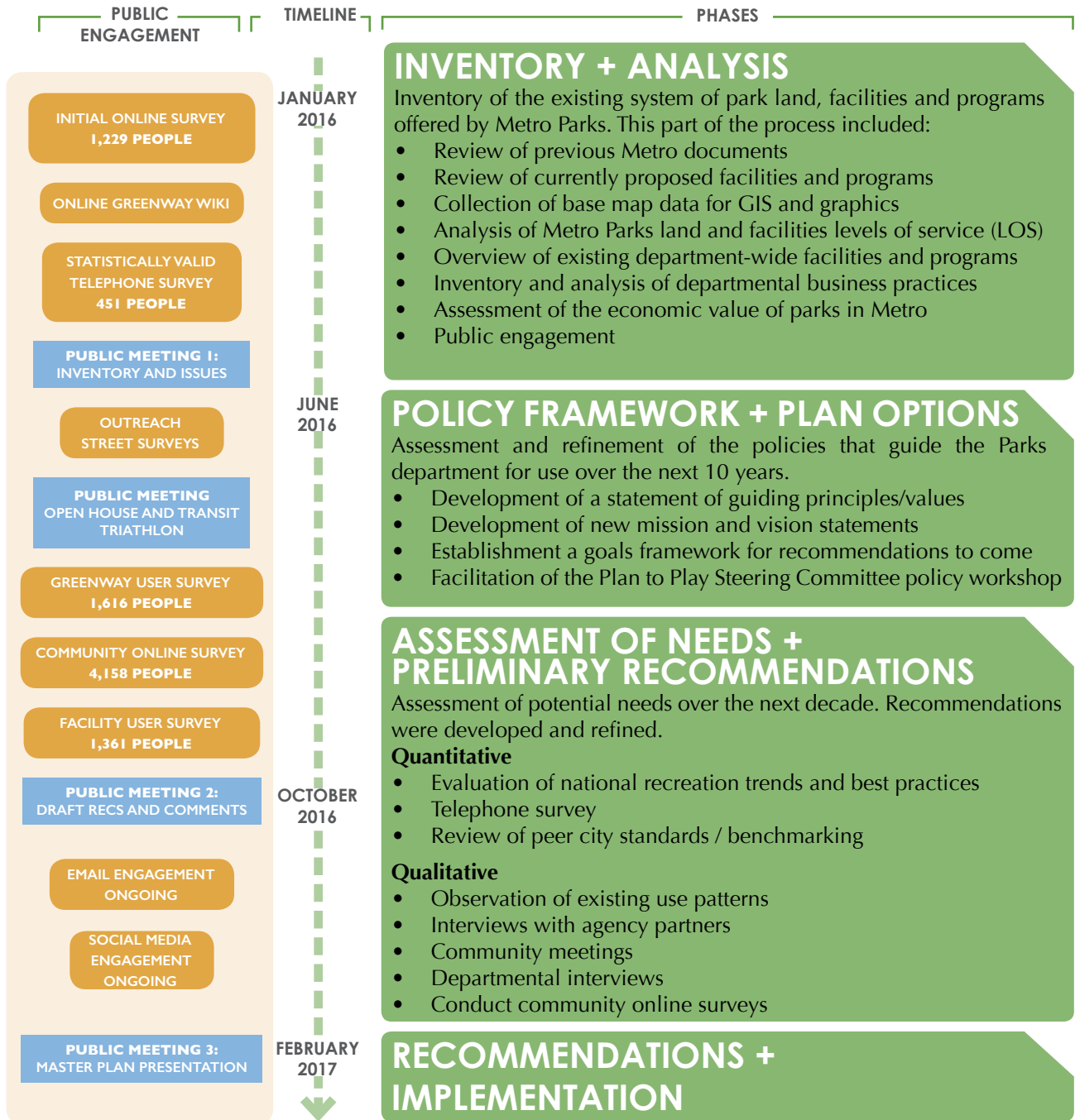


AIR POLLUTION REMOVAL

Parks with trees and shrubs remove air pollutants that endanger human health and damage structures. These green spaces **provide health benefits and reduce air pollution control costs in Nashville by \$3.66 million per year.**

1.7 THE PROCESS

Public engagement is a key component to the success of any public planning process. Successful engagement breathes life into a project and ensures that it reflects the values and priorities of the community it serves. For Plan to Play, the objective was to learn how residents use the park system, understand their needs and concerns, hear what Metro Parks is doing well, and identify areas for improvement. From the onset, the plan embarked on a robust community engagement and promotional strategy to ensure broad public involvement and engagement throughout the process. The goal was simple: Cast a wide net and engage as many people as possible.



Plan to Play recommendations are built upon data and input deliberately gathered from a variety of sources.

- **People:** The self-determined opinions and thoughts of residents, visitors, business owners, stakeholders and partners.
- **The System:** Metrics on how and how well the current park and greenways system serves the residents of Nashville.
- **Peers:** Cities of similar size and population with which Metro Nashville competes or shares aspirational goals.
- **Best Practices and Market Research:** A look at who's doing the best work and how recreation is projected to evolve.

PUBLIC ENGAGEMENT

Over 9,000 people participated in the planning process to help planners assess how residents use the park system, understand their needs and concerns, hear what Metro Parks is doing well, and identify areas for improvement.

COMMUNITY MEETINGS

Public meetings were held in regionally diverse locations to offer attendees an opportunity to provide valuable input and stay informed of Plan to Play progress. Over 488 people attended these meetings. Metro Parks, Metro Public Works, and the Metro Transit Authority also teamed up to host an open house where people came to offer input on the three plans related to parks and greenways (Plan to Play), sidewalks and bikeways (WalknBike), and public transit (nMotion).

STAKEHOLDER AND PARTNER AGENCIES

Local not-for-profit “friends” groups, environmental organizations, and sports groups were interviewed.

PEER CITY BENCHMARKING

Five peer cities were identified and contacted to compare Metro Parks system data to those of **Austin, Louisville, Charlotte/Mecklenberg, Denver, and Portland, Oregon.** Some of the benchmark metrics include:

- System Acreage
- Facility Types
- Budgets / Operations Expenditures

NATIONAL TRENDS ASSESSMENT

Trends in recreation were identified to help Metro Parks anticipate future needs in programs and facilities.

SYSTEM LEVEL OF SERVICE ANALYSIS

The purpose of an existing Level of Service (LOS) analysis is to quantify how well the park and recreation needs of a community are being met with existing resources. It is also used to help determine where Metro Parks resources are deficient. The method used in determining the desired LOS for Nashville and Davidson County is based on community needs, existing facilities and amenities, and park acreage and access.



Sampling of public interactions during master plan process.

1.8 VISION AND GUIDING PRINCIPLES

The Plan to Play process re-evaluated and articulated Metro Parks’ purpose and values. This exercise was intended to help ensure that everything the department does aligns with a foundational vision that is relevant to Metro Nashville’s contemporary needs and ethos. These statements were crafted by the Plan to Play Steering Committee and Metro Parks staff and resulted in a new mission statement, a first-ever vision statement, and a first-ever set of guiding principles. Together, these statements have guided the development of Plan to Play’s recommendations and will be the standards by which departmental decisions are made.

Nashville’s parks and greenways offer life-enriching everyday experiences that are central to the city’s identity as a green, active, diverse, creative, thriving, and healthy community.

PARKS SHOULD BE ...

Open to All

We distribute resources throughout Nashville to ensure equitable access and inclusion for everyone.

Relevant and Diverse

We offer places, activities and experiences that are as varied as the Nashville community itself.

Healthy

Our facilities and programs support the integration of health and wellness into everyday life.

Green

The acquisition, development, and management of our park infrastructure reflect best practices in the management of natural resources and the ecological services they provide.

Strategic and Productive

We plan for successful outcomes through efficiency, cost-effectiveness and the balancing of varied interests. We develop effective partnerships in the public interest.

Safe

We design and manage clean and safe parks and facilities.

Uniquely Nashville

Through community spaces, stewardship and education, we promote the natural, cultural and creative character of our community.

Transparent

The community is invited to participate in key decision-making.

A Good Investment

We contribute to the prosperity of Nashville through economic impact, public health, climate resilience and quality of life.

1.9 GOALS

**Land**

Increase the livability for Nashville and Davidson County residents by improving access to an excellent regional system of public parks and greenways that provides recreational, educational, ecological, and aesthetic benefits to enhance the quality of life for all.

**Facilities**

Provide a wide variety of park facilities and amenities within the parks and greenways system to offer opportunities for valuable recreation experiences in appropriate settings for the benefit of residents and visitors to the region.

**Programs**

Grow Metro Parks program participation, visibility, and facility use by offering all residents opportunities to participate in cultural, athletic, and environmental education programs to increase health, and build and support social and community cohesion across the region.

**Operations and Management**

Sustainably manage Metro Parks' operations so public tax dollars are being used as responsibly and efficiently as possible, while ensuring residents enjoy first-rate experiences and facilities. Use staff, technology, planning, and best business practices to increase Metro Parks' performance and community impact.

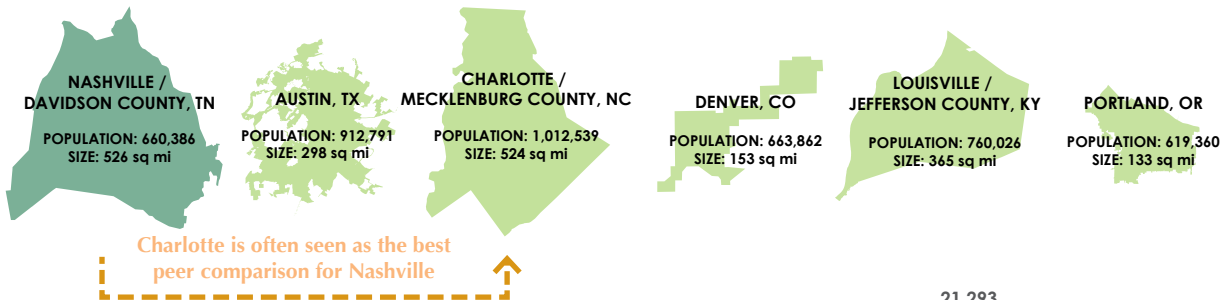
**Finance**

Responsibly balance service delivery and facilities management with multiple sources of sustainable funding. Strategically look for opportunities to maximize Metro Parks' resources, staff, and facilities to best serve Metro Parks' growing and diversifying population. Ensure no one service or set of services places an undue or inappropriate burden on the Metro Parks budget.

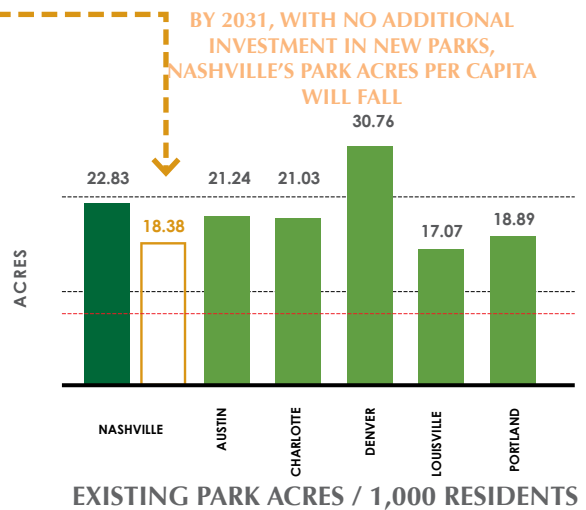
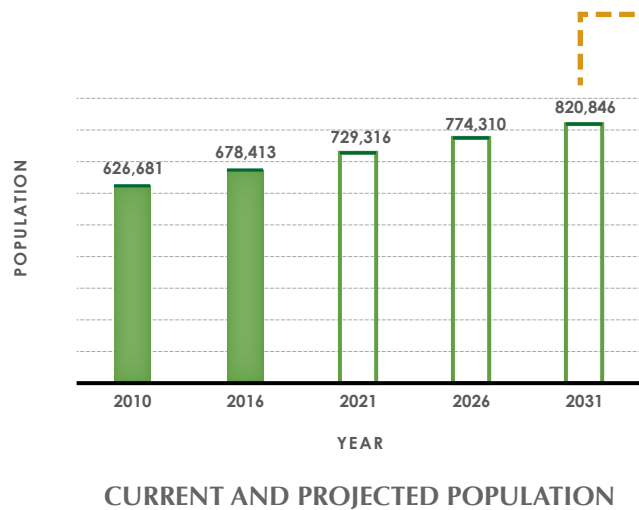
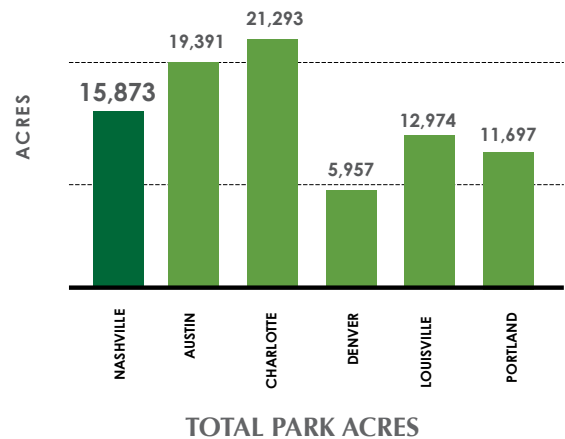


LAND Key Findings

Land is a fundamental element of the park system. It not only includes formal developed parks but also natural areas and greenway corridors used to accommodate trails that provide transportation within and beyond the parks. Of the comparable cities used in this plan’s analysis, Metro Nashville has the largest county land area with the second-smallest population. This presents Metro Parks with challenges and opportunities.



- For its size, **15,873 acres**, the Metro system has a unique identity with an unusually high percentage of large regional park acreage compared to peer cities.
- There is a **shortage, however, of more developed park land** with active recreation facilities when compared to peer cities.
- Nashville’s projected population growth rates and demographic shifts in the next 10 years **will require park land acquisition to provide an acceptable level of service.**





- Plan to Play recommendations can be built on NashvilleNext’s foundation of consensus that answered:
 - » Where development and growth in the community should occur.
 - » Where neighborhood character and conservation landscapes should continue.
- **Downtown parks** are under intense pressure. With a growing population, these parks are at or **are reaching maximum capacity.**
- Metro Parks needs to update the system of classifying parks and set goals for existing and future park sizes.
- Greenways are a valuable tool for land preservation as well as connecting places. **Over 2,700 acres of floodplain lands are already preserved as corridors.**
- Though Nashville has a significant acreage of park land, its distribution is not even across the county. After analyzing the locations of parks, **gaps in system coverage were identified as opportunities for future expansion.**

WOULD YOU SUPPORT THE PARKS DEPARTMENT PRESERVING MORE GREEN SPACE AND ACQUIRING ADDITIONAL PROPERTY TO DEVELOP NEW PARKS AND GREENWAYS?*

94% SUPPORT 

WOULD STRONGLY (61%) OR SOMEWHAT (33%) SUPPORT

HOW DO YOU GET TO THE PARK OR FACILITY?***

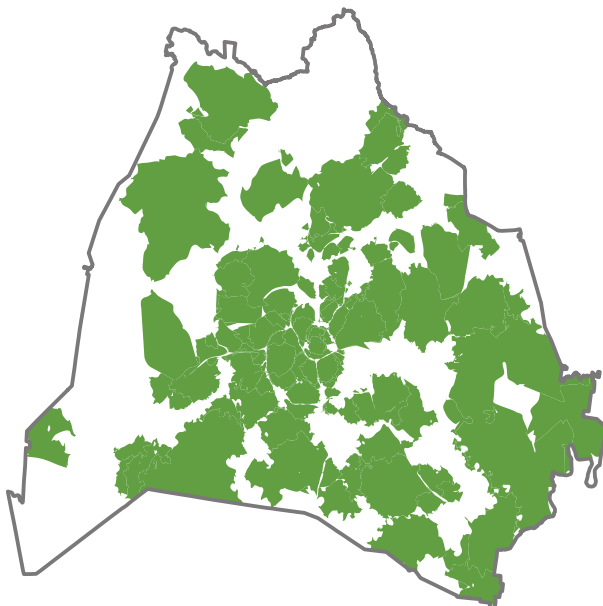


92% DRIVE TO THE PARK OR FACILITY

WHY DO YOU DRIVE INSTEAD OF OTHER MODES OF TRANSPORTATION?***



64% LIVE TOO FAR TO WALK OR BIKE

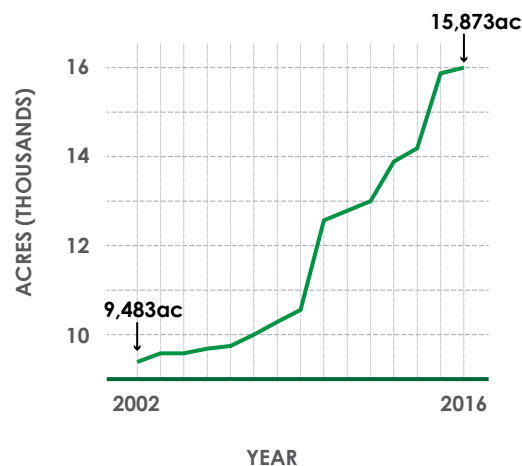


PARK SERVICE GAP MAP

*Data from the Telephone Survey. See section 5.1.1

**Data taken from the Online Community Survey. See section 5.1.1

METRO PARKS TOTAL NUMBER OF ACRES



METRO PARKS TOTAL ACRES

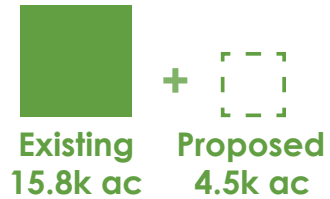


LAND

Key Recommendations

Metro’s projected increase in population alone will require continued significant investment in park land acquisition just to maintain its current levels of service. In order to achieve the even higher standards derived from Plan to Play’s needs assessment, park land acquisition must exceed the rate of the projected population growth.

□ Expand park land by over **4,500 acres**



Plan to Play establishes new level of service goals for each park type based on the plan’s needs assessment. These park acreage goals were arrived at by taking a comprehensive look at the current system; comparing the current system to peer cities; reviewing public input, needs assessment, and priorities; and looking at the projected growth rate of the population.

PARK TYPE	SERVICE LEVELS				PARK ACRES	
	EXISTING 2016	2016 RECOMMENDED SERVICE LEVELS		METRO-OWNED EXISTING 2016	ADDITIONAL ACRES NEEDED FOR 2026	
Pocket Parks (incl. school playgrounds): < 3 acres	0.12	0.15	acres per	1,000	54	37
Neighborhood Parks: 3 - 20 acres	0.83	1.00	acres per	1,000	511	226
Community Parks: 20 - 100 acres	1.77	2.00	acres per	1,000	1,169	379
Regional Parks: 100 + acres	28.10	28.10	acres per	1,000	10,176	3,187
Signature Parks	0.26	0.40	acres per	1,000	168	141
Special Use Park (incl. sports facilities)	1.09	1.50	acres per	1,000	721	440
Greenway corridors	0.97	1.00	acres per	1,000	643	130
Total Developed Park Land*	33.14	34.15	acres per	1,000	15,873	4,541

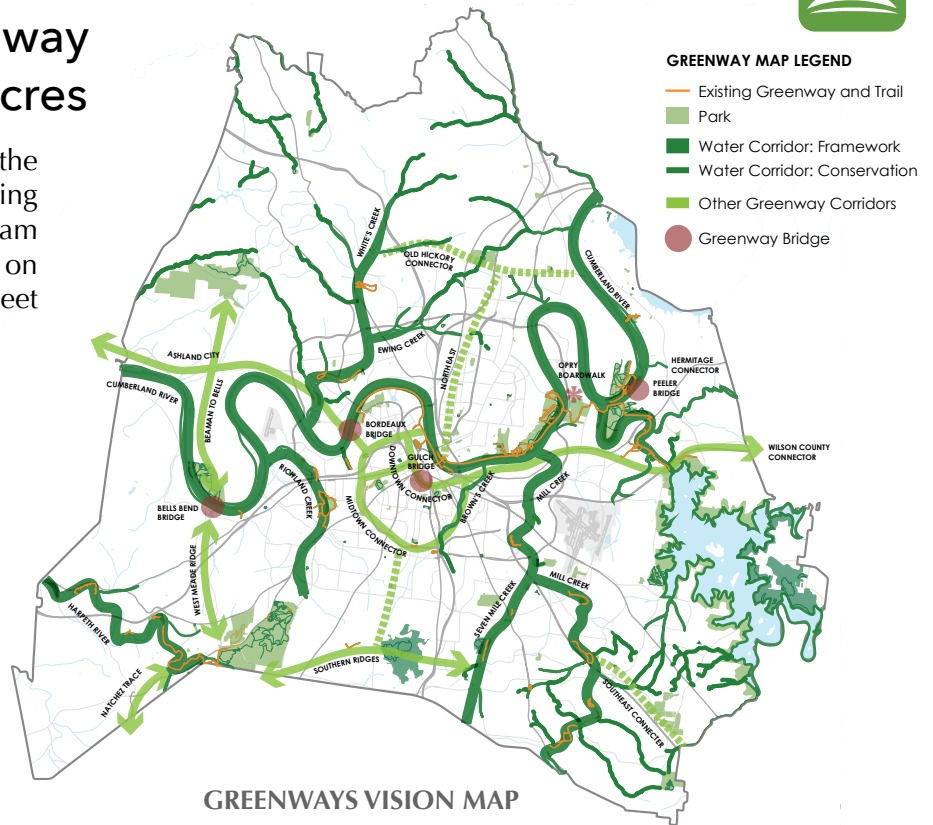
* Includes land bank properties

EXISTING AND RECOMMENDED PARK ACREAGE



Expand greenway land by 130 acres

Continue to build out the greenway system, focusing on river and stream corridors. Expand focus on overland corridors to meet transportation needs.

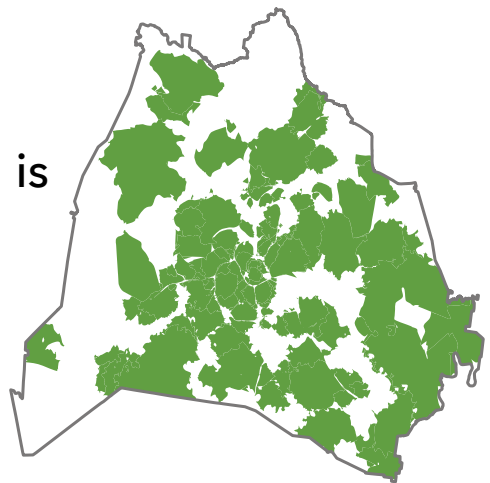


Update park typologies

Identifying the appropriate facilities, amenities, and sizes of parks according to new classifications will allow for better park planning and equitable distribution of services.

Prioritize expanding parks equally across communities where growth is high and service limited

Areas not highlighted on the analysis maps help identify underserved neighborhoods.





FACILITIES

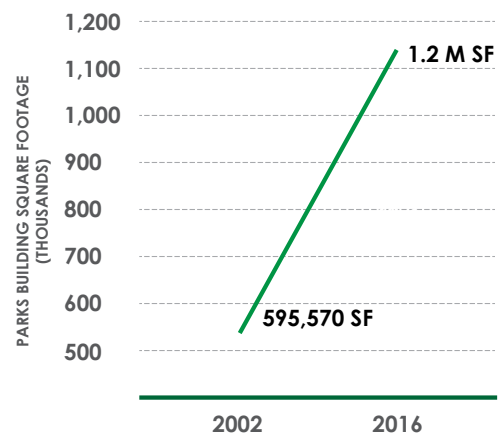
Key Findings

Park facilities are the physical infrastructure within the park system that allow people to utilize the parks in a variety of ways. These facilities need to be accessible and flexible in order to accommodate a wide range of expanding future trends and needs.

- **Paved and unpaved trails are among the most valued facility** types in the system, and the community wants more of them across the county.
- The smaller existing recreation centers may provide great access in neighborhoods today, **but larger regional mega-centers will provide the best practices model for financial sustainability to satisfy growing demand for indoor recreation and program services.**
- Higher-quality maintenance and more programmatic management of historic park sites is considered an unmet community need.
- Because of population growth and demographic shifts, **Metro must to invest in both existing and new recreation facilities** to maintain or conservatively increase the level of service enjoyed today.
- **Needed key facilities and amenities can be added to existing park land** in order to meet some of the growing demands.
- Many neighborhoods of the county are underserved geographically by both park land and facilities, which affects equitable access for all residents.

Existing Park Facilities	
Facility Type	Metro-Owned Existing 2016
Reservable Shelters	60
Multipurpose Fields	83
Ball Fields (Adult and Youth)	86
Basketball Courts	61
Tennis Courts	147
Playgrounds	156
Dog Parks	7
Paved Multiuse Trails	102
Unpaved Trails/ Hiking Trails	66
Mountain Bike Trails	23
Outdoor Pools	4
INDOOR AMENITIES:	
Community Center/Recreation /Gymnasium/Fitness Facility	810,069 SF

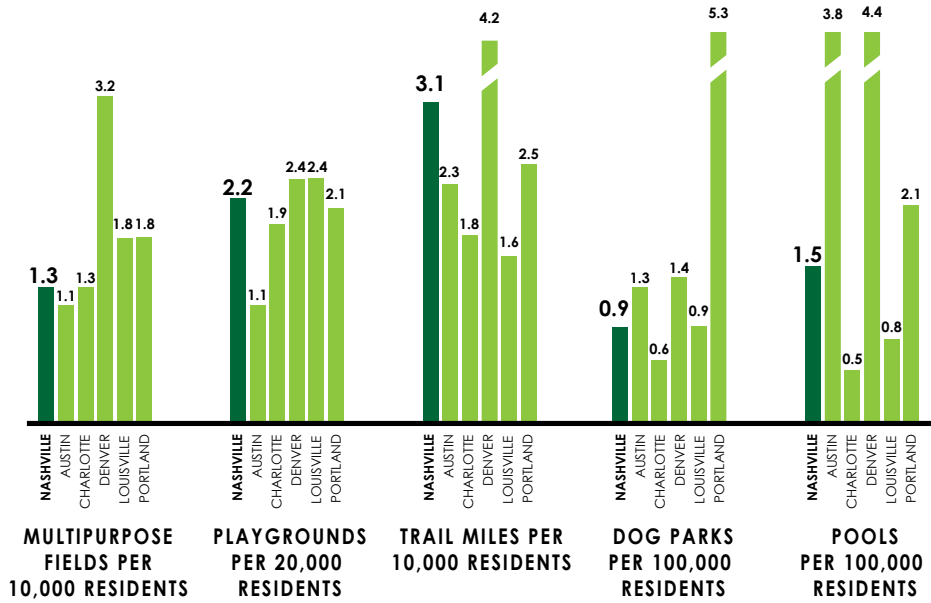
EXISTING PARK FACILITIES BY TYPE



GROWTH IN PARKS BUILDING SQUARE FOOTAGE

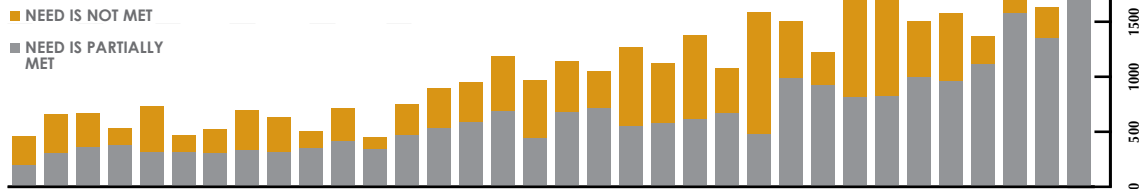


AMENITIES

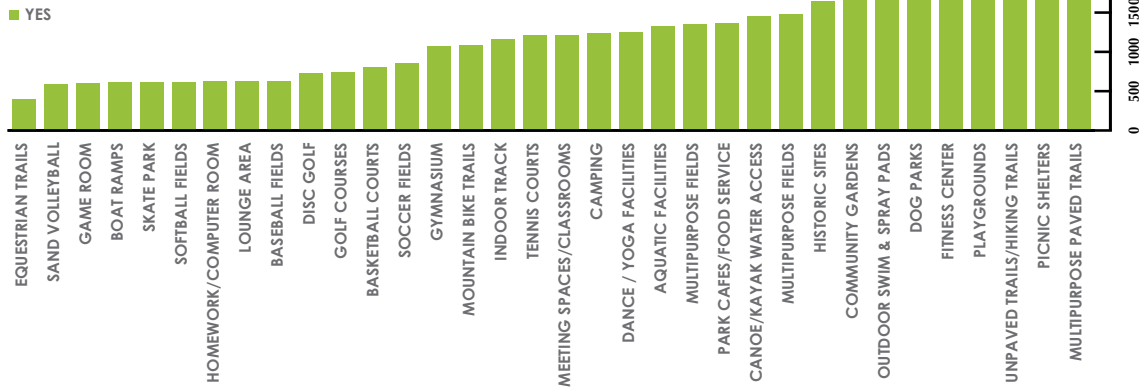


COMPARISON OF KEY AMENITIES*

IS YOUR NEED FOR THIS FACILITY MET?



DO YOU OR DOES YOUR HOUSEHOLD HAVE A NEED FOR THESE FACILITIES?



FACILITY NEEDS MET**

*Data from the Peer City Comparison. See section 5.2

**Data taken from the Online Community Survey. See section 5.1.1



FACILITIES

Key Recommendations

Facilities are all of the built assets and amenities in the park system. They range from community centers to trails, from swimming pools to museums and playgrounds, and have a total estimated asset value of approximately \$628 million. These facilities support both general informal use by the public as well as specialized or scheduled use for athletic competitions, recreation programs, or other events.

Expand investment in park facilities within existing parks and in new parks

In order to provide a broader distribution of recreation services, facilities can be added to existing park land as well as in newly acquired park land.

FACILITIES			
TYPE	EXISTING 2016	Additional Facilities/ Amenities Needed	
Paved MultiUse Trails	102	53	Mile(s)
Unpaved Trails/ Hiking Trails	66	50	Mile(s)
Picnic Shelters	60	17	Sites(s)
Outdoor Pools	4	5	Site(s)
Playgrounds	156	65	Site(s)
Dog Parks	7	8	Site(s)
Multipurpose Fields	83	46	Field(s)
Basketball Courts	61	50	Court(s)
Tennis Courts	147	25	Court(s)
Ball Fields (Adult and Youth)	86	43	Field(s)
Mountain Bike Trails	23	16	Mile(s)
INDOOR AMENITIES:			
Community Center/Recreation /Gymnasium/Fitness Facility (Square Feet)	870,069*	481,000	Square Feet

*Includes 60,000 SF under construction in Madison and Smith Springs parks in 2017

Expand outdoor aquatic facilities (pools and spray-grounds) by **125,000 square feet**

Pools and spraygrounds should have a true regional service radius, and consideration should be given to co-locating them with megacenters and indoor pools for operational and maintenance efficiency.

Expand community centers by **481,000 square feet**

Community centers are one of the largest and the most expensive categories of park facilities to build, staff, and maintain, and demand for new centers throughout Metro is high.

EXISTING AND PROPOSED LEVEL OF SERVICE FOR FACILITIES

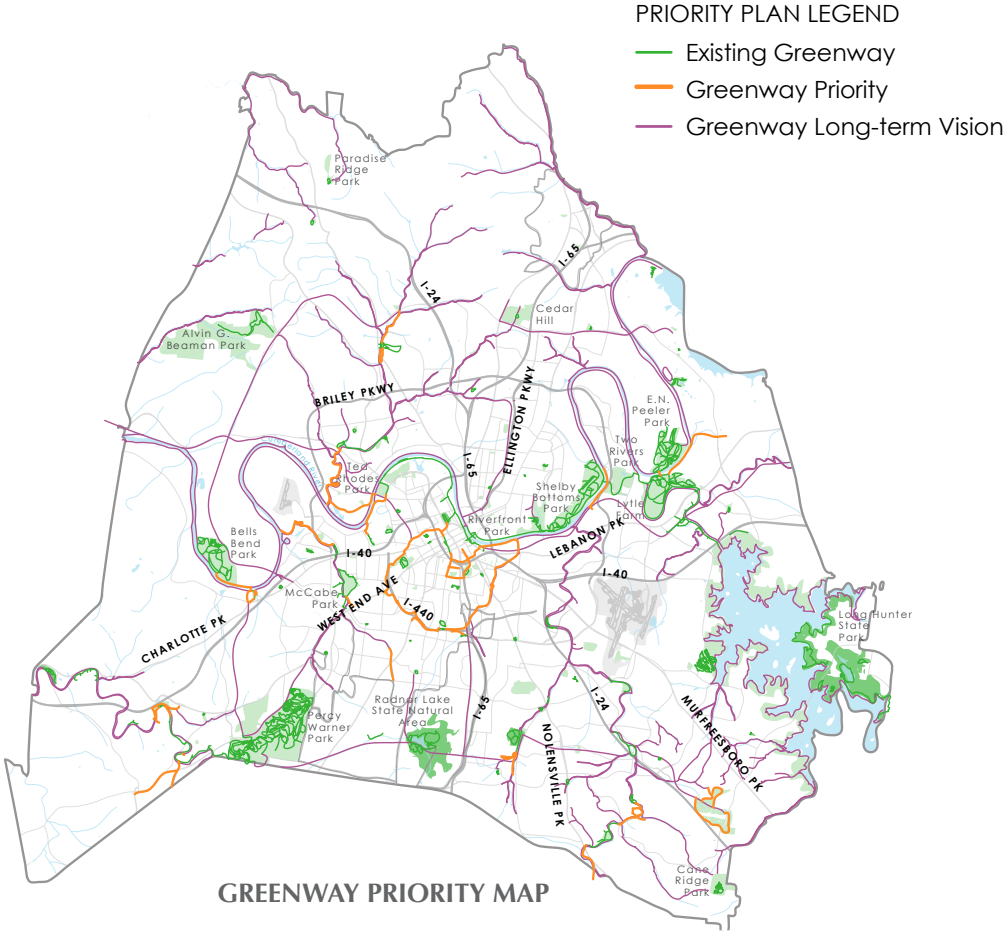




□ Improve other key facilities such as historic sites, community gardens, blueways, park cafes, golf facilities and Wave Country

□ Expand the greenway trail network by adding **53 miles of paved and 50 miles of unpaved trails**

During the public engagement phase of Plan to Play, as well as at public meetings for years, Metro Parks has heard how important it is for people to be able to walk or bike to their park or greenway. The result is greenway plans that place a higher priority on connectivity and transportation, and sidewalk and bikeway plans that interface with parks and greenways.





PROGRAMS

Key Findings

Metro Parks offers over 1,200 programs a week, covering a wide variety typical for a system of its size. Programs are generally defined as staffed, guided, or facilitated activities, or events and activities provided by the issuing of a reservation or permit. Programs range from ballet classes to canoe trips, boot camps to after-school programs, and farmers' markets to history tours. These programs offer cultural, health and wellness, and nature education opportunities for all ages across the county.

- The strongest message received from public input is that Nashvillians **want more opportunities to participate in programs.**
- Many programs, including summer enrichment, arts programs, and the disabilities program, are oversubscribed and have wait lists. Competition to get into limited programs has in some cases driven people to wait outside the door of a community center at 4 a.m. to be assured a place in a popular program.
- Regional and neighborhood centers offer a diversity of program types, but are short on nature, history and cultural arts programs. Due to staffing and resource limitations, it appears that these programs are mostly confined to their own facilities, which limits their countywide benefit.
- **Productivity of space is low at many community centers and arts facilities** until after-school hours.
- Over 95 percent of programs are offered free of charge. Community centers, nature centers, and arts venues operate at net loss in aggregate. While not entirely unusual in principle, the degree of loss is likely compounded by the very high number of free programs.
- Membership and program fees are considered low compared to those of private competitors.
- In community and user surveys, those who use Parks programs **rate them high, but only a small part of the population participate in programs.**
- Programs are not widely marketed due to staffing capacity and resource limitations.

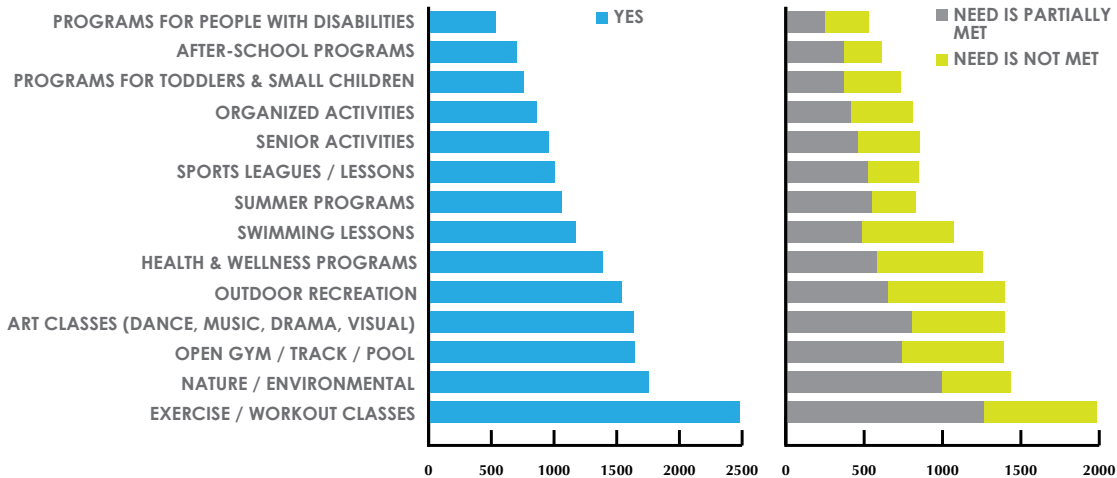
Core Program Areas:

- Community Enrichment (after-school and summer programs, senior programs)
- Cultural Arts (theater, dance, music, visual arts)
- Fitness and Wellness (boot camp, yoga, Zumba, spin class)
- Nature and History
- Outdoor Recreation (kayak and canoe, hiking, mountain biking)
- Specialized Recreation (golf clinics)
- Sports and Aquatics (swim and sports lessons, leagues)
- Special Events (both Parks-sponsored and community-hosted events including festivals, concerts, walks, runs)



DO YOU OR DOES YOUR HOUSEHOLD HAVE A NEED FOR THESE PROGRAMS?*

IS YOUR NEED FOR THIS PROGRAM MET?



PROGRAM MET AND UNMET NEEDS*

HOW WOULD YOU RATE THE QUALITY (APPEARANCE & RECREATION OPPORTUNITIES) OF PARKS & GREENWAYS?***



82% EXCELLENT / GOOD
RATE THE QUALITY OF PARKS & RECREATION OPPORTUNITIES TO BE EXCELLENT (36%) OR GOOD (46%)

21% HAVE PARTICIPATED IN A PARKS PROGRAM
88% RATE THE QUALITY OF THE PROGRAMS AS EXCELLENT OR GOOD

HOW DO YOU USE PARKS & GREENWAYS?*

- 43% WALK, RUN, HIKE, OR BIKE
- 22% RELAX / ENJOY NATURE
- 8% FAMILY OUTING
- 7% SPORTS ACTIVITY
- 4% DOG PARK
- 18% OTHER
- 2% PARTICIPATE IN A PROGRAM
- 2% PLAY GOLF
- 2% CONCERT OR FESTIVAL
- 2% FITNESS CENTER / WEIGHT TRAINING
- 1% SWIMMING
- 1% DON'T KNOW

DO YOU PARTICIPATE IN PROGRAMMING OFFERED?***

54% DO NOT PARTICIPATE DUE TO BEING UNAWARE OF THE PROGRAMS OFFERED

HOW DO YOU RATE THE QUALITY OF ACTIVITIES OR PROGRAMS?***



72% RATE THE QUALITY OF ACTIVITIES & PROGRAMS TO BE EXCELLENT

SURVEY FINDINGS

*Data taken from the Online Community Survey. See section 5.1.1

** Data taken from Telephone Survey. See section 5.1.1

*** Data taken from Facility User Survey. See section 5.1.1



PROGRAMS

Key Recommendations

One primary desire of Nashvillians as expressed in public input is more – more program offerings, at more locations in the county, and more promotion about available program offerings. As a result, many of the recommendations focus primarily on expanding access to existing programs. That said, the list of programs offered should continue to be assessed annually to be dynamically responsive to shifts in the market.

□ Improve access to programs

- **Expand the operating hours at community centers** with more opportunities throughout the week and over the weekend.
- **Improve efficiency of spaces within existing facilities to expand program availability.** Where utilization rates for rooms appear to be low, identify programs to increase usage.
- Develop an age segment matrix of users for each type of recreation facility to **determine how well each age segment is being served by each program type and identify areas of need.**
- **Create new partnerships with businesses and outfitters to expand recreation program opportunities** as they apply to performing and visual arts, outdoor recreation, wellness and fitness, active senior adults, people with disabilities, and after-school and summer programs.

□ Prioritize program offerings

- **Expand programs by expanding the hours of operation at facilities, hiring more staff, and exploring partnerships and opportunities to engage contract providers.**
- The public engagement process identified a list of existing programs that were highly regarded but were considered in too short supply:
 - » Outdoor Recreation (kayaking, rock climbing, camping)
 - » Exercise and Fitness (boot camps, yoga, Zumba classes)
 - » Health and Wellness (teaching kitchens, nutrition courses)
 - » Art (dance, painting, theater)
 - » Summer Enrichment (children’s summer program)
 - » After School (organized play, tutoring)
 - » Senior Citizens
 - » Visual and Performing Arts
 - » Disabilities Programs



□ Expand environmental education

- Before building additional nature centers, expand countywide program offerings through existing community centers, especially in areas of the county where residents may not have access to or the ability to visit a nature center.
- Consider new nature centers when master planning new parks with an eye toward the reuse of any available historic buildings.
- Incorporate environmental education into outdoor recreation programs in order to improve the experiential aspect of learning.

□ Develop innovative and new programming in urban parks

- Activate downtown parks with frequent planned activities and small-scale performances to encourage daily use and neighborhood activities.
- Provide programs for neighborhood parks in low-income areas that are rarely targeted for permitted events by outside groups.

□ Program historic sites systematically

- Classify all historic properties as a **new management section within Metro Parks.**
- Program historic sites in a systematic approach that utilizes the system collection of historic sites to provide **comprehensive and countywide programming.**

□ Establish volunteerism as a formal program

- **Develop a volunteer recruitment and training program.**
- Identify targeted volunteer projects that ensure a good return on investment.
- Hire a volunteer coordinator to build the program.
- Train staff on how to effectively work with volunteers in park settings.



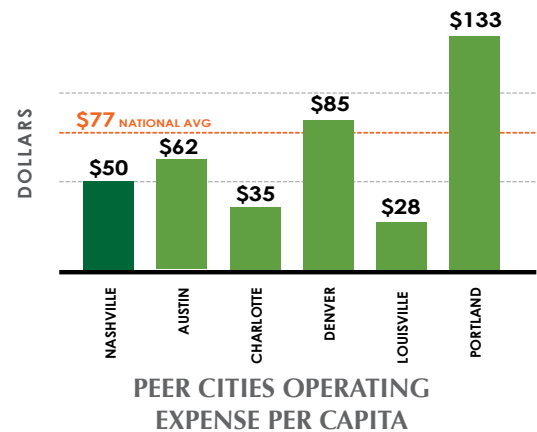
OPERATIONS

Key Findings

Over the last 10 years, Metro Nashville has made substantial strides with regard to capital investments by adding new facilities and land to the park system. The department, however, has not seen the same amount of operational growth to support the new additions to the system. This has created a gap between the operational needs of the system and the current operating budget. For a park system to be sustainable, capital and operational investment must be made together because new capital projects require additional operational and maintenance needs.

Operations of the Metro Park system depend on a well-trained and dedicated staff who are responsible for planning and delivering programs, maintaining the land and facilities, and administering and promoting the system on a day-to-day basis. A continued, sustainable level of investment in park operations is the foundation of capital investments in land, facilities, and programs.

- Metro Parks’ staff have extremely high loyalty and dedication to the department.
- When comparing operating expenses per capita, Metro Parks’ budget of \$50 per person is significantly lower than the national average of \$77 per person.
- Metro Parks’ total operating budget in 2015 was just over \$33,400,000, the second-lowest operating budget among peer cities.



- **Metro Parks ranks second among peer cities for operating cost recovery. It retains the lowest percentage of revenue at 3% with the next lowest peer city being 54%.**

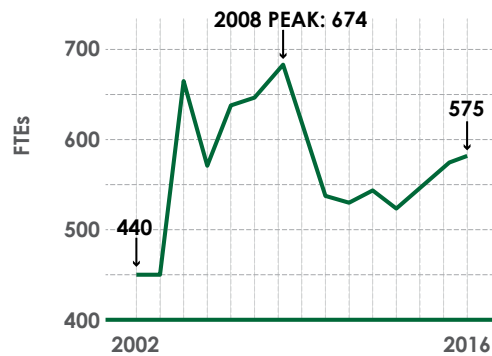
Agency	Fees Kept by Agency	Non-Tax Revenue	Fees Kept as % of Non-Tax Revenue
Portland	\$ 26,768,718	\$ 28,703,839	93%
Charlotte / Mecklenburg County	\$ 1,631,000	\$ 2,442,614	67%
Denver	\$ 11,095,320	\$ 17,561,412	63%
Louisville	\$ 5,722,986	\$ 10,400,471	55%
Austin	\$ 2,166,170	\$ 4,002,170	54%
Nashville*	\$ 360,000	\$ 12,122,960	3%

*Figures adjusted from information provided by TPL for Nashville based on internal data. Includes golf surcharge, that has now expired.

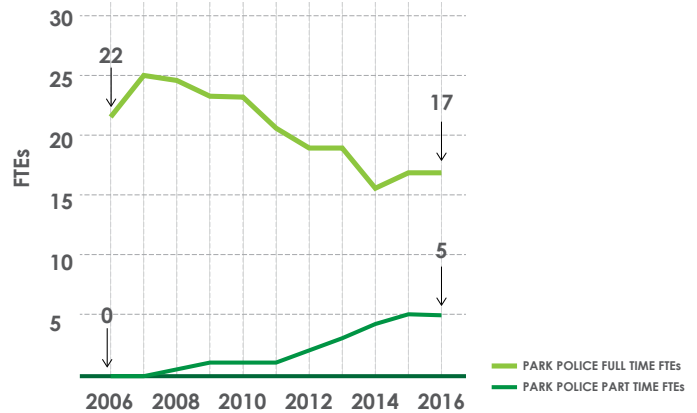
PEER CITIES OPERATING REVENUE RETENTION



- In order to manage it, first measure it. Understanding trends, costs of services, the market, and usership allow the department to more efficiently and effectively allocate resources.
- Sustainable funding of operating expenses can:
 - » Increase staffing levels.
 - » Expand high-demand program offerings.
 - » Increase hours of operation.
 - » Allow expanded marketing of services.
 - » Grow revenue stream.
 - » Improve levels of maintenance.
- **Program types should be classified to ensure core essential programs remain free and accessible, and value-added programs do not place an operational and financial burden on the park system.**
- Individual business plans can identify the operational and funding needs of a facility or program, as well as opportunities to offset costs with revenue and improve customer service.



METRO PARKS TOTAL FULL TIME EQUIVALENT (FTE) HOURS



METRO PARKS TOTAL FULL TIME EQUIVALENT (FTE) HOURS FOR PARK POLICE

WOULD YOU SUPPORT INCREASING PROGRAM FEES SO THAT SPECIFIC USERS ARE PAYING A BIGGER SHARE OF COSTS?*



49% AGREE
STRONGLY (16%) OR SOMEWHAT (33%) AGREE

HAVE USER FEES PROHIBITED YOU FROM PARTICIPATING IN PROGRAMS?

94% NO

FEEL FEES HAVE NOT PROHIBITED THEM FROM PARTICIPATING IN PROGRAMS



* Data taken from Telephone Survey. See section 5.1.1



OPERATIONS

Key Recommendations

This section identifies the operational support necessary to support and implement land, facility and program recommendations. When combined, these recommendations form a strategy by which the growth of the park system and the capacity of the Parks Department to manage the system grow in tandem. Operations recommendations reflect a more entrepreneurial approach to the management of the department, using both performance indicators and outcomes to operate the system in a more efficient and measurable manner. In addition to department-specific recommendations, opportunities exist to scale up existing partnerships and other successful strategies already in place to maximize benefits.

□ Conduct a staffing level assessment

to determine appropriate levels throughout the department. Given the known maintenance and operating challenges faced by the existing system, as well as the recommendations to add parks, expand programs, and extend the hours at many facilities, this in-depth study will help ensure that system growth and departmental capacity expand in tandem.

□ Create an office of collaboration

to lead the process of developing and managing many of the operational and financial recommendations in Plan to Play that relate to alternative revenue streams, scaling up partnerships, and otherwise bringing new resources to the department in order to help fulfill its mission.

□ Invest in communications, public relations, marketing, and branding across the system

Metro Parks' communications staffing level (one person) is far below those of peer cities and even other Metro departments. Given the many quantifiable economic and quality-of-life benefits of parks, including tourism and public health, and the more entrepreneurial business model recommended in this plan, it is critical for Metro Parks to invest in additional marketing and communications.

□ Upgrade technology

to improve efficiency and operations, and allow the department to accomplish more with fewer human resources. There are several critical technological needs at Metro Parks, including upgrades to payment systems, online reservations, and an asset management/work order system.



□ Conduct a program assessment

to understand the goals, priorities, and changing financial realities of a growing and changing park system.

□ Cultivate and nurture partnerships

as Nashville's population continues to boom and the needs and complexities of the system grow. This is a critical time to examine what public-private partnerships exist in Nashville today and what partnerships can grow, evolve, and be augmented to best serve Metro's properties and the area's residents and visitors into the future.

□ Track data and performance department wide

to more efficiently and effectively allocate resources by better understanding the market, true costs, usership, life cycles, trends, and other factors. Using measurable outcomes will allow the department to identify the greatest areas of need, track success, and know where and when additional support is needed.

□ Classify services

using a systematic approach to assess the value and priority of the range of services provided by the department. Understand the distribution and delivery of services as well as opportunities to grow the system to better serve the community, and identify which programs and services should be available to every taxpayer and which justify a fee.

□ Develop business plans

for community centers, sports complexes/field houses, golf courses, aquatic facilities, Hamilton Creek Marina, and any other facility with yearly revenue of \$100,000 or more. To understand the operational and funding needs of these facilities, business plans should be the first step in the implementation process.

□ Implement a Natural Area Management Plan

Using standards and policies already developed, implement a proactive natural area management plan to inform maintenance practices and operational standards for the purposes of resource conservation, habitat preservation, biodiversity, and appropriate recreational and programmatic use.



FUNDING THE FUTURE

Key Findings

Funding impacts every park element discussed thus far. A critical decision for Metro government is not only how much money to invest in the future of the park system, but also what funding structure best suits Metro Parks. The system relies heavily on public dollars annually allocated by the Metro Council. Could Metro Parks be allowed the ability to generate some of its own funding and revenue sources? What role can or should private partnerships play in Nashville's park system?

- Today, the total asset value of the park system is approximately **\$683 million**.
- **Metro government continues to provide great financial support** for capital investments to the park system.
 - » **Capital spending is highest per person** compared to peer cities.
 - » **Capital spending is highest per acre** compared to peer cities.

Agency	Jurisdiction Population	Total Capital Spending	Capital Spending per Capita
Nashville*	660,836	\$ 35,488,720	\$ 53.70
Denver*	663,862	\$ 23,370,519	\$ 35.20
Austin	912,791	\$ 22,645,132	\$ 24.81
Portland	619,360	\$ 8,516,570	\$ 13.75
Charlotte / Mecklenburg County*	1,012,539	\$ 7,600,000	\$ 7.51
Louisville	760,026	\$ 4,141,951	\$ 5.45

*Figures adjusted from information provided by TPL for Nashville, Denver, and Charlotte / Mecklenburg County based on internal data.

PEER CITIES CAPITAL SPENDING PER CAPITA

Agency	Fees Kept by Agency	Non-Tax Revenue	Fees Kept as % of Non-Tax Revenue
Portland	\$ 26,768,718	\$ 28,703,839	93%
Charlotte / Mecklenburg County	\$ 1,631,000	\$ 2,442,614	67%
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Nashville*	\$ 360,000	\$ 12,122,960	3%

*Figures adjusted from information provided by TPL for Nashville based on internal data. Includes golf surcharge, that has now expired.

PEER CITIES OPERATING REVENUE RETENTION



- National and peer city analyses suggest that **it is unusual for a system this size to rely solely on public tax dollars for annual funding.**
- **There are opportunities to grow revenue** generated by Metro Parks with minor adjustments to the cost recovery system.
- Great opportunity exists for **strengthening private partnerships**, like friends groups, to increase the number of revenue streams and leverage public dollars.

WOULD YOU SUPPORT THE PARKS DEPARTMENT PRESERVING MORE GREEN SPACE AND ACQUIRING ADDITIONAL PROPERTY TO DEVELOP NEW PARKS AND GREENWAYS?

94% SUPPORT 
WOULD STRONGLY (61%) OR SOMEWHAT (33%) SUPPORT

SHOULD PARKS DEPARTMENT USE ANY ADDITIONAL FUNDING TO IMPROVE EXISTING PARKS & FACILITIES OR NEW DEVELOPMENT?

65% FAVOR NEW INVESTMENT AT EXISTING PARKS & FACILITIES
29% FAVOR NEW DEVELOPMENT 

WOULD YOU SUPPORT THE INCREASING PROGRAM FEES SO THAT SPECIFIC USERS ARE PAYING A BIGGER SHARE OF COSTS?

 **49% AGREE**
STRONGLY (16%) OR SOMEWHAT (33%) AGREE

WOULD YOU AGREE THAT METRO SHOULD PROVIDE ADDITIONAL FUNDING TO THE DEPARTMENT WHEN COMPARED TO THE NATIONAL AVERAGE?

77% AGREE 
STRONGLY OR SOMEWHAT AGREE TO RAISING THE PARKS DEPARTMENT BUDGET

SURVEY FINDINGS

* Data taken from Telephone Survey. See section 5.1.1



FUNDING THE FUTURE

Key Recommendations

Land, facilities, program, and operational recommendations collectively represent a future for Nashville’s park system built on equity, sustainability, and best practices. These recommendations are often the “what” part of the plan. There are few recommendations that do not have a cost for their implementation. Funding describes the “how” part of the master plan - how will Nashville fund this bold vision? Achieving the goals of Plan to Play will require an increase in Metro funding while Metro Parks simultaneously diversifies its revenue streams – not to replace Metro funds but to supplement them and increase operational efficiency.

Nashville’s parks and greenways generate **\$550,410,000** in economic benefits through:

- property values and tax revenue
- recreation use
- tourism spending
- stormwater infiltration
- human health benefits
- air pollution removal

Recommended investment for improvements by 2027:

Capital Investment

\$ 667 million

Includes community centers, blueway access sites, trails, athletic fields, courts, planning projects, other park amenities and facilities.

New Capital Investments

Capital Investments in Existing Assets

Deferred Maintenance

Operating Investment

\$ 67.7 million (annually)

Operating costs quantify the annual dollar value to fulfill the strategic recommendations set forth in this plan. They include administrative, program, and maintenance staff as well as the upkeep and operational needs of a mix of amenities within park land and community centers.

Maintenance and Operations of:

- Park land
- Facilities
- Programs

Staff Positions

Land Acquisition

\$ 534 million MARKET VALUE

\$534 million, at the current market rate, to acquire the recommended park land acreages needed over the next 10 years.

Park land

Greenway Corridors



□ Diversify funding strategies

Metro Nashville's Parks system is unusually dependent on the Metro budget as its single source of funding. Most other parks departments in large cities have between 25 and 30 sources of funds. Metro should diversify its funding and revenue streams. Strategies include:

- Earned Income
- Open Space Ordinance
- Business Improvement Districts
- Sponsorships
- Impact Development Fees
- Enterprise Funds
- Parking Fees
- Tax Increment Financing
- Land and Property Leases
- Service Providers
- Hotel Tax
- Partners and Friends Groups

□ Land acquisition will need to utilize the funding strategies above to execute acquisitions outside of the General Fund

Due to the extremely high cost to acquire the needed park land for the next 10 years at the current market rate, land transactions will require alternative funding sources to shift the financial burden off the tax base.

□ Retain earned income

by transitioning toward a practice of allowing some or all of the revenue produced by Metro Parks to be retained by Metro Parks. Currently, Metro Parks generates approximately \$12,000,000 in revenue from fees each year. Nationally, large cities average \$8,800,000 in revenue and most keep all or a percentage of this revenue without its negatively impacting annual budget allocation.

□ Friends groups and partners

Friends groups and partners have proved to be an essential part of running a park system. They contribute to the Parks Department mission by raising private funds, donating volunteer hours, helping to deliver programs, and raising public and political awareness of park-related issues. Metro Parks should explore how these partnerships can be augmented to best serve the park system and the department's public mandate.

- Develop memoranda of understanding or equivalent agreements to clearly articulate the roles and responsibilities of each partner.
- Create work plans to help ensure both partners are working toward shared and synergistic goals.
- Provide dedicated Parks staffing to coordinate with friends groups and partners.

1.12 CONCLUSION: THE ROAD TO 2027

The Metro Parks and Greenways system must grow to address projected needs, to maintain Nashville’s quality of life, and stay competitive with peer cities. The community has expressed strong support for the existing system and its improvement.

“Must care for what we have built - and build what we can care for.” This means re-balancing capital and operating investments in park and greenway infrastructure.

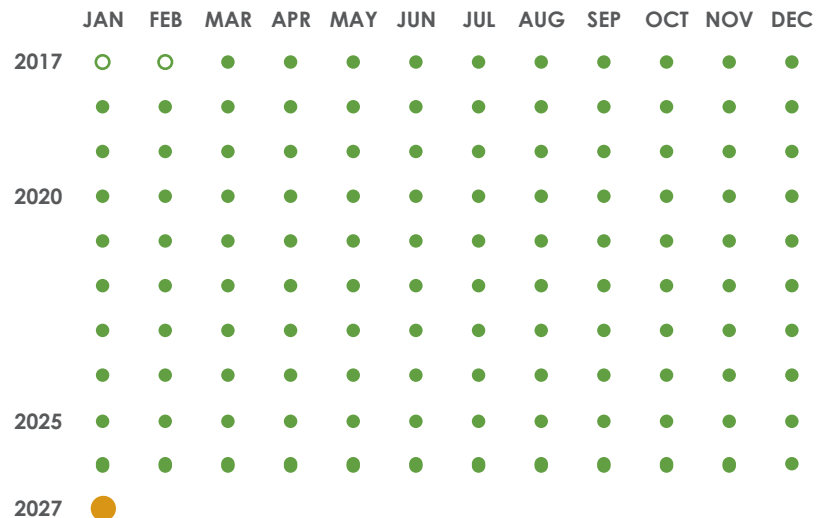
Metro has a great system of parks and greenways that can manage the demand for “more and better” by using a combination of well-tested financial strategies, used by peer cities and others, that leverage public dollars.

This park system made up of land, facilities, programs and people provides great economic, social and environmental value (i.e., a Triple Bottom Line) annually. It offers remarkably high “ROI” and also generates revenue every year that can contribute to its own operational needs.

Parks and greenways are shared community spaces for ALL, every resident regardless of age, socioeconomic status, gender, race or political affiliation.

1.13 THE FUTURE COMES EVERY DAY

Plan to Play represents an ambitious, sweeping plan to improve and expand not only Nashville’s parks and greenways but also an agenda to create policies and funding mechanisms that will support this expansion. Though 10 years might seem a long time to accomplish these tasks, 2027 is fast approaching. Time is of the essence.





“More greenways please. The ones we have are wonderful!”

“I use the arts programs at Centennial and hope they continue.”

“More summer jobs for teenagers!”

“Love the big band dances at Centennial.”

“We love the Farmers Market”

“Please add more dog parks.”

“Need to incorporate kayaking in the area.”

“More multipurpose fields for football / soccer.”

“We need to preserve natural areas as parks so they are not developed.”

“We love the blackberries at Shelby Bottoms.”

“Our family treasures the undisturbed natural space provided by Parks.”

“We need to invest in our parks now. Expanding their services to a wide audience will help secure that future”

“My husband proposed in Centennial Park!”

* selected comments from Community Online Survey



1. INTRODUCTION

Now is a time of great excitement and some trepidation in Nashville as the city grows and changes at an unprecedented rate. This rush of growth presents both opportunities and challenges. The city has put enormous energy in recent years preparing for and responding to change. Plan to Play, the Nashville Parks and Greenways Master Plan, is a critical part of that preparation. Population growth, densification, culture, quality of life, equity issues, recreation, climate resilience, infrastructure, public health, social cohesion, conservation, economic development – these issues come together in Nashville’s parks and greenways like nowhere else. **For these reasons, it is perhaps more important than ever for Metro Parks to plan for the future we all want.**

1.1 PLAN PURPOSE

The first-ever parks and greenways master plan was completed in 2002 and updated in 2008. That plan has now been largely implemented and is obsolete. The implementation of that plan resulted in a transformation of Nashville’s park system with thousands of acres of park land added, hundreds of thousands of square feet of new buildings, many new miles of greenway trail, and many other improvements. **In 14 years the system grew bigger by one-half than it had in the previous 100 years.** This plan honors the hard work, dedication and leadership of the many people whose legacy is Nashville’s current park system.

Today, Metro Parks finds itself at a crossroads. While the park system has dramatically grown, the operational capacity of the department has not always kept pace. Knowing that Nashville’s park system must keep up with if not surpass the city’s projected pace of growth, it is critical for Plan to Play to offer a vision for the future that articulates not just what new parks, facilities, and programs will be offered where, but also how these new parks will be funded, staffed, and maintained. **Plan to Play presents just such a sustainable path forward.**

This is Metro Parks’ playbook for the next 10 years. Reflecting the community’s priorities and values, best practices, ambitious goals, and financial responsibility, it will guide the work of the Park Board, Parks staff, and the Greenways Commission in providing Nashville’s residents with one of the best park systems in the country. More than ever, it will also inform the work of the department’s many partners in the public, not-for-profit, and private sectors.

1.2 MASTER PLAN PROCESS IN BRIEF

The development of the Master Plan was done in four major parts. Part 1 included inventory of the existing system of park land, facilities, and programs offered by Metro Parks. This part of the process included:

1.2.1 Inventory and Analysis

- Review of previous Metro documents
- Review of currently proposed facilities and programs
- Collection of base map data for GIS and graphics
- Analysis of Metro parks and recreation land and facilities levels of service (LOS)
- Overview of existing Parks-wide facilities
- Overview of existing Parks-wide programs
- Inventory and analysis of departmental business practices
- Assessment of the economic value of parks in Metro
- Public engagement

1.2.2 Policy Framework

After the inventory and analysis phase of work was underway, the policies that are to guide Metro Parks had to be assessed and refined for use over the next 10 years.

- Develop new mission and vision statements
- Develop statement of guiding principles/values
- Facilitate the Plan to Play Steering Committee policy workshop
- Establish a goals framework for recommendations to come

1.2.3 Assessment of Needs + Preliminary Findings

With an inventory of existing assets and guiding principles in place, the assessment of potential needs was completed. From the Needs Assessment process, a preliminary set of recommendations was developed and refined.

- Quantitative
 - » Evaluation of national recreation trends
 - » Review of national best practices
 - » Review of peer city standards / benchmarking
- Qualitative
 - » Observation of existing use patterns
 - » Interviews with agency partners
 - » Community meetings
 - » Departmental interviews
 - » Conduct community online surveys
 - » Conduct statistically valid telephone survey
 - » Assess demographic trends
- Findings and Preliminary Recommendations

Final recommendations were developed for Land, Facilities, Programs, and Operations. More importantly, funding strategies that included viable options for new revenue streams and financial operations were proposed from a long list of best practices proven beneficial in other park systems across the United States. A combination of increasing departmental efficiencies and tapping into new opportunities to increase park revenue are two key means shaping a sustainable financial future for the system.

1.2.4 Recommendations and Implementation Strategies

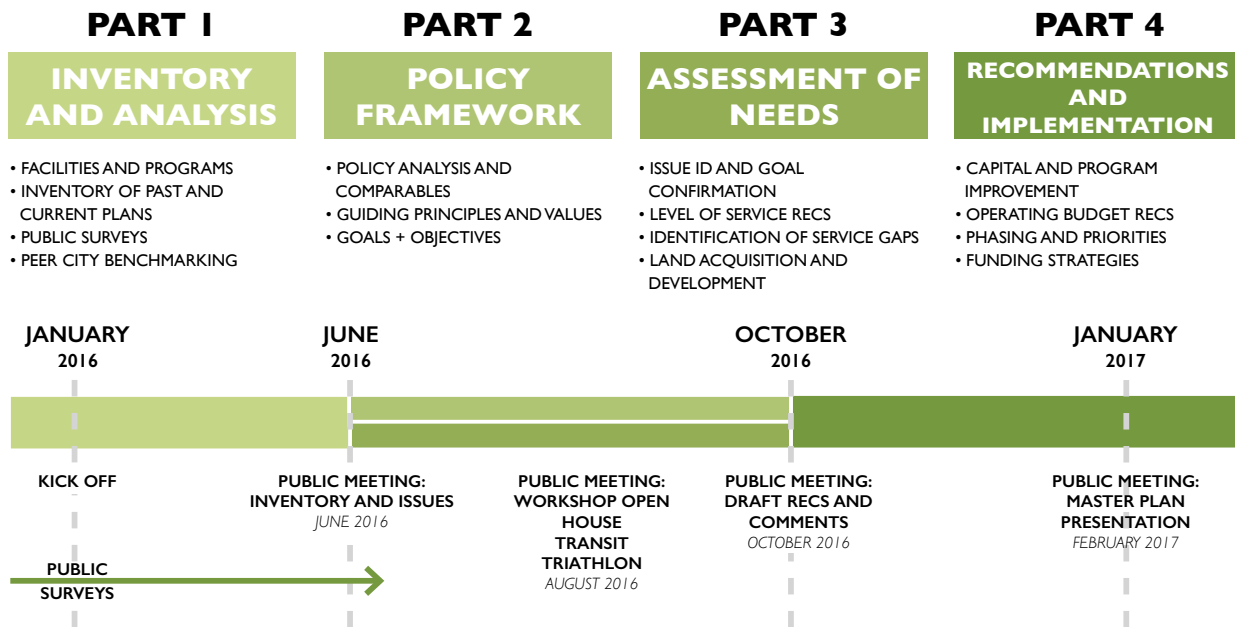


Figure 1-1 Overview of the master plan process



PLAN TO PLAY: METRO PARKS MASTER PLAN

2. QUANTIFYING THE BENEFITS OF PARKS

2.1 PARKS ADDRESS A BROAD RANGE OF PUBLIC NEEDS

Advocates and enthusiasts of parks and greenways instinctively understand that they offer numerous benefits – and they are right. Countless studies document how access to nature offers psychological benefits, how a good workout is a great stress reliever, how creating art expands the brain, and how community activities create societal cohesion. People develop new skills and learn teamwork on the sports field. Children find mentors in community center staff. Personal goals are achieved on kayak trips and on the golf course. Yes, parks are the endorphins of a city.

These benefits can be both intangible and priceless. But there are other metrics by which to gauge the value of parks. These equally important metrics offer a quantifiable bottom line in real financial terms. As part of Plan to Play, and for the first time ever, an economic analysis was completed that addresses six specific areas in which parks and greenways provide economic value to Metro Nashville.

Using conservative methodologies, **the study finds that Nashville’s parks and greenways generate \$550,410,000 in economic benefits**, most of it on an annual basis. A full version of The Economic Benefits of the Public Park and Recreation System in Nashville, Tenn. is in the Appendix. Top-line findings are summarized here:

PROPERTY VALUES AND TAX REVENUE

Parks and greenways raise the value of nearby residential properties. People enjoy living close to these amenities and open spaces and are willing to pay for the proximity. Parks raised the value of nearby residential properties in total by \$200 million. **This translates into an additional \$2.15 million in annual tax revenues to the city.**

TOURISM

Nashville’s parks are essential to the area’s ability to attract visitors. Downtown parks, in particular, play host to major festivals and events every year. In 2015, four such festivals hosted in parks attracted 378,000 attendees who spent \$96.1 million in the local economy. Each year, tournaments at the Centennial Sportsplex attract 12,700 out-of-town visitors who spend \$19.6 million. **In total, these 390,000 visitors spend \$116 million annually.**

HUMAN HEALTH

Independent research shows that park use translates into increased physical activity resulting in medical cost savings. The approximately 23,000 adults who use Nashville’s park and recreation system engage in physical activity at a level sufficient to generate measurable health benefits. **This yields an annual medical cost savings of \$27.5 million.**

RECREATION USE

Residents enjoy Nashville parks, greenways, sports fields, and community centers for a variety of activities. **The annual market value of these recreational activities is \$69.5 million.** This translates into a benefit of approximately \$105 per resident. Since Metro Parks typically receives \$53 per resident annually in tax dollars, the recreational benefits alone offer an excellent return on investment.

STORMWATER RETENTION

Since the percentage of impervious surfaces (pavement and roofs) in most parks and greenways is very low, Metro Parks properties offer more stormwater benefits than other properties that have been developed. Parks absorb precipitation, slow its runoff, and reduce the volume of water that enters the sewer system. **This is valued at \$16.9 million annually.**

AIR POLLUTION REMOVAL

Parks with trees and shrubs remove air pollutants that endanger human health and damage structures. **These green spaces provide health benefits and reduce air pollution control costs in Nashville by \$3.66 million per year.**

These economic benefits collectively enhance the quality of life in Nashville. That quality-of-life enhancement is an essential component of any strategy for continued economic development, especially because the most sought-after employees in today's economy consider more than just salary when choosing places of employment. Focus group studies conducted by Carnegie Mellon University have found that young creative workers, particularly those in high-technology fields, consider lifestyle factors such as environmental and recreational quality more heavily than the job itself when choosing where to live. Another survey of high-tech workers found that a job's attractiveness increases by 33% in a community with a high quality of life. **Skilled workers are attracted to cities with parks, clean air and water, and diverse opportunities for recreation.** Parks in Metro are an investment in economic development because they contribute to making Nashville a desirable place to live. ~~Yet another~~ measure of the value of parks is the triple bottom line. This began as an accounting framework that addresses a three-dimensional view of performance and sustainability: social, environmental, and financial. The triple bottom line can be used to measure the impact of an individual development, or the impact of an entire organization's activities on the community. This is a valid metric to assess whether dollars invested in Nashville's park system will sustainably impact the community it serves in ways that are socially, environmentally, and financially beneficial.

Again, Plan to Play offers ample evidence that the benefits of investing in Metro's parks and greenways system rank extraordinarily high when assessed against this triple bottom line of sustainability. These environmentally sustainable investments:

1. **Have a positive influence on the environment**
2. **Offer a positive impact on the affected community**
3. **Are financially sustainable**

2.2 THE TRIPLE BOTTOM LINE

TRAIL-ORIENTED DEVELOPMENT

Trail-oriented development has gained popularity as more communities seek to encourage active transportation and healthy lifestyles by proposing developments focused on walking and biking versus a more traditional car-centric development. The Beltway in Atlanta and the Midtown Greenway in Minneapolis are two examples of greenways that have spurred mixed use development along their corridors, such as the Ponce City Market in Atlanta and MoZaic in Minneapolis.

In February 2017, Metro Nashville Planning Commission passed the first trail-oriented development community policy for over 269 acres in East Nashville. This policy affects four Metro schools, one public park and multiple private property owners. The property owners came together to request that this special policy be applied to the area as a way to provide important public connection in an area that lacks public street connectivity. The purpose of the trail-oriented development policy is to encourage active transportation, such as walking and biking, by requiring properties within its bounds build a publicly accessible multi-use trail of almost two miles to connect all properties within the area that is currently underserved by greenways.

Key components of this Trail Oriented Development Special Policy:

- encourages coordination between the property owners to align the trails.
- preserves natural features of properties and minimizes negative environmental impact through strategies like cluster development and limiting light pollution.
- encourages a mix of uses in neighborhood nodes to provide small, contextual commercial developments as trail “destinations.”



Ponce City Market in Atlanta is an adaptive reuse development containing residences, a food hall, and retail. It derives much of its success from the Beltline Greenway. Developers even created an extension of the greenway through the building.



MoZaic in Minneapolis is a mixed use development located adjacent to the Midtown Greenway in Minneapolis. Ramps and stairs connect it to this popular commuting and recreational route.



2.3 NASHVILLENEXT

In 2015, after a three-year process of intense public engagement, the Metro Planning Department produced a new General Plan for Nashville and Davidson County. Consensus was built all across the community that provided a shared vision, goals, policies, and actions that will be a planning roadmap for Nashville's next 35 years. Plan to Play is built on foundation of NashvilleNext. That plan adopted several principles that guided decision-making. They are:

- Ensure opportunity for all
- Expand accessibility
- Create economic prosperity
- Foster stronger neighborhoods
- Advance education
- Champion the environment
- Be Nashville

Throughout Plan to Play, it becomes clear that perhaps no other single area of investment is better positioned to contribute to the fulfillment of all of these goals than parks and greenways.



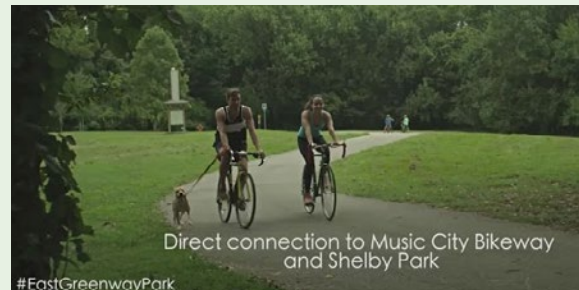
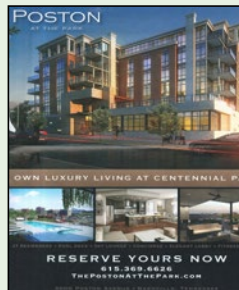
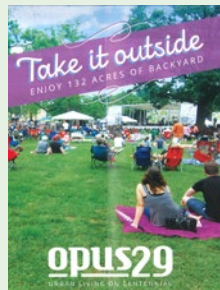
INVESTING IN QUALITY-OF-LIFE

In 2015, Nashville Public Radio aired a local story about people who move to Nashville first and find the job later. Every recent transplant interviewed was motivated by the quality of life Nashville offers. Reporter Blake Farmer opened the story with this: "Let's start with a side note: Parks seem to seal the deal -- from the neighborhood playground to Centennial Park and its full size replica of the Parthenon."

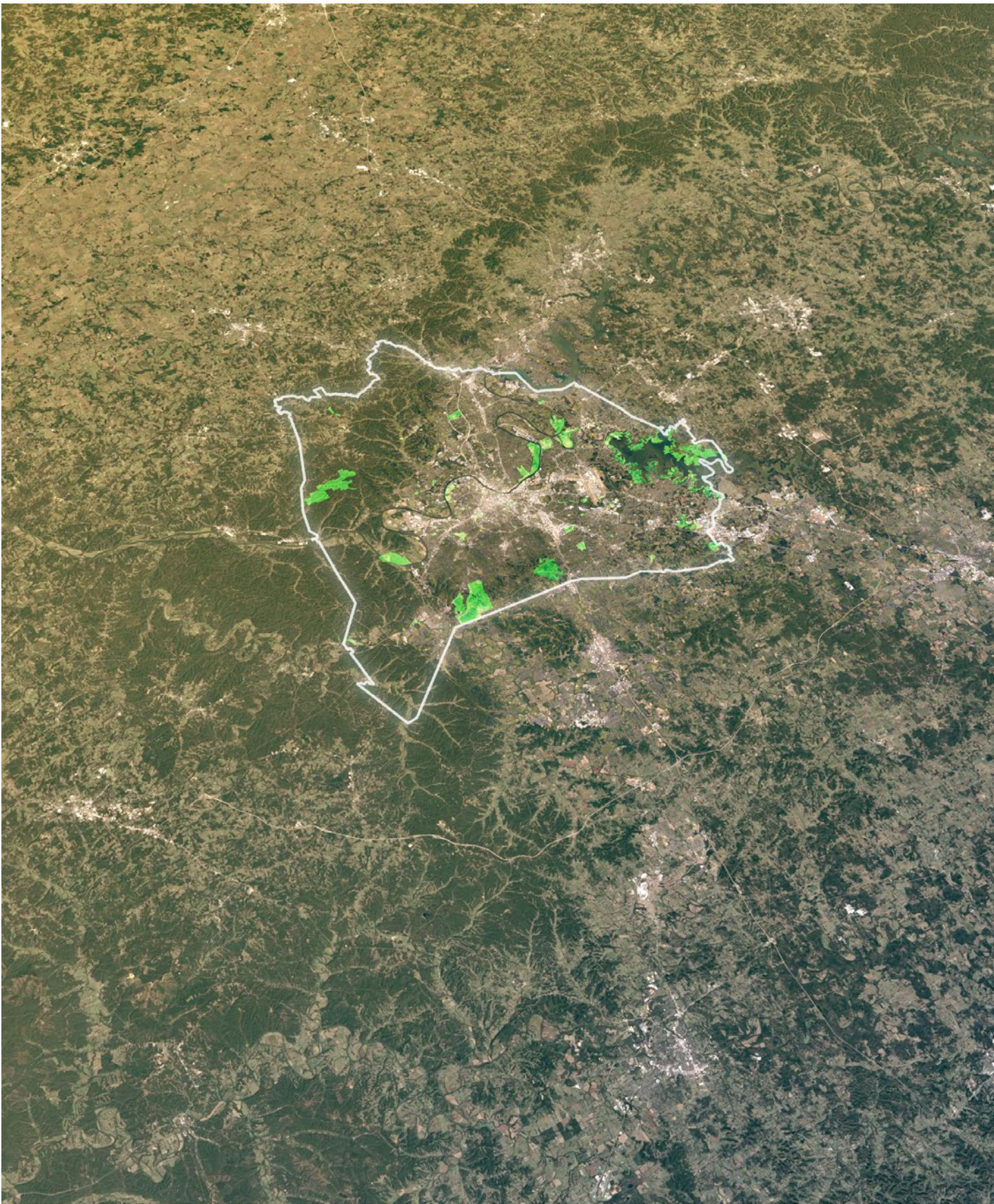
He goes on to talk with several newcomers, including Jacki Holland. "We were at Sevier Park and it was Easter," Holland said. "It was

beautiful and my daughter was playing on the playground. We were just laying on the hill enjoying the day and we just sort of looked at each other and said, **'This could be nice. This could be a nice life for us.'**"

These findings support Mayor Barry's positioning of parks and greenways as infrastructure. **It reflects an understanding of the many ways in which parks provide essential services at a great return on investment.**



Developments in Nashville often promote their proximity to parks and greenways.



PLAN TO PLAY: METRO PARKS MASTER PLAN

3. REGIONAL CONTEXT

3.1 NATURAL SETTING

The Central Basin, also known as the Nashville Basin, is a large pear-shaped geographic area occupying much of the center of Tennessee. The area measures 5,851 square miles, approximately 65 miles east to west and 95 miles north to south. The Central Basin is entirely surrounded by a raised geographic formation called the Highland Rim, except for the valley of the Cumberland River that enters and exits the northern corners of the Basin.

The natural character in this Nashville basin is defined by a series of watersheds and topography of rolling hills, steep bluffs, gentle valleys, and flat floodplains. While most of the northeastern and southeastern area of the county consists of gently rolling hills and valleys, the northwest and southwest are characterized by steeper ridges, bluffs and valley physiography. The vast majority of this terrain has escaped intensive development pressure due in large part to the difficulty and higher costs associated with building on steep terrain.

The county's ecological landscape is home to mature forests, wild blueberry-covered ridge tops, five kinds of forest habitat including rocky cedar glades (which are unique to this part of the world), river marshes, and the extensive river and stream network (The Conservation Fund, Mar 2011).

Within this Cumberland River Basin sits Tennessee's capital city, Nashville. Since becoming a Metropolitan Government in 1963, Nashville/Davidson County contains 526 square miles (336,640 acres). Its geography contains approximately 350 miles of waterways, including the Cumberland River, which bisects the county; numerous other tributaries and streams; and three, large man-made lakes. In addition, over 38,000 acres of land are located in the floodplain. This extensive network of riparian habitat and floodplains has shaped development patterns since human habitation.

The largest river, the Cumberland River, snakes its way from east to west through the middle of the county. Today, this once free-flowing river is actually a "lake" controlled by two dams, Old Hickory Lock and Dam and J. Percy Priest Dam, operated by the United States Army Corps of Engineers. Other smaller rivers and creeks largely flow toward the Cumberland. Some of the more important tributaries in Davidson County include Whites Creek, Manskers Creek, Stones River, Mill Creek, and the Harpeth River. Many have, or are targeted to have, greenway corridors and trails within the floodplain buffer zone.

Each river, stream, and tributary has a protected floodplain buffer zone. Floodplains are areas where flooding is common. Mostly, floodplains are areas adjacent to rivers, creeks, lakes, streams, and other waterways that are subject to flooding when there are significant rainfall events. Floodplains are documented as providing beneficial functions to waterways, especially when they are undisturbed or have been restored to a natural state. These benefits include providing corridors of green open space, filtering impurities and nutrients from stormwater runoff, providing flood and erosion control, recharging groundwater, creating/enhancing wildlife habitat areas, providing agricultural lands with rich soil, and preserving archaeological sites. Undevelopable areas within the floodplain are many times very suitable for use as park land or greenway corridors.

Metro has realized the value of restoring floodplains to a natural condition to not

only reap the ecological rewards but also reduce hazardous flooding (by purchasing and demolishing structures in the floodplain). These buy-outs offer an ever-expanding opportunity over time to extend the existing greenway corridors in Metro along rivers and streams in the Cumberland River Basin.

3.2 CULTURAL AND HISTORIC FEATURES

“History is all explained by geography” (Writers at Work: First Series, 1958). Early settlement along the Cumberland River in a veritable garden of vegetation and plentiful game was no accident. Nashville was founded in 1779 as a settlement originally called Bluff Station and then Fort Nashborough. As the settlement became a town, the original layout was influenced by the river landscape. The traditional platting of land in Nashville followed other English colonial towns by dividing the land into one-acre squares or greens. Normally the squares surrounded a public open space and/or central civic building. But Nashville’s first civic space and courthouse building (i.e., the public square) was four acres in size and took pride of place on a high bluff east and to the edge of the platted squares.

From this town layout “hub,” roadways radiated out like the spokes of a wheel, originally defined by game trails and becoming farm-to-market roads as time went on. These roads connected a thriving young Nashville through rolling terrain of meadow and forest to points of commerce in the territory. The radiating pikes eventually led to the neighboring communities of Columbia, Gallatin, Franklin, Murfreesboro, and Shelbyville.

While some park-like spaces in Nashville preceded the 1897 Tennessee Centennial Exposition, it was the movement to preserve the grounds after the exposition as a permanent park that established a park board in Nashville. The legislation permitted park boards to be established locally throughout Tennessee. Centennial Park, formally acquired in 1902, remains one of Nashville’s most culturally significant sites. It is Watkins Park, donated to the city in 1870 by Samuel Watkins and designated a park in 1901, that is Nashville’s oldest existing park.



Tennessee Centennial Exposition
Chromolithograph by The Henderson Litho Co., 1896.

Nashville’s prime location, accessibility as a river port, and its major railroad system allowed it to grow quickly. It was incorporated and became the county seat of Davidson County in 1806. In 1843, the city was named the permanent capital of the state of Tennessee.

3.2.1 Historical Landscapes

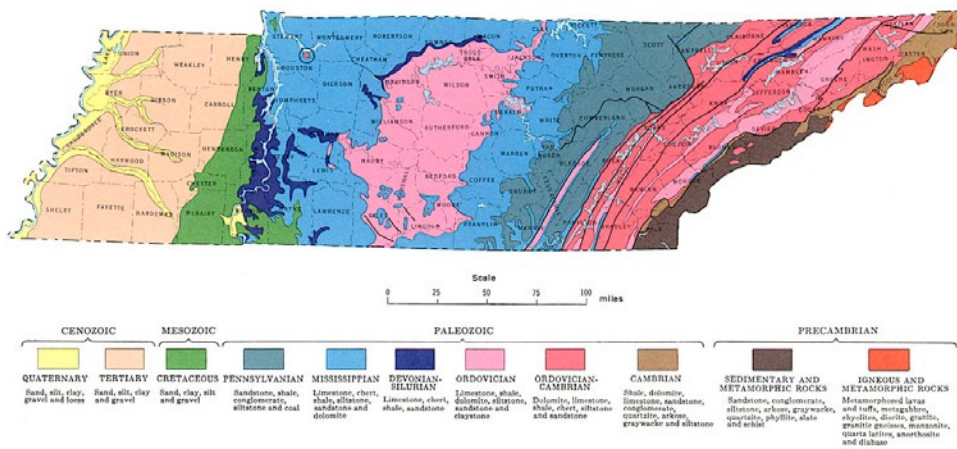
Today over 100 sites in Davidson County are on the National Register of Historic Places. Those include The Hermitage, a nationally significant home of President Andrew Jackson, well-known architectural landmarks such as Union Station and The Parthenon, and historic neighborhoods, rural farms, and communities (Nashville Open Space Plan, Mar 2011).

Development patterns in Davidson County are closely related to its topography. Much of what remains as large, contiguous open space is located in the northwest and far west portions of the county where the terrain is hilly and difficult to develop. In contrast, much of the remaining two-thirds of the county are either built-out or developable (The Conservation Fund, Mar 2011).

3.3 LAND USE AND DEVELOPMENT

The Nashville region has experienced economic growth and stability in recent years that are the envy of many other parts of the country. The next quarter-century offers both opportunity and challenge for cities and regions in their planning and policy decisions. Nashville’s past exemplary good fortune and good choices resulted in transformative urban and regional economic growth, and has placed the city and region at an advantage compared to other parts of the country.

3.3.1 Regional Growth



GENERALIZED GEOLOGIC MAP OF TENNESSEE

Tennessee Geologic Map. Courtesy of TN Department of Environment

3.4 PLANNING CONTEXT

Plan to Play was not created in a vacuum. Other plans form the foundation and context. What follows is a brief summary of some the most important plans that guided this document.

3.4.1 NashvilleNext Plan

NashvilleNext is a plan created by Nashvillians that will guide how and where we grow in Nashville and Davidson County over the next 25 years. Nashville and Davidson County's population is expected to grow by 186,000 by 2040, and the region to 1 million. NashvilleNext is built on the community's goals and vision – ensuring opportunity for all, expanding accessibility, creating economic prosperity, fostering strong neighborhoods, improving education, championing the environment, and being Nashville – building on our unique strengths as a city and as Nashvillians.

Work is now underway on several of the most pressing issues:

- Preserving our neighborhoods while building housing close to transit and job corridors
- Protecting rural character and natural resources
- Creating walkable centers with jobs, housing, and services in suburban and urban areas
- Expanding walking, biking, and transit
- Making our city affordable for all Nashvillians

3.4.2 Community Plans

Metro Nashville/Davidson County's 14 Community Plans are future-focused planning documents adopted by the Metropolitan Planning Commission that describe the role each community plays in realizing the overall vision of the county. Each plan addressed what residential, commercial, office, and open space each community will house for the county. All 14 have been recently updated as part of NashvilleNext implementation.

3.4.3 Nashville Naturally

Another significant planning effort in 2011 resulted in a vision for Nashville's open space, which worked with residents and Metro officials over a year's time to successfully inventory and evaluate the region's natural areas to develop a vision that includes:

- Improving the Cumberland River system, the source of the county's drinking water;
- Increasing the sustainable local food supply through urban and rural farming;
- Improving public health by making it easier for people to bike, walk, and play; and
- Protecting scenic and historic places from disappearing to development.

Nashville Naturally, also known as the Nashville Open Space Plan, calls for connecting open space in all corners of Davidson County through the network of conserved acreage in vital locations along the Cumberland River Basin as well as the greening of the central downtown core. The concept is captured in the plan's simplified slogan, Four Corners, Nine Bends, and a Heart of Green.

3.4.4 WalknBike

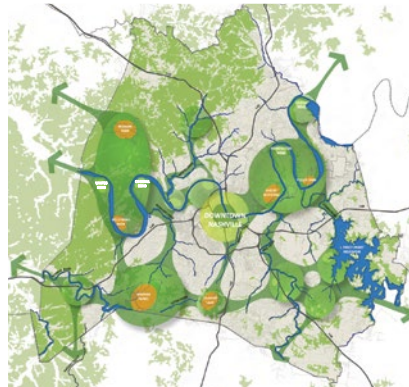
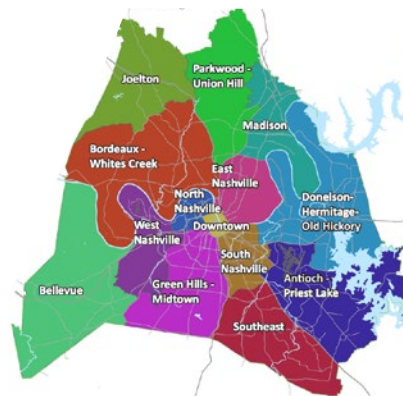
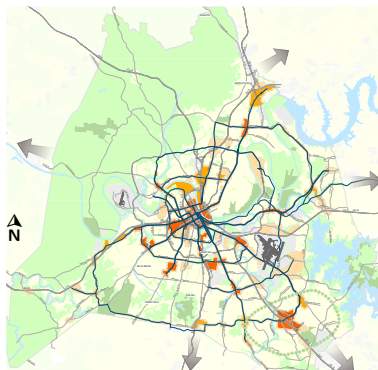
Concurrent with the process of developing Plan to Play, Metro Public Works developed WalknBike, a master plan for the expansion of sidewalks and bicycle facilities throughout Davidson County. Coordination between the two planning teams

helped to ensure an integrated strategy of improving non-motorized access to parks and greenways and to acknowledge the important role that greenway trails serve in providing transportation infrastructure and connectivity.

The planning team reviewed additional planning documents completed in the last several years and worked to build upon or validate recommendations that the community endorsed in these plans that resonate today through this Plan to Play process. Many of these plans have a direct relationship to the Parks and Greenways Master Plan. Others are indirectly related or benefit from the Plan to Play recommendations for expanding recreation opportunities as the community grows in population and changes in demographic diversity. Alphabetically listed below, they are:

- Climate Smart Nashville, A Decision Support Tool for Nashville (ongoing)
- Gear Up 2020, A Set of Fast Actions for Metropolitan Nashville’s Public Space, Infrastructure and Mobility Systems (2016)
- Green Ribbon Committee: Report to the Mayor (2009)
- nMotion, the Nashville MTA strategic plan for transit (2016)
- Mayor’s Youth Master Plan (2010)
- Metropolitan Nashville Urban Forestry and Landscape Master Plan (2016)
- Nashville Public Library Facilities Master Plan 2015–2040 (2016 draft)
- Public Art Community Investment Plan (2016 draft)
- Shaping Healthy Communities (2016)
- Livable Nashville Report (2017)

3.4.5 Other Related Planning Efforts



Planning Images
Clockwise: NashvilleNext Plan, Community Character Plan Areas, Nashville Naturally Open Space Plan, nMotion Transit Vision Plan

3.5 POPULATION AND DEMOGRAPHIC PROJECTIONS

The demographic analysis provides an understanding of the population in Davidson County. This analysis is reflective of the total population, and its key characteristics such as population density, age distribution, households, and other data points. It is important to note that future projections are all based on historical patterns, and unforeseen circumstances during or after the time of the projections could have a significant bearing on the validity of the final projections.

3.5.1 Methodology

Demographic data used for the analysis was obtained from U.S. Census Bureau and from Environmental Systems Research Institute, Inc. (ESRI). All data was acquired in July 2016 and reflects actual numbers as reported in the 2010 Census, and estimates for 2016 and 2021 as obtained by ESRI. Straight line linear regression was utilized for projected 2026 and 2031 demographics. The geographic boundary of Davidson County was utilized as the demographic analysis boundary shown in Figure 3-1.

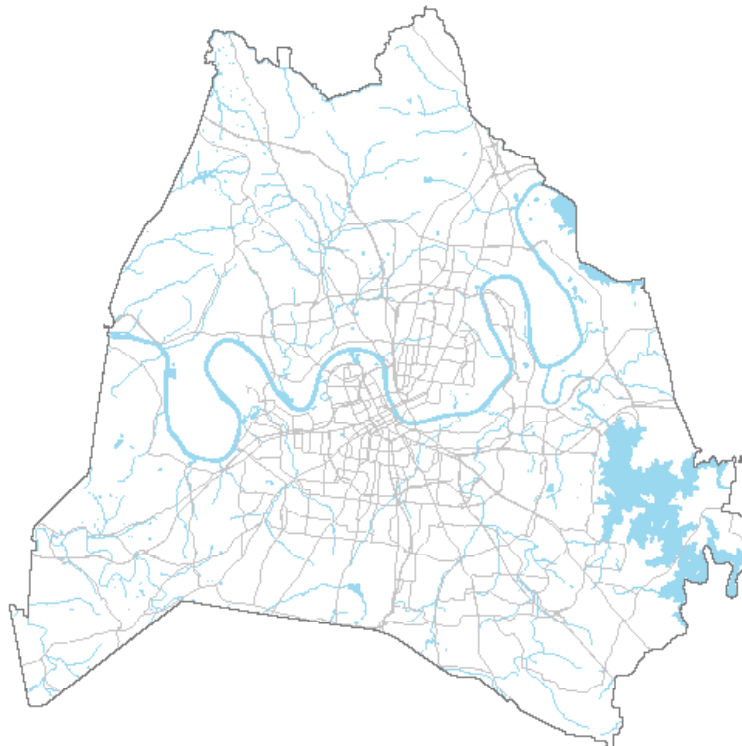


Figure 3-1 Davidson County Boundary

Studies and predictions are indicating significant population growth for Nashville. Based on predictions through 2031, the local population is anticipated to have approximately 820,846 residents living in 30,735 households. This represents 28% population growth rate over the next 15 years. The number of households is projected to experience a 19% growth rate over the same time frame. With a growing population, park services must also grow. Population growth will spur further land development, and the locale and form of this development must inform Nashville’s strategy for future park investments.

3.5.2 Davidson County Populace

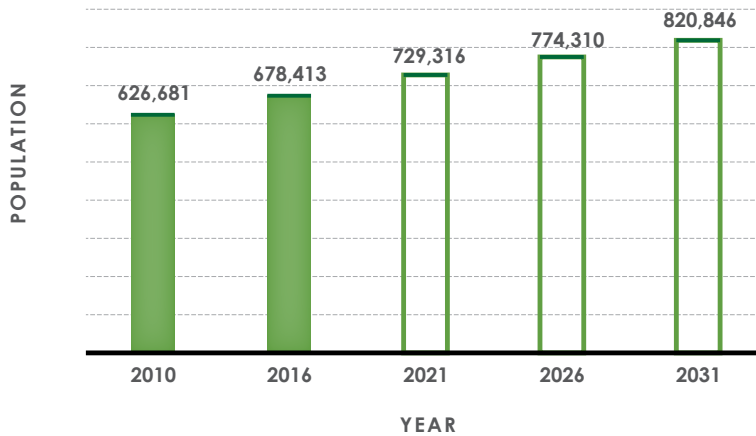


Figure 3-2 Total Population

Generally speaking, the population is getting older. Currently, the county’s largest age segment is the 18-34 age group, which represents 28% of the population; however, it is expected to witness a decline in the next 15 years. Conversely, the 55-plus age population is expected to grow to 28.4% over the next 15 years – the only age segment projected to increase. Nashville’s aging trend means that park services focused on an active adult population (age 55-plus) will assume an even greater importance.

Age Groups

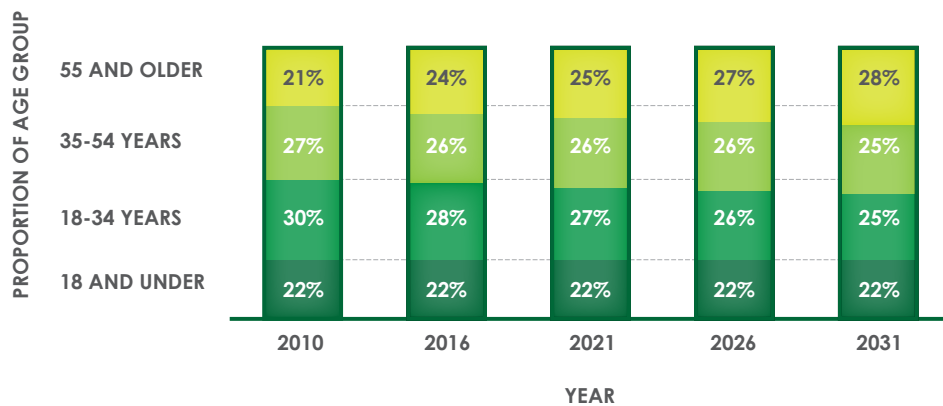


Figure 3-3 Population by Age Segment

Race and Ethnicity

Nashville’s diversity is increasing. A more diverse population will require continued foresight and planning to ensure that park services are responsive to changing customer needs. Understanding how people from a wider breadth of ethnic and cultural backgrounds use parks can help the system better ensure equity, access, and inclusion.

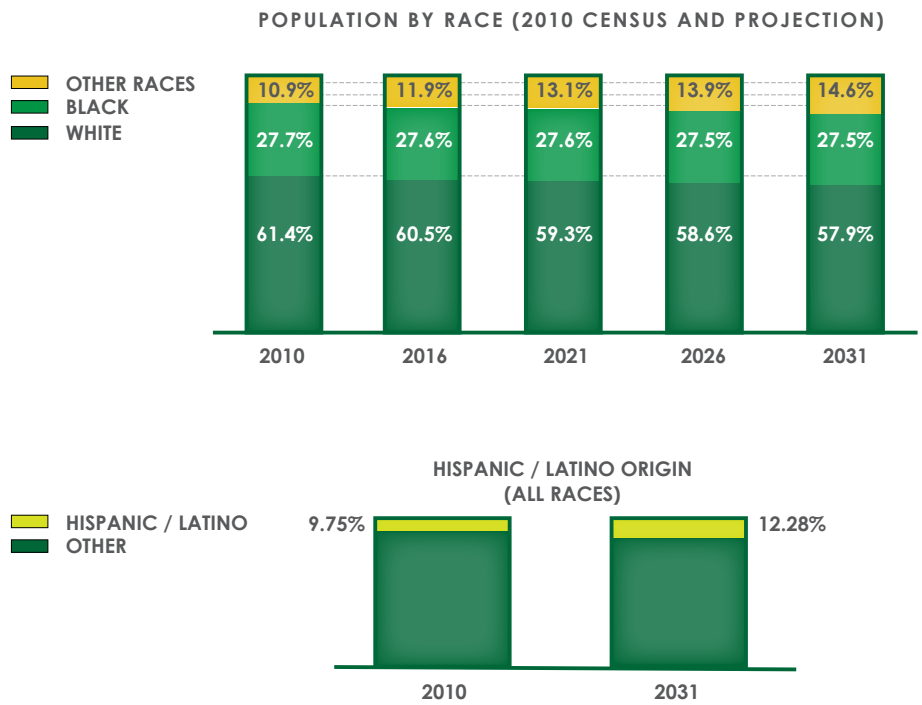


Figure 3-4 Population by Race
 Figure 3-5 Hispanic/Latino Origin Population

Income

As seen in Figure 3-6, the county's per capita and median household income is above state averages but below national median household income averages and slightly higher than national per capita income. **Future predictions expect that both per capita income and median household income for the area will increase to \$36,101 and \$64,850, respectively, by 2031.**

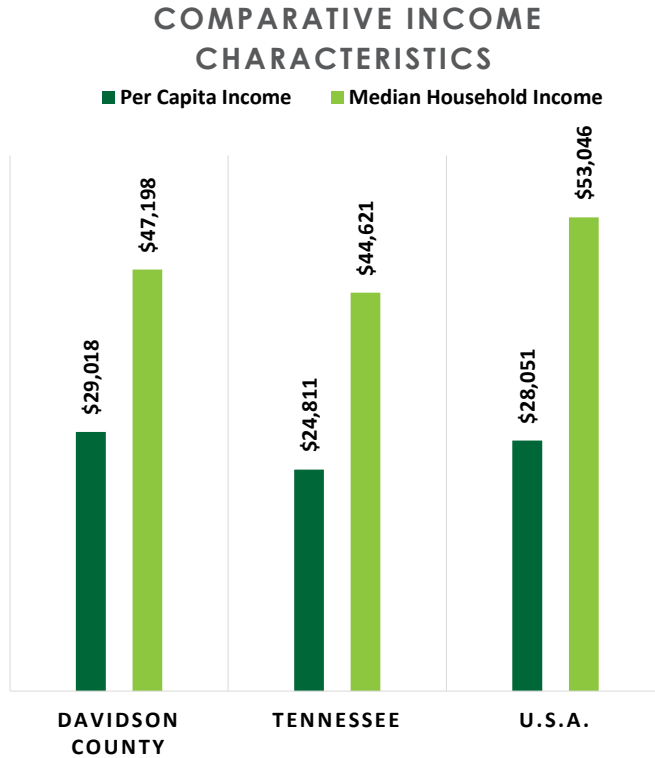


Figure 3-6 Comparative Income Characteristics 2016



3.5.3 Davidson County Implications

The following implications are derived from the analyses provided above. Each implication is organized by the outlined demographic information sections.

1. Population

The population is increasing and projected to experience 28% population growth rate over the next 15 years. **The number of households is projected to experience a 19% growth rate over the same time frame.** With a growing population, recreation services must grow commensurate to the population. Additionally, development will continue over the next 15 years, and the parks and recreation system will need to strategically invest, develop, and maintain facilities in relation to housing development areas.

2. Age Segmentation

The county's aging trend is significant because **programs and facilities focused on an active adult (55-plus population) will assume an even greater importance as the population changes in the years to come.** Age segments have different activity preferences. For example, older adults may enjoy passive recreation activities more so than active. However, with the millennial generation surpassing the baby boomer population, multigenerational facilities and services will be crucial to help support different age segments throughout Davidson County in the years to come.

3. Households and Income

With a median and per capita household income lower than state averages, it will be important for the county to provide offerings that focus on value while still offering a high-quality product. It would also benefit the system to **look into different funding and revenue strategies to help the department cover costs.**

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PLAN TO PLAY: METRO PARKS DRAFT MASTER PLAN

4. EXISTING PARKS AND GREENWAYS

Part of the process of determining where Metro Parks needs to go is a quantified assessment of where it is. This chapter documents key measures of Nashville's existing parks and greenways; its facilities, programs, and services; and its operations, maintenance, and finance. Together, these data points form a picture of the current state of Nashville's existing park system and a basis for decisions about the future. Figure 4-1 shows a quick overview of the many elements that make up the current park system.



Figure 4-1 Metro Parks and Greenways Overview

4.1 2002 MASTER PLAN STATUS

Many of the places, spaces, and experiences that Nashvillians have loved for generations are the legacy of a century's worth of foresight, investment, and hard work by people who love parks. The City of Nashville's Department of Parks and Recreation was established in 1901. Over the course of the 20th century, it created a system of parks worthy of great pride. Nashville marked the 100th anniversary of its park system in 2001. In recognition of this milestone and to guide the system into its second century, then-Mayor Bill Purcell commissioned the first-ever parks and greenway master plan, which was completed in 2002 (a minor update was completed in 2008).

The 2002 plan outlined an investment strategy for the growth of Nashville's park and greenway system. By 2016, Mayors Purcell, Dean, and Barry, with the Metro Council, had invested approximately \$350 million of capital funds into our parks. The results have been transformative.

- Over 5,000 acres of park land have been added with a total acreage now approaching 16,000 acres.
- Over 100 new playgrounds now serve neighborhoods across the county.
- The greenway system, which started only in the early 1990s, has grown to over 80 miles.

Do many in Nashville remember when there were no dog parks, spraygrounds, skateparks, or regional community centers with indoor walking tracks and fitness centers? **This unprecedented capital investment in growth and development was the result of public support, political leadership, dedicated staff and, notably, a solid plan. Nashville planned for the future it wanted.** That plan, 15 years old as of this writing, has been largely implemented and is now obsolete.

This chapter of Plan to Play not only looks at the current status of Metro Parks' capital investments (its land and facilities), it also measures the department's programs, operations, and finance.

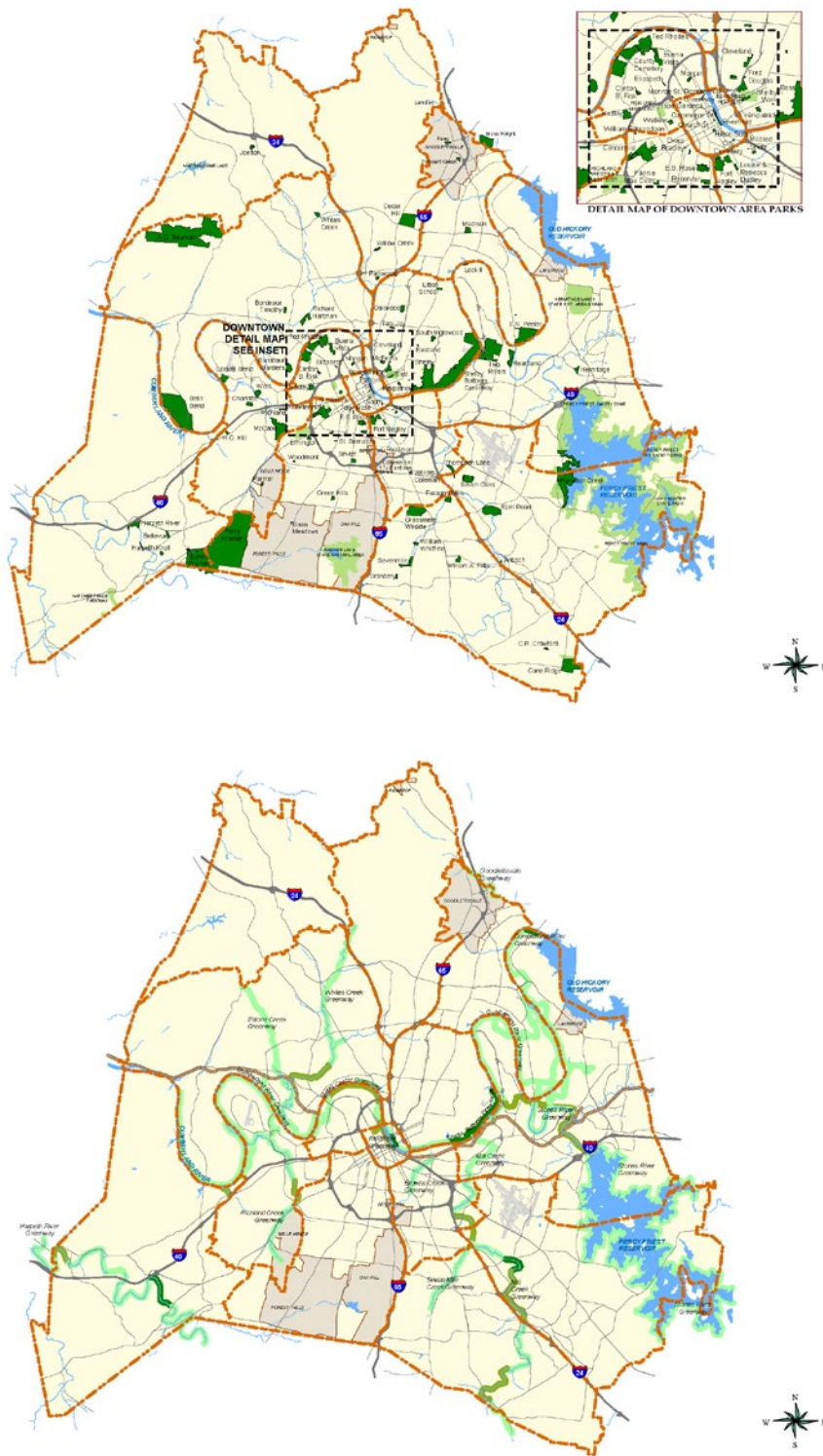


Figure 4-2 2002 Master Plan Parks and Greenways Maps

4.2 LAND



Parks across Nashville’s system range in size from one-quarter acre to over 3,000 acres. Collectively, they equal 15,873 acres as of January 2017. The two graphs below illustrate the growth of Nashville’s park system since completion of the 2002 master plan. As a means of organizing these public open spaces, the parks are grouped according to a hierarchy of typologies.

The 2002 master plan used a now-outdated set of park typologies. The list below reflects the typologies that are recommended in Chapter 7 of Plan to Play. These new classifications are used here to quantify the existing system to allow for consistency and ease of comparison throughout the plan.

The park typologies used in Plan to Play are:

- Pocket Parks
- Neighborhood Parks
- Community Parks
- Regional Parks
- Greenway Corridors
- Signature Parks
- Specialty Parks

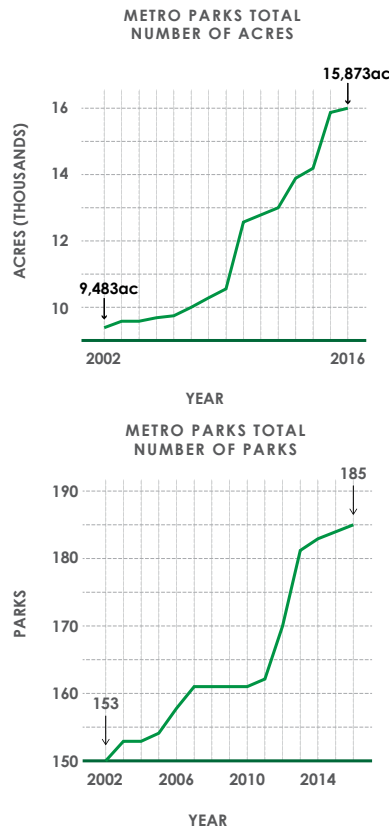


Figure 4-3 Growth in number of parks and total acreage since 2002.

EXISTING PARK ACRES	
Park Type	METRO-OWNED EXISTING 2016
Pocket Parks (incl. school playgrounds): < 3 acres	54
Neighborhood Parks: 3 - 20 acres	511
Community Parks: 20 - 100 acres	1,169
Regional Parks: 100 + acres	10,176
Signature Parks	168
Special Use Park (incl. sports facilities)	721
Greenway Corridors	643
Total Developed Park Land*	13,445

* Includes land bank properties. Excludes undeveloped.

Figure 4-4 Existing park acreage by park type.

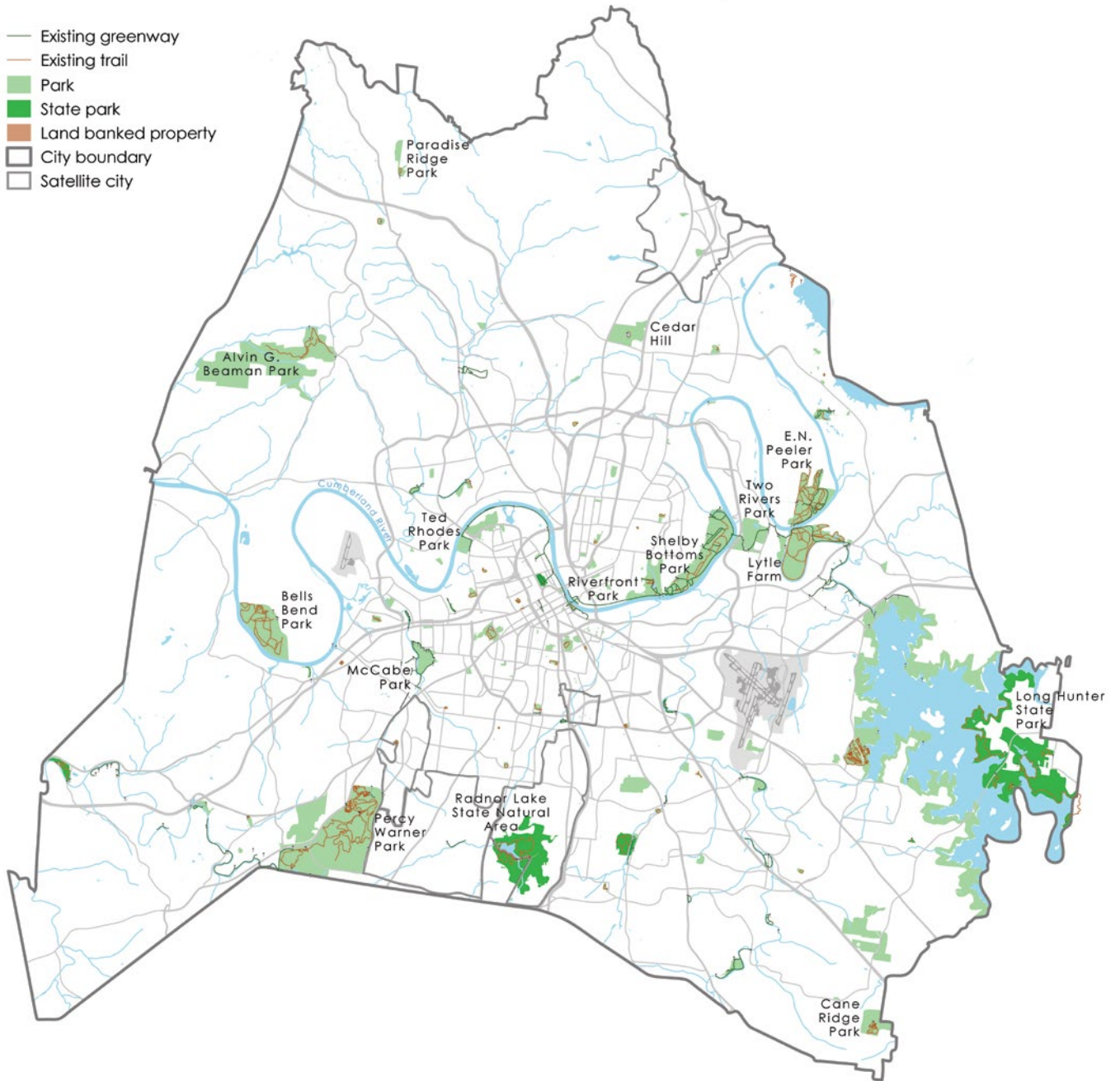


Figure 4-5 Map of Existing Park and Greenway System



4.2.1 Pocket Parks (<3 ac)

Pocket parks are likely to be located in urban settings where land availability is more limited. The 2002 master plan recommended against the development of pocket parks because they can be more expensive to maintain per acre than other park types. Existing examples of pocket parks are Church Street Park and Bass Park.



Church Street Park

4.2.2 Neighborhood Parks (3-20 ac)

Neighborhood parks are often the recreational and social focus of a community. Typically active and passive uses include sport courts, playground, landscaping and seating, picnic shelters, a small field, or a community center. Existing examples of neighborhood parks include Bellevue Park and Richland Park.



Fannie Mae Dees Park

4.2.3 Community Parks (20-50 ac)

Community parks serve larger areas and may provide more intensive recreation activities like sports complexes, community centers, and larger gathering areas. These parks can preserve significant natural areas. Existing examples of community parks include Hadley Park and Sevier Park.



Rose Park

Regional parks have the acreage to feature one-of-a-kind facilities like a golf course or a major sports complex. Many of Nashville’s regional parks are also natural areas where habitat protection and passive recreation are the primary goals. Shelby Park and the Warner Parks are two examples of existing regional parks.



Bells Bend Park

4.2.4 Regional Parks (50-500+ ac)

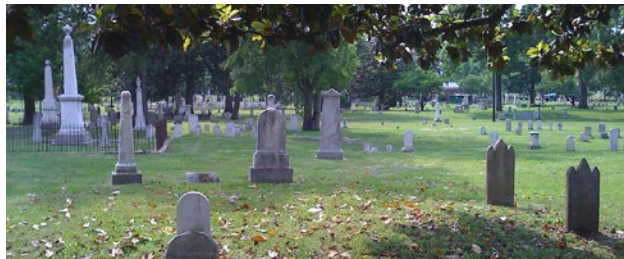
Signature parks are one-of-a-kind public spaces, typically in urban areas, that play host to major civic events, festivals, and concerts, and attract tourists. Existing signature parks include Riverfront Park and Centennial Park.



Centennial Park

4.2.5 Signature Parks

Special use parks typically have a single use and may focus on large sports complexes. Ted Rhodes Park, the Nashville City Cemetery, and Harpeth River Park are existing examples of special use parks.



Nashville City Cemetery

4.2.6 Special Use Park

4.2.7 Greenway Corridors

Greenways are linear corridors of open space for conservation, recreation, and non-motorized transportation. Greenways may exist with no improvements at all for habitat protection. The greenways program has been underway since the early 1990s. It is a prominent component of the Metro Parks Department, spearheaded by the Greenways Commission, first appointed in 1992.

The greenway program provides concerted effort toward preserving environmentally important lands along the county's seven main water corridors and natural features as well as building trails within them for the multiple benefits of recreation, non-motorized transportation, environmental conservation, and community health.

Because the greenway component of the park system is both corridor-based (LAND) and trail-based (FACILITY), the existing inventory of "greenway trails" is included in the Facilities discussion to follow.

Greenway development has focused primarily on Davidson County's waterways, which include the following:

- Cumberland River Greenway
- Harpeth River Greenway
- Seven Mile Creek Greenway
- Mill Creek Greenway
- Stones River Greenway
- Whites Creek Greenway
- Richland Creek Greenway
- Browns Creek Greenway



Harpeth River Greenway

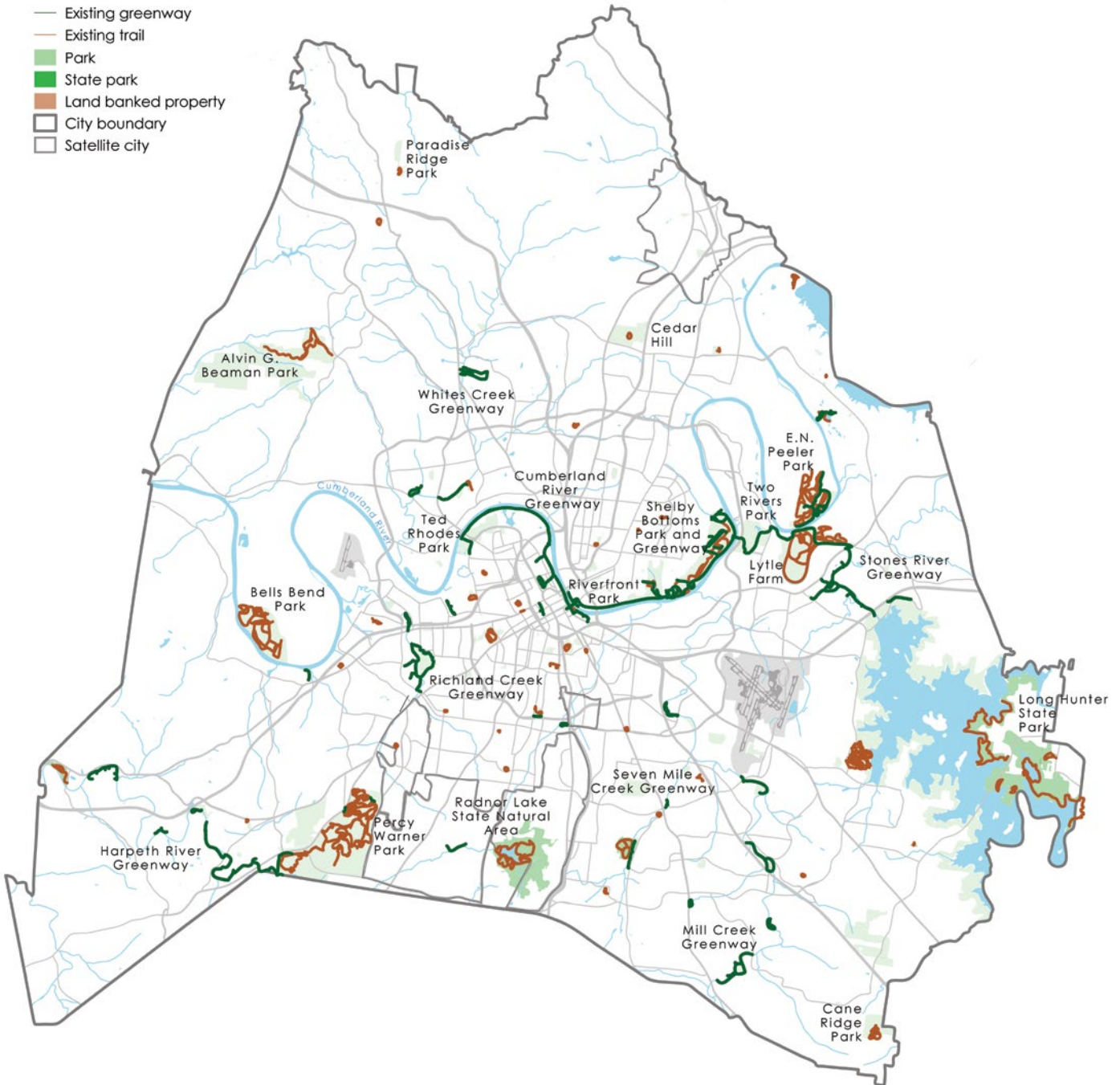


Figure 4-6 Map of Nashville's Existing Greenways



4.2.8 Other Park and Recreation Land

Note that some properties managed by other agencies function as Metro Parks. This includes 55 playgrounds and other recreational facilities on land owned by Metropolitan Nashville Public Schools and other public agencies.

Other parks in Davidson County are managed by agencies including Tennessee State Parks, the U.S. Army Corps of Engineers, and satellite cities. Where appropriate, these parks are taken into consider in Plan to Play so that a fuller picture of park service, regardless of provider, can be seen.

4.2.9 Historic Sites

There are 18 Metro Parks-owned or -operated sites, as well as multiple other historic sites and features, that have been locally designated as Historic Landmark Districts. Designation requires that all exterior alterations must comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties and places the authority for this determination under the Metropolitan Historic Zoning Commission. Metro Parks' historic sites include landscapes, buildings, and other resources. These sites are located on park types of all kinds and are used for a variety of programs, most of which are addressed in the next sections of this chapter.

- Sunnyside Mansion (Sevier Park)
- Centennial Park and the Parthenon
- Grassmere (Croft House) at the Nashville Zoo (operated by the Nashville Zoo)
- Fort Negley
- Nashville City Cemetery
- Two Rivers Mansion
- Stone Hall (Stones River Greenway)
- Warner Parks
- Shelby Park and the U.S. Naval Reserve Center
- Public Square (Metro Courthouse)
- Buchanan Station Cemetery
- Fort Nashborough
- Aaitafama Archaeological Park (Kellytown)
- Lock One Park
- Lock Two Park
- Buchanan House at Bells Bend



Historic Sites. Clockwise: Ft. Negley, Metro Public Square, Two Rivers Mansion, Parthenon at Centennial Park

4.3 FACILITIES



Facilities are all of the built assets and amenities in the park system. They range from community centers to trails, from swimming pools to museums and playgrounds, and have a total estimated asset value of approximately \$200 million. These facilities support both general informal use by the public as well as specialized or scheduled use for athletic competitions, recreation programs, or other events. The table below lists and quantifies all of the major facilities within the park system by type. The list is not exhaustive, but it does provide a general overview of the system’s facility types.

Buildings of all kinds make up an important class of facilities within the system. Totalling over 1.2 million square feet of conditioned spaces, they represent Metro Parks’ most monetarily valuable assets after land. The graph below illustrates the increase in the total square footage of buildings in Nashville’s park system since completion of the 2002 master plan. Figure 4-9 maps the geographic distribution of the primary existing buildings in the park system. These include all of the community centers, nature centers, cultural centers like the Centennial Performing Arts Studios, golf course clubhouses, and specialty facilities like Sportsplex and the Wave Country water park.

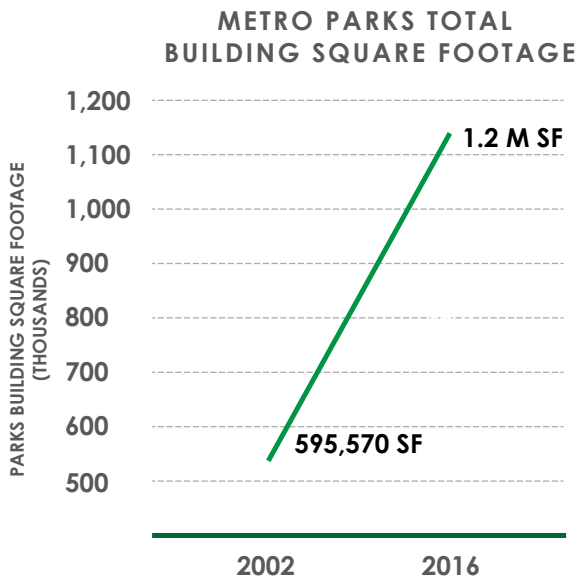


Figure 4-7 Growth in building square footage since 2002.

Existing Park Facilities	
Facility Type	Metro-Owned Existing 2016
Reservable Shelters	60
Multipurpose Fields	83
Ball Fields (Adult and Youth)	86
Basketball Courts	61
Tennis Courts	147
Playgrounds	156
Dog Parks	7
Paved Multiuse Trails	102
Unpaved Trails/ Hiking Trails	66
Mountain Bike Trails	23
Outdoor Pools	4
INDOOR AMENITIES:	
Community Center/Recreation /Gymnasium/Fitness Facility	810,069 SF

Figure 4-8 Existing park facilities by type.

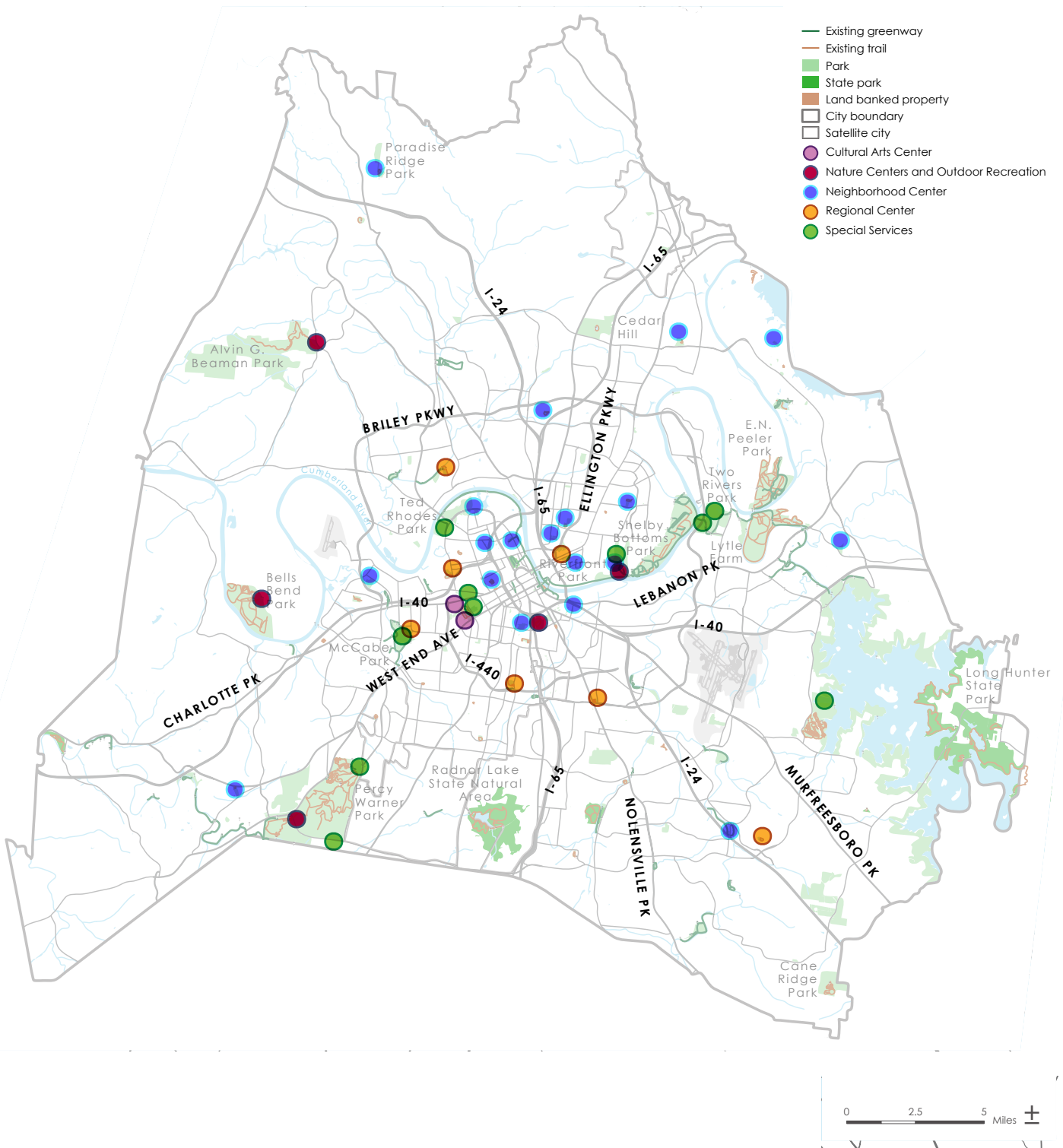


Figure 4-9 Map of Community Center Facilities

4.3.1 Regional Community Centers

Metro Parks has seven existing regional community centers that total over 230,000 square feet of space. Each of these centers includes a fully equipped fitness center, gymnasium, indoor walking track, movement studio, arts and crafts room, multipurpose meeting spaces, and a game room. Some regional centers include an indoor swimming pool or a senior center.



East Park: Regional Community Center

Figure 4-10 outlines some of the general operating statistics for each of the regional centers.

Center Name	Square Footage*	# of Programs (2015)	Free Programs	% of Free Programs	# of Participations (2015)	# of Visitors	Volunteer Hours
Southeast Regional Center	46,000	24	17	71%	21,013	138,856	3,516
Hadley Regional Center*	37,776	17	8	47%	35,369	78,555	1,125
Coleman Regional Center*	37,000	33	18	55%	49,508	131,092	540
East Regional Center*	33,994	30	16	53%	18,305	43,391	1,800
Hartman Regional Center*	33,915	53	48	91%	32,548	41,932	3,200
McCabe Regional Center	25,000	32	20	63%	33,511	79,571	250
Sevier Regional Center	20,000	29	16	55%	22,451	54,563	73
Total	233,685	218	143	66%	212,705	567,960	10,504

* Facility includes indoor swimming pool

** Chart sorted by square footage

Figure 4-10 Regional Center Facility Statistics

Metro Parks has 19 existing neighborhood community centers that total over 300,000 square feet of space. These centers include a gymnasium and multipurpose rooms that are used for games, arts and crafts, community meetings, and other activities. Some of the neighborhood centers include small fitness rooms, a seasonal outdoor swimming pool, or other features. Figure 4-11 outlines some of the general operating metrics for each of the neighborhood centers.



Shelby: Neighborhood Community Center

4.3.2 Neighborhood Community Centers

Center Name	Square Footage*	# of Programs (2015)	# of Participations (2015)	# of Visitors	Volunteer Hours
Looby	24,307	22	60,734	80,654	450
Napier	23,430	24	11,687	-	2,524
South Inglewood	23,000	14	12,525	31,661	200
McFerrin	22,500	14	12,785	30,800	750
Old Hickory	22,279	10	28,869	39,919	1,568
Easley Center at Rose Park	17,676	16	26,596	33,138	322
Parkwood	16,890	11	9,823	19,509	105
Bellevue	16,801	11	32,548	31,892	20
Shelby	15,928	24	13,420	17,931	688
Madison	15,800	14	29,865	60,105	570
Morgan	15,250	33	17,596	31,274	35
Cleveland	15,000	-	-	-	152
Antioch	13,580	15	32,548	29,118	7,018
Hermitage	13,319	13	8,931	16,074	1,175
Watkins	11,924	17	49,059	64,219	5,000
Kirkpatrick	11,470	18	32,892	52,946	680
Paradise Ridge	9,210	48	13,218	18,070	828
West	9,210	-	-	-	-
Elizabeth Senior Center	8,854	39	18,614	20,870	240
Total	306,428	343	411,710	578,180	22,325

Figure 4-11 Neighborhood Center Facility Statistics

4.3.3 Nature and Outdoor Centers

Metro Parks manages over 30,000 square feet of nature and outdoor centers. These buildings provide interpretive and exhibit space, a multipurpose meeting room, library, staff offices, and outdoor classroom spaces. Figure 4-13 outlines some of the general operating metrics for each of the nature centers.



Beaman Park Nature Center

Center/Program Name	Square Footage*	# of Programs (2015)	# of Participations (2015)	Volunteer Hours
Warner Nature Center	21,600	205	11,622	7,970
Fort Negley Visitor Center	3,500	162	5,830	3,959
Shelby Nature Center	3,175	236	5,974	2,206
Bells Bend Outdoor Center	2,228	152	5,125	708
Beaman Nature Center	2,201	191	3,193	185
Outdoor Recreation Program	-	6	904	-
Total	32,704	952	32,648	15,028

*Chart sorted by square footage

Figure 4-12 Nature and Outdoor Facilities Statistics

4.3.4 Cultural Arts

Programs related to dance, music, theater, and the visual arts are hosted in community centers and other facilities throughout the park system. The Centennial Performing Arts Center (16,500 square feet) and the Centennial Art Center (3,000 square feet) are programmed exclusively for the arts. These, as well as shared arts spaces in community centers are reflected in the square footage numbers in Figure 4-13.



Centennial Arts Building

Center/Program Name	Square Footage*	# of Programs (2015)	# of Participations (2015)	Volunteer Hours
Dance	51,950	36	29,045	n/a
Music	15,928	18	22,711	n/a
Theater	15,928	39	10,943	n/a
Visual Arts	3,318	18	13,554	n/a
Total	87,124	111	76,253	n/a

*Chart sorted by square footage

Figure 4-13 Cultural Arts and Facilities Statistics

4.3.5 Special Use Facilities

Special use facilities are best understood as revenue producing destinations in the parks. Metro Parks manages over 250,000 square feet of special service facilities. The existing special use facilities include seven golf courses, a sailboat marina on Percy Priest Lake, and a water park with wave pool and slides. The Sportsplex is Metro’s only field house with two sheets of ice, a competitive swimming pool, fitness center, and tennis complex. The Parthenon is the jewel of the Metro Parks system and is part of the Special Services Division because it generates revenue with nearly 300,000 visitors a year.

Facility Name	Square Footage*	# of Programs (2015)	# of Participations (2015)**
Sportsplex	151,550	43	274,804
Wave Country	32,000	n/a	54,225
Parthenon	22,217	n/a	293,800
Ted Rhodes Golf Course	8,348	n/a	44,479
Two Rivers Golf Course	8,348	n/a	60,388
McCabe Golf Course	6,750	n/a	111,473
Harpeth Hills Golf Course	6,208	n/a	68,674
Shelby Golf Course	6,000	n/a	31,151
Warner Golf Course	6,000	n/a	24,366
Marina	3,900	n/a	38,952
Total	251,321	340,574	1,002,312

*Chart sorted by square footage

** For golf courses, number represents rounds played

Figure 4-14 Special Use Facilities Statistics



Special Use Facilities
Centennial Sportsplex, Wave Country

4.3.6 Greenway Trail Facilities

Metro's Greenways are linear corridors of open space for conservation, recreation, and non-motorized transportation. See Section 4.2.7 for a discussion of greenway corridor land acreage and system map. An existing countywide greenway plan provides a framework for this comprehensive network of greenway corridors and trails to provide a wide range of positive impacts and multiple benefits.

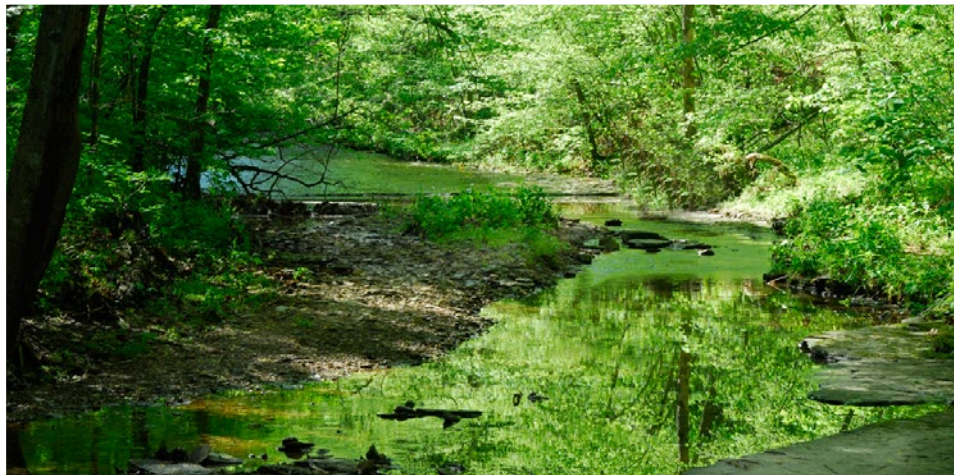
Providing a network of accessible, safe, and attractive greenway trails within these corridors is a priority. As a facility type, greenways may include paved, multiuse trails and/or primitive hiking trails that provide connectivity between multiple destinations. See the Appendix for a thorough accounting of existing greenway trail facilities.

EXISTING MULTIUSE PAVED TRAIL FACILITIES – 102 MILES

- The paved, multiuse greenway trails are part of an off-street system and often provide connections among destinations. They contribute to the city's multimodal transportation network by connecting with on-street facilities. Fitness trails and walking loops in active recreation parks are included in the total miles for this discussion.

EXISTING UNPAVED TRAIL FACILITIES – 66 MILES

- Unpaved trails include everything from short spur trails to destinations off larger multiuse trails to long, natural rustic hiking experiences in a wide variety of Metro greenway corridors and park properties.



Greenways and Trails Across Nashville
From Top: Centennial Park, Beaman Park, Shelby Bottoms Greenway and Park

4.4 PROGRAMS



Metro Parks has an expansive recreation program inventory. The department offers a broad array of approximately 1,200 programs per week with over 725,000 participations in 2015. Programs include environmental education, after-school and summer enrichment, sport clinics and lessons, fitness and wellness classes, music, dance, theater, outdoor adventure trips, hikes, tours, and lessons in the visual arts. Senior programs are focused at the Elizabeth Park Community Center and four additional regional centers. Metro's disabilities program is one of the only programs in the city for adults who have aged out of many other systems. The core program areas offered by Metro Parks include:

- Community Enrichment (after-school and summer programs, senior programs)
- Cultural Arts (theater, dance, music, visual arts)
- Fitness and Wellness (boot camp, yoga, Zumba, spin class)
- Nature and History
- Outdoor Recreation (kayak and canoe, hiking, mountain biking)
- Specialized Recreation (golf clinics)
- Sports and Aquatics (swim and sports lessons, leagues)
- Special Events (both Parks-sponsored and community-hosted events including festivals, concerts, walks/runs, etc.)

The following pages outline existing program offerings based on facility type. As part of the Plan to Play process, a full assessment of Parks' programs was conducted. The assessment included a space productivity analysis (availability of public facilities vs. the hours of actual use), an evaluation of individual programs (delivery method, participation, and revenue), and a systemwide accounting of programs and their core services areas. Some of this data is presented in this section. See the Appendix for the full program study.

Some definitions used in this section:

Organized Clubs/Leagues

Organized clubs and leagues are structured activities in which participants gather regularly to participate in an activity. Clubs and leagues are typically associated with member or participant fees/dues, but that is not always the case. Common examples of organized clubs and leagues include, but are not limited to, Master Swim Club, basketball leagues, gardening clubs, etc.

Drop-in/Unstructured

Drop-in, or unstructured, activities are self-guided and lack a formal structure. These activities are not time-bound and do not have a repeating/recurring schedule participants must follow. Common examples of drop-in/unstructured activities include, but are not limited to, open/lap swim, weightlifting, and open gym.

Instructional Classes/Clinics

Instructional classes and clinics are structured activities designed to teach a specific skill(s) to participants. Classes are typically associated with a fee and have one or multiple instructors. Classes and clinics also usually meet regularly and have a defined schedule of classes/clinics. Common examples of instructional classes/clinics include, but are not limited to, swim lessons, baseball clinics, and yoga.

Rentals and Park Use Permits

Rentals and park use permits are defined as the approved private use of a public space. Rentals and park use permits include facility and open space rentals and typically are approved via an application process through the Parks department. Common examples of rentals and park use permits include, but are not limited to, picnic shelter rentals, birthday parties, and photography/film events.

Metro Parks has seven regional community centers. Typical programming based out of the regional centers include group fitness, youth and adult sports, dance classes, senior recreation, art classes, aquatics, free play, and youth out-of-school programs. In addition, the multipurpose rooms in the regional centers are popular rental spaces for private and community functions.

The regional community centers provide a wide array of different programmatic opportunities with the most programs pertaining to fitness and wellness. Nature and history, outdoor recreation, and cultural arts are the least-offered program types. Regional centers offer 66% of programs free of charge.

Figure 4-15 through Figure 4-17 below provide additional information about the core areas, delivery methods, and service providers in regional community centers.

4.4.1 Regional Community Centers

Regional Center Programs: Delivery Method	
Delivery Method	Percentage
Organized Clubs/Leagues	40%
Drop-in/Unstructured	25%
Instructional Classes/Clinics	34%
Rentals and Park Use Permits (including private lessons/personal training)	Additional 2,824 recorded
Total	100%

Figure 4-15 Regional Center Programs: Delivery Method

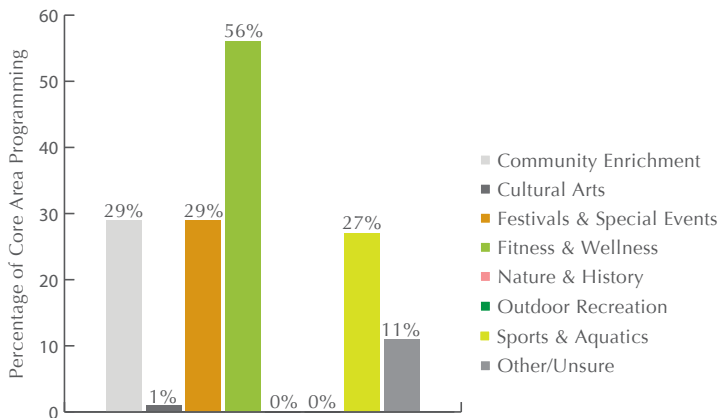


Figure 4-16 Regional Center Programs: Core Areas

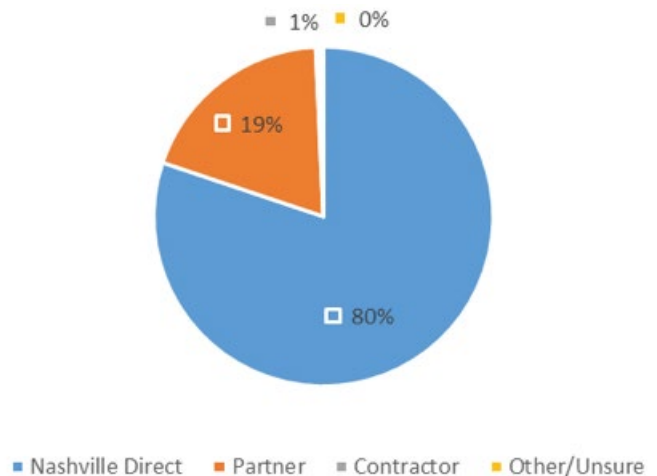


Figure 4-17 Regional Center Programs: Service Provider

4.4.2 Neighborhood Community Centers

Metro Parks has 19 neighborhood community centers. Typical programming at neighborhood centers includes competitive adult and youth sports, arts and crafts, walking clubs, scouting programs, organized games, and social events. All neighborhood centers can be rented outside of business hours for private and community functions.

Neighborhood centers offer many different program types with the most classified as community enrichment. Outdoor recreation programs are offered the least. The neighborhood centers differ from the regional centers in that there are more unstructured, or drop-in, programs available at neighborhood centers. Additionally, the neighborhood centers benefit from more partnerships, and only 72% of programs are offered directly by Metro Parks.

Figure 4-18 through Figure 4-20 below provide additional data about the core areas, delivery methods, and service providers at neighborhood community centers.

Neighborhood Center Programs: Delivery Method	
Delivery Method	Percentage
Organized Clubs/Leagues	44%
Drop-in/Unstructured	44%
Instructional Classes/Clinics	12%
Rentals and Park Use Permits (including personal trainers and private parties)	Additional 4,570 recorded
Total	100%

Figure 4-18 Neighborhood Center Programs Delivery Method

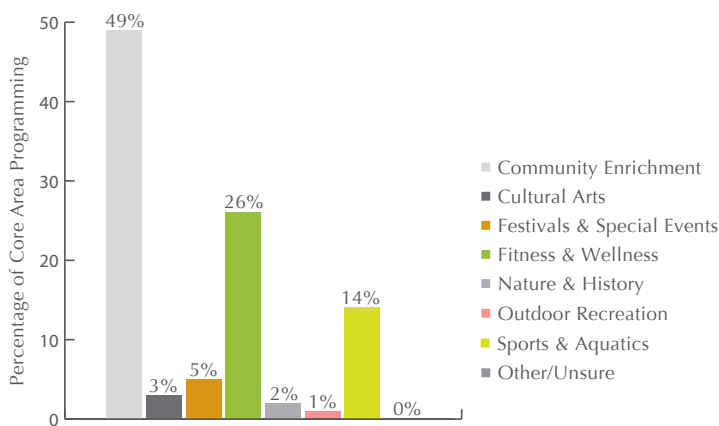


Figure 4-19 Neighborhood Center Programs: Core Areas

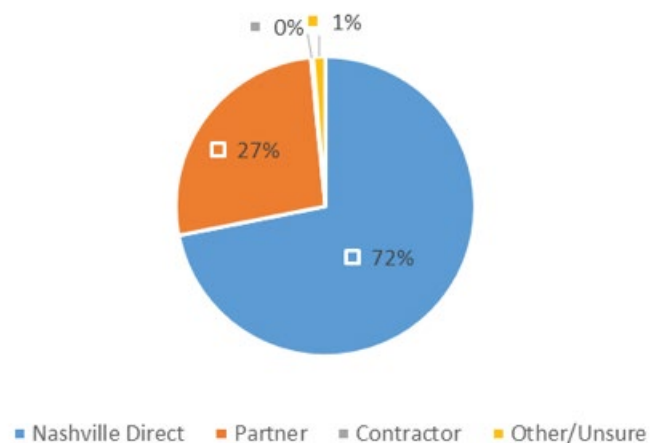


Figure 4-20 Neighborhood Center Programs: Service Provider

4.4.3 Environmental and Outdoor Recreation

In addition to the 26 regional and neighborhood community centers, Metro Parks offers programming out of its nature and outdoor centers. The Fort Negley Visitors Center is also included in this section since it is operationally grouped with the nature and interpretive-oriented facilities.

Metro Parks provides approximately 1,400 individual classes at these facilities annually. In 2015, these programs yielded 33,648 participations (not including private facility use, direct visitor service, or volunteer projects at the nature centers). Figures below show the core area, delivery methods used, and service provider at nature and indoor centers.

Figure 4-21 through Figure 4-23 below represent the core areas, delivery methods, and service provider. Note that very few programs are currently provided through partners.

Nature Centers and Outdoor Recreation Programs: Delivery Method	
Delivery Method	Percentage
Drop-in/Unstructured	13%
Organized Clubs/Leagues	2%
Instructional Classes/Interpretive Programs	47%
Rentals and Park Use Permits	8%
Field Trips	27%
Outreach	4%
Total	100%

Figure 4-21 Environmental Centers and Outdoor Recreation Programs Delivery Method

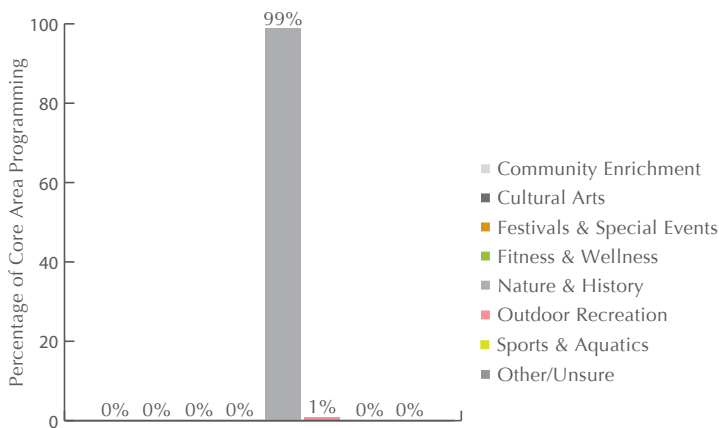


Figure 4-22 Environmental Centers and Outdoor Recreation Programs Core Areas

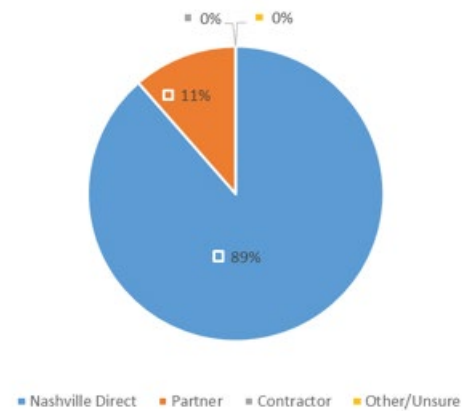


Figure 4-23 Environmental Centers and Outdoor Recreation Programs Service Provider

4.4.4 Cultural Arts

Cultural arts programs are concentrated at a few venues including the Centennial Performing Arts Studios, the Centennial Art Center, and the Looby Theater. Satellite programs are offered at community centers as staffing and funding permit.

Figure 4-24 through Figure 4-26 outlines some of the general operating metrics for each of the arts spaces.

Cultural Arts: Delivery Method	
Delivery Method	Percentage
Drop-in/Unstructured/Self-Guided/Events	8%
Instructional Classes/Workshops/Clinics/Interpretive Programs	74%
Leagues/Competitions	0%
Organized Clubs/Registered Low-Organized Activities/Staff-guided	0%
Outreach	2%
Rentals and Park Use Permits	17%
Total	100%

Figure 4-24 Cultural Arts Programs Delivery Method

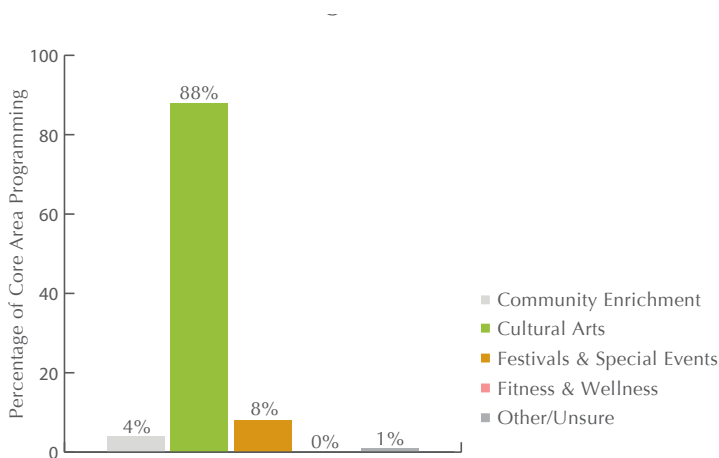


Figure 4-25 Cultural Arts Programs: Core Areas

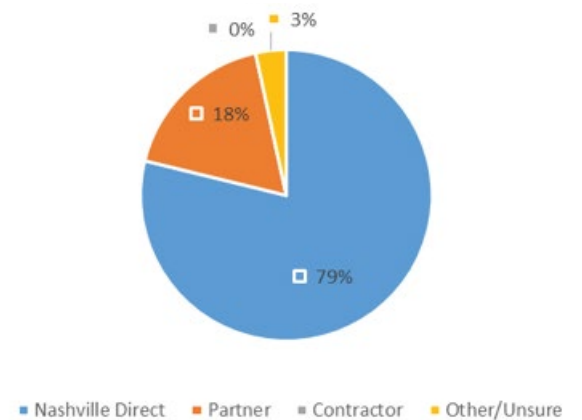


Figure 4-26 Cultural Arts Programs: Service Provider

4.4.5 Special Services Programs

Special Services programming is distributed across a wide array of program areas and facilities, including golf courses, Centennial Sportsplex, Hamilton Creek Marina, the Parthenon, and Wave Country. There are over 100 sports leagues/programs hosted at Metro Parks facilities, and many of these leagues/programs are run by partner organizations. Figure 4-27 through Figure 4-29 provide general operating metrics for the Special Service programs. Note that these numbers do not reflect the league participation through facilities or fields permitted to non-profits.

Special Services Programs: Delivery Method	
Delivery Method	Percentage
Leagues / Competitions	11%
Drop-in / Unstructured / Self-guided / Events	7%
Organized Clubs / Registered Low-organized activities / Staff-guided	7%
Instructional Classes / Workshops / Clinics / Interpretive Programs	57%
Private Lessons	11%
Camps	3%
Rentals & Park Use Permits	1%
Trips & Off-site Tours	3%
Outreach	0%
Other / Unsure	0%
Total	100%

Figure 4-27 Special Services Programs Delivery Method

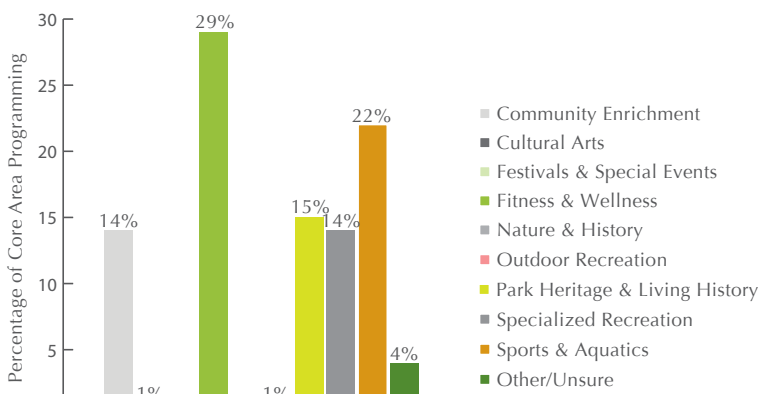


Figure 4-28 Special Service Programs Core Areas

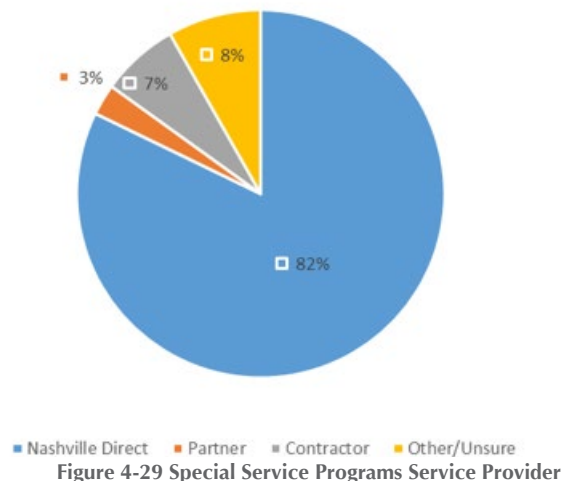


Figure 4-29 Special Service Programs Service Provider

4.4.6 Special Events

In addition to the day-to-day programs offered throughout Metro Parks, Nashville’s parks play host to hundreds of special events each year. These include concerts, festivals, farmers’ markets, races, weddings, and others. While many events are produced or co-sponsored by Metro Parks, the department issues a permit to outside organizations or individuals for most of them. As Nashville continues to grow, demand on park spaces for special events also grows.

Special events are permitted annually by Metro Parks. The graph below classifies these events by type.

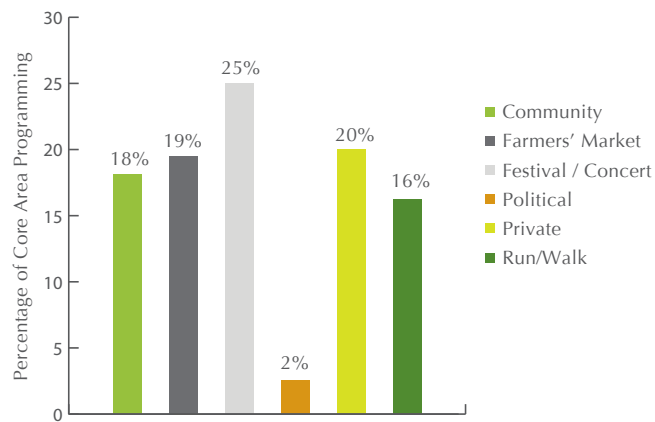


Figure 4-30 Special Events by Type

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4.5 OPERATIONS



The Metro Charter articulates the structure, authority, and responsibilities of the Metropolitan Board of Parks and Recreation. The board itself is a seven-member citizen commission charged with oversight of the department. Five of the board members are appointed by the Mayor for five-year terms; the School Board and the Planning Commission each appoint one member from their own boards to serve as representatives to the Park Board for one-year terms.

In 2016, the department employed 358 full-time employees and 525 part time and seasonal employees.. The department consists of eight divisions that oversee all aspects of the department’s work and is structured according to the following organizational chart.

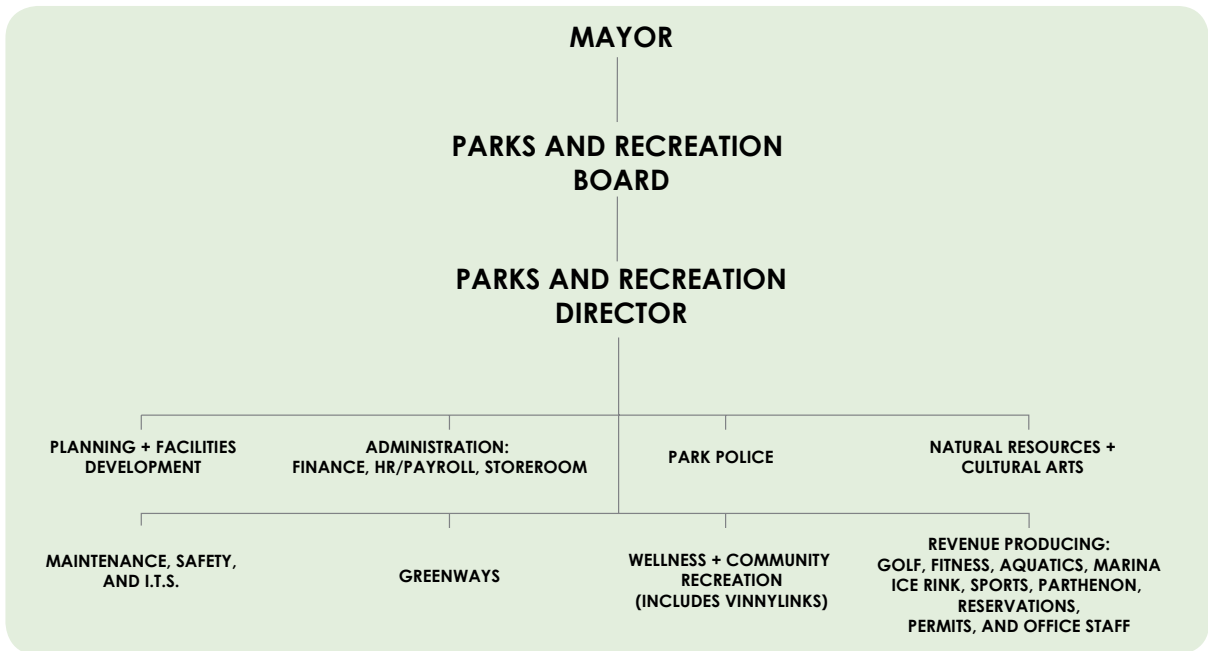


Figure 4-32 Metro Parks Organizational Chart

DIVISION RESPONSIBILITIES

Finance and Administration

System-wide leadership and management of the departmental budget.

Recreation

Management of the 26 regional and neighborhood community centers throughout Davidson County.

Special Services

Management of all of the facilities that have traditionally been considered the department's revenue producing facilities. These are golf courses, the Centennial Sportsplex, Wave County, Hamilton Creek Marina, the Parthenon, sports fields/league and picnic shelter permitting.

Consolidated Maintenance

Maintenance of all parks and facilities except, generally, golf courses. It operates out of four regional maintenance facilities.

Planning and Facilities Development

Managing the planning, design and construction of all parks and park facilities except greenways.

Greenways and Open Space

Managing the planning, design and construction of greenways and managing most land acquisition for parks and greenways.

Natural Resources, Cultural Arts and Special Events

Management of nature centers, the Fort Negley Visitors Center, outdoor recreation and special event permitting.

Department	Operating Budget	Full Time Equivalents (FTEs)
Finance and Administration	\$2,202,500*	15
Recreation	\$6,448,300	114.01***
Special Services	\$9,770,700**	117.91***
Consolidated Maintenance	\$13,215,600	150.08
Planning and Facilities	\$195,900	4.0
Greenways and Open Space	\$215,300	2.0
Natural Resources, Arts and Special Events	\$1,945,30	29.04***
Park Police	\$1,652,700	21.96
* Includes Non-Allocated		
** Includes After Hours, Instructors, and VinnyLinks BUs		
***Number includes FT/PT only. FTEs not specified for seasonals		

Figure 4-33 Metro Parks FY 2016 Operational Budget and FTEs

The first graph below shows the variations in the number of full time equivalent (FTE) staff members since completion of the 2002 master plan. the second graph below shows the variations in Park Police staffing levels since 2006. The subsequent graphs (shown previously) illustrate the growth of the park system itself during the same period.

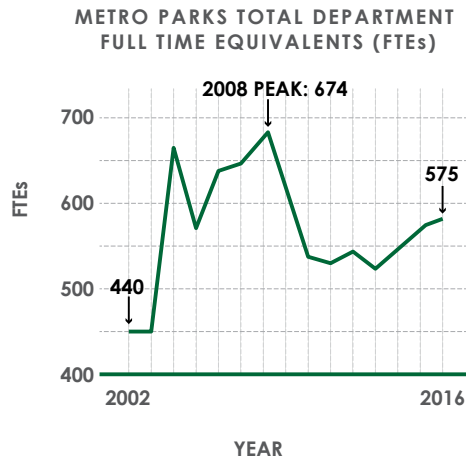
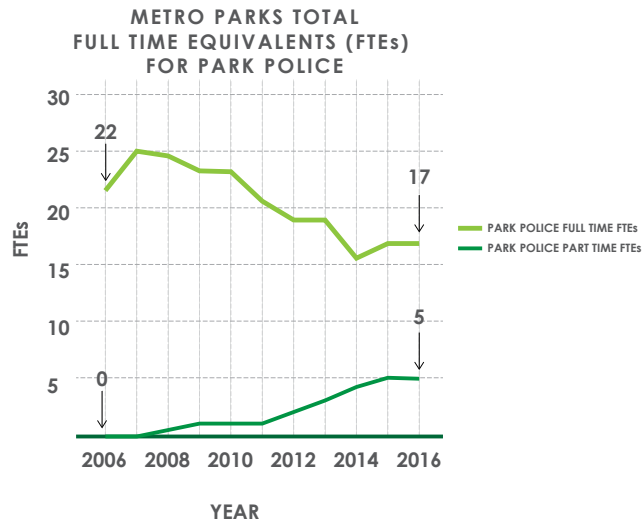


Figure 4-34 Metro Parks 2002-2016 Staffing Levels

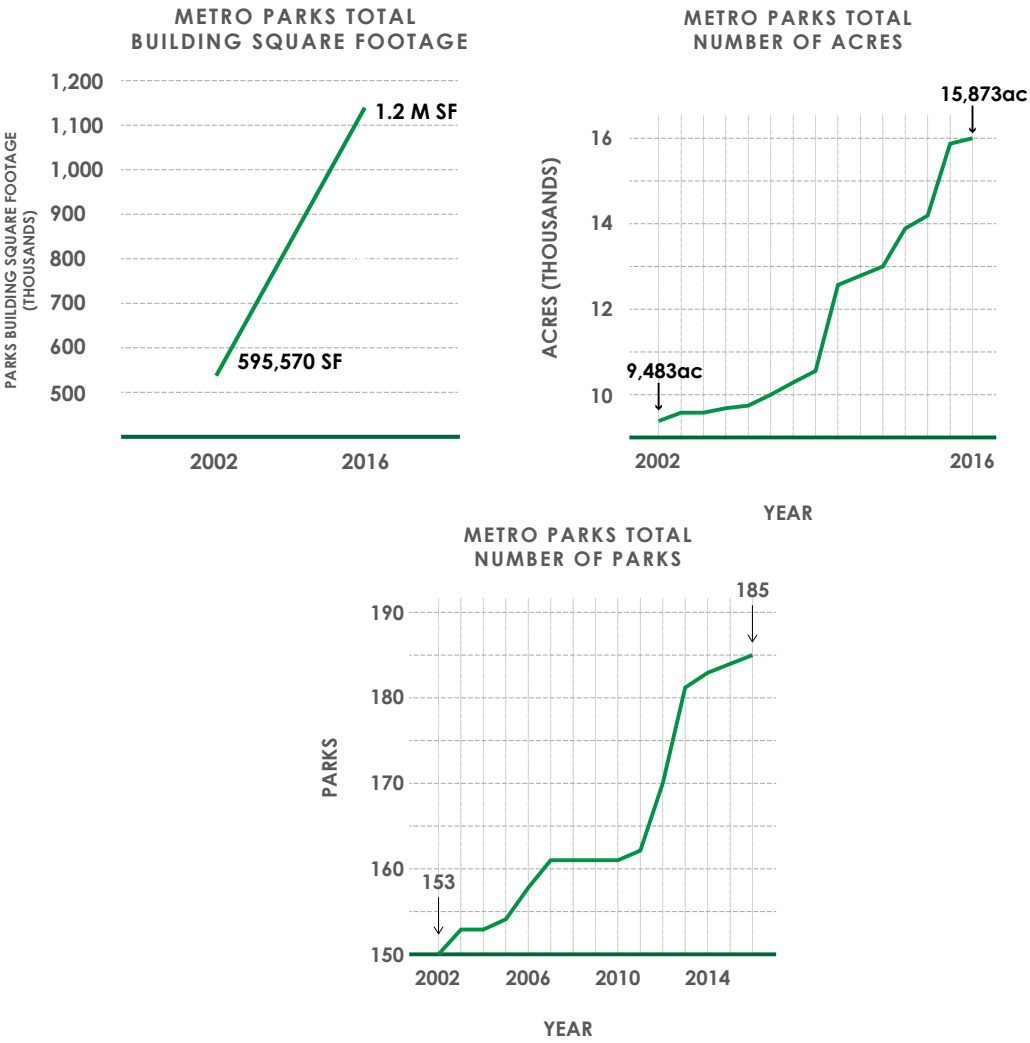


Figure 4-35 Metro Parks 2002-2016 Management of Parks and Buildings



PLAN TO PLAY: METRO PARKS MASTER PLAN

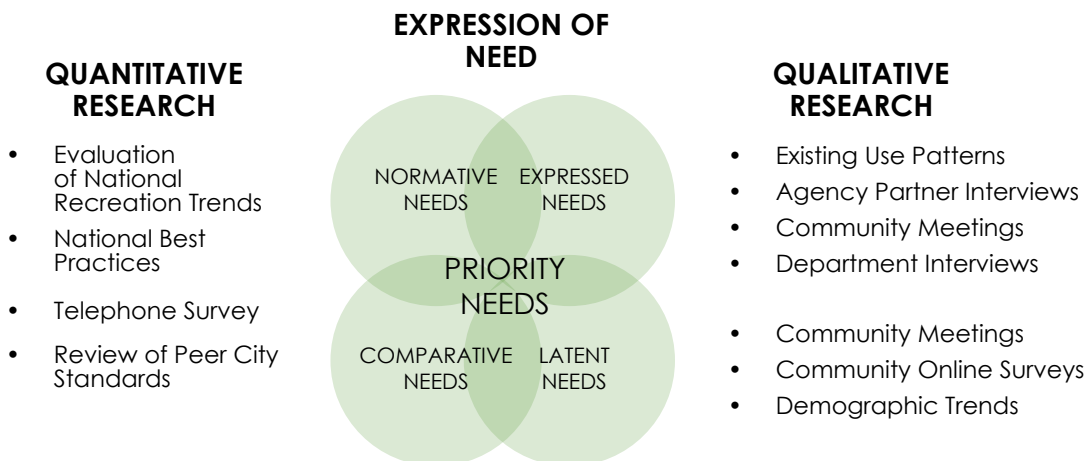
5.0 ASSESSING COMMUNITY NEEDS

Plan to Play is built upon data and input gathered from a variety of sources.

5.1 PUBLIC INPUT

- **From people:** The self-determined opinions and thoughts of residents, visitors, business owners, stakeholders, and partners.
- **From the system itself:** Metrics on how and how well the current park and greenways system serves the residents of Nashville.
- **From peers:** Cities of similar size and population with which we compete or share our aspirational goals.
- **From best practices and market research:** A look at who's doing the best work and how recreation is projected to evolve.

Public engagement is a key component to the success of any public planning process. Successful public engagement breathes life into a project and ensures that it reflects the values and priorities of the community it serves. For Plan to Play, the objective was to learn how residents use the park system, understand their needs and concerns, hear what Metro Parks is doing well, and identify areas for improvement. From the onset, the plan embarked on a robust community engagement plan and promotional strategy to ensure broad public involvement and engagement throughout the process. **The goal was simple: Cast a wide net and engage as many people as possible.** As a result, over 9,000 people participated in the planning process with over 2 million Facebook impressions. This was accomplished by utilizing a diverse set of tools, each of which provided feedback that was incorporated into the planning process. The following describes each tool in more depth.



5.1.1 SURVEYS

Throughout the Plan to Play process, the team used multiple survey types to gather input. Most surveys were published online and promoted through all other public media. All but user and greenways surveys were offered in both English and Spanish; all were translated as requested into other languages. The results of these surveys can be referenced in the appendix. The public surveys were:

Initial Online Survey

PARTICIPANTS: 1,229

An online survey was conducted prior to the first public meeting. The purpose of the survey was to kick off the plan and solicit a first round of general input on how people use the parks and to learn perceptions and recreational needs.

Statistically Valid Telephone Survey

PARTICIPANTS: 451

In order to capture a statistically valid sampling of the entire Nashville population – not just those who are involved with parks or might attend a public meeting – a random-sample survey was conducted via phone and web. This approach yielded scientifically defensible data with an error rate of +/- 4.6% at a 95% confidence level. The demographics of the survey sample were near proportionate to the actual adult population in Nashville. Where appropriate, an industry-accepted range was used to weight the sample in order to establish proportionate representation.



FUNDING/PRIORITIES

WOULD YOU SUPPORT THE PARKS DEPARTMENT PRESERVING MORE GREEN SPACE AND ACQUIRING ADDITIONAL PROPERTY TO DEVELOP NEW PARKS AND GREENWAYS?



SHOULD PARKS DEPARTMENT USE ANY ADDITIONAL FUNDING TO IMPROVE EXISTING PARKS & FACILITIES OR NEW DEVELOPMENT?



WOULD YOU SUPPORT THE INCREASING PROGRAM FEES SO THAT SPECIFIC USERS ARE PAYING A BIGGER SHARE OF COSTS?



WOULD YOU AGREE THAT METRO SHOULD PROVIDE ADDITIONAL FUNDING TO THE DEPARTMENT WHEN COMPARED TO THE NATIONAL AVERAGE?



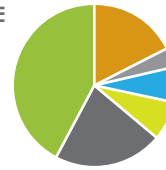
HOW OFTEN DO YOU VISIT A PARK OR FACILITY?

64% VISIT PARKS AT LEAST ONCE A MONTH
15% DO NOT USE PARKS OR FACILITIES FOR THE FOLLOWING REASONS



HOW DO YOU USE PARKS & GREENWAYS?

43% WALK, RUN, HIKE, OR BIKE
22% RELAX / ENJOY NATURE
8% FAMILY OUTING
7% SPORTS ACTIVITY
4% DOG PARK
18% OTHER



WHY DO YOU NOT VISIT A PARK OR FACILITY?

31% DON'T HAVE TIME
23% JUST NOT INTERESTED
15% TOO FAR AWAY
16% PHYSICAL LIMITATIONS
6% SECURITY REASONS
10% OTHER



OTHER CONSISTS OF?

2% PARTICIPATE IN A PROGRAM
2% PLAY GOLF
2% CONCERT OR FESTIVAL
2% FITNESS CENTER / WEIGHT TRAINING
1% SWIMMING
1% DON'T KNOW
8% OTHER

QUALITY RATINGS

HOW WOULD YOU RATE THE QUALITY (APPEARANCE & RECREATION OPPORTUNITIES) OF PARKS & GREENWAYS?



82% RATE THE QUALITY OF PARKS & RECREATION OPPORTUNITIES TO BE EXCELLENT (36%) OR GOOD (46%)

21% HAVE PARTICIPATED IN A PARKS PROGRAM

88% RATE THE QUALITY OF THE PROGRAMS AS EXCELLENT OR GOOD

HOW WOULD YOU RATE THE PARKS ABILITY TO MAINTAIN THE OVERALL PHYSICAL CONDITION OF THE PARKS?

68%

FEEL THE PARKS ARE WELL-MAINTAINED UNDER TIGHT BUDGET FOR OPERATIONS (EXCELLENT (24%) OR GOOD (44%))

DO YOU VALUE THE PRESERVATION OF NATURAL AREAS?



77%

VALUE THE PRESERVATION OF NATURAL AREAS A GREAT DEAL

22% SOMEWHAT VALUE THE PRESERVATION OF NATURAL AREAS

DO YOU FEEL SATISFIED WITH SPORTS & AQUATIC AT METRO PARKS?

79%

ARE VERY (29%) OR SOMEWHAT (50%) SATISFIED WITH THE SPORTS & AQUATIC FACILITIES

DO YOU AGREE THAT EVERYONE SHOULD HAVE ACCESS TO HIGH-QUALITY PARKS?

94%

AGREE TO HAVING HIGH-QUALITY PARKS AVAILABLE TO PEOPLE FROM ALL WALKS OF LIFE

DO YOU FEEL SAFE AT PARKS, GREENWAYS, OR FACILITIES?

90%

FEEL VERY (41%) OR SOMEWHAT (49%) SAFE WHEN THEY GO TO A METRO PARK

71% FEEL VERY OR SOMEWHAT SAFE ON GREENWAYS

11% FEEL VERY OR SOMEWHAT UNSAFE ON GREENWAYS



Community Survey PARTICIPANTS: 4,158

This in-depth survey sought community input specific to facilities and programs. The survey asked detailed questions about how the individual or their household felt the park system was meeting their needs and what could be done to better meet their needs. The survey was available online, circulated through email blasts, and distributed at over a dozen Metro Parks events and meetings. While participants self-selected, street teams proactively gathered input from typically underrepresented communities including the Latino community, the African-American community, and among New Americans. In addition to English and Spanish, the survey was translated as needed into other languages, with more than 16 nations of origin.

HOW DO YOU GET TO THE PARK OR FACILITY?



WHY DO YOU DRIVE INSTEAD OF OTHER MODES OF TRANSPORTATION?

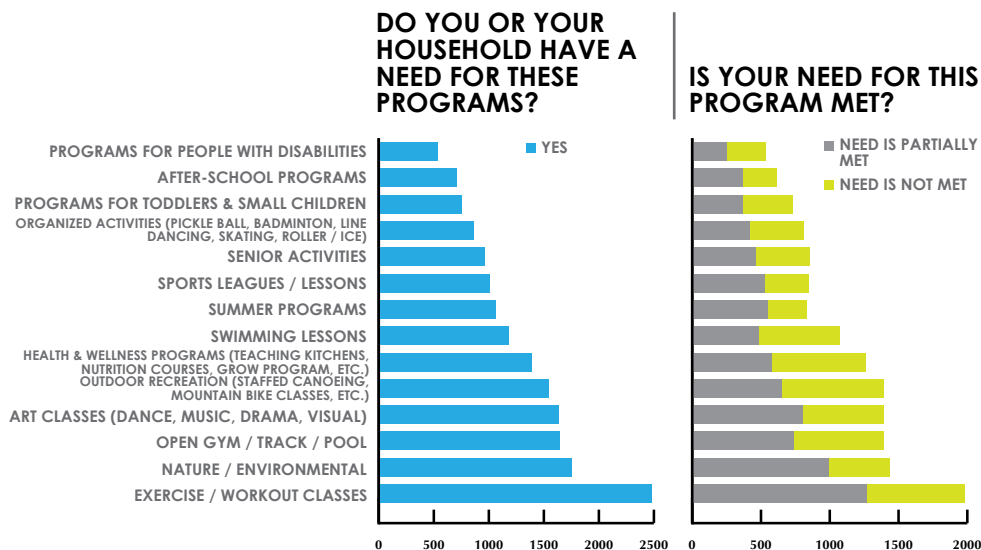
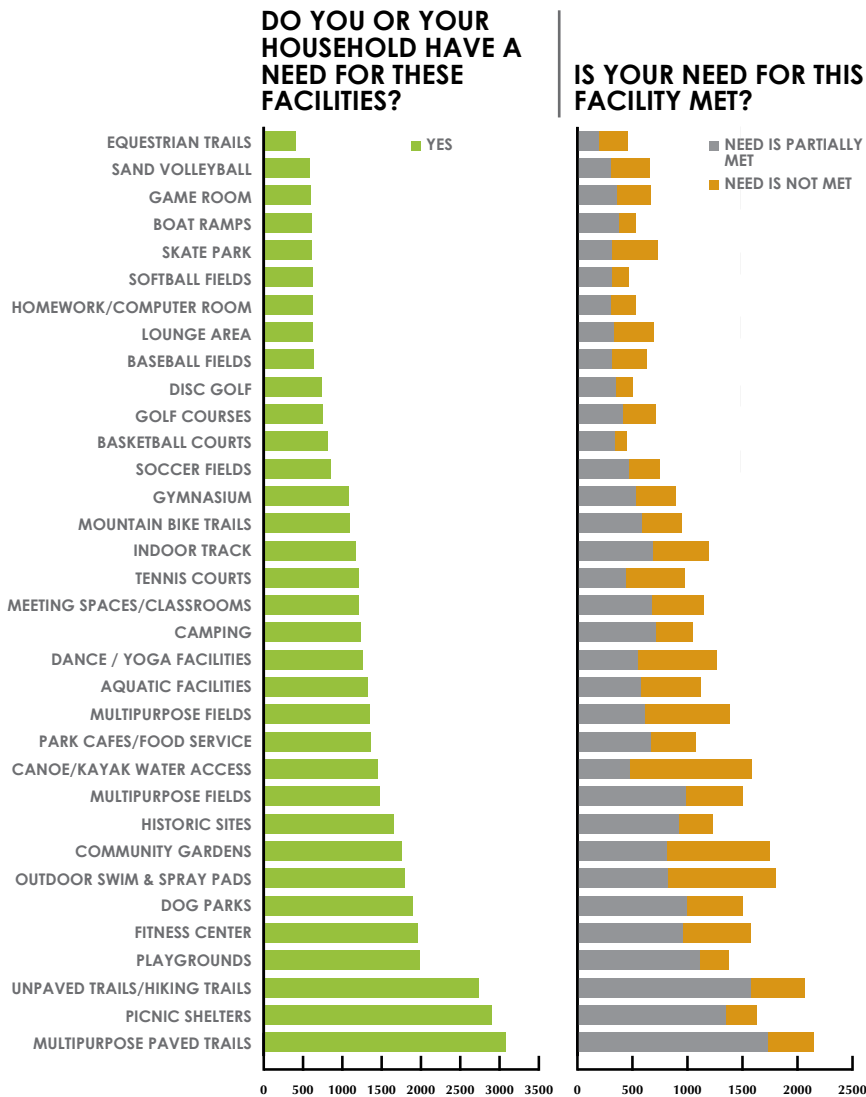


DO YOU PARTICIPATE IN PROGRAMMING OFFERED?



WHAT ARE THE THREE MOST IMPORTANT PUBLIC SERVICES PROVIDED BY PARKS?

- 1 FITNESS, HEALTH, & WELLNESS OPPORTUNITIES
- 2 RECREATION OPPORTUNITIES
- 3 SAFE PLACE FOR CHILDREN



Facility User Survey PARTICIPANTS: 1,361



In order to better understand the opinions and specific needs of park customers at staffed facilities, a user survey was created to gather user data around the topics of access, use, amenities, satisfaction, and safety. Surveys were distributed at Metro Parks' facilities countywide including various community centers, golf courses, nature centers, historic sites, and arts centers.

HOW MANY VISIT A FACILITY AT LEAST ONCE A WEEK?



HOW DO YOU GET TO THE FACILITY?



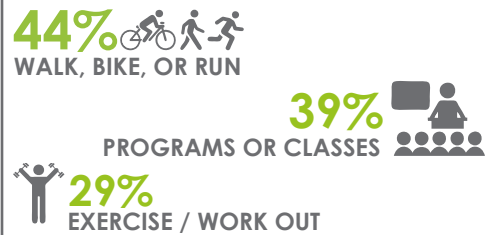
WHY DO YOU DRIVE OVER WALKING OR BIKING?



HAVE USER FEES PROHIBITED YOU FROM PARTICIPATING IN PROGRAMS?



WHAT ACTIVITIES DO YOU PARTICIPATE IN WHILE AT THE FACILITY?



HOW DO YOU RATE THE QUALITY OF ACTIVITIES OR PROGRAMS?



WHAT WOULD YOU CHANGE WITH CURRENT PROGRAMS?



WHAT ARE THE MOST IMPORTANT PUBLIC SERVICES PROVIDED BY THE FACILITY?

- 1** FITNESS, HEALTH, & WELLNESS OPPORTUNITIES
- 2** RECREATION OPPORTUNITIES
- 3** SAFE PLACE FOR CHILDREN
- 4** PUBLIC EDUCATION (NATURE CLASSES, HOMEWORK HELP, ETC.)

PARTICIPANTS: 1,616

After the first round of public meetings, it became clear that greenways and trails emerged as the most popular type of facility that Metro Parks offers. As a result, it was important to better understand user needs and to get a deeper understanding of how the greenway experience can be improved.

Greenway Facility User Survey



HOW DO YOU USE YOUR GREENWAYS?

93% 
EXERCISE

80% 
ENJOY NATURE

45% 
SPENDING TIME WITH FRIENDS

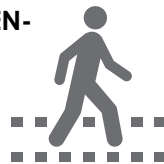
62% OF RESPONDENTS WERE VERY LIKELY OR SOMEWHAT LIKELY TO USE A COMBINATION OF CYCLING OR WALKING PLUS PUBLIC TRANSIT IF MORE GREENWAYS CONNECTED TO TRANSIT STOPS.

WHAT OBSTACLES LIMIT OR PROHIBIT YOU FROM USING GREENWAYS FOR TRANSPORTATION?

60% LACK OF SIDE-WALKS AND/OR BIKEWAYS TO GET TO A GREENWAY

55% LACK OF GREENWAY ROUTE TO MY DESTINATION

51% LACK OF GREENWAY CLOSE TO MY HOUSE




WHAT AMENITIES ARE MOST IMPORTANT TO YOU?

1 
RESTROOM

2 
WATER FOUNTAINS

3 
TRASH CANS

4 
BENCHES / REST AREAS

5 
EXERCISE STATIONS

6 
BIKE FIXIT STATIONS

IF METRO PARKS WERE ABLE TO OFFER MORE PROGRAMMING ON GREENWAYS, WHAT TYPE WOULD YOU PARTICIPATE IN?



56% NATIVE / ENVIRONMENTAL WALKS

46% HISTORY WALKS



39% FITNESS / HEALTH PROGRAMS

5.1.2 Public Community Meetings

Public meetings were held at strategic points throughout the Master Plan process to update the public on the Master Plan and to gather information. In total, three rounds of community meetings were held, with each round including multiple meeting opportunities that were geographically distributed throughout the county. The following is a brief overview of the meetings.

PUBLIC MEETING #1: REVIEW OF INVENTORY & ANALYSIS PHASE AND INITIATE NEEDS ASSESSMENT

In June 2016, a series of five public meetings were held in locations throughout Davidson County, and were attended by a total of 378 participants. This first round of public meetings had two primary goals:

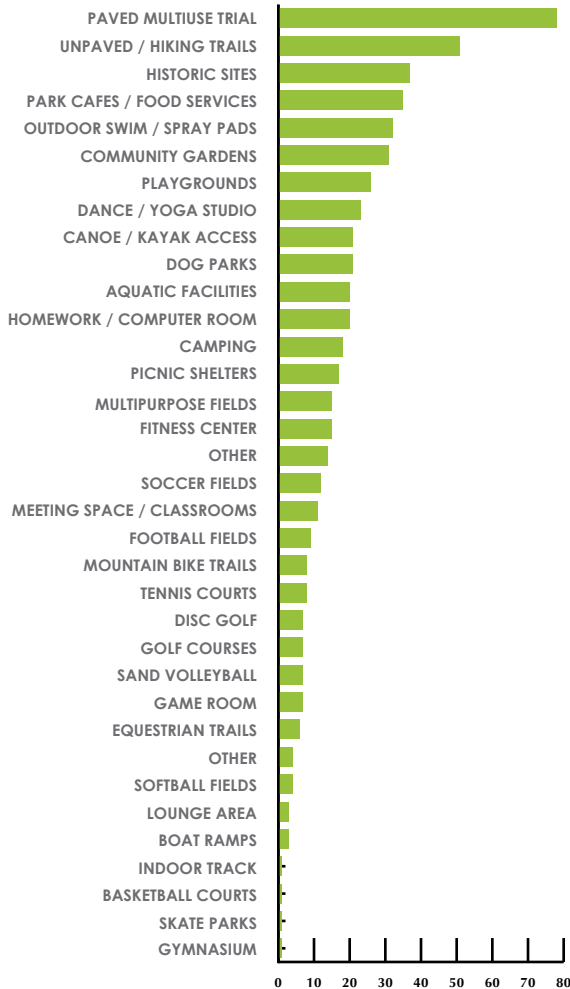
1. **Education:** Provide an overview of the current park system to educate the public on what the existing park system has to offer.
2. **Information Gathering:** Initiate the needs assessment phase of the Master Plan by asking the public how well their needs are currently being met, what parts of the system are most valuable, and what are the most important services offered.

Each meeting started off with a presentation that provided an overview of the current park system from parks and greenways to facilities and programs. Following the presentation, attendees were asked to participate in three breakout stations:

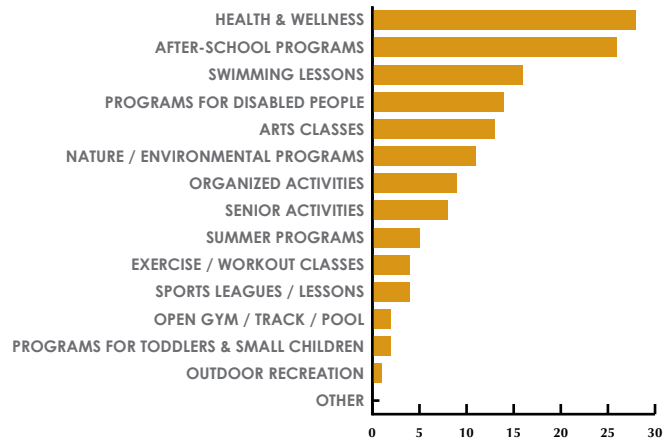
- **Spending Choices:** Each participant was asked to indicate how they would choose to spend and allocate money across the park system. Each participant indicated what needed the most funding from their perspective by placing a dot(s) in a category.
- **Supply and Demand:** Each participant was asked to answer one question: “What do you wish you could do at Metro Parks that is not currently available to you or is in short supply?” The station provided a list of various types of outdoor facilities, indoor facilities, and programs, and asked each participant to indicate if there should be more of a particular facility or program. As a follow-up to this exercise, each participant was also asked if anything was in over-supply.
- **Park Services:** Participants were asked to name the most important services that Metro Parks provides. For this station, “service” was defined as an act of helpful activity and could be as specific or broad as the participant desired.

The following is a summary of the Supply and Demand station for all public meetings:

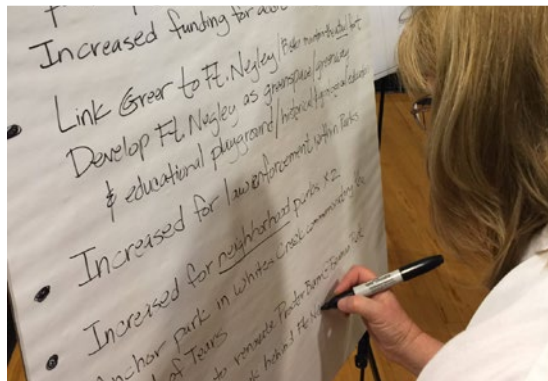
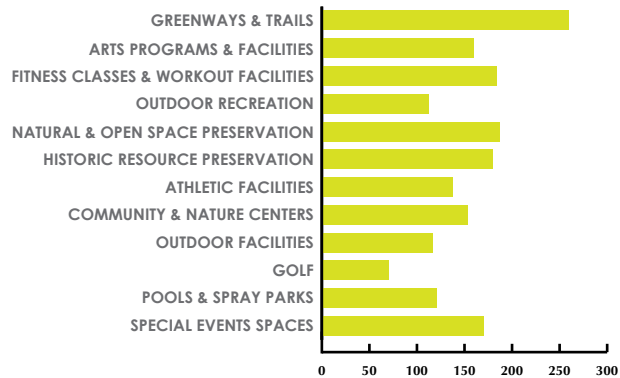
MOST IN NEED FACILITIES:



MOST IN NEED PROGRAMS:



PRIORITIES FOR SPENDING:



PUBLIC MEETING #2: REVIEW OF PRELIMINARY RECOMMENDATIONS

The purpose of the second series of meetings was to present preliminary recommendations. These meetings allowed the public to see how their input and participation in the various surveys and the first round of meetings helped shape the preliminary recommendations. Attendees were able to view recommendations for each category of land, facilities, and programs and to provide any comments.

Four meetings were held at different locations countywide with a total of 488 attendees.

PUBLIC MEETING #3: PRESENTATION OF THE DRAFT MASTER PLAN AND PUBLIC COMMENT PERIOD

On February 13, 2017, Mayor Megan Barry presented Plan to Play to the public at a meeting in the Main Library downtown. Subsequent to the public release, display boards were exhibited at nine community center locations countywide, as well as the Main Library. In addition, the public was invited to view the full draft plan posted on the Plan to Play website. The public comment period closed on February 26, 2017.



OPEN HOUSE AND TRANSIT TRIATHLON

Plan to Play took place at a unique time for Metro Nashville as it was one of several landmark planning projects underway. Most notable in their relation to Plan to Play were nMotion: Metro Transit Authority’s Strategic Plan and WalknBike: Public Works’ Strategic Plan for Sidewalks and Bikeways. This convergence was well-timed. Not only has each plan informed the recommendations of the others, but the timing of each also presented cross-promotional opportunities to solicit more public input. The most notable of these was the Transit Triathlon. Metro Parks, Metro Public Works, and the Metro Transit Authority teamed up to host an open house where people came to offer input on the three plans on a large map of Davidson County. People marked or noted where they wanted to see a new park or greenway, a new transit or bikeway route, or sidewalk. Participants were also able to mark where barriers currently exist for pedestrians and cyclists. The results from this exercise were used by all three plans to better understand existing destinations and where connections are needed.



With a broad mission, a countywide focus, and a culture of collaboration, it was essential for Plan to Play to gather the insights and ideas of the many stakeholders and partner agencies that routinely work with Metro Parks. Nonprofit “friends” groups, environmental organizations, sports groups, governmental and regulatory agencies, and other partners were all asked about the strengths and weaknesses of Metro Parks as well as their own visions for the future of Nashville’s park system. Among the invited groups that met and/or provided completed questionnaires are the agency and partner stakeholders listed below (in alphabetical order).

- Cheekwood Botanical Garden and Museum of Art
- The Conservancy for Centennial Park and Parthenon
- Friends of Fort Negley
- Friends of Metro Dance
- Friends of Shelby Park
- Friends of Warner Parks
- Friends of Woodmont Park
- Greenways for Nashville
- Land Trust of Tennessee
- Metro Arts Commission
- Metro Health Department

5.1.3 Stakeholder and Partner Meetings

- Metro Historic Commission
- Metro Nashville Public Schools
- Metro Planning Department
- Metro Public Libraries
- Metro Public Works
- Metro Transit Authority
- Metro Water Services
- Nashville Civic Design Center
- Nashville Convention and Visitors Corporation

See the Appendix for a list of the questions asked of stakeholders.

5.1.4 Plan to Play Steering Committee

Mayor Barry appointed a committee of citizen representatives to help guide the Plan to Play process. A parks plan touches on many aspects of community, culture, and economy and it was important to select an equally broad cross section of Nashvillians with knowledge, expertise, and perspective. The steering committee met three times over the course of the planning process to help ensure that the planning team remained on track. In addition, subcommittees were established to help develop departmental mission and goal statements, and to dive deeper on greenways.



5.1.5 Metro Parks Website and Online Maps

The Plan to Play website was an important tool for communicating with the public, soliciting input, and posting materials and information. The webpage acted as a home base for the Master Plan. Information could be quickly and easily updated and made available to the public. The webpage served many functions throughout the planning process, including:

- Providing an overview of Plan to Play and the planning process
- Hosting a master schedule where information on public meetings, survey opportunities, and Metro Parks events could be found
- Materials and presentations from public meetings and other outreach
- An online comment form

The website also hosted a mapping exercise focused on greenways. With the help of the team from WalknBike, an interactive map was developed that allowed the community to show the geographic location of trail ideas, important connections to make, barriers to travel, great routes, and more. The information was compiled and used in the greenway planning process.

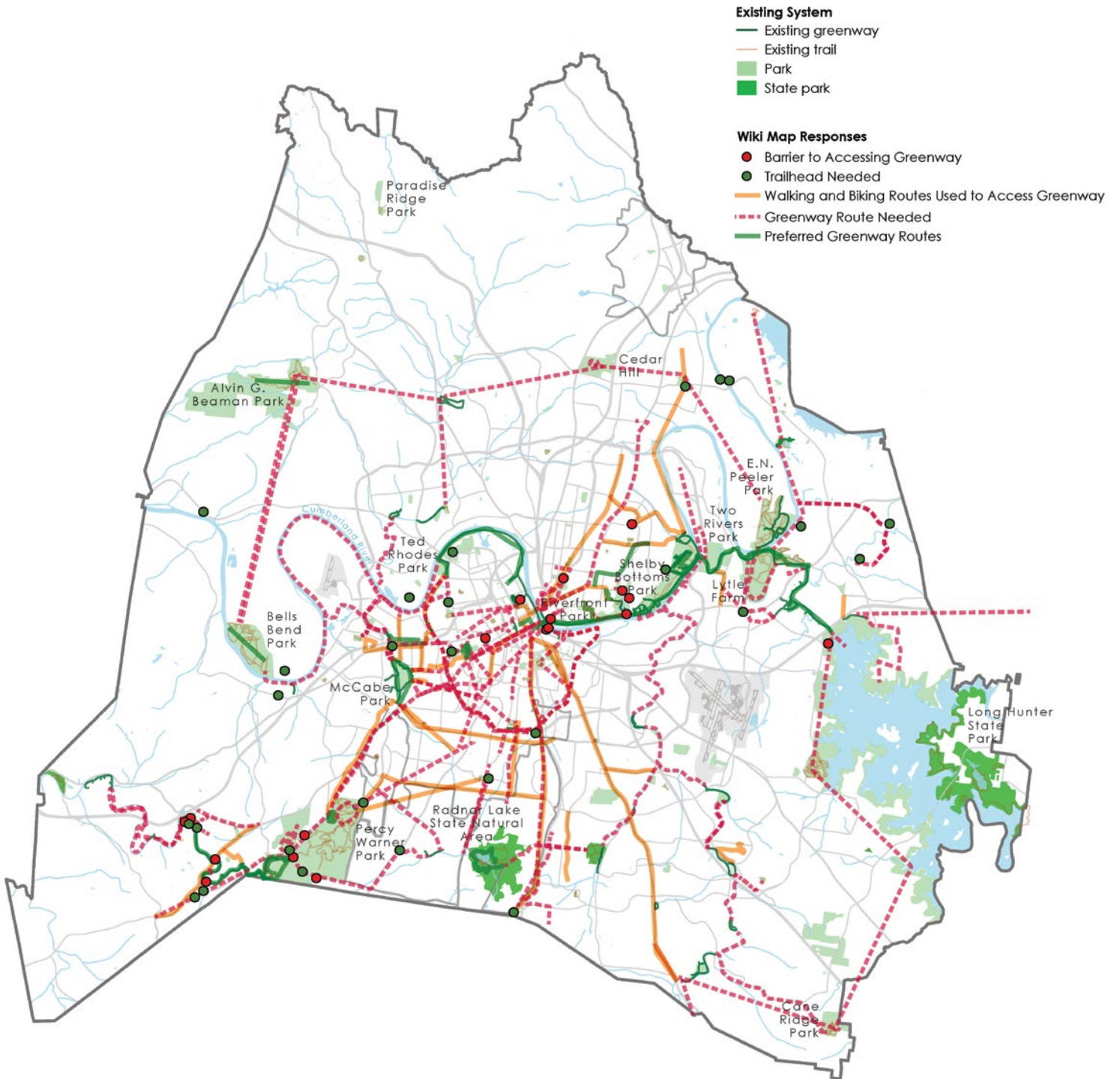


Figure 5-1 INTERACTIVE MAP SUMMARY

5.1.6 Social Media

Social media is central to any public input process. Many people who cannot or will not attend a public meeting will offer input via a social media platform. Between Facebook, Twitter, Nextdoor, Google Groups, the online Metro Nashville Channel, and other avenues, the public was notified of public events and linked to the Plan to Play website to offer input, watch videos, and engage in the process. This effort produced over 2 million Facebook impressions, over 100,000 Twitter impressions, and over 9,000 responses via the various media and meetings.”

5.1.7 Email Marketing

Parks distributed 13 e-blasts to a subscriber list of more than 16,000. Plan to Play was also included in more than 65 e-newsletters citywide.



Metro Parks partnered with the Nashville Civic Design Center to host a series of talks by distinguished guest lecturers attended by over 500 people. This was an opportunity to bring the design and development community and the general public into discussion about larger issues related to parks, open space, design, and urbanism. Guests were Adrian Benepe, former commissioner of the New York City Parks Department; Thomas Woltz, a celebrated international landscape architect working in Centennial Park; and Peter Harnik, the director of the Center for City Park Excellence at The Trust for Public Land.

5.1.8 Lecture Series



Thomas Woltz speaks at The Frist Center on October 6, 2016

The Metropolitan Board of Parks and Recreation adopted Plan to Plan at a regularly scheduled public meeting on Tuesday, March 4, 2017.

5.1.9 Park Board Approval of Plan

5.2 PEER CITY COMPARISON

A key factor in determining how well Nashville is doing in providing park services is to compare it to the performance of other cities. For this exercise, five peer cities were selected because of their similar characteristics to Nashville and Davidson County such as population, form of government, or size. In addition, the list includes aspirational cities that are known for their excellent park systems. In the following pages, specific metrics on operations, budgets, staffing, and inventories are compared across these cities. This analysis aims to provide a direct comparison of peer agencies in order to understand more about the successes and needs of the Nashville system.

Plan to Play's peer cities comparison looks at:

- Austin, Texas
- Charlotte/Mecklenburg County, North Carolina
- Denver, Colorado
- Louisville, Jefferson County, Kentucky
- Portland, Oregon

It must be noted that a benchmark analysis is only as good as the available data. Every effort was made to obtain the most credible information, and organize the data in a consistent and comparable format. Due to difference in how each system collects, maintains, and reports data, variances may exist. These variations have an impact on the per capita and percentage allocations examined; hence, the overall comparison should be viewed with this in mind. All data is believed to be accurate as of June 2016.

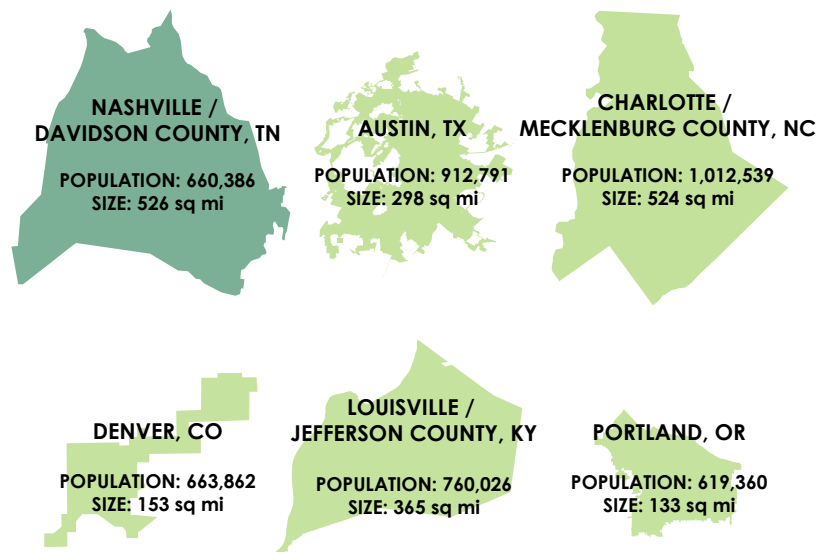


Figure 5-2 Benchmark Peer City Statistics

In terms of total acreage per 1,000 residents, **Nashville ranks second among benchmark agencies with nearly 23 acres per 1,000**. Nashville is well ahead of the curve nationwide, as it provides residents with more than double the national median acreage. The table below shows the total acreage for each system and how that translates into service per 1,000 residents.

5.2.1 System Acreage

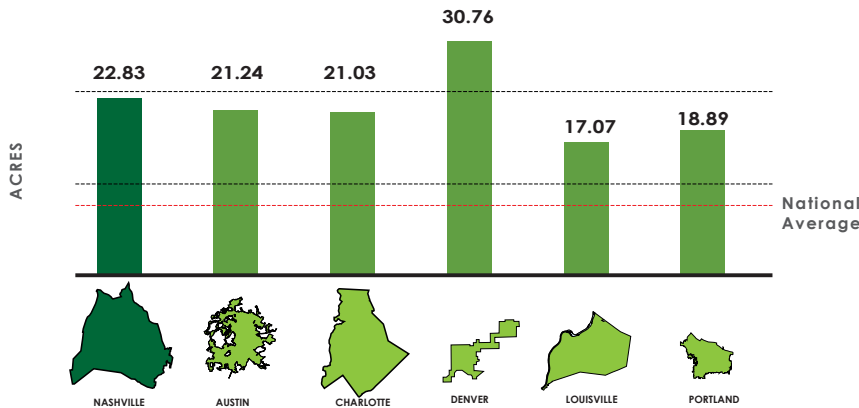


Figure 5-3 Peer Cities Park Acres per 1,000 Residents
Reference:

The tables below compare key facility types and associated levels of service. There are areas in which Nashville leads the way among its peers and others where it falls behind its peers, industry averages, or both. In most areas, Nashville is still below the recommended service level for specific amenities. In Chapter 7, these peer city and best practice inputs are one component that inform the development of recommended LOS for Nashville to work toward over the next 10 years.

5.2.2 Facility Types

TRAILS

Nashville ranks near the top among peer agencies with 0.31 trail miles per 1,000 residents. National best practice is 0.25-0.5 miles per resident.

Agency	Jurisdiction Population	Total Trail Miles	Total Trail Miles per 1,000 Residents
Denver*	663,862	284	0.43
Nashville*	660,836	208	0.31
Portland	619,360	152	0.25
Austin	912,791	212	0.23
Charlotte / Mecklenburg County	1,012,539	187	0.18
Louisville	760,026	120	0.16

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

Figure 5-4 Peer Cities Park Trail Miles per 1,000 Residents

BASEBALL

Nashville falls just above the benchmark median, with a level of service of 7,775 residents per ball diamond. The national best practice level of service for ball diamonds is 12,000 residents per adult field and 10,000 residents per youth field.

Agency	Jurisdiction Population	Ball Diamonds	Residents Served per Diamond
Denver	663,862	137	4,846
Portland	619,360	123	5,035
Nashville	660,836	85	7,775
Charlotte / Mecklenburg County	1,012,539	109	9,289
Louisville	760,026	80	9,500
Austin	912,791	70	13,040

Figure 5-5 Peer Cities Residents per Baseball Diamond

MULTIPURPOSE FIELDS

Nashville ranks near the bottom among peer agencies, with a level of service of nearly 8,000 residents per rectangular field. The national best practice for rectangular fields is 8,000 residents per soccer field and 15,000 residents per multipurpose field.

Agency	Jurisdiction Population	Rectangular Fields	Residents Served per Field
Denver	663,862	191	3,476
Portland	619,360	111	5,580
Louisville	760,026	135	5,630
Charlotte / Mecklenburg County	1,012,539	129	7,849
Nashville	660,836	83	7,962
Austin	912,791	102	8,949

Figure 5-6 Peer Cities Residents per Multipurpose Field

TENNIS COURTS

Assessing the level of service for tennis courts for each system, **Nashville serves around 4,500 residents per tennis court**. Nashville’s current level of service mirrors the national average of 4,495 residents served per tennis court.

Agency	Jurisdiction Population	Tennis Courts	Residents Served per Court
Denver	663,862	148	4,486
Nashville	660,836	147	4,495
Louisville	760,026	160	4,750
Portland	619,360	123	5,035
Charlotte / Mecklenburg County	1,012,539	149	6,796
Austin	912,791	124	7,361

Figure 5-7 Peer Cities Residents per Tennis Court

PLAYGROUNDS

When comparing total number of residents per playground, **Nashville stands out as the benchmark leader with more than 4,236 residents served per playground**. This is promising considering that providing recreational opportunities for youth is central to the overall mission of parks and recreation departments. However, Nashville falls just below the national best practice of 5,000 residents served per playground.

Agency	Jurisdiction Population	Playgrounds	Residents Served per Playground
Nashville	660,836	156	4,236
Denver	663,862	155	4,283
Louisville	760,026	165	4,606
Portland	619,360	128	4,839
Charlotte / Mecklenburg County	1,012,539	193	5,246
Austin	912,791	147	6,209

Figure 5-8 Peer Cities Residents per Playground

INDOOR FACILITIES

In general, indoor recreation spaces, such as recreation centers and aquatic facilities, are very desirable amenities among residents. Compared to peer agencies, **Nashville is providing a commendable level of service for recreation centers, ranking first among benchmark agencies with 1.38 square feet of indoor recreation space per resident.** This level of service falls just below the national best practice of 1.5-2.0 square feet per resident. Another measure of indoor facility service level is the size of individual facilities. Nashville’s average community center square footage is 20,774, which is small by national standards.

Agency	Jurisdiction Population	Total Square Footage of Indoor Facilities	Indoor Facility Square Feet per Capita
Nashville	660,836	913,262	1.38
Denver	663,862	627,651	0.95
Austin	912,791	592,927	0.65
Charlotte / Mecklenburg County	1,012,539	536,445	0.53
Louisville	760,026	219,781	0.29

*Square footage figures for Portland were unavailable.

Figure 5-9 Peer Cities Indoor Square Feet per Capita

DOG PARKS

Dog parks are a trending amenity in communities across the country, and parks and recreation agencies are seeing a high return on investment from these types of attractions, in terms of overall satisfaction of users. **Nashville’s nine dog parks rank it just above the benchmark median, with a level of service of 73,426 residents served per dog park.** The national best practice level of service is 50,000 residents served per dog park.

Agency	Jurisdiction Population	Dog Parks	Residents Served per Dog Park
Portland	619,360	33	18,768
Denver	663,862	10	66,386
Nashville	660,836	9	73,426
Austin	912,791	12	76,066
Louisville	760,026	5	152,005
Charlotte / Mecklenburg County	1,012,539	6	168,757

Figure 5-10 Peer Cities Residents Served per Dog Park

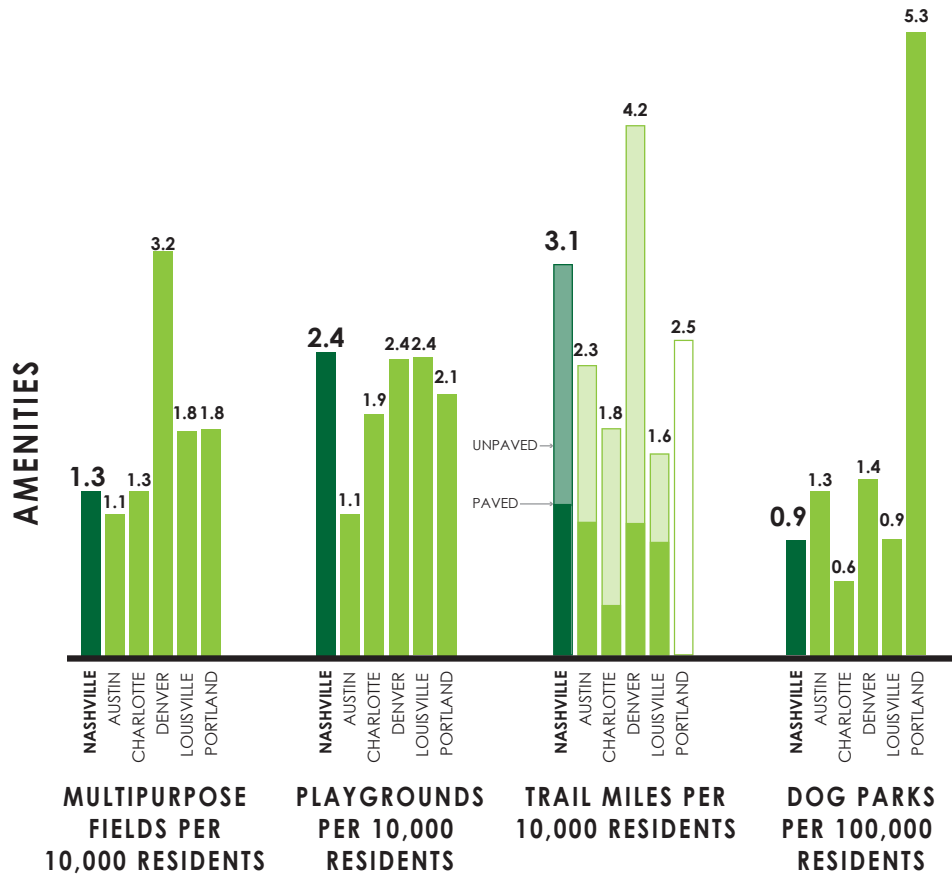


Figure 5-11 COMPARISON OF KEY AMENITIES

5.2.3 Comparison of Operational Expenditures and Revenue

Operating Expense per Acre and Per Capita

This section covers the annual operational expenditures, earned income, and cost recovery levels. Budget items in this section include the most recent figures. Non-tax revenues and operating expenses are compared to the population of each jurisdiction to determine the revenue/cost per capita. Dividing total non-tax revenue by total operating expense arrives at the operational cost recovery. Cost recovery is a critical performance indicator that measures how well each department’s revenue generation covers the total operating costs.

The charts below compare the total operating expense to the total acreage for each agency. This comparison provides a high-level understanding of each department’s cost to maintain and operate each acre. Operating funds are used to pay staff and purchase the equipment and materials necessary to run the department. Operating budgets are typically compared using two metrics: cost per acre and cost per capita (person). Looking at both shows where Nashville stands with comparable cities.

Compared to peer agencies, Nashville has a low operating expense per acre. Although this demonstrates the operational efficiency of the department, the relatively low price per acre may also be indicative of lower maintenance levels and/or limited resources in comparison to other benchmark agencies. The national average of \$3,533 per acre indicates that the average park system nationwide is allocating \$1,417 more per acre to operate and maintain their park system.

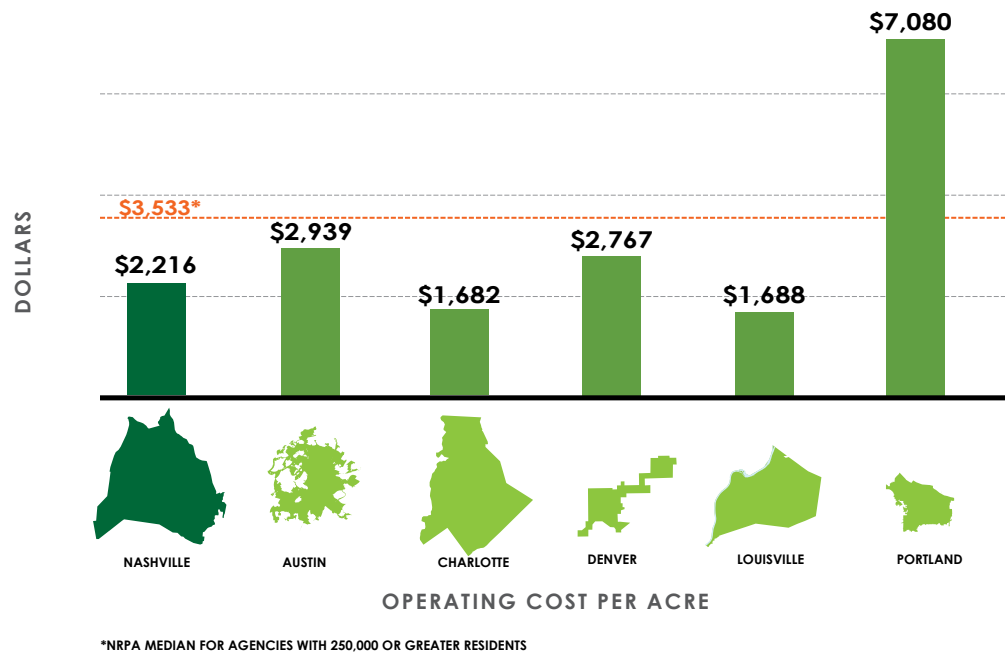


Figure 5-12 Peer Cities Operating Expense per Acre

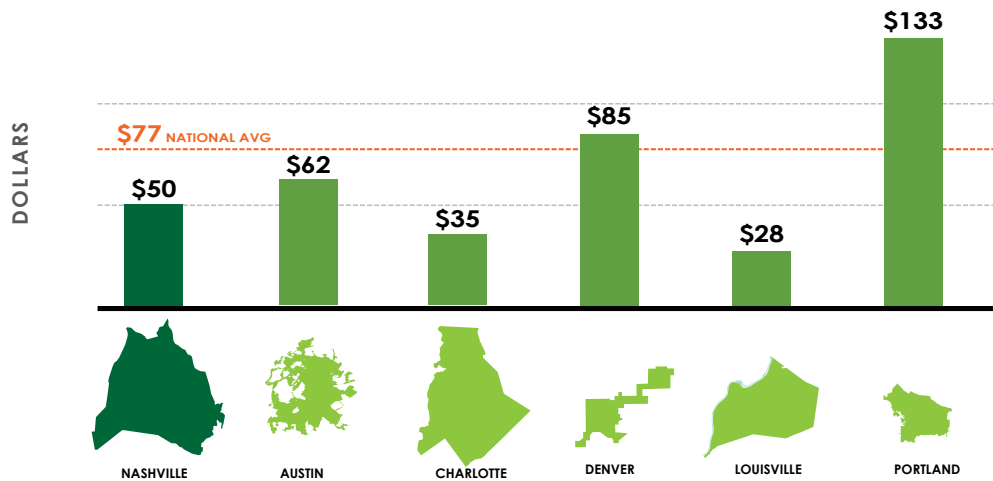


Figure 5-13 Peer Cities Operating Expense per Capita

Non-tax revenues are the funds received by Metro Parks from customers in the form of fees for services like golf courses, facility reservations, commercial event permits, fitness classes, and other fee-based services.

Non-Tax Revenue per Capita

Agency	Jurisdiction Population	Total Non-Tax Revenue	Revenue per Capita
Portland	619,360	\$ 28,703,839	\$ 46.34
Nashville*	660,836	\$ 12,122,960	\$ 18.34
Louisville	760,026	\$ 10,400,471	\$ 13.68
Denver*	663,862	\$ 7,295,500	\$ 10.99
Austin	912,791	\$ 4,002,170	\$ 4.38
Charlotte / Mecklenburg County	1,012,539	\$ 2,442,614	\$ 2.41

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

Figure 5-14 Peer Cities Non-Tax Revenue per Capita

Cost recovery describes the percentage of Metro Parks' operating budget that is recovered through the revenue it generates (i.e., non-tax revenue). Nashville's level of sustainability is above the national median cost recovery level of 29%.

Operating Cost Recovery

Agency	Total Non-Tax Revenue	Total Operating Expense	Operating Cost Recovery
Louisville	\$ 10,400,471	\$ 21,900,474	47%
Nashville*	\$ 12,122,960	\$ 33,441,918	36%
Portland	\$ 28,703,839	\$ 82,817,798	35%
Denver*	\$ 7,295,500	\$ 56,511,470	13%
Austin	\$ 4,002,170	\$ 56,993,543	7%
Charlotte / Mecklenburg County	\$ 2,442,614	\$ 35,818,368	7%

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

Figure 5-15 Peer Cities Operating Cost Recovery

Revenue Retention

Nashville’s current business model returns all earned revenues back to the general fund for appropriation. To develop an understanding of how other agencies manage their revenues, this section quantifies the total dollars retained by each agency, then expresses this amount as a percent of total operating revenues.

Agency	Fees Kept by Agency	Non-Tax Revenue	Fees Kept as % of Non-Tax Revenue
Portland	\$ 26,768,718	\$ 28,703,839	93%
Charlotte / Mecklenburg County	\$ 1,631,000	\$ 2,442,614	67%
Denver	\$ 11,095,320	\$ 17,561,412	63%
Louisville	\$ 5,722,986	\$ 10,400,471	55%
Austin	\$ 2,166,170	\$ 4,002,170	54%
Nashville*	\$ 360,000	\$ 12,122,960	3%

*Figures adjusted from information provided by TPL for Nashville based on internal data. Includes golf surcharge, that has now expired.

Figure 5-16 Peer Cities Operating Revenue Retention

Capital Spending

Capital funds are used to build new parks and facilities and for replacement and major renovations to existing.

Agency	Jurisdiction Population	Total Capital Spending	Capital Spending per Capita
Nashville*	660,836	\$ 35,488,720	\$ 53.70
Denver*	663,862	\$ 23,370,519	\$ 35.20
Austin	912,791	\$ 22,645,132	\$ 24.81
Portland	619,360	\$ 8,516,570	\$ 13.75
Charlotte / Mecklenburg County*	1,012,539	\$ 7,600,000	\$ 7.51
Louisville	760,026	\$ 4,141,951	\$ 5.45

*Figures adjusted from information provided by TPL for Nashville, Denver, and Charlotte / Mecklenburg County based on internal data.

Figure 5-17 Peer Cities Capital Spending per Capita

Marketing Budget

Marketing and communications is used to promote park facilities, services, and events, communicate with the public, and raise awareness of Parks-related issues.

Agency	Annual Marketing Budget	Total Marketing FTEs	Marketing Budget per Dedicated FTE	Marketing Budget as Percent of Total Operational Expense
Austin	\$ 598,060	4	\$ 149,515	1.05%
Denver*	\$ 392,000	3	\$ 130,667	0.69%
Portland	\$ 400,000	3	\$ 123,077	0.48%
Nashville*	\$ 99,258	1	\$ 99,258	0.30%
Louisville	\$ 27,000	2	\$ 13,500	0.12%

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

Note: Charlotte/Mecklenburg County budget and staffing levels for marketing were unavailable.

Figure 5-18 Peer Cities Marketing Budget

Full time equivalents (FTEs) are a way of comparing total employee working hours between agencies. Nashville’s service coverage is also above the national median for parks and recreation agencies (7.4 FTEs per 10,000) and all agencies serving populations of 250,000-plus (3.9 FTEs per 10,000).

Full Time Equivalents

Agency	Total FTEs	Jurisdiction Population	FTEs per 10,000 Residents
Portland	489	619,360	7.90
Nashville*	496	660,836	7.51
Austin	648	912,791	7.10
Denver	471	663,862	7.09
Louisville	350	760,026	4.61
Charlotte / Mecklenburg County*	435	1,012,539	4.30

*Figures adjusted from information provided by TPL for Nashville and Charlotte/Mecklenburg County based on internal data.

Figure 5-19 Peer Cities Full Time Equivalents

The table below describes staffing levels for payroll employees and volunteers, then calculates volunteer hours as a percentage of the total hours worked by staff. Setting aside Portland as an outlier, Nashville represents the median value (6%) among peer systems for percentage of volunteer hours to staff hours.

Volunteer Contributions

Agency	Total FTEs	Total Staff Hours	Total Volunteer Hours	Volunteer Hours as % of Staff Hours
Portland	489	1,017,120	471,638	46%
Charlotte / Mecklenburg County*	435	904,800	81,183	9%
Louisville	350	728,000	57,688	8%
Nashville*	496	1,031,449	61,118	6%
Denver	471	979,680	49,440	5%
Austin	648	1,347,840	42,664	3%

*Figures adjusted from information provided by TPL for Nashville and Charlotte/Mecklenburg County based on internal data.

Figure 5-20 Peer Cities Volunteer Hours

5.2.4 Budget and Operating Findings from Peer City Benchmark

- Nashville ranks near the middle for operating expense per capita compared with peer cities, with just over \$50 spent on operations per resident annually, but well below the national average of \$70. Put another way, Nashville's annual operating budget is around \$33,442,000; the peer city median is \$46,165,000.
- Compared to peer agencies, Nashville has a low operating expense per acre at \$2,216. Although this demonstrates the operational efficiency of the department, the relatively low price per acre may also be indicative of lower maintenance levels and/or limited offerings in comparison to other benchmark agencies. The department's minimal expense per acre can be partially attributed to the relatively low cost to maintain its natural areas and undeveloped park land, which counts for 60% of the system's total acreage. Top-line findings from the NRPA database reflect a national median of \$3,533 per park acre managed among all reporting agencies.
- Metro Parks' revenues, at over \$12,000,000 annually, highlight the department's earning capability a strength, which contributes to the overall sustainability of the operation. According to the NRPA, Nashville's cost recovery of 36% is above the national average of 29%.
- All other peer agencies in the benchmark study retain some portion of their total operating revenues. This might suggest that Nashville could establish a similar fund to capture a percentage of revenues and allow for more discretionary operating funding for the department. Enterprise funds can aid an agency in determining total cost of providing services and assist with implementing capital improvements.
- Nashville is the clear benchmark leader in terms of capital spending, both overall and per capita. This demonstrates a strong commitment to the future of the city's parks system. This level of capital spending also requires careful planning and management of resources to ensure that operational capacity is adjusted to adequately maintenance and staff future assets.
- Nashville's relatively low spending on marketing per dedicated full-time employee would indicate that Metro Parks could expend more marketing dollars. Metro Parks also falls near the bottom of peer agencies for its ratio of marketing to operational expenditures, as it spends only 0.3% of its total operations on marketing efforts. Within Metro, the Parks Department has one staff member dedicated to public relations, versus three at Public Works, four at the Nashville Public Library, and four at MTA.
- When comparing staffing levels to the overall population of each service area, Nashville's ratio ranks second among benchmark cities, with 7.51 FTEs per 10,000 residents. Nashville's service coverage is also just above the national median for parks and recreation agencies (7.4 FTEs per 10,000). While this level of staffing would indicate that the department is well-equipped, in terms of human resources, to operate, efficiency may be hampered by factors such as the size of Davidson County, which results in higher than average travel times to maintain park land and facilities, smaller than average community centers by square foot which spreads staff thinly, and the minimal use of contracted services and seasonal workers.

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5.3 NATIONAL TRENDS

While Plan to Play is focused on creating a vision tailored to Nashville, information on national trends in parks and recreation are useful in understanding broader movements in the demand for Metro Parks facilities and services.

The Sports & Fitness Industry Association’s (SFIA) 2016 Study of Sports, Fitness, and Leisure Activities Topline Participation Report reveals that the most popular sport and recreational activities include fitness walking, treadmill, running/jogging, free weights, and road cycling. The full report can be found in the Appendix. A majority of the most popular activities appeal to both young and old alike, can be done in most environments, are enjoyed regardless of skill level, and have minimal economic barriers to entry. These popular activities also have appeal because of their social application. For example, although fitness activities are mainly self-directed, people enjoy walking and biking with others because it can offer motivation and camaraderie.

According to the Physical Activity Council, an “inactive” is defined as an individual who doesn’t take part in any physical activity. Over the last five years, the number of inactive individuals has increased 7.4% from 76 million in 2010 to 81.6 million in 2015. However, looking at just the past year, from 2014 to 2015, the U.S. saw a slight decrease of 0.6% from 82.7 million to 81.6 million individuals. Although this recent shift is very promising, inactivity remains a dominant force in society, evidenced by the fact that 27.7% of the population falls into this category.

The following tables offer an at-a-glance look at trends in a wide range of recreational activities including general sports, general fitness, aquatics, outdoor/adventure recreation, and water sports.



General Sports

National Participatory Trends - General Sports					
Activity	Participation Levels			% Change	
	2010	2014	2015	14-15	10-15
Golf	26,122	24,700	24,120	-2.3%	-7.7%
Basketball	25,156	23,067	23,410	1.5%	-6.9%
Tennis	18,719	17,904	17,963	0.3%	-4.0%
Baseball	14,198	13,152	13,711	4.3%	-3.4%
Soccer (Outdoor)	13,883	12,592	12,646	0.4%	-8.9%
Badminton	7,645	7,176	7,198	0.3%	-5.8%
Softball (Slow Pitch)	8,477	7,077	7,114	0.5%	-16.1%
Football, Touch	8,663	6,586	6,487	-1.5%	-25.1%
Volleyball (Court)	7,315	6,304	6,423	1.9%	-12.2%
Football, Tackle	6,850	5,978	6,222	4.1%	-9.2%
Football, Flag	6,660	5,508	5,829	5.8%	-12.5%
Soccer (Indoor)	4,920	4,530	4,813	6.2%	-2.2%
Volleyball (Sand/Beach)	4,752	4,651	4,785	2.9%	0.7%
Gymnastics	4,418	4,621	4,679	1.3%	5.9%
Ultimate Frisbee	4,571	4,530	4,409	-2.7%	-3.5%
Track and Field	4,383	4,105	4,222	2.9%	-3.7%
Racquetball	4,603	3,594	3,883	8.0%	-15.6%
Cheerleading	3,134	3,456	3,608	4.4%	15.1%
Ice Hockey	2,140	2,421	2,546	5.2%	19.0%
Pickleball	N/A	2,462	2,506	1.8%	N/A
Softball (Fast Pitch)	2,513	2,424	2,460	1.5%	-2.1%
Lacrosse	1,423	2,011	2,094	4.1%	47.2%
Wrestling	2,536	1,891	1,978	4.6%	-22.0%
Roller Hockey	1,374	1,736	1,907	9.9%	38.8%
Squash	1,031	1,596	1,710	7.1%	65.9%
Field Hockey	1,182	1,557	1,565	0.5%	32.4%
Boxing for Competition	855	1,278	1,355	6.0%	58.5%
Rugby	940	1,276	1,349	5.7%	43.5%

NOTE: Participation figures are in 000's for the U.S. population ages 6 and over

Large Increase (greater than 25%)	Moderate Increase (0% to 25%)	Moderate Decrease (0% to -25%)	Large Decrease (less than -25%)
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Figure 5-21 National Trends: General Sports

General Fitness

National Participatory Trends - General Fitness					
Activity	Participation Levels			% Change	
	2010	2014	2015	14-15	10-15
Fitness Walking	112,082	112,583	109,829	-2.4%	-2.0%
Treadmill	52,275	50,241	50,398	0.3%	-3.6%
Running/Jogging	46,650	51,127	48,496	-5.1%	4.0%
Free Weights (Hand Weights) under 15 lbs	N/A	41,670	42,799	2.7%	N/A
Stretching	35,720	35,624	35,776	0.4%	0.2%
Stationary Cycling (Recumbent/Upright)	36,036	35,693	35,553	-0.4%	-1.3%
Weight/Resistant Machines	39,185	35,841	35,310	-1.5%	-9.9%
Free Weights (Dumbbells) over 15 lbs	N/A	30,767	31,409	2.1%	N/A
Elliptical Motion Trainer	27,319	28,025	27,981	-0.2%	2.4%
Free Weights (Barbells)	27,194	25,623	25,381	-0.9%	-6.7%
Yoga	20,998	25,262	25,289	0.1%	20.4%
Calisthenics/Bodyweight Exercise	N/A	22,390	22,146	-1.1%	N/A
Choreographed Exercise	N/A	21,455	21,487	0.1%	N/A
Aerobics (High Impact)	14,567	19,746	20,464	3.6%	40.5%
Stair Climbing Machine	13,269	13,216	13,234	0.1%	-0.3%
Cross-Training Style Workout	N/A	11,265	11,710	4.0%	N/A
Stationary Cycling (Group)	7,854	8,449	8,677	2.7%	10.5%
Pilates Training	8,404	8,504	8,594	1.1%	2.3%
Trail Running	4,985	7,531	8,139	8.1%	63.3%
Cardio Cross Trainer	N/A	7,484	7,982	6.7%	N/A
Boot Camp Style Cross-Training	N/A	6,774	6,722	-0.8%	N/A
Cardio Kickboxing	6,287	6,747	6,708	-0.6%	6.7%
Martial Arts	6,002	5,364	5,507	2.7%	-8.2%
Boxing for Fitness	4,788	5,113	5,419	6.0%	13.2%
Tai Chi	3,193	3,446	3,651	5.9%	14.3%
Barre	N/A	3,200	3,583	12.0%	N/A
Triathlon (Traditional/Road)	1,593	2,203	2,498	13.4%	56.8%
Triathlon (Non-Traditional/Off Road)	798	1,411	1,744	23.6%	118.5%

NOTE: Participation figures are in 000's for the U.S. population ages 6 and over

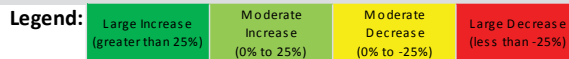


Figure 5-22 National Trends: General Fitness

Aquatic Activity

National Participatory Trends - Aquatics					
Activity	Participation Levels			% Change	
	2010	2014	2015	14-15	10-15
Swimming (Fitness)	N/A	25,304	26,319	4.0%	N/A
Aquatic Exercise	8,947	9,122	9,226	1.1%	3.1%
Swimming (Competition)	N/A	2,710	2,892	6.7%	N/A

NOTE: Participation figures are in 000's for the U.S. population ages 6 and over

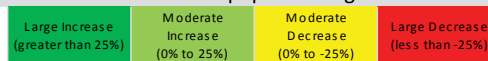


Figure 5-23 National Trends: Aquatic Activity

Outdoor Recreation

National Participatory Trends - Outdoor / Adventure Recreation					
Activity	Participation Levels			% Change	
	2010	2014	2015	14-15	10-15
Bicycling (Road)	39,730	39,725	38,280	-3.6%	-3.6%
Fishing (Freshwater)	39,911	37,821	37,682	-0.4%	-5.6%
Hiking (Day)	32,534	36,222	37,232	2.8%	14.4%
Camping (< 1/4 Mile of Vehicle/Home)	32,667	28,660	27,742	-3.2%	-15.1%
Wildlife Viewing (>1/4 Mile of Home/Vehicle)	21,158	21,110	20,718	-1.9%	-2.1%
Camping (Recreational Vehicle)	16,651	14,633	14,699	0.5%	-11.7%
Birdwatching (>1/4 mile of Vehicle/Home)	13,317	13,179	13,093	-0.7%	-1.7%
Fishing (Saltwater)	12,056	11,817	11,975	1.3%	-0.7%
Backpacking Overnight	7,998	10,101	10,100	0.0%	26.3%
Archery	6,323	8,435	8,378	-0.7%	32.5%
Bicycling (Mountain)	7,152	8,044	8,316	3.4%	16.3%
Skateboarding	7,080	6,582	6,436	-2.2%	-9.1%
Fishing (Fly)	5,523	5,842	6,089	4.2%	10.2%
Roller Skating, In-Line	8,128	6,061	6,024	-0.6%	-25.9%
Climbing (Sport/Indoor/Boulder)	4,542	4,536	4,684	3.3%	3.1%
Adventure Racing	1,214	2,368	2,864	20.9%	135.9%
Bicycling (BMX)	2,090	2,350	2,690	14.5%	28.7%
Climbing (Traditional/Ice/Mountaineering)	2,017	2,457	2,571	4.6%	27.5%

NOTE: Participation figures are in 000's for the U.S. population ages 6 and over

Large Increase (greater than 25%)	Moderate Increase (0% to 25%)	Moderate Decrease (0% to -25%)	Large Decrease (less than -25%)
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Figure 5-24 National Trends: Outdoor Recreation

Watersports

National Participatory Trends - Water Sports / Activities					
Activity	Participation Levels			% Change	
	2010	2014	2015	14-15	10-15
Canoeing	10,306	10,044	10,236	1.9%	-0.7%
Kayaking (Recreational)	6,339	8,855	9,499	7.3%	49.9%
Snorkeling	9,332	8,752	8,874	1.4%	-4.9%
Jet Skiing	7,739	6,355	6,263	-1.4%	-19.1%
Sailing	4,106	3,924	4,099	4.5%	-0.2%
Water Skiing	4,849	4,007	3,948	-1.5%	-18.6%
Rafting	4,389	3,781	3,883	2.7%	-11.5%
Scuba Diving	2,938	3,145	3,274	4.1%	11.4%
Wakeboarding	3,611	3,125	3,226	3.2%	-10.7%
Kayaking (Sea/Touring)	1,958	2,912	3,079	5.7%	57.3%
Stand-Up Paddling	1,050	2,751	3,020	9.8%	187.6%
Surfing	2,585	2,721	2,701	-0.7%	4.5%
Kayaking (White Water)	1,606	2,351	2,518	7.1%	56.8%
Boardsailing/Windsurfing	1,373	1,562	1,766	13.1%	28.6%

NOTE: Participation figures are in 000's for the U.S. population ages 6 and over

Large Increase (greater than 25%)	Moderate Increase (0% to 25%)	Moderate Decrease (0% to -25%)	Large Decrease (less than -25%)
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Figure 5-25 National Trends: Watersports

5.3.1 Local Sport and Market Potential

Potential Index (MPI) measures the probable demand for a product or service in Davidson County, Tennessee. The MPI shows the likelihood that an adult resident of the target area will participate in certain activities when compared to the U.S. national average. The national average is 100; therefore a number below 100 represents a lower than average participation rate, and a number above 100 represents a higher than average participation rate. This data is another measure of demand in Nashville that informs the recommendations found in Chapter 7 of Plan to Play.

ESRI's MPI for a product or service for an area is calculated by the ratio of the local consumption rate for a product or service for the area to the U.S. consumption rate for the product or service, multiplied by 100. MPIs are derived from the information integration from four consumer surveys.

Davidson County is compared to the national average in four categories – general sports, fitness, outdoor activity, and money spent on miscellaneous recreation. Overall, residents of Nashville demonstrate participation trends that have above-average potential index numbers in all categories. Davidson County exhibits high interest in a wide range of activities that includes:

- Pilates
- Backpacking
- Jogging/running
- Tennis
- Yoga
- Frisbee

Nashvillians also spend more money than the U.S. average on attending college basketball games, college football games, and going to the zoo.



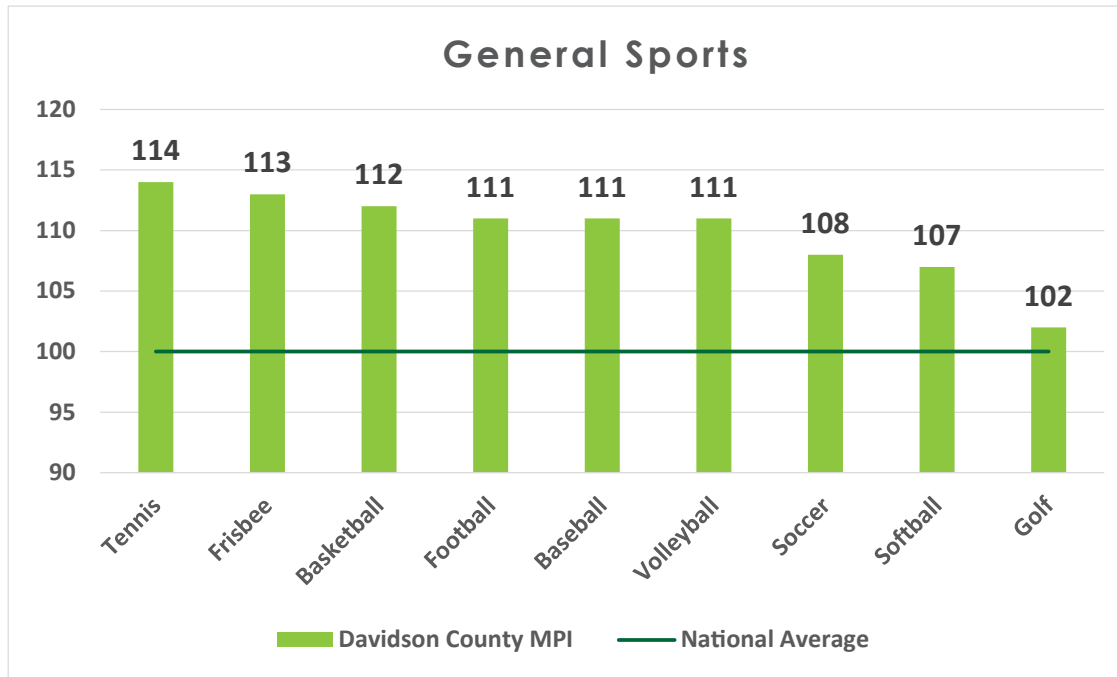


Figure 5-26 Davidson County Participation: General Sports

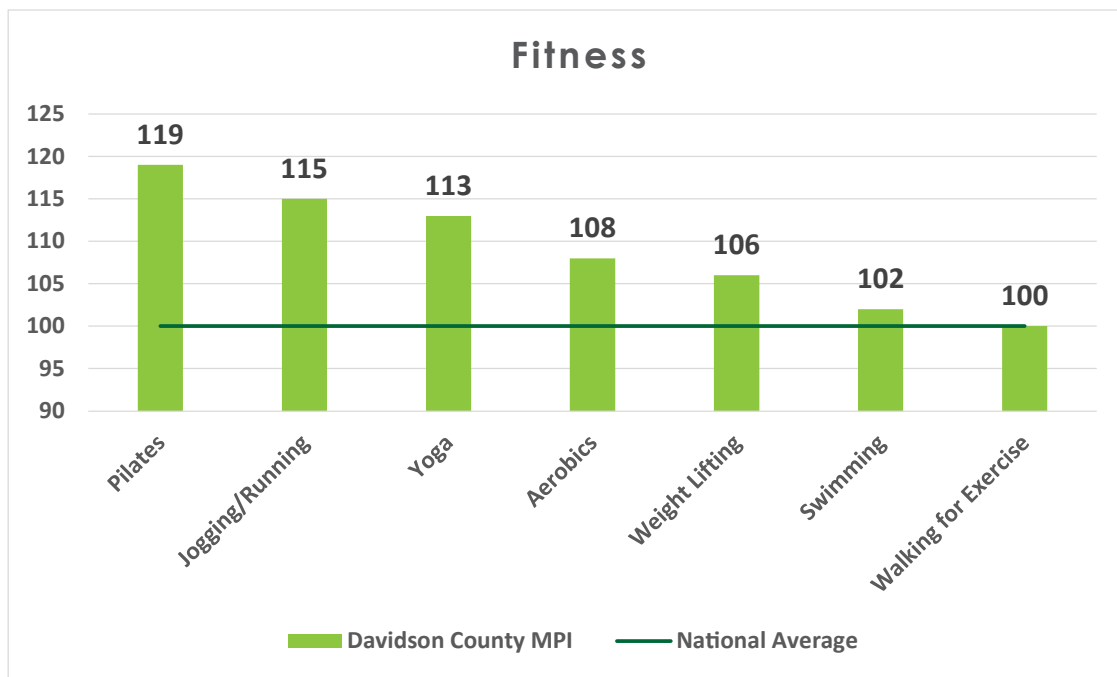


Figure 5-27 Davidson County Participation: Fitness

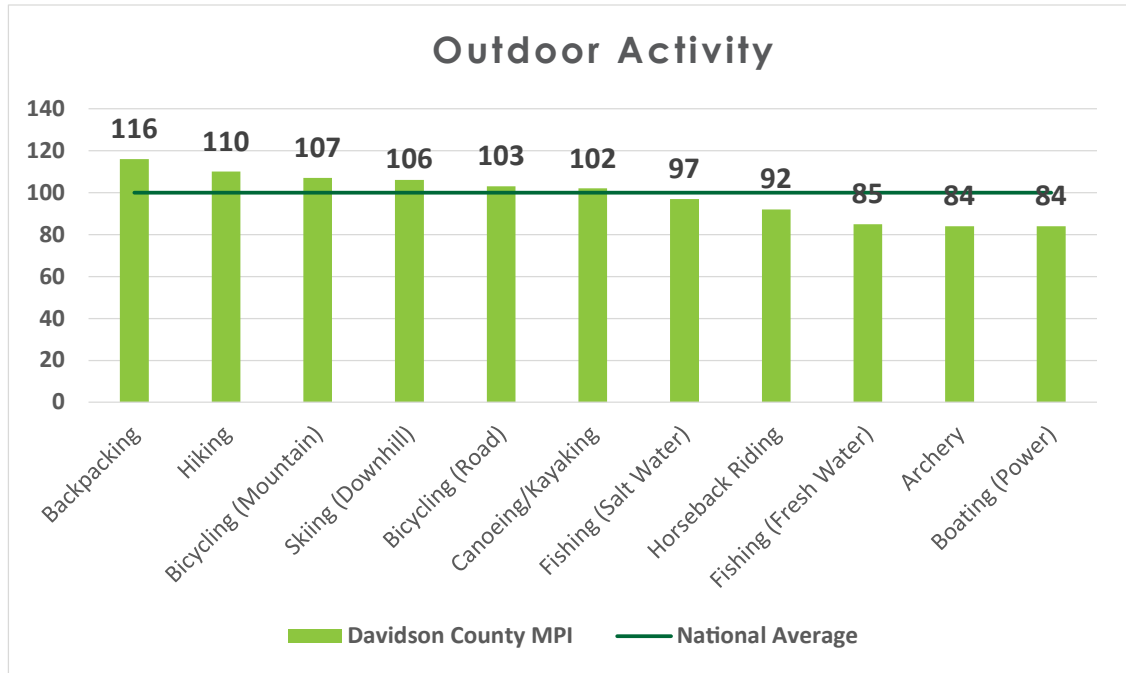


Figure 5-28 Davidson County Participation: Outdoor Activity

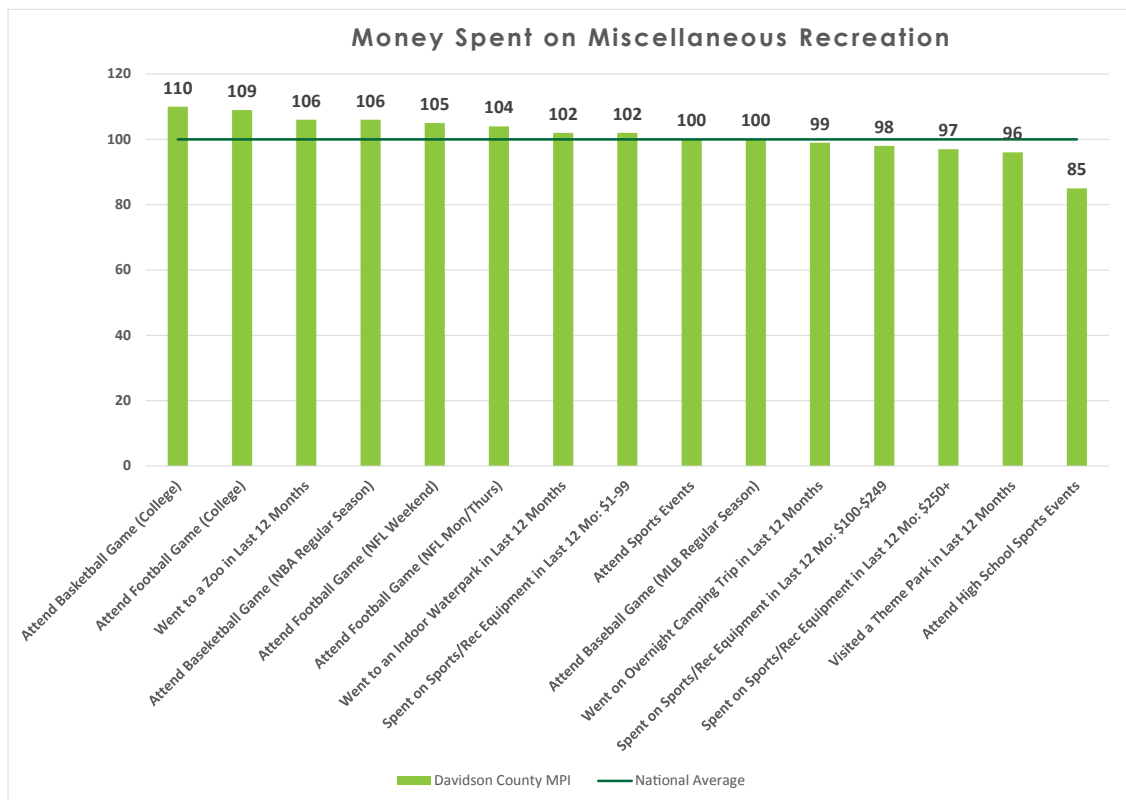


Figure 5-29 Davidson County Participation: Miscellaneous



5.4 EXISTING LEVEL OF SERVICE

Level of Service (LOS) is a measurement of a system's performance. For the purposes of this section of Plan to Play, an LOS analysis was performed to quantify how well the existing park system is meeting the needs of the community in 2016 where deficiencies exist.

For Nashville, the analysis of level of service was informed by using three basic techniques that provided guidance or targets from which recommendations were reached.

- Acreage (Amount of park land)
- Facilities (Amount of facilities)
- Service Distance

To complete the LOS analysis for Metro, the consultant team established targets after they:

- Analyzed public input and identified priorities (Section 5.1);
- Looked at how well the system is currently meeting existing demand (Section 4.0);
- Compared against benchmarking cities (Section 5.2);
- Looked at projected growth rate of the population, and anticipated demographic changes (Section 3.5);
- Examined the current level of recreation experience (Section 4.4); and
- Considered existing levels of access residents have to parks and greenways facilities (Section 5.4.2).

The desired LOS is initially assessed by identifying the acreage and facilities required to meet actual recreation demand, and determining the minimum land necessary to provide those parks and recreation facilities. The desired acreage and facilities LOS is based on the premise that land alone is not sufficient to meet recreation needs. In other words, the desired LOS is the sum of the recreation opportunities that results from land and facilities that combined can meet demands. A neighborhood could have land; but without accompanying facilities and amenities, it may not sufficiently meet the desired level of service for the area. If a certain level of recreational facilities is determined to be necessary, until those facilities are in place, the recreational LOS is not being met. Likewise, if the park facilities are too distant (usually measured in miles or travel distance) from the residents in a community, the LOS is not being met.

USE OF NASHVILLENEXT TRANSECTS

An important factor in determining service distance is the density of development and

PUBLIC INPUT

For the first time in Metro Parks, level of service for facilities was mapped and analyzed. From a broad list of facility types, a priority ranking of park facilities was completed based on the survey results of residents who responded to questions about what they valued most about Metro Parks, and where Metro Parks services do not meet demand. The following facility priorities list emerged from public input:

- Paved multiuse trails
- Unpaved trails
- Picnic shelters
- Recreation/fitness centers
- Playgrounds
- Dog parks
- Swimming pools and splash pads
- Historic sites
- Community gardens
- Canoe/kayak access
- Park cafes and concessionaires in parks
- Multipurpose fields

population around a park. Most people may need to drive to a park in a rural area while thousands may live and work within a 10 minute walk of a downtown park. Development density has been taken into consideration by using different targets for the levels of service in different parts of the county. To accomplish this, NashvilleNext transect density categories and related maps were used. The consultant team worked with five of the seven NashvilleNext transect categories for analyses: Rural (T2), Suburban (T3), Urban (T4), Centers (T5), and Downtown (T6). Refer to Figure 5-30.

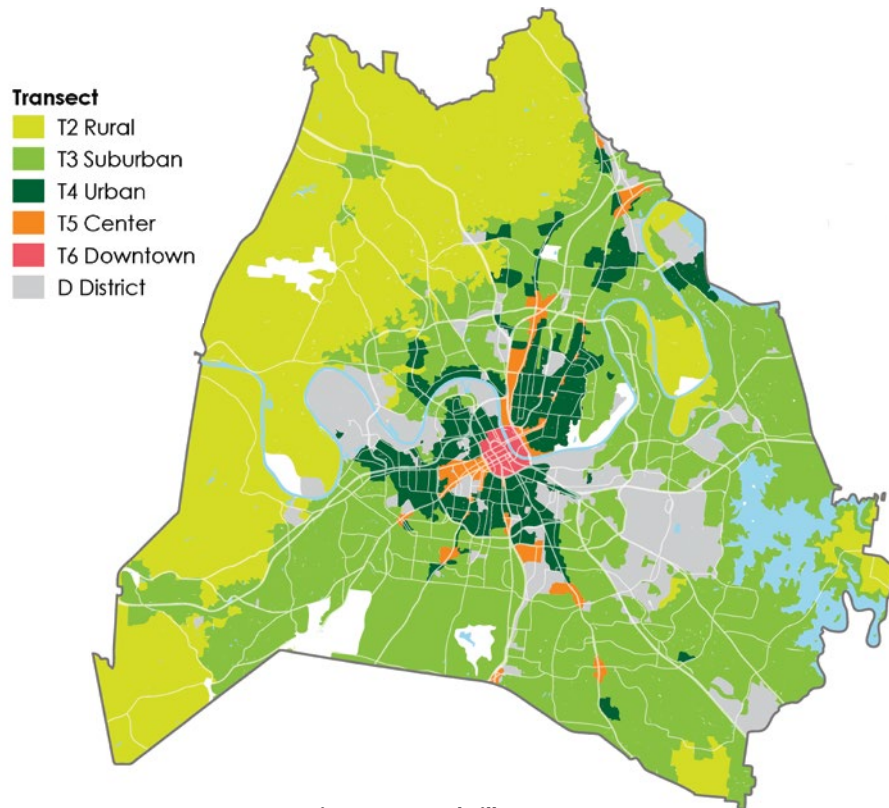


Figure 5-30 NashvilleNext Transect Map

Acreage, facility, and access goals for level of services were developed, based on the factors listed below:

- Public survey input
- Existing acreage level of service
- Benchmark and peer cities comparisons

**5.4.1 Analysis:
Existing Park
Acreage Level
of Service**

The most common way to analyze the level of service (LOS) for existing acreage is to compare the number of public park acres per 1,000 residents in the community. As of 2016, there are 13,445 acres of developed park land and greenways in the county, and 660,836 residents, or 20.34 acres per 1,000 residents. In 2026, Metro’s population is expected to rise to 774,310. **Unless Metro adds additional park or greenway acreage, its LOS will decrease to 17.36 acres per 1,000 residents.** Figure 5-31 shows the LOS analysis for each park type, and compares Metro Parks’ levels with other comparable cities. This comparison provides information used to determine the appropriate service and ultimately recommendations.

2016 PARK ACREAGE AND LEVEL OF SERVICE			
Park Type	NASHVILLE 2016 SERVICE LEVEL PER 1000 RESIDENTS*	PEER CITIES SERVICE LEVELS	PARK ACREAGE
Pocket Parks (incl. school playgrounds): < 3 acres	0.12	Austin: 0.03 Denver: 0.03	54
Neighborhood Parks: 3 - 20 acres	0.83	Austin: 1.07 Charlotte: 0.69 Denver: 1.04 Louisville: 0.56	511
Community Parks: 20 - 100 acres	1.77	Charlotte: 2.66 Denver: 1.77 Louisville: 1.57	1,169
Regional Parks: 100 + acres	28.10	Austin: 6.75 Charlotte: 4.7 Denver: 1.9 Louisville: 8.97	10,176
Signature Parks	0.26		168
Special Use Park (incl. sports facilities)	1.09	Austin: 2.37 Denver: 1.67	721
Greenway Corridors	0.97		643
Total Developed Park Land**	20.34		13,445

* Assumes a 2016 population of 660,836

** Excludes land bank properties. Excludes undeveloped.

Figure 5-31 Existing Acreage and Peer Cities Level of Service

While Plan to Play is a master plan for the Metropolitan Board of Parks and Recreation, level of service analyses included all publicly available parks in Davidson County, including parks operated by the State of Tennessee, the U.S. Army Corps of Engineers, and satellite cities within Davidson County. All public parks were mapped for the purpose of showing true park land deficits regardless of provider agency.

DOWNTOWN PARK PRESSURE ANALYSIS

Because the dynamics of park use in downtown Nashville are unique, different metrics are required to analyze Levels of Service. Parks in the downtown transect (T6) serve a growing population of residents, workers, and tourists. They also play host to the biggest and most frequent special events in the city. For these reasons, a second mapping exercise offered further insight into service and use in these downtown parks. First, an analysis of park pressure was calculated based on the residential population that live within a half mile (10-minute walk) of each park. A multiplier was used to capture the added pressure from daytime commuters and tourists. Not calculated into the multiplier is pressure from future downtown residential and office units that are slated to come online within the 10-year window of this master plan. The colors on Figure 5-32 below represent the current pressure at each existing downtown park. The park pressure analysis helps to further understand existing gaps in service downtown, and to understand which parks are at capacity.

PARK PRESSURE

- VERY HIGH
- HIGH
- MODERATE
- DOWNTOWN PARK SERVICE AREA
- OTHER PARK
- DOWNTOWN (T6) TRANSECT BOUNDARY

THIS MAP SHOWS THE LEVEL OF PARK PRESSURE ON DOWNTOWN PARKS WITHIN THE NASHVILLE NEXT DOWNTOWN (T6) TRANSECT. THE PARK PRESSURE ANALYSIS LOOKS AT PARK ACRES PER 1,000 RESIDENTS LIVING WITHIN A HALF-MILE (10-MINUTE WALK) SERVICE AREA OF EACH PARK. THE SERVICE AREAS ARE BASED ON A DYNAMIC ANALYSIS APPROACH USING A WALKABLE ROAD NETWORK THAT REMOVES INTERSTATES, HIGHWAYS, RIVERS, AND RAILROADS TO DETERMINE HOW AN INDIVIDUAL WOULD WALK TO EACH PARK.



Figure 5-32 Downtown Park Pressure Map

PARK	PARK ACRES	POPULATION WITHIN A HALF-MILE SERVICE AREA	ACRES PER 1000 RESIDENTS	PARK PRESSURE
BICENTENNIAL CAPITOL MALL STATE PARK	51.4	6919	7.43	MODERATE
CHURCH STREET PARK	0.28	5483	0.05	VERY HIGH
COMMERCE CENTER PARK	0.31	5005	0.06	VERY HIGH
EAST BANK PARKS*	12.94	357	36.25	MODERATE
PUBLIC SQUARE PARK	6.01	6632	0.9	VERY HIGH
RIVERFRONT PARK	21.99	7066	3.11	HIGH
WALK OF FAME PARK	2.67	5442	0.49	VERY HIGH

EAST BANK PARKS* INCLUDE CUMBERLAND PARK & EAST BANK GREENWAY
POPULATION FIGURE INCLUDES A 2.14 MULTIPLIER TO TAKE INTO ACCOUNT WEEKDAY COMMUTERS WHO WORK IN DOWNTOWN NASHVILLE.

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5.4.2 Analysis: Existing Park Access Level of Service **EXISTING LEVEL OF SERVICE FOR ACCESS – SERVICE RADII**

Another step to determine existing LOS was to analyze the level of access to each park in the system. This analysis measured distance, which varied based on transect and type of parks or amenity. A level of service radii was determined for each park type, Figure 5-34. The service radius for each park was based on a distance from that park, and is mapped according to real access using the existing road network. For shorter distances (Transects 4, 5, and 6), a walkable road network is used that removes highways and interstates. This type of analysis more accurately reflects the distance to a park by accounting for barriers such as interstates, rivers, and disconnected streets.

		Access Radii			
Nashville Next Transect		Pocket	Neighborhood	Community	Regional
Rural	T2	N/A	2 miles	3 miles	5 miles
Suburban	T3	N/A	1.5 mile	2 miles	5 miles
Urban	T4	1/2 mile	3/4 mile	1 mile	5 miles
Centers	T5	1/3 mile	1/2 mile	3/4 mile	5 miles
Downtown	T6	1/4 mile	1/3 mile	1/2 mile	5 miles

Figure 5-33 Park Level of Service Transect Access Radii

For this approach, the service area expands outward from the park. Residents outside of the service buffers (areas that the park is intended to serve) are considered “under served”. This is graphically represented on the following maps by the areas of white or no color (Figure 5-35 to Figure 5-39). For all park typologies except regional, distance standards vary depending on the specific transect of the community.

Level of Service Coverage

- Pocket Park
- Neighborhood Park
- Community Park

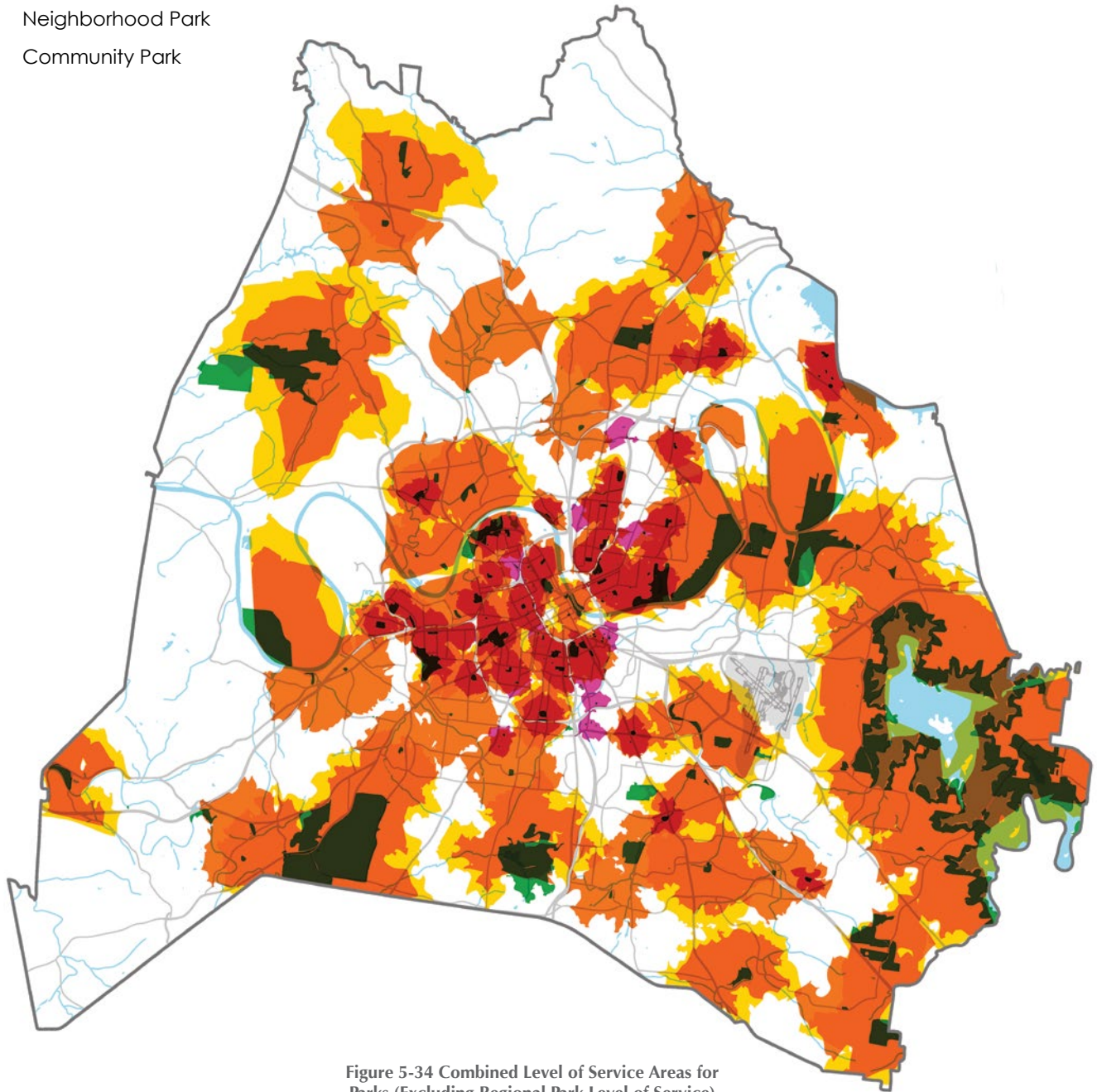
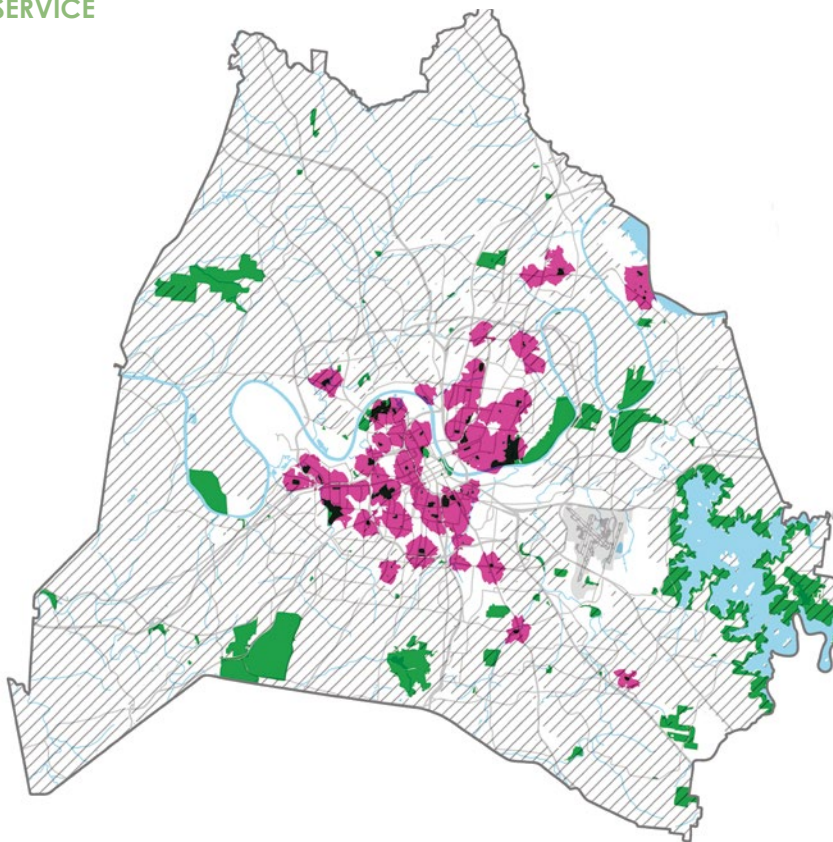


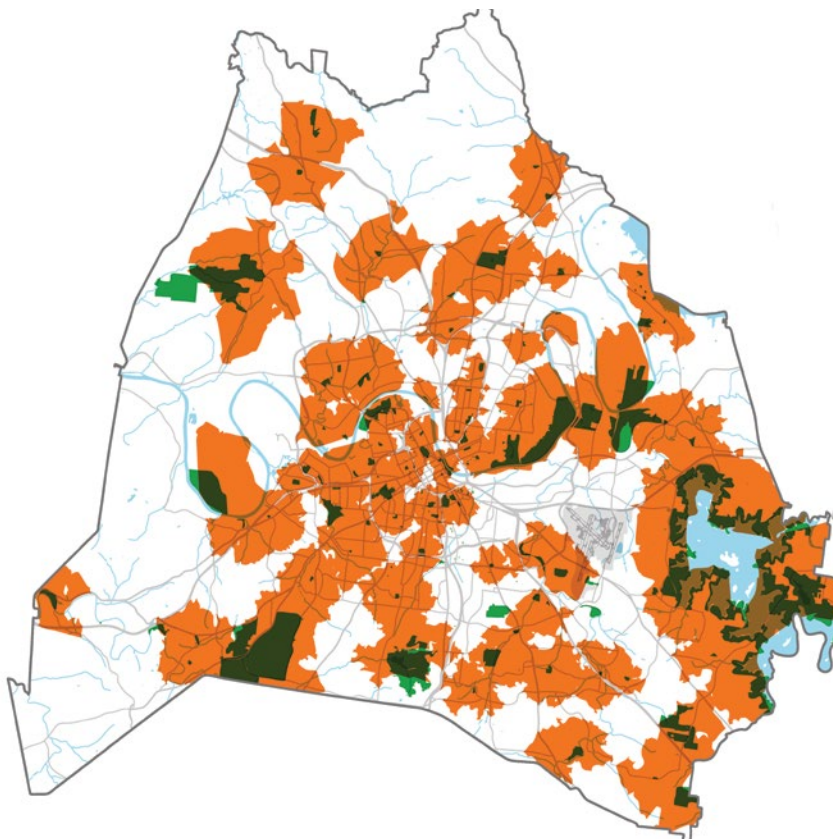
Figure 5-34 Combined Level of Service Areas for Parks (Excluding Regional Park Level of Service)



TRANSECT	LOS RADIUS
Rural T2	n/a
Suburban T3	n/a
Urban T4	0.5 miles
Centers T5	0.33 miles
Downtown T6	0.25 miles

The pocket parks analysis includes pocket, neighborhood, community, regional, and signature parks. The pocket park analysis did not include service for the rural (T2) or suburban (T3) transects, indicated in the cross hatching, because Metro focuses on providing pocket parks in more densely populated areas of the city.

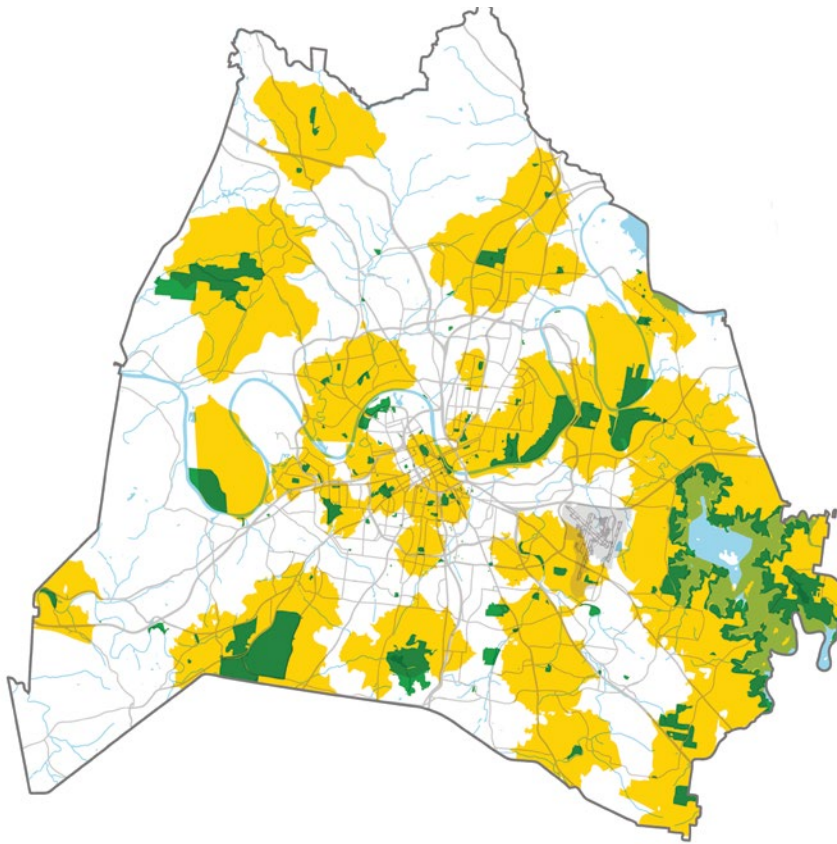
Figure 5-35 Pocket Park Level of Service Areas



TRANSECT	LOS RADIUS
Rural T2	2 miles
Suburban T3	1.5 miles
Urban T4	0.75 miles
Centers T5	0.5 miles
Downtown T6	0.33 miles

The neighborhood parks analysis includes neighborhood, community, regional, and signature parks.

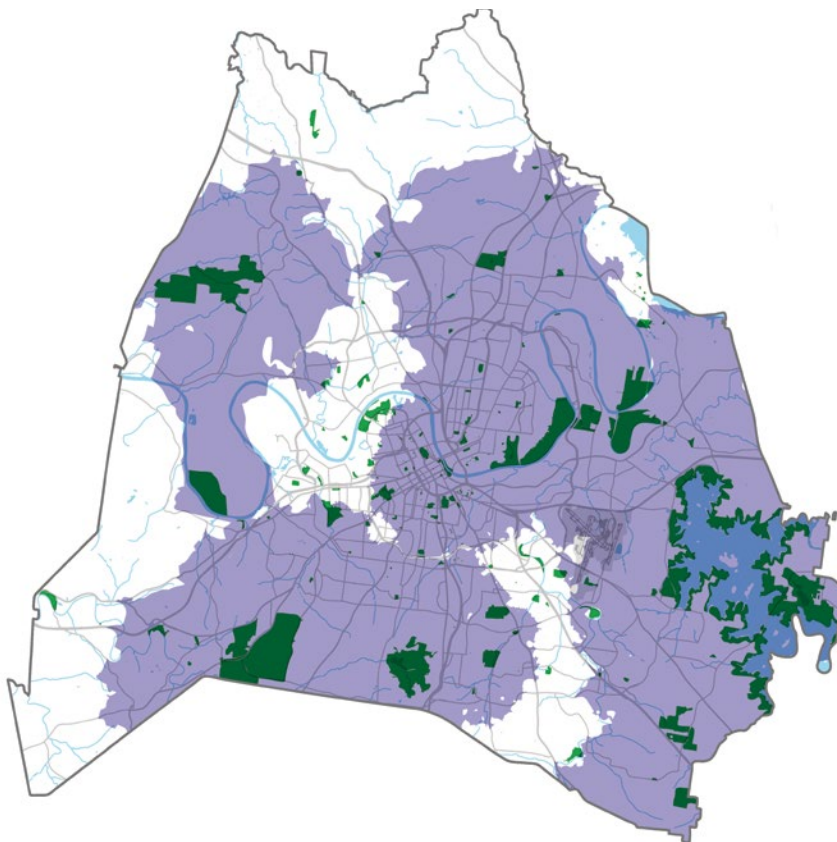
Figure 5-36 Neighborhood Park Level of Service Areas



TRANSECT	LOS RADIUS
Rural T2	3 miles
Suburban T3	2 miles
Urban T4	1 mile
Centers T5	0.75 miles
Downtown T6	0.5 miles

The community parks analysis includes community, signature, and regional parks.

Figure 5-37 Community Park Level of Service Areas



TRANSECT	LOS RADIUS
Rural T2	5 miles
Suburban T3	5 miles
Urban T4	5 miles
Centers T5	5 miles
Downtown T6	5 miles

The regional park analysis included all parks classified by Metro Parks as regional parks as well as all state and federal parks inside county boundaries. A 5-mile travel radius was used for regional parks for all transects. We acknowledge that regional park locations are based on unique landscape features, and therefore cannot be placed "on a grid." Regional parks are each a unique destination and everyone should be able to access them. One regional park, Southeast Property, was included in our analysis that is not yet open to the public.

Figure 5-38 Regional Park Level of Service Areas

**5.4.3 Analysis:
Existing
Facilities Level
of Service**

Another level of service measure is the number of facilities provided per 1,000 residents. Like acreage, there are no strict standards for the number of facilities a community should have to serve its residents. Public use, needs, and desires are a critical factor when determining facility level of service. In addition to these factors, the consultant team also looked at national recreation trends and peer cities to understand how recreation use is changing across the country in ways that might impact Metro Parks' future facility needs.

This analysis measured distance, which varied based on transect and type of parks or amenity, similar to the park access analysis. A level of service radii was determined for key facilities in the system, Figure 5-34. The service radius for each facility is based on a distance from that facility, and is mapped according to real access using the existing road network. For shorter distances (Transects 4, 5, and 6) a walkable road network is used that removes highways and interstates. This type of analysis more accurately reflects the distance to a facility by accounting for barriers such as interstates, rivers, and disconnected streets. Access was mapped for key facility types with the exception of picnic shelters. Depending on need and demand, multiple shelters may be appropriate in one park. As a result, access to this facility type did not provide data to inform where access was sufficient and where it was inadequate.

LOS analyses were developed specifically for seven facility / amenity types that emerged as the highest priorities from the public needs assessment, peer city analysis, and national recreation trends:

- Greenways and trails
- Neighborhood community centers
- Regional community centers
- Aquatic community centers
- Picnic shelters
- Playgrounds
- Dog parks
- Multipurpose fields



Amenity:	2016 Inventory - Developed Facilities			
	Nashville Units	Nashville Current Service Level based upon population		
Paved Multiuse Trails	102	0.15	miles per	1,000
Unpaved Trails/ Hiking Trails	66	0.10	miles per	1,000
Picnic Shelters	60	1.00	site per	11,014
Outdoor Pools	4	1.00	site per	165,209
Playgrounds	156	1.00	site per	4,236
Dog Parks	7	1.00	site per	94,405
Multipurpose Fields	83	1.00	field per	7,962
Basketball Courts	61	1.00	court per	10,833
Tennis Courts	147	1.00	court per	4,495
Ball Fields (Adult and Youth)	86	1.00	field per	7,624
Mountain Bike Trails	23	0.03	miles per	1,000
INDOOR AMENITIES:				
Community Center/Recreation /Gymnasium/Fitness Facility (Square Feet)	870,069 SF*	1.23	SF per	person

Figure 5-39 Existing and Recommended Facility Level of Service

Figure 5-40 identifies the 2016 key facility types, the corresponding level of service per 1,000 residents. This analysis can be used to make final recommendations for the numbers of facilities needed by applying the modified level of service to the population.

5.4.4 Greenways and Trails

Greenways (paved multiuse trails) and hiking trails (unpaved, earthen trails) emerged during the public input process as the highest-priority facility types. In order to determine need, it was important to understand current service. The previous master plan set a service area goal of providing a greenway within 2 miles of every Nashville resident. This goal was determined by one’s proximity to the actual route of the greenway trail rather than a greenway access point. The LOS for this master plan analyzed access to trail access points.

For the purpose of this analysis, both linear greenway trails and paved trails within parks (i.e. fitness loops) were mapped (Figure 5-42) using their access points. The analysis is based on various distances associated with NashvilleNext transects and access using the full road network as identified in Figure 5-41. For shorter distances (1 mile or less), a walkable road network was used that removes highways and interstates from the analysis.

The hiking trails were mapped separately but were developed in a similar manner (Figure 5-43). The analysis is based on a five-mile distance for all trails in the T2 and T3 transects (Figure 5-30 and Figure 5-41). The level of service was not determined for the T4, T5, or T6 transects. Mountain biking and equestrian trails are not included.

Currently, Metro Parks maintains 102 miles of paved multiuse trails and 66 miles of unpaved trails. This is 0.15 miles and 0.10 miles per 1,000 residents respectively.

Access Radii

GREENWAYS		Greenways	Hiking Trails	Park Trails
		paved multi-use trails (8 ft min)	unpaved trails (dirt, mowed, gravel)	Walking loops
Rural	T2	3 miles	5 miles	1.5 miles
Suburban	T3	3 mile	5 miles	1 mile
Urban	T4	1 mile	N/A	3/4 mile
Centers	T6-T5	1/2 mile	N/A	1/2 mile

Figure 5-40 Paved trails with parks

LEVEL OF SERVICE RADII

TRANSECT	GREENWAYS	PAVED TRAILS
Rural T2	3 miles	1.5 miles
Suburban T3	3 miles	1 mile
Urban T4	1 mile	0.75 miles
Centers T5	0.5 miles	0.5 miles
Dtown T6	0.5 miles	0.5 miles

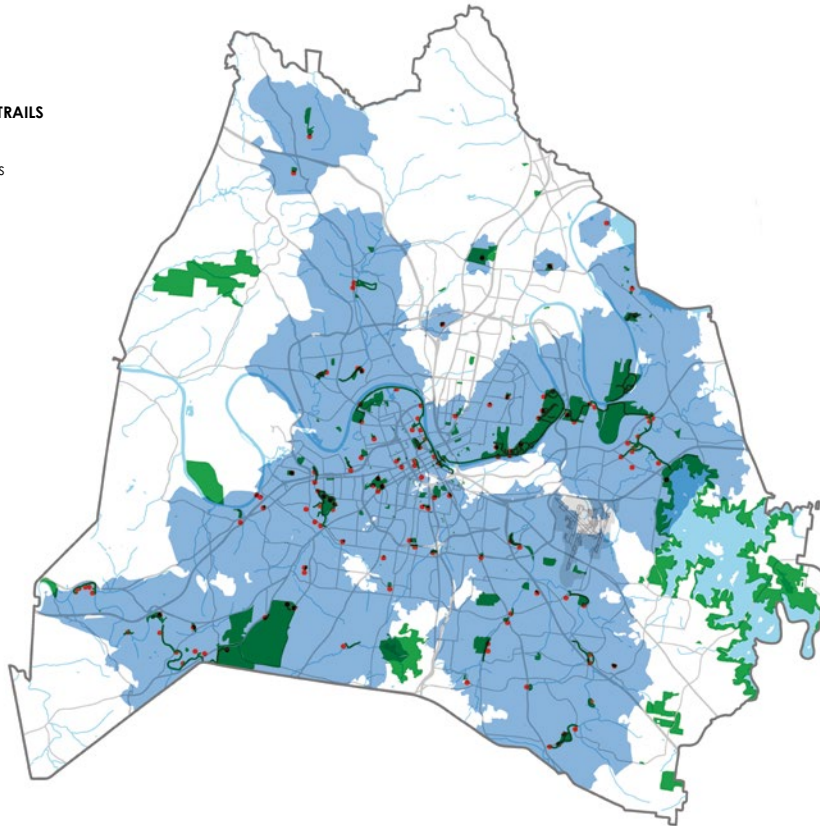


Figure 5-41 Greenway: Paved Trail Level of Service

LEVEL OF SERVICE RADII

TRANSECT	HIKING TRAILS
Rural T2	5 miles
Suburban T3	5 miles
Urban T4	n/a miles
Centers T5	n/a miles
Downtown T6	n/a miles

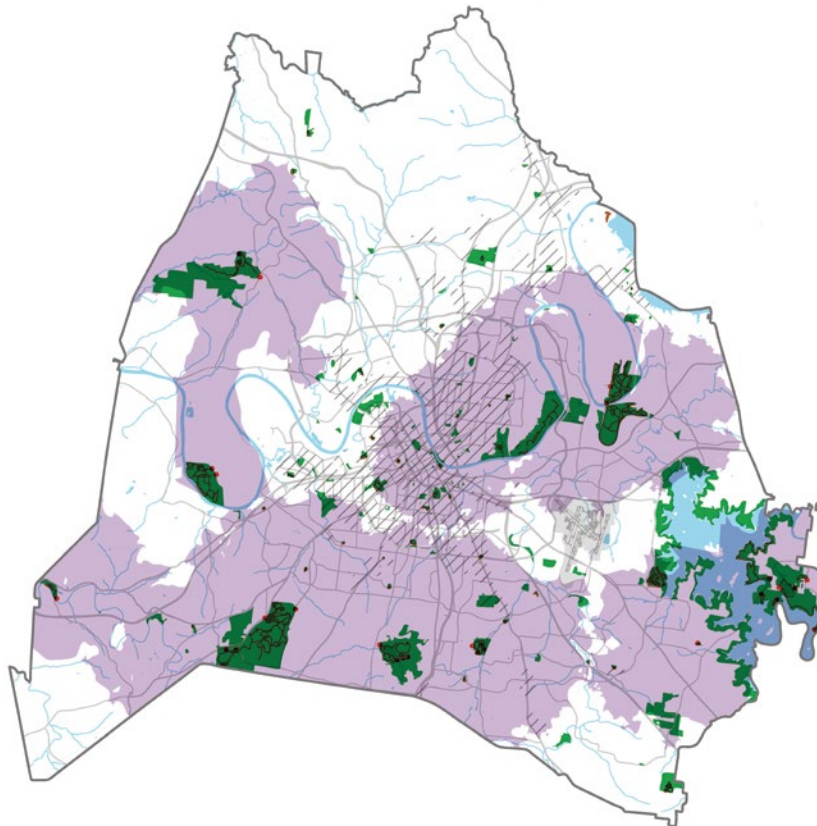


Figure 5-42 Greenway: Unpaved Trails Level of Service

NEIGHBORHOOD COMMUNITY CENTERS, REGIONAL COMMUNITY CENTERS, AND AQUATICS

Community centers are high-demand facilities that are also very expensive to operate so these facilities were analyzed to get a better understanding of the geographic areas that are currently under served by existing facilities. Nashville’s community centers are current divided into two tiers: neighborhood community centers, which average 16,000 square feet in size and offer basic recreational amenities; and regional community centers, which average 33,000 square feet and are full-service facilities that include a fitness center, movement studio, indoor walking track, and maybe a swimming pool.

The level of service for community centers is determined by one center within a predetermined distance (see below). The service areas are based on a dynamic analysis approach, which uses the full road network to determine how an individual would travel the specified distance from each community center. The following distances were used for each facility type:

- Neighborhood community center (Figure 5-44): 1.5 miles
- Regional community center (Figure 5-46): 3 miles
- Community center with aquatics (Figure 5-45): 3 miles
- Centennial Sportsplex (Figure 5-45): 5 miles

Aquatic facilities, indoor and outdoor pools, are also high demand facilities, which in Metro Nashville, are located at some community centers with the exception of the Centennial SportsPlex which is considered a sport and fitness facility. Existing pool locations were mapped to understand the geographic areas that are currently under served by existing facilities.

LEGEND

- Community Center
- Neighborhood Community Center Service Area (1.5-mile radius)

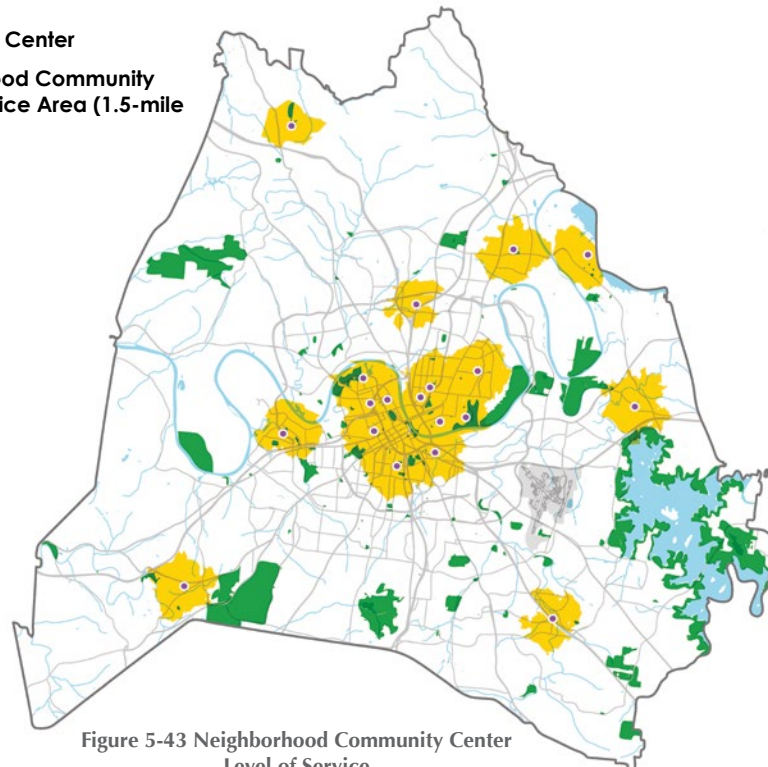


Figure 5-43 Neighborhood Community Center Level of Service

LEGEND

- Regional Community Center
- Regional Community Center Service Area (3-mile radius)

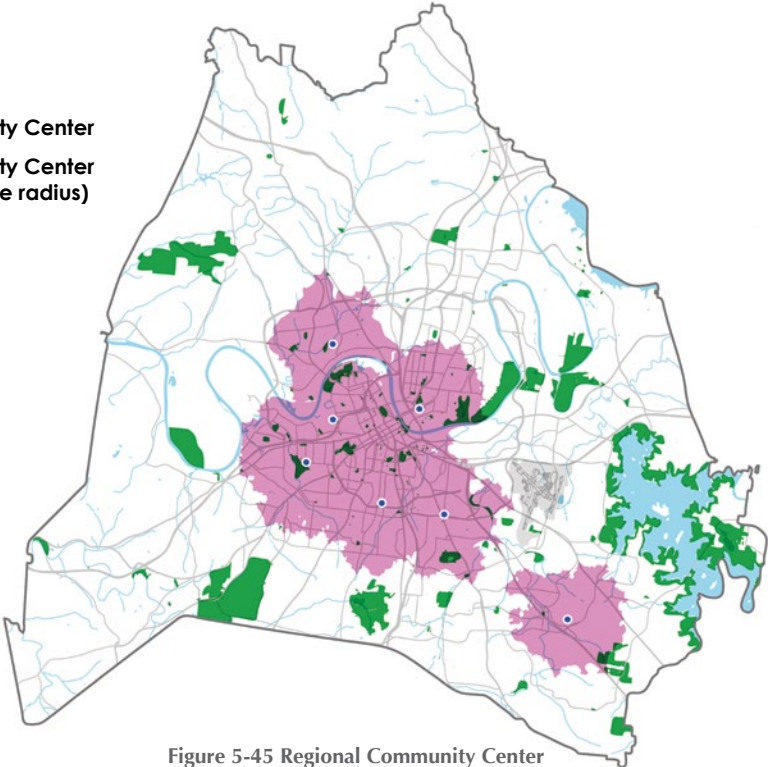


Figure 5-45 Regional Community Center Level of Service

- Indoor Pool (3-mile radius)
- Outdoor Pool (3-mile radius)
- Centennial Sportsplex (5-mile radius)
- Aquatic Community Center Service Area

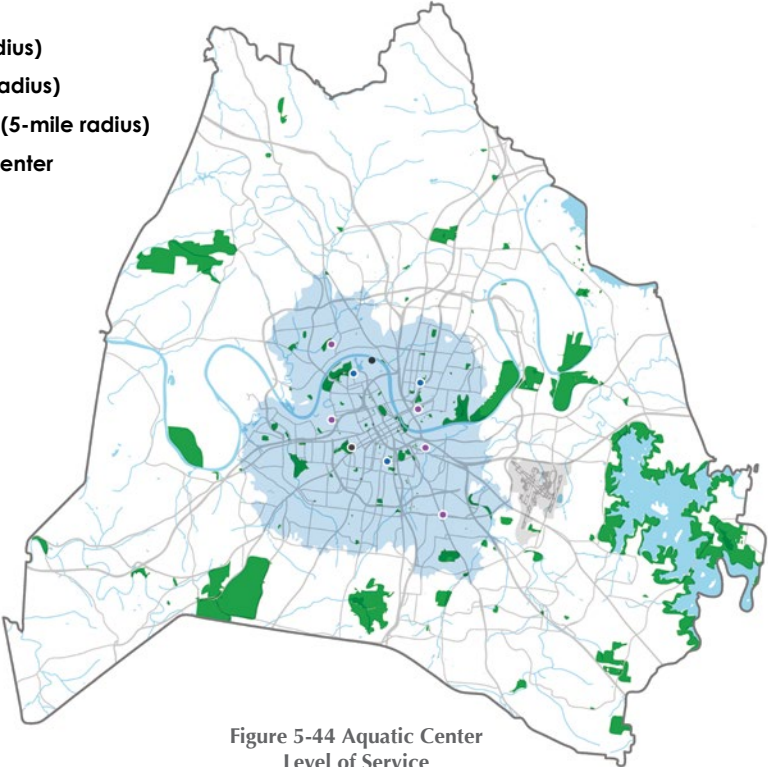


Figure 5-44 Aquatic Center Level of Service

PICNIC SHELTERS

Metro Parks currently manages 60 picnic shelters, which equals a current level of service of one shelter per 11,014 people.

PLAYGROUNDS

The level of service analysis for playgrounds includes playgrounds on Metro Parks property. Realizing that school playgrounds managed by Metro Parks still provide recreational value to surrounding neighborhoods, these facilities were included in the analysis. To understand distribution and locations of playgrounds not currently managed by Metro Parks, playgrounds were also mapped on Metro School properties including elementary and middle schools (Figure 5-48).

Nashville currently has 92 playgrounds managed by Metro Parks or one playground per 7,183 people.



LEGEND
 ● Picnic Shelters

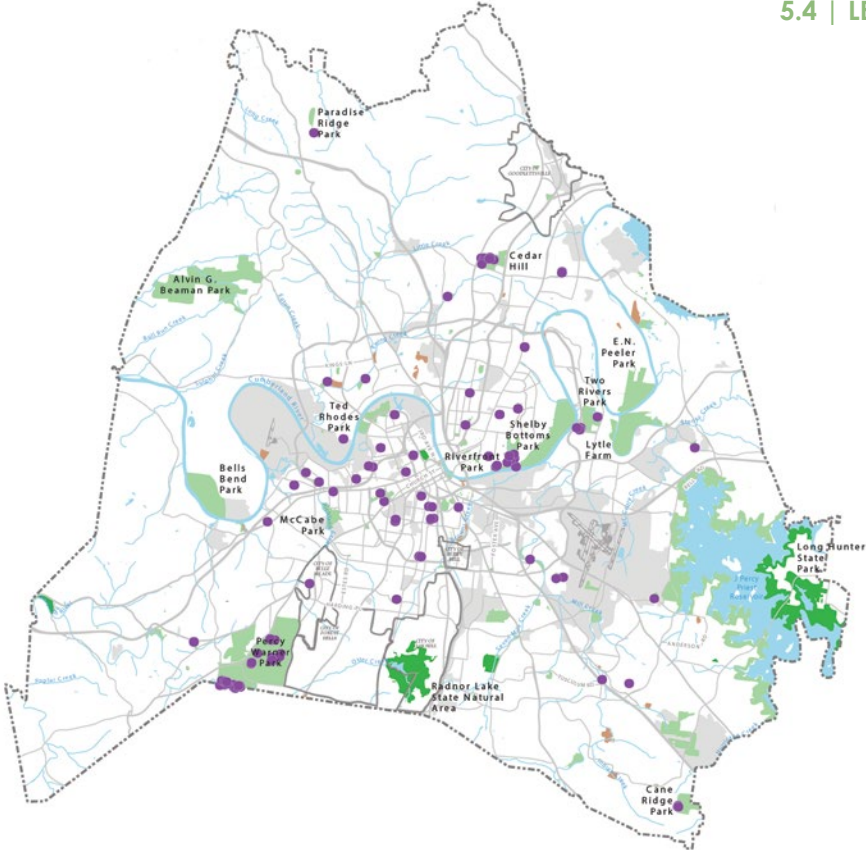


Figure 5-46 Picnic Shelter Locations

● Park Playgrounds
 ● School Playgrounds Managed by Parks
 ○ School Playgrounds Not Managed by Parks
 ■ Playground Service Area

LEVEL OF SERVICE RADII

TRANSECT	LOS RADIUS
Rural T2	N/A
Suburban T3	3 miles
Urban T4	2 miles
Centers T5	1 mile
Downtown T6	1 mile

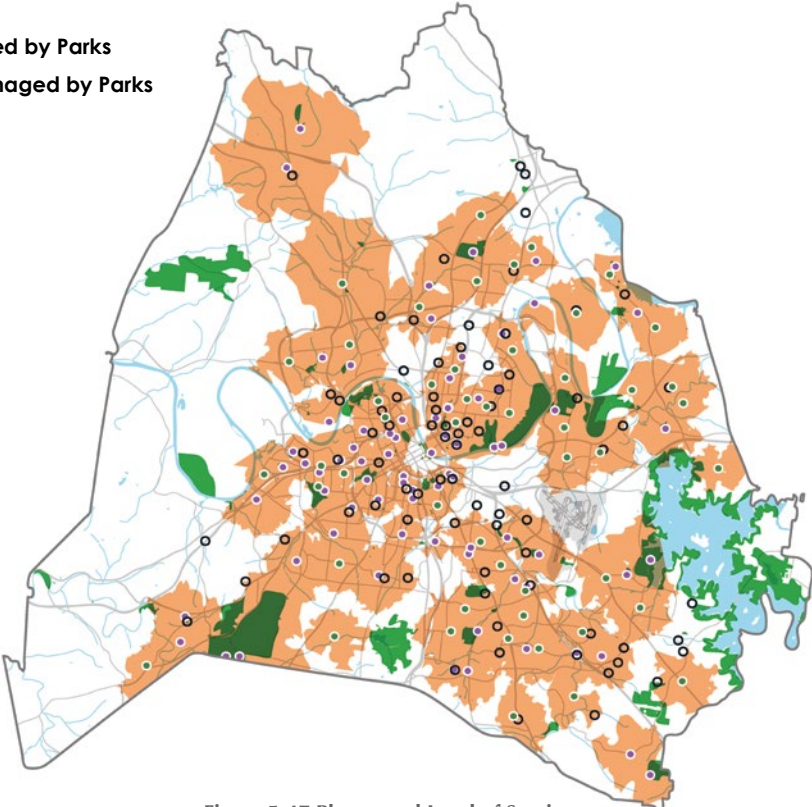


Figure 5-47 Playground Level of Service

DOG PARKS

Like the other facilities herein, the level of service analysis for access to dog parks is based on various distances associated with NextNashville Transects and access using the full road network (see Figure 5-49 for how the distances vary by transect). Nashville currently has seven dog parks managed by Metro Parks or one dog park per 94,405 people.

MULTIPURPOSE FIELDS

The level of service for multipurpose fields is determined using a three mile access radius for each field. Given the diverse types of fields in the Metro Parks System, competitive, practice, and informal fields were all included in the analysis (Figure 5-50). Nashville currently has 16 multipurpose fields or one per 41,302.



LEGEND

- Dog Parks
- Dog Park Service Area

LEVEL OF SERVICE RADII

TRANSECT	LOS RADIUS
Rural T2	N/A
Suburban T3	3 miles
Urban T4	2 miles
Centers T5	1 mile
Downtown T6	1 mile

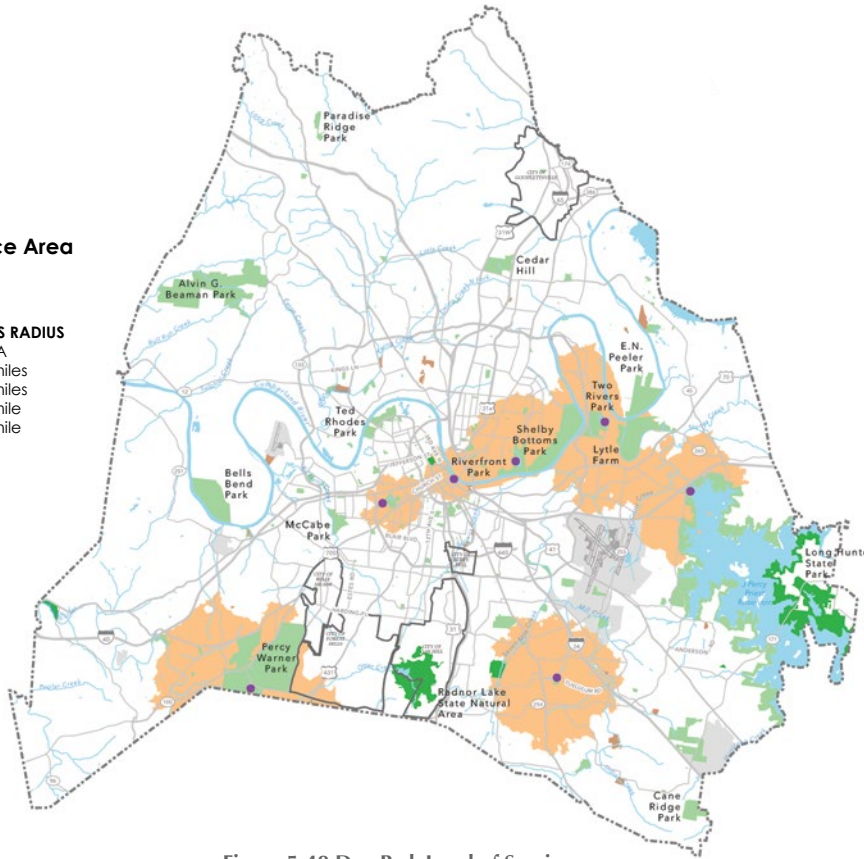


Figure 5-48 Dog Park Level of Service

- Competitive Field
- Practice Field
- Informal Field
- Multipurpose Field Service Area

LEVEL OF SERVICE RADII

TRANSECT	LOS RADIUS
All	3 miles

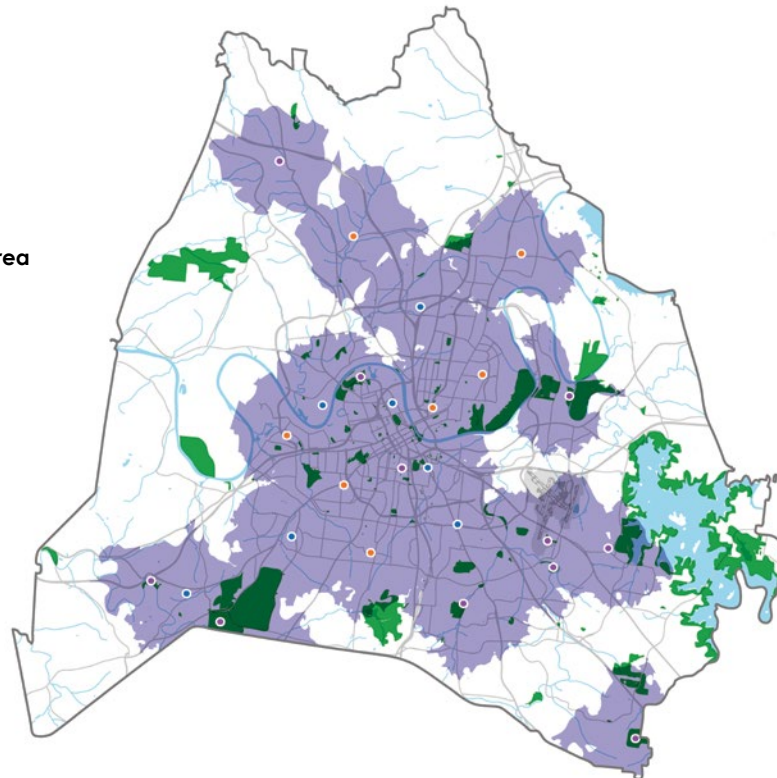


Figure 5-49 MultiPurpose Field Level of Service

KEY LEVEL OF SERVICE FINDINGS

- In 2026, Metro's population is expected to rise to 774,310. Metro Parks' current levels of service cannot be maintained, much less improved, without adding more land and facilities.
- The level of service analysis concluded that, regardless of park type, each park provides a recreation experience for the surrounding community. For example, regional parks serve as neighborhood or community parks for adjacent residents. Because of this, each park type was mapped with the service area of its own type as well as the service area of the park types smaller than it.
- Many parks are currently lacking the appropriate number of facilities to meet demand. In addition to providing new park land to meet recreation needs, many facility needs can be accommodated with new facilities in existing parks.



5.5 FINDINGS AND OBSERVATIONS

LAND

Land is a fundamental element of the park system. The land, measured in acreage, includes not only formal developed parks but also natural areas and greenway corridors used to accommodate trails that provide transportation within and beyond the parks. Of the comparable cities used in this plan's analysis, Metro Nashville has the largest county land area with the second smallest population. This presents Metro Parks with challenges and opportunities.

- Parks are essential infrastructure with an extremely high return on investment (ROI) that includes recreational, economic, social, environmental, health, and educational benefits.
- For its size, 15,873 acres, the Metro Parks system has a unique identity with an unusually high percentage of large regional park acreage compared to peer cities:
 - » Ranked #4 for total park acreage
 - » Ranked #2 for acres per person
- Over the last decade, with the focus on acquiring large tracts at the edges of the county, these big natural areas have become a unique and defining strength of Nashville's park system.
- There is a shortage, as result, of more developed park land with active recreation facilities when compared to peer cities.
- NashvilleNext built a foundation of consensus for Plan to Play. It answered:
 - » where development and growth in the community should occur, and
 - » where neighborhood character and conservation landscapes should continue.
- Though Nashville has a significant acreage of park land, its distribution is not even across the county. After analyzing the locations of parks, gaps in system coverage were identified as opportunities for future expansion.
- Downtown parks are under intense pressure. With a growing population, these parks are at or are reaching maximum capacity.
- Metro Parks needs to update the system of classifying parks and set goals for existing and future park sizes.
- Greenways are a valuable tool for land preservation as well as connecting places. Over 2,700 acres of floodplain lands are already preserved as corridors.

FACILITIES

Park facilities are the physical infrastructure within the Parks system that allow people to utilize the parks in a variety of ways. These facilities need to be accessible and flexible in order to accommodate a wide range of expanding future trends and needs.

- Paved and unpaved trails are among the most valued facility types in the system, and the community wants more of them across the county.
- The small-sized existing recreation centers may provide great access in

neighborhoods today, but larger regional mega-centers will provide the best practices model for financial sustainability to efficiently satisfy growing demand for indoor recreation and program services.

- Historic buildings are sometimes in competition with many other needs for limited Parks funds; some historic properties exhibit deferred maintenance issues.
- Because of population growth and demographic shifts, Metro must re-invest in existing and new recreation facilities to maintain or conservatively increase the level of service we enjoy today.
- Needed key facility types can be added to existing park land to meet some of the growing demands and improve levels of service.
- Many portions of the country are under-served geographically by both land and facilities, which affects equitable access for all residents.
- Nashville offers no quality food service or cafe experiences in its park system.

PROGRAMS

Based on the information compiled herein, Metro Parks has done a great job providing facility access to residents while delivering different types of programs.

- Metro Parks offers a wide variety of programs typical for a system of its size. The strongest message received from public input is that Nashvillians primarily want existing program to expand.
- Regional and neighborhood centers offer a diversity of program types but are short on nature/history and cultural arts programs. Due to either staffing limitations or culture, it appears that these programs are mostly confined to their own facilities, which limits their countywide benefit.
- Productivity of space is low at many community centers and arts facilities until after-school hours. See the Appendix for additional information on this.
- Many programs, including summer enrichment, arts programs, and the disabilities program, are oversubscribed and have wait lists. Competition to get into limited programs has in some cases driven people to wait outside the door of a community center at 4 a.m. be assure a place in a popular program.
- Over 95% of programs are offered free of charge. Community centers, nature centers, and arts venues operate at net loss in aggregate, which is not unusual; but the degree of loss may be compounded by this very high number of free programs. See Appendix for additional information on this.
- Membership and program fees are considered low compared to private competitors.
- In community and user surveys, those who use Parks programs rate them high; but only a small part of the population participate in programs.
- Programs are not widely marketed due to staffing capacity and resource limitations.

OPERATIONS

Operations of the Metro Parks system depend on a well-trained and dedicated staff. Their energy and dedication plan and deliver the programs, maintain the land and facilities, and administer and promote the system on a day-to-day basis. A continued, sustainable level of investment in Parks operations multiplies any investment made in land, facilities, or programs.

- Metro Parks staff have extremely high loyalty and dedication to the department.
- Metro Parks operating budget / expenses of \$50 per person is significantly lower than the national average of \$77 per person.
- Metro Parks' total operating budget in 2015 was just over \$33,400,000, the second-lowest operating budget among peer cities.
- Metro Parks ranks second among peer cities for operating cost recovery. It retains the lowest percentage of revenue, with the next-lowest peer city being 54%.
- Sustainable funding of operating expenses can:
 - » increase staffing levels,
 - » expand high-demand program offerings,
 - » increase hours of operation,
 - » allow expanded marketing of services,
 - » grow revenue stream, and
 - » improve levels of maintenance.
- 94% of facility users surveyed said user fees have not prohibited participation in a program.
- Program types should be classified to ensure core essential programs remain free and accessible, and value-added programs do not place an operational and financial burden on the Parks system.
- Understanding trends, costs of services, the market, and usership allows the department to more efficiently and effectively allocate resources.
- Individual business plans can identify the operational and funding needs of a facility or program, as well as opportunities to offset costs with revenue and improve customer service.

FUNDING

Funding impacts every park element discussed thus far. Though this section is closely related to the preceding Operations section, funding is focused on the larger, long-range questions of how Nashville can sustainably invest in its park system. A critical decision for Metro Government is not only how much money to invest in the future of the park system, but also what funding structure best suits Metro Parks. Must it continue to rely primarily on public dollars annually allocated by the Metro Council? Or could it be allowed the ability to generate some of its own funding and revenue sources? What role can or should private partnerships play in Nashville's park system?

- Metro Government continues to provide great financial support for capital investments to the park system:
 - » Capital spending is highest per person compared to peer cities, and
 - » Capital spending is highest per acre compared to peer cities.
- National and peer city analyses suggest that it is unusual for a system this size to rely solely on public tax dollars for annual funding.
- There is opportunity to grow revenues generated by the Metro Parks department with minor adjustments to the cost recovery system.
- There is opportunity for strengthening private partnerships like friends groups to increase the number of revenue streams and leverage public dollars.
- Based on peer city comparisons, incentivized or regulated participation by the development community to invest in beneficial public improvements is a financial tool for added consideration in Metro.



6. CLARIFYING OUR VALUES

As a component of the Plan to Play process, Metro Parks' purpose and values were re-evaluated and articulated. This exercise was intended to help ensure that everything the department does aligns with a foundational vision that is relevant to Nashville's contemporary needs and ethos. These statements were crafted by the Plan to Play Steering Committee and Metro Parks staff and resulted in a new mission statement (which had last been assessed in 2002), a first-ever vision statement, and a first-ever set of guiding principles.

Together, these statements have guided the development of Plan to Play's recommendations and will be the standards by which departmental decisions are made.

6.1 CLARIFYING THE MISSION OF METRO PARKS

MISSION

It is the mission of Metro Parks and Recreation to sustainably and equitably provide everyone in Nashville with an inviting network of public parks and greenways that offer health, wellness, and quality of life through recreation, conservation, and community.

6.2 MISSION STATEMENT

A vision statement functions as a broad aspiration objective.

6.3 VISION

VISION

Nashville's parks, facilities, and programs offer life-enriching everyday experiences that are central to the city's identity as a green, active, diverse, creative, thriving, and healthy community.

6.4 GUIDING PRINCIPLES

Based on the above statements, the Steering Committee and staff worked further to identify and refine nine guiding principles. These are meant to serve as filters through which to assess the appropriateness of plan recommendations and departmental actions.

Metro Parks and Recreation strives to provide Nashville and Davidson County with a park and greenway system that is:

Open to All

We distribute resources throughout Nashville to ensure equitable access and inclusion for everyone.

Relevant and Diverse

We offer places, activities, and experiences that are as varied as the Nashville community itself.

Healthy

Our facilities and programs support the integration of health and wellness into everyday life.

Green

The acquisition, development, and management of our park infrastructure reflect best practices in the management of natural resources and the ecological services they provide.

Strategic and Productive

We plan for successful outcomes through efficiency, cost-effectiveness, and the balancing of varied interests. We develop effective partnerships in the public interest.

Safe

We design and manage clean and safe parks and facilities.

Uniquely Nashville

Through community spaces, stewardship, and education, we promote the natural, cultural, and creative character of our community.

Transparent

The community is invited to participate in key Decision Making.

A Good Investment

We contribute to the prosperity of Nashville through economic impact, public health, climate resilience, and quality of life.



A few of the many programs and opportunities Metro Parks creates in the community.

6.5 GOALS AND OBJECTIVES

Five core goals emerged from the community engagement process as the basis for future action and decision-making for Plan to Play. These goals are the product of a comprehensive, public engagement process. Public input, extensive research, and best practices review have resulted in strategic directions that will build on the parks' system to reflect community needs and emerging trends in recreation. The Parks and Recreation Plan continues the vision for a high-quality, equitable system of parks and recreation land, facilities, and programs. The resulting strategic direction will help focus energy, commitment, and resources of Metro Parks, other departments, local businesses, and user groups to support and maintain parks, recreation facilities, and programs as desired by this community.



Land Acquisition and Development

Increase the livability for Nashville and Davidson County residents by improving access to an excellent regional system of public parks and greenways that provides recreational, educational, ecological, and aesthetic benefits to enhance the quality of life for all.

- Expand park network informed by service area gaps, equitable access, and opportunity.
- Enact innovative zoning, permitting, and development tools for park system expansion, especially in urban areas and along greenways.
- Acquire natural areas and other environmental and cultural/historic resources.
- Increase connectivity to parks and other destinations with greenways paired with better access by bike, foot, and transit.
- Implement best practices in environmental stewardship and natural resource management.
- Integrate public art, focus on place-making, and recognize civic presence and context.



Facilities

Provide a wide variety of park facilities and amenities within the parks and greenway system to provide opportunities for valuable recreation experiences in appropriate settings for the benefit of residents and visitors to the region.

- Ensure that all facilities are responsive to community needs and acknowledge different age groups, cultural backgrounds, and economic strata.
- Continue to develop facilities that contribute to public health.
- Find innovative ways to protect, use, and steward historic buildings.
- Promote the development of athletic facilities that attract regional and national competitions, generate revenue, and provide economic benefit.
- Align high-cost facility offerings with a level of return on investment that is consistent with the mission and principles of the department.



3 Programs and Services

Grow Metro Parks' program participation, visibility, and facility use by offering all residents opportunities to participate in cultural, athletic, and environmental education programs to increase health, and build and support social and community cohesion across the region.

- Provide a full range of programs that respond to community needs like health and wellness, cultural arts, environmental education, and recreation.
- Increase access to programs through expanded hours of operation, and partnerships.
- Raise awareness of programs through better marketing.
- Adapt and change as community needs, demands, and trends change.
- Expand programs for youth and teens to gather in a safe and accepting environment.
- Promote parks as a premier destination for seniors through enhanced recreational and social programming.
- Increase arts accessibility with traditional and nontraditional venues and partnerships.
- Programs and special events should be sensitive to the impacts, public accessibility, and carrying capacity of the host park.



4 Operations and Management

Sustainably manage Metro Parks' operations so public tax dollars are being used as responsibly and efficiently as possible, while ensuring residents enjoy first-rate experiences and facilities. Use staff, technology, planning, and best business practices to increase Metro Parks' performance and community impact.

- Ensure that investments in new parks do not result in the neglect of existing parks.
- Scale up partnerships with nonprofit organizations and public and private agencies to pool resources and meet shared goals.
- Better utilize technology to improve efficiency and customer service.
- Maintain data and establish performance measures to improve efficiency and customer service.
- Improve public communications.
- Increase awareness of the benefits (economic and otherwise) of parks and greenways.
- Transition toward policies that phase out any subsidies that may be out of sync with the



5 Finance

Responsibly balance service delivery and facilities management with multiple sources of sustainable funding. Strategically look for opportunities to maximize Metro Parks' resources, staff, and facilities to best serve Metro Parks' growing and diversifying population. Ensure no one service or set of services places an undue or inappropriate burden on the Metro Parks budget.

- Diversify revenue streams in order to help buffer the department from irregularities in public funding.
- Adopt entrepreneurial practices that help the department to deliver better services.
- Develop the annual fee schedule in a manner that protects public interest, access, and equity, while balanced with practical cost recovery goals that support financial sustainability.



7. PLAN RECOMMENDATIONS

All of the work undertaken in the previous six chapters culminates in the recommendations found here in Chapter 7. These recommendations were built around seven major sources of input:

- Community engagement
- Partner and stakeholder interviews
- Peer city benchmarking
- Best practices nationally
- Recreational trends
- Analysis of Nashville's existing park system, operations, and finances

Together, these recommendations propose not just what and where new parks and facilities should be located, but how the system can be sustainably operated and financed. This path forward allows the system to grow in scale, services, equity, and quality while making the operational changes and investments to support that growth.

A 10-year work plan, issued as a separate bound volume, was created in addition to the recommendations to prioritize the projects, actions, tasks, costs, and schedule that will result in the full implementation of Plan to Play.

7.1 INTRODUCTION

7.2 CAPITAL IMPROVEMENTS: LAND



There are many different components that together make up the Metro Nashville Parks system; some of them include residents, staff, programs, and facilities. However, in its basic form, the physical foundation of the system is land. The land-specific recommendations in Plan to Play are intended to work in concert with the other recommendations and together provide the road map for the next 10 years of park system growth.

At 526 square miles, the sheer size of Davidson County offers an incredible diversity of existing parks and future park opportunities. Our combined city/county form of government makes Metro unique compared to most other cities. Dense urban neighborhoods are within just a few miles of sprawling suburbs and rural farmland. Each of these forms of development offers its own opportunities for distinctive park scale, character, and use.

For the last decade or more, successive supportive mayoral administrations and Metro Parks have made a concerted effort to focus many land acquisition efforts toward large-acre natural areas at the edges of the county. These more passive open spaces preserve farmland, forest, and habitat. They reflect Nashville's values and are a unique and defining strength of the city's existing park system. **While Metro Parks is by no means done protecting large rural properties, it must become equally good at acquiring and developing smaller urban parks.** Indeed, as the city continues to densify, urban parks will become increasingly critical to ensuring a high quality of life, walkable access, and equitable benefits for all residents. These urban parks will require new strategies for acquisition, development, and maintenance, which are discussed in plan sections 7.5 and 7.6.

Metro's projected increase in population alone will require continued significant investment in park land acquisition just to maintain its current levels of service. In order to achieve the even higher standards derived from Plan to Play's needs assessment, park land acquisition must exceed the rate of the projected population growth. In order to determine how much and where new park land should be acquired, Plan to Play utilizes four distinct tools:

- Park Typologies
- Level of Service: Per capita acreage standards
- The NashvilleNext Transect

GOAL 1: LAND ACQUISITION AND DEVELOPMENT

Increase the livability for Nashville and Davidson County residents by improving access to an excellent regional system of public parks and greenways that provides recreational, educational, ecological, and aesthetic benefits to enhance the quality of life for all residents of Nashville and Davidson County



Top: Public Square, Above: Shelby Bottoms

7.2.1 Park Typologies

Update Park Typologies

One of the first steps in developing land recommendations involved assessing the current park types or categories. This assessment identified the need to update these categories to better meet the needs of the community. Park typologies have been re-calibrated for Plan to Play and formalized with an acreage range and unique program function for each type. The new park classification system, first introduced in Section 4.5, is as follows:

- Pocket Park (up to 3 acres)
- Neighborhood Park (3 to 20 acres)
- Community Park (20 to 100 acres)
- Regional Park (100+ acres)
- Greenway Corridor
- Specialty Park
- Signature Park

There is great value and benefit to re-calibrating park typologies:

- Each type includes a menu of possible amenities and related likely length of user visit. See type descriptions and amenity menus in Section 7.2.2.
- New park capital and operational costs can be more accurately forecast based on these typology definitions. Each park type has a different level of maintenance and operational needs. The appropriate level of maintenance service is based on the size as well as the number and type of facilities and amenities. Detailed information related to operations and maintenance recommendations can be found in Section 7.5.
- Budgets for existing park improvements and operations can be determined by assessing the facilities / experiences that might be missing from an individual park based on the menu of amenities.
- New investment in existing parks to meet these classifications can be identified.

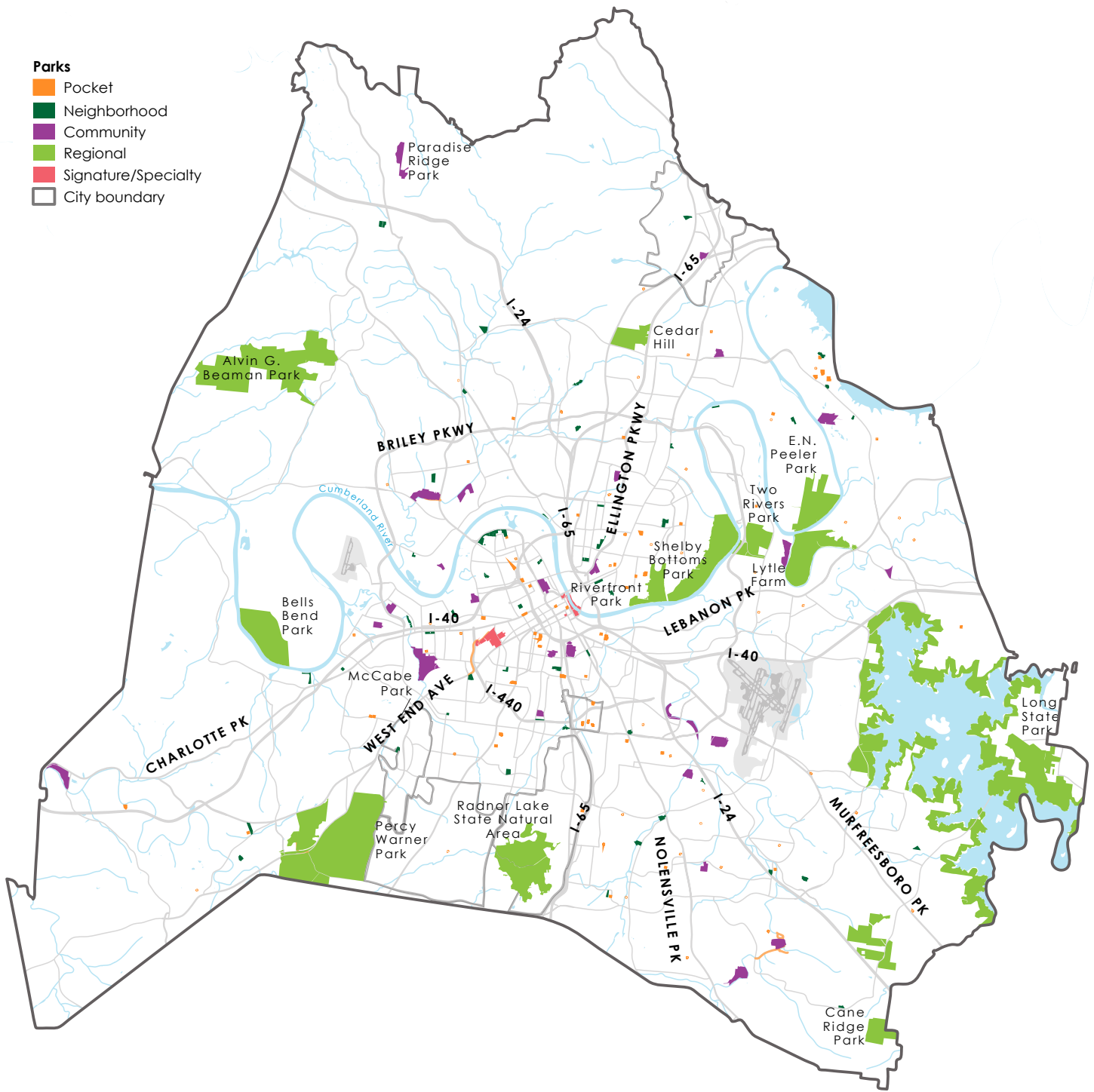


Figure 7-1 Map of Proposed Park Typologies



7.2.2 Park Land: Types and Amenities **POCKET PARKS : LESS THAN 3 ACRES IN SIZE (INCLUDES SCHOOL PLAYGROUNDS MAINTAINED BY METRO PARKS).**

Current Level of Service: 0.12 acres per 1,000 people

Current Pocket Park Acreage: 54 acres

Recommended Service Level: 0.15 acres per 1,000 people

Additional Acres Needed by 2027: 37 acres

Pocket parks are appropriate in the densest areas of the city where walking or biking is the primary way users access the park, and larger tracts of land are not available or not feasible for purchase based on land or property values. New pocket parks should be built in the T4, T5, and T6 transects, where high-density growth exists or is projected. Pocket parks have significantly less value in suburban and rural areas where individual residential and farm properties often exceed the size of this park type.

While pocket parks can be more expensive to build and maintain per acre, they also typically serve more people per acre than larger parks. In addition, opportunities exist to expand pocket parks through augmenting and improving the partnership with Metro Nashville Public Schools and other Metro departments that own land in Davidson County.

DESIGN PARAMETERS

Site Selection: On a local or collector street in residential neighborhoods. Where possible, next to a civic building or school.

Length of stay: One-hour experience or less.

Typical Amenities: One main amenity (e.g., major playground, sport court, fountain); no restrooms unless necessary for signature amenity; loop trail; benches, small picnic shelter.

NEIGHBORHOOD PARKS : 3 TO 20 ACRES IN SIZE.

Current Level of Service: 0.83 acres per 1,000 people

Current Neighborhood Park Acres: 512 acres

Recommended Service Level: 1.00 acre per 1,000 people

Additional Acres Needed by 2027: 226 acres

Neighborhood parks are of a size that has value in all of the transects.

DESIGN PARAMETERS

Site Selection: On a local or collector street. Where possible, next to a school.

Encourage location to link subdivisions. Ideally linked by trails to other parks.

Length of stay: One-hour experience or less.

Typical Amenities: Two signature amenities; no restrooms unless necessary for signature amenity; may include a sports field, shelters, loop trails, or sport court.

Revenue Facilities: none

COMMUNITY PARKS : 20 TO 100 ACRES IN SIZE.

Current Level of Service: 1.77 acres per 1,000 people

Current Community Park Acres: 1,170 acres

Recommended Service Level: 2.00 acres per 1,000 people

Additional Acres Needed by 2027: 379 acres

Community parks are of a size that has value in all of the transects.

DESIGN PARAMETERS

Site Selection: On collector or arterial streets. If near arterial street, provide natural or artificial barrier. Preference is streets on four sides, or three sides with school or municipal use on fourth side. Encourage trail linkage to other parks.

Length of Stay: One to three hours.

Typical Amenities: Several signature amenities: e.g., trails, sports fields, large shelters/ pavilions, community playground, recreation center, sports courts. Public restrooms, ample parking with security lighting should be considered. Sport fields and sport complexes can be accommodated at this park.

Revenue Facilities: : One or more (e.g., pool, sports complex, pavilion)

REGIONAL PARKS : OVER 100 ACRES IN SIZE

Current Level of Service: 28.1 acres per 1,000 people

Current Community Park Acres: 10,177 acres

Recommended Service Level: 28.1 acres per 1,000 people

Additional Acres Needed by 2027: 3,187 acres

DESIGN PARAMETERS

Site Selection: Prefer location which can preserve natural resources on-site such as forests, streams, and other geographic features or sites with significant cultural or historic features. Access from public roads capable of handling anticipated traffic.

Length of Stay: Half-day to all-day experience.

Amenities: 10 to 12 amenities to create a signature facility (e.g., golf course, tennis complex, sports complex, lake, regional playground, reservable picnic shelters, outdoor recreation/extreme sports, recreation center, trails, specialty facilities); public restrooms, concessions, special event site. Sport fields and sport complexes are typical at this park.

Revenue Facilities: Park design should anticipate revenue production in order to offset operational costs.

SIGNATURE PARKS

Current Level of Service: .26 acres per 1,000 people

Current Community Park Acres: 169 acres

Recommended Service Level: 0.4 acres per 1,000 people

Additional Acres Needed by 2027: 141 acres

These parks have a unique identity that makes them unlike other parks in the system, and have a major tourism and special event focus. Riverfront Park, Public Square, and Centennial Park are examples of this type. Given the unique characteristics, they do not fit within the standard park types listed above. There is an immediate opportunity to add to the acreage of Signature Parks through the completion of the Riverfront Park Master Plan.

SPECIALTY PARKS

Current Level of Service: 1.09 acres per 1,000 people

Current Community Park Acres: 721 acres

Recommended Service Level: 1.5 acres per 1,000 people

Additional Acres Needed by 2027: 440 acres

Specialty parks are typically programmed around a primary recreational use such as a soccer complex. The facility recommendations in Plan to Play include active sports fields and complexes that would be accommodated in specialty parks. At the same time, note that it is essential to take advantage of specialty parks to also achieve more general recreational goals by adding amenities such as playgrounds and fitness trails, so that the specialty parks also provide general recreation experiences.

A 10-MINUTE WALK

For the last decade, Metro Parks has focused significant attention on the acquisition of large natural areas at the edges of the county. The department recognized early on that the geography of Davidson County and city-county system of government presents a unique opportunity to protect rural and forested land within the county. Today that work provides residents with an extraordinary system of natural areas that are a strength and a defining component of Nashville's park system. Acquiring and protecting large natural areas is a unique feature of the system and should continue to be a strength and an important priority.

However, as Metro Nashville continues to densify, it must also secure parkland in the more dense parts of the city. This means

smaller urban parks within easy walking distance from home. A person can typically walk one-half mile in 10 minutes. Given good pedestrian infrastructure, most will gladly walk 10 minutes to get to an inviting, well-designed neighborhood park. Plan to Play recommends the development of a park within one-half mile of everyone living within the Downtown, Urban, and Center transects. These are the areas identified in NashvilleNext where future density will be concentrated.

Working toward this goal, the department must look for unique opportunities to expand these parks in places like former industrial property and dead or underutilized retail strips.



7.2.3 Greenways:
Level of Service

Expand Greenway Land by 130 Acres

- Current Level of Service: 0.97 acres per 1,000 people
- Current Greenway Acres: 644 acres
- **Recommended Service Level: 1 acre per 1,000 people**
- **Additional Acres needed by 2027: 130 acres**

Greenways are linear corridors of open space that are protected for conservation and often include trails for passive recreation and non-motorized transportation. This section of Plan to Play addresses the land acquisition aspect of greenways. The Facilities recommendations address the related issue of trail development.

The countywide greenway map illustrates greenway corridors, which include natural corridors (rivers, ridges, etc.), urban corridors (man-made roadways, railways, utility right of way), and hybrids of the two. Working with multiple landowners, the acquisition process for corridors can take many years. It is often not feasible to construct trails within these corridors until a significant continuous segment is aggregated from multiple properties. Nonetheless, identifying and acquiring these corridors is the first step in the process.

Metro Nashville should continue to build out the greenway system with a continued focus on river and stream corridors, but also include an expanded focus on overland corridors to meet transportation needs, better geographic access, and connectivity. As a part of this master plan, two maps were created that illustrate the greenway system plan for the next 10 years – the Vision Plan and the Priority Plan.

The Vision Plan illustrates the countywide long-range vision for greenway corridors and should serve as the adopted countywide greenway master plan for the purposes of Metro Planning Department and Metro Stormwater regulations. These corridors provide important connections and linkages necessary to meet the recreation needs of Metro Nashville residents. However, greenways provide more than a recreation experience; they also serve as essential transportation and environmental infrastructure. This network is also part of a larger countywide network of sidewalks and bikeways, that together create a comprehensive transportation network. When faced with the opportunity, Metro Parks should acquire land within the corridors identified in this Vision Map. In order to continue implementing the Greenway Vision Plan, Plan to Play recommends adding **130 acres of greenway corridors over the next 10 years.**

GREENWAY MAP LEGEND

- Existing Greenway and Trail
- Park
- Water Corridor: Framework
- Water Corridor: Conservation
- Other Greenway Corridors
- Greenway Bridge



Figure 7-2 Greenways Vision Plan

GREENWAY CORRIDOR PRIORITY PLAN

The priority plan lists greenway priorities for the next ten years, while acknowledging the value in remaining flexible and opportunistic. The pace of project readiness is driven by funding and, most importantly, when right of way has been obtained. Piecing the greenway puzzle together largely depends on cooperation and participation of landowners, developers, and many local, state, and federal agencies. The priority plan should be revisited annually to update priorities based on new information or newly identified needs. See Figure 7-8.

New Corridors

- Downtown Loop
- North Gulch to Bicentennial Mall
- South Gulch to South Street
- Charlotte Rail Trail to 440 Spoke
- Mid-Town Loop
- 440 Greenway
- Brown's Creek, Fairgrounds to Cumberland River/Rolling Mill Hill/Riverfront Park

Tourism and Cultural Trails

- Music City Center to Adventure Science Center and Ft. Negley
- Stones River to The Hermitage

Regional Connections

- Mill Creek to Williamson County (Concord Road)
- Rail-with-Trail to Wilson County
- Rail-with-Trail to Cheatham County
- The Trace Connector

Under-served Areas

- East-Elmington Parkway
- Northeast Quadrant, East to West
- Southeast Anchor Park

Key Connections

Major bridges and boardwalks as connecting icons:

- Opry Mills Connector (Shelby Bottoms and Stones River)
- Brookmeade Park to Bells Bend Pedestrian Bridge and/or Ferry
- Neelys Bend to Stones River Pedestrian Bridge and/or Ferry

Links connecting destinations

- Schools
- Libraries
- Neighborhoods
- Businesses
- Shopping
- Restaurants
- Entertainment
- Transit, etc.

Finish the Water Corridor Trails

Segments to fill gaps and improve recreation and transportation connections (in alphabetical order by waterway):

Cumberland River

- Brookmeade Park expansion in both directions
- East Bank expansions in both directions
- Rolling Mill Hill to Cumberland River Pedestrian Bridge
- Bells Bend Park to Cleeces Ferry site
- TSU Campus

Mill Creek

- Rivendell in both directions to Blue Hole Road and to Orchard Bend Park
- Blue Hole Road to Ezell Park
- Culbertson Road to Concord Road

Harpeth River

- Harpeth Bend to the soccer complex and Highway 70
- Riverwalk expansion in both directions
- Harpeth Bend to Old Hickory Boulevard Commercial Center

Richland Creek

- Main loop to England Park
- England Park to West Park
- Main loop to Saint Thomas Campus
- Seven Mile
- Whitfield Park to Edmondson Pike and Vicinity
- Crieve Hall

Stones River

- Lytle Park, Ravenwood, Binns

Whites Creek

- Upper: Fontanel expansion in both directions, North to high school, South toward Briley Parkway
- Lower: Whites Creek at Ashland City Highway to Bordeaux Gardens, landfill, County Hospital Road, to Cumberland River

7.2.4 Park Land:
Level of Service

Expand Park Land by Over 4,500 Acres

Level of service was introduced in Section 5.4 of this plan where the existing park system was assessed. Level of service of acreage per capita is a quantifiable standard and measure of acreage of park land per 1,000 residents. Plan to Play establishes new level of service goals for each park type based on the plan’s needs assessment. These park acreage goals were arrived at by taking a comprehensive look at the current system; comparing our current system to peer cities; reviewing public input, needs assessment, and priorities; and looking at the projected growth rate of the population.

Note that some park land needs, particularly smaller parks, could be achieved by repurposing land already owned by other Metro departments for park purposes.

PARK TYPE	SERVICE LEVELS				PARK ACRES	
	EXISTING 2016	2016 RECOMMENDED SERVICE LEVELS			METRO-OWNED EXISTING 2016	ADDITIONAL ACRES NEEDED FOR 2026
Pocket Parks (incl. school playgrounds); < 3 acres	0.12	0.15	acres per	1,000	54	37
Neighborhood Parks: 3 - 20 acres	0.83	1.00	acres per	1,000	511	226
Community Parks: 20 - 100 acres	1.77	2.00	acres per	1,000	1,169	379
Regional Parks: 100 + acres	28.10	28.10	acres per	1,000	10,176	3,187
Signature Parks	0.26	0.40	acres per	1,000	168	141
Special Use Park (incl. sports facilities)	1.09	1.50	acres per	1,000	721	440
Greenway corridors	0.97	1.00	acres per	1,000	643	130
Total Developed Park Land*	33.14	34.15	acres per	1,000	15,873	4,541

* Includes land bank properties

Figure 7-3 Existing and Proposed Level of Service for Parks

THE TRANSECTS AND NASHVILLENEXT

The transects were first introduced in Section 5.4 of Plan to Play. They are a tool long used by the Metropolitan Planning Department as a guide and an organizing component of their work in city planning. Transects define the population density and development character in different parts of the county. Plan to Play uses five of the seven established transect categories. They are:

- Rural (T2)
- Suburban (T3)
- Urban (T4)
- Center (T5)
- Downtown (T6)

NashvilleNext supplements the existing transect categories by identifying additional areas appropriate for higher-density development around corridors and centers that may exist within any of the underlying transects in Figure 7-3.

For Plan to Play, the transects are used as a representation of population density, a guide to sizing and programming parks to fit surrounding development patterns, and a tool to establish the service radius of each park type. Collectively, these factors help maximize access and equitable distribution of parks and open space.

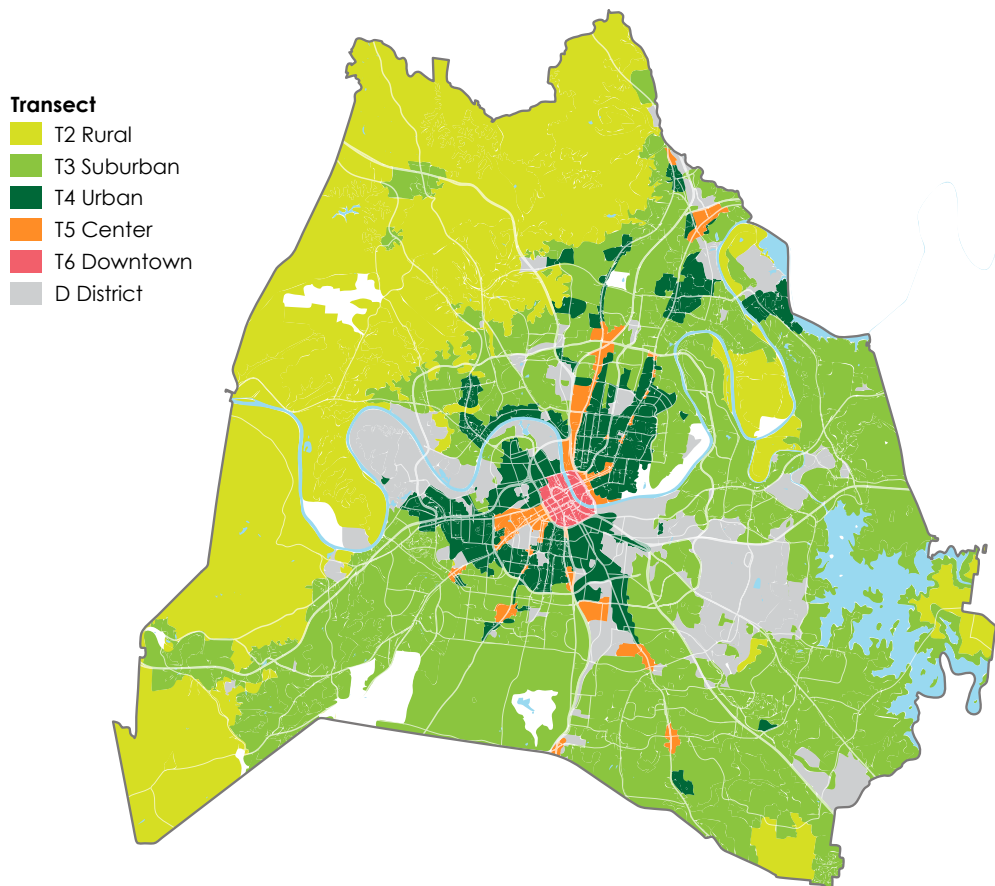


Figure 7-4 Transect Map

7.2.5 Park Land: Distance

LEVEL OF SERVICE - SERVICE DISTANCE

A service distance represents the geographic zone served by a given park. Plan to Play assigns a service radius to each park based on park typology (acreage) and transect (density and development character). In essence, the larger the park, the bigger the service radius, and the denser the transect, the smaller the service radius.

This strategy supports walkable, bikeable access to parks in dense areas, while acknowledging that many parks in low-density areas will continue to be reached by car. In addition, the strategy acknowledges that land acquisition opportunities in urban areas will tend toward smaller acreages and that suburban and rural areas will be where many of the large acreage opportunities exist.

Typology, transect, and service radius have been mapped for all of Metro's existing parks, and are shown in Section 5.4.2. This exercise shows the areas that are currently well-served by parks (within the colored radii) and those that are under-served (in white). These gap maps serve as a guide to Metro Parks in improving park access in under-served areas per the level of service acreage goals. At the same time, it is important to acknowledge, per the 2011 Nashville Open Space Plan, that acquiring land adjacent to existing parks may be justified to achieve service level goals for facilities, for viewshed or habitat protection, or other recommendations of Plan to Play.

Note that, regardless of park type, each park provides a recreation experience for the immediate surrounding community. For example, community parks serve as neighborhood parks for adjacent residents, and as such should generally have type-appropriate amenities, such as playgrounds, that would normally be found in neighborhood or community parks.



POP-UP PARKS

Developing new park facilities is often time-consuming and expensive. It might take years for a good idea or a new approach to be funded, designed, and built. One way of hacking this process is through pop-up projects. A pop-up is a temporary installation that may last for only a year or a season, or even a week. Perhaps the best local model for this is Park(ing) Day, the annual one-day event hosted locally by the Nashville Civic Design Center, in which on-street parking spaces are repurposed for more human-centric activities. In a park, a pop-up installation could be a collection of hammocks installed in a shady grove of trees, a Makers Playground where children can build forts, or bocce ball and table tennis brought in to activate a park space. Imagine a collection of outdoor rooms furnished with designs by local craftspeople.

Pop-up installations, usually funded through sponsorships and managed by a partner organization, are a good way to test ideas, activate parks, and offer new, fun, low-cost experiences that enrich the vitality of a park.



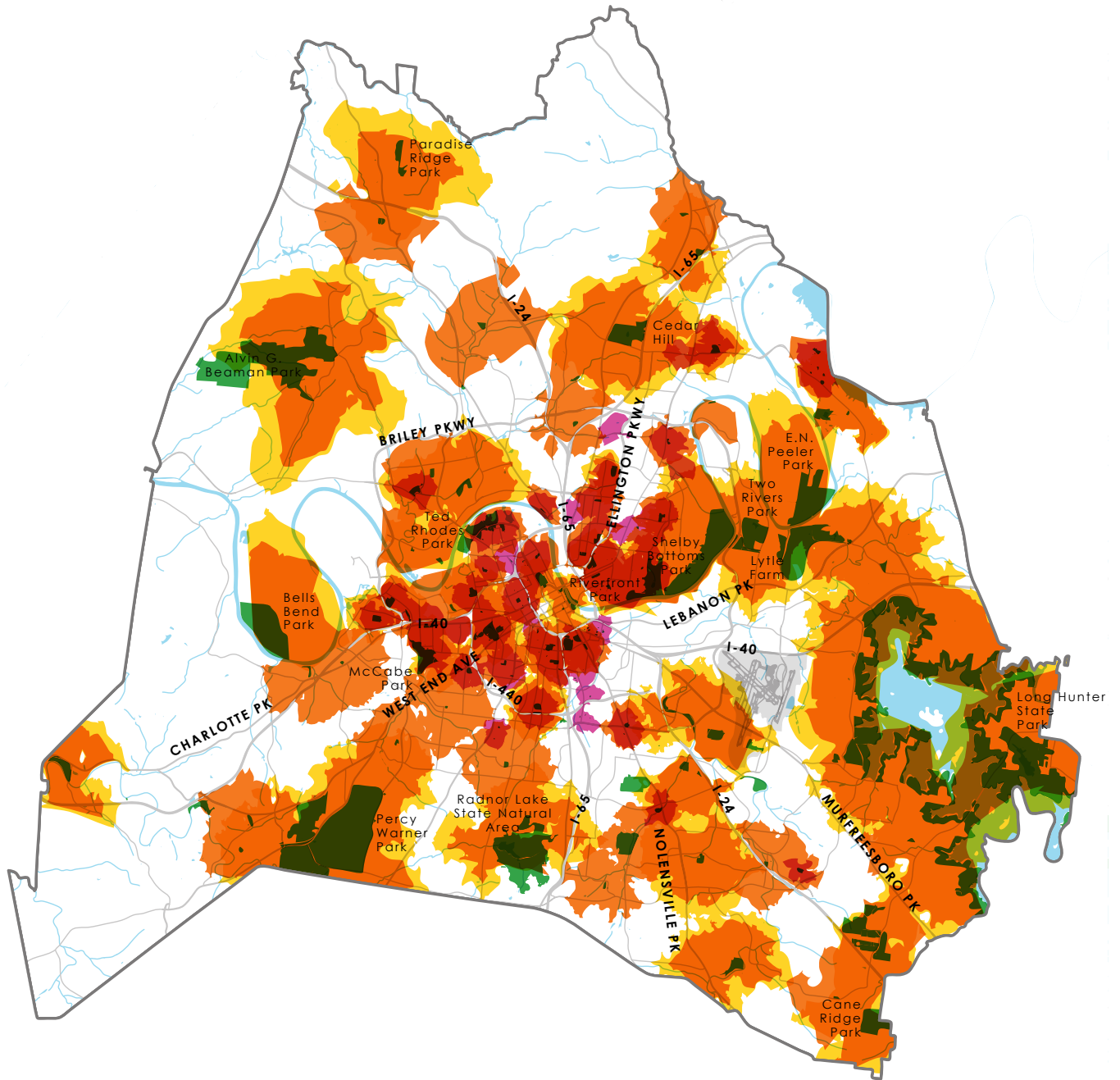


Figure 7-5 Combined Level of Service Areas for Parks (Excluding Regional Parks)

ADDITIONAL PARK LAND CONSIDERATIONS

EQUITABLE ACCESS TO PARKS

One of the guiding principles of Plan to Play is the equitable geographic distribution of park land to provide recreational opportunities for all Metro residents. This principle was also supported in the statistical survey with 94% of respondents agreeing that having high-quality parks available to people from all walks of life across the city is important to them personally. Furthermore, it was also a major theme that emerged from the steering committee's discussion of plan outcomes.

The level of service analysis identified how many additional acres of park land Metro Nashville needs. The accompanying maps identify the areas that are currently under-served. Because equitable distribution of park resources is a central guiding principle of Plan to Play, this analysis took a step further by looking at how gaps in service correlate to low-income communities and future growth centers and corridors.

As seen in Figure 7-5, a majority of low-income populations have access to parks. As the park system grows, however, the service gaps in low-income areas that do exist should be targeted for investment. This priority will help to ensure that all neighborhoods receive the full benefits of public parks.

As part of the NashvilleNext planning process, corridors and centers appropriate for future growth and density were identified. To understand the current park service in and around these centers and corridors, they were mapped as part of the level of service analysis; refer to Figure 7-5. As the park system grows, growth centers and corridors currently under-served by park land and facilities should be targeted for investment.

Additional future exercises to help prioritize park land acquisition include overlaying health disparities maps and climate resilience maps.

DOWNTOWN PARKS

While downtown parks are not a specific type of park, the use and pressures placed on parks located in the downtown core are unique compared to many other parks in the system and often involve a special events or tourism focus. All existing downtown parks fall within the signature park typology; however, downtown parks also serve as a neighborhood or community park for a growing resident population and the community of people who work downtown. To meet these needs, there must be parks downtown that provide the everyday recreation opportunities – playgrounds, picnic shelters, fitness equipment, and programs. As the park system grows, Nashville should acknowledge the intense and diverse needs placed upon these parks. In addition, Metro Parks should consider developing a downtown park master plan that addresses the unique needs of the most intensively urban zone of Nashville, and actively pursue opportunities for creating additional parks and green spaces downtown.

NATURAL AREAS

Not every park type contains or consists entirely of a designated natural area. These areas warrant unique considerations, many of which are outlined in Section 7.5.14. In addition, natural area designation would predicate consideration of any of the amenities listed on the menu for each park type.

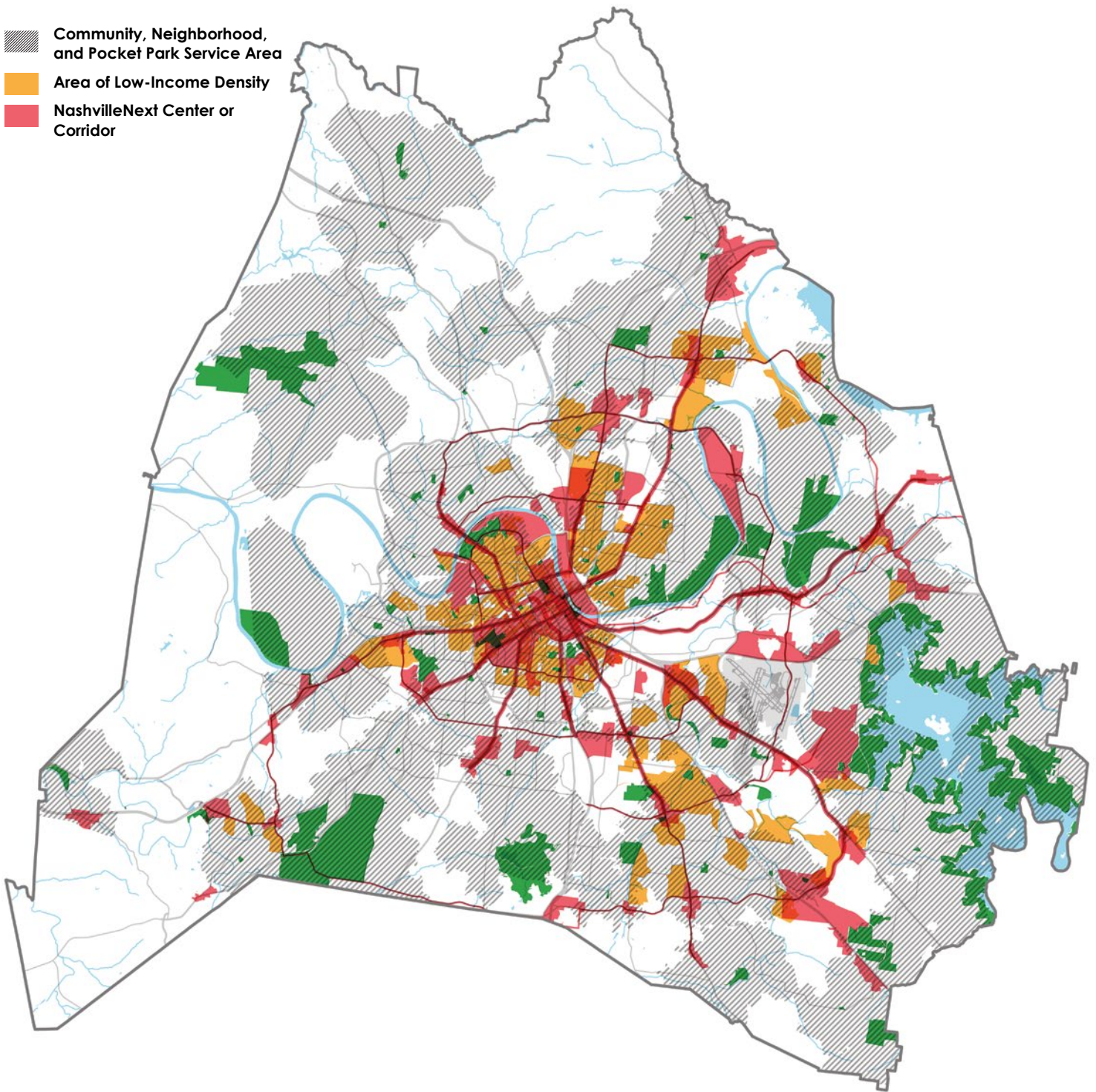


Figure 7-6 Level of Service with Low-Income Density and Centers



HEALING THE DIVIDE: INTERSTATE PARKS

As Nashville grows, the core of the city continues to attract new residents. What once was surface parking now contains apartments, restaurants, and offices. Downtown is quickly becoming a neighborhood. In 2007, fewer than 3,000 people lived downtown. By 2017, it is estimated that over 12,000 will call Nashville's core their home (Downtown Partnership, 2016). With land prices continuing to increase sharply, the acquisition of parks is difficult and costly. However, with these changes also come new opportunities. Looking at a map of Nashville's core, one immediately notices how much land the interstate loops consume in some of the most valuable areas of Nashville. Populated areas adjacent to the interstates also have some of the highest need for outdoor park space as many residents live in dense housing without private open space.



Cities across the country have realized the opportunity that lies within the land their urban interstates occupy. San Francisco, Seattle, and Boston have all removed or buried sections of their urban interstates to create parks and new development. Dallas and St Louis, among others, are decking over large sections of their highways to convert them into park land for the city.



Klyde Warren Park in Dallas, Texas, is perhaps the best-known recent example of an interstate park and was brought about by a public-private partnership. It is a 5.2 acre park opened in 2012, and connects the downtown cultural district and a mixed use neighborhood. Capping over an interstate is not cheap and neither is designing and building a quality public park. The project cost a total of \$110 million dollars, however the city of Dallas paid only \$20 million of that. A diversity of other funding partners contributed the remaining amount: State and Federal funds contributed almost \$40 million and Private donations of \$50 million, made up the majority of funding. However, this investment has already stimulated nearby development, with studies projecting \$312 million in economic benefit and \$1.2 million in direct tax revenue (USDOT, 2016).

The Nashville Civic Design Center has long advocated for the capping of interstates in several parts of Nashville: The Gulch, North Nashville, East Nashville, and Interstate 440. These are locations where existing or potential park land is low, and interstate area is high. Many of these locations are adjacent to both

Klyde Warren Park
Above: 2009. Before construction
Below: 2017. After construction.



Above left: NCDC study showing existing Gulch Interstate corridor
 Above right: NCDC study showing proposed parks above existing interstate.
 Below left: USDOT proposal for interstate park on Jefferson Street
 Below right: USDOT proposal for interstate park at 28th street

high-end developments and low-income, public housing developments. In July of 2016, the United States Department of Transportation hosted a design charrette to envision parks that would heal communities severed by the construction of the interstates. Both the Jefferson Street and 28th Street plans cap over the existing interstate to bring these communities back together. Where interstates at one point in time divided parts of the community, parks have been presented as a way to bridge the gap, connect communities, and enhance the quality of life.

7.3 CAPITAL IMPROVEMENTS: FACILITIES



Plan to Play established levels of service (LOS) for key facility types. Similar to the land levels of service, the facilities' level of service are built around several major sources of input, including:

- Public engagement
- Partner and stakeholder interviews
- Peer city benchmarking
- Best practices nationally
- Recreational trends
- Analysis of the existing park system, operations, and financing

These levels of service are shown in the Figure 7-7.

While the level of service table includes many of the most traditionally tracked amenity and facility types among recreation agencies across the United States, there are many other facility types included in Plan to Play that are just as important for a park system to provide. In general, these facilities tend to be somewhat more specialized in nature and warrant more individualized consideration. These non-level of service facilities are addressed beginning in Section 7.3.7 on page 154.

Several facilities types, like community centers and large sports complexes, can be extraordinarily expensive to build and operate. For these facilities, Plan to Play offers preliminary recommendations and advises that business plans be developed to fully identify the feasibility, cost/benefit, operational options (including partnerships), and other factors that should inform any decision around these significant investments.

While some facility recommendations identify specific locations, most are to be determined based on geographic and equitable distribution, access, the compatibility of surrounding land uses, and the availability of land. Both existing and new parks are candidates for these facilities.

GOAL 2: FACILITIES

Provide a wide variety of park facilities and amenities within the parks and greenway system acreage to provide opportunities for valuable recreation experiences in appropriate settings for the benefit of residents and visitors to the region

Amenity:	2016 Inventory - Developed Facilities							2026 Facility Standards		
	Nashville Units	Nashville Current Service Level based upon population			Recommended Service Levels: Revised for Local Service Area			Meet Standard/ Need Exists	Additional Facilities/ Amenities Needed	
Paved Multiuse Trails	102	0.15	miles per	1,000	0.20	miles per	1,000	Need Exists	53	Mile(s)
Unpaved Trails/ Hiking Trails	66	0.10	miles per	1,000	0.15	miles per	1,000	Need Exists	50	Mile(s)
Picnic Shelters	60	1.00	site per	11,014	1.00	site per	10,000	Need Exists	17	Sites(s)
Outdoor Pools	4	1.00	site per	165,209	1.00	site per	50,000	Need Exists	5	Site(s)
Playgrounds	156	1.00	site per	4,236	1.00	site per	4,000	Need Exists	65	Site(s)
Dog Parks	7	1.00	site per	94,405	1.00	site per	50,000	Need Exists	8	Site(s)
Multipurpose Fields	83	1.00	field per	7,962	1.00	field per	6,000	Need Exists	46	Field(s)
Basketball Courts	61	1.00	court per	10,833	1.00	court per	7,000	Need Exists	50	Court(s)
Tennis Courts	147	1.00	court per	4,495	1.00	court per	4,495	Need Exists	25	Court(s)
Ball Fields (Adult and Youth)	86	1.00	field per	7,624	1.00	field per	6,000	Need Exists	43	Field(s)
Mountain Bike Trails	23	0.03	miles per	1,000	0.05	miles per	1,000	Need Exists	16	Mile(s)
INDOOR AMENITIES:										
Community Center/Recreation /Gymnasium/Fitness Facility (Square Feet)	870,069 SF*	1.23	SF per	person	1.5	SF per	person	Need Exists	481,000	Square Feet

*Includes 60,000 SF under construction in Madison and Smith Springs parks in 2017

Figure 7-7 Existing and Proposed Level of Service for Facilities

7.3.1 Paved Multiuse Trails

Add 53 Miles of Paved Multiuse Trails to Expand the Greenway Network

During the public engagement phase of Plan to Play, as well as at public meetings for years, Metro Parks has heard how important it is for people to be able to walk or bike to their park or greenway. Plan to Play and WalkNBike (Metro Public Works’ bike/pedestrian plan), as well as nMotion (the regional transit plan) have been developed nearly concurrently and in close coordination. The result is greenway plans that place a higher priority on connectivity and transportation, and sidewalk and bikeway plans that interface with parks and greenways. Mayor Barry has made a high priority of coordinating capital projects between Metro departments. New changes in practice and structure are institutionalizing this welcome leadership going forward.

- Paved multiuse trails have the benefit of being one of the least expensive facility types to build and maintain, and the most popular facility type as determined in Plan to Play’s needs assessment.
- Paved multiuse trails are the main facility type built on greenway corridor land. Paved multiuse trails are also developed in other park types as fitness trail loops and longer trail systems.
- Plans and priorities for development are outlined in Figure 7-8.

DEVELOPMENT GOALS FOR GREENWAYS

- Increase connectivity for multimodal transportation.
- Enhance and expand Metro’s multimodal transportation network by strategically utilizing off street greenway trail facilities as part of the countywide system
- Complete the water corridor system where trail gaps exist and in under-served areas
- Complete the downtown and mid-town greenway trail loops
- Invest in key connections from greenway trails to parks, schools, neighborhoods, commercial areas, cultural and civic institutions, and other regional destinations.
- Coordinate greenway land acquisition with MTA, planning, public works, and efforts of other Metro departments.
- Strengthen connections to public transportation and sidewalk and bikeway networks.
- Meet level of service needs for trails with emphasis on walkable and equitable access in NashvilleNext centers, urban, suburban, and rural transects.
- Increase connectivity to affordable housing and high-density areas.
- Use natural utility and infrastructure corridors to create regional commuting options.
- Develop a comprehensive wayfinding system for transportation and recreational use of greenways and tie into comprehensive wayfinding for a Metro-wide transportation network. Develop a system that can be easily updated to reflect new or updated routes and destinations.
- Strategically locate amenities such as drinking fountains, outdoor fitness equipment, picnic shelters, mile markers, canopy trees, scenic overlooks, and wayfinding signage.
- Connect to cultural and historical amenities and destinations.

PRIORITY PLAN LEGEND

- Existing greenway
- Greenway Priority
- Greenway Long Term Vision

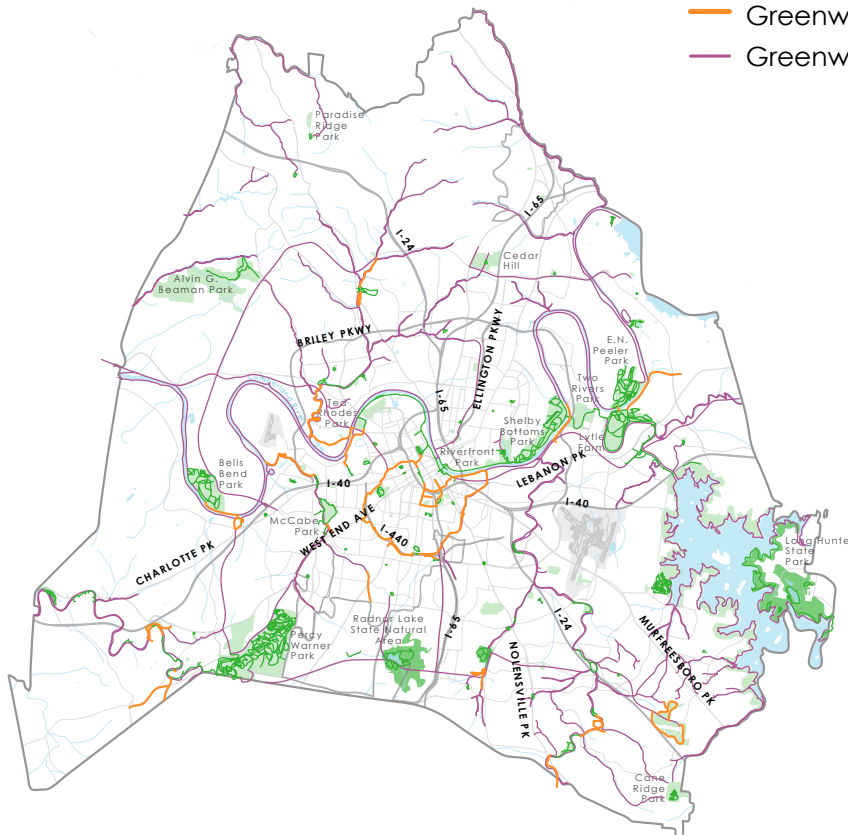


Figure 7-8 Greenways Priority Plan

Add 50 Miles of Unpaved Trails

7.3.2 Unpaved Trails

Like paved trails, unpaved trails (i.e., hiking or primitive trails) were identified as a top priority in the Plan to Play needs assessment and are also among the least expensive facilities to develop and maintain.

Many opportunities for trail development exist in park sites that will be master planned in 2017, including Ravenwood/Lytle Bend and Southeast/Antioch. In addition, existing parks such as Beaman Park hold potential for trail system expansion. Furthermore, many greenway land corridors may be suited to unpaved development instead of or in addition to paved trails.

Nashville is uniquely suited to explore the possibility of long distance trails in the western and northwestern sectors of Davidson County. Much of the land use policy applied to this area by the Metro Planning Department is conservation-oriented. Land acquisition and the piecing together of easements could allow for significant trail mileage through the densely wooded and steep slopes of the Highland Rim.

7.3.3 Picnic Shelters

Add 17 Large Picnic Shelters

- Large, reservable picnic shelters are a high priority as determined by the Plan to Play needs assessment and because demand for available shelters exceeds capacity.
- Consider co-locating with community centers to double as program space.
- Consider air-nasiums as appropriate for multipurpose use.
- Consider grouping shelters where appropriate to permit the use of multiple shelters for larger community events.
- Build smaller, non-reservable shelters as appropriate in pocket and neighborhood parks and along greenways.

7.3.4 Community Centers

Add 481,000 SF of Community Centers

Achieve a level of service of 1.67 square feet per person

The recommendations for community centers in Plan to Play are preliminary. The development of business plans for facilities with annual revenues of \$100,000 or more is recommended in order to confirm feasibility.

Community centers are one of the largest and the most expensive categories of park facilities to build, staff, and maintain, and demand for new centers throughout Metro is high. Identifying a comprehensive sustainable financial model for expansion of community centers across the system is complex and beyond the scope of Plan to Play. For this reason, the first and highest-priority recommendation, as it relates to community centers, is the development of business plans. This strategy is supported by recommendations in the operations and financial sections reflecting a general shift toward a more entrepreneurial business model for the entire Parks Department. Additional community centers should be built only after business plans are completed and the addition is determined feasible.

With the above qualifier in place, Plan to Play proposes the framework below as the preferred facilities development model to help guide business plans.

The existing neighborhood and regional community centers are undersized in terms of square footage. This circumstance results in a number of operational inefficiencies and suboptimal access. Going forward, Plan to Play recommends a three-tiered system:

- Neighborhood Community Centers
- Regional Community Centers
- Mega (or Multigenerational) Community Centers

NEIGHBORHOOD COMMUNITY CENTERS

Nashville's 19 existing neighborhood centers are between 10,000 and 20,000 square feet in size and typically include a gymnasium and several multipurpose rooms for games, activities, community meetings, and events. Although some, like South

Inglewood, have been built in recent years, many neighborhood centers represent the first generation of Nashville's community centers, built in the early 1960s at the time of the city/county consolidation. These centers are often located in what have historically been lower-income areas. While programming is limited, it is also mostly free and an important lifeline for many under-served residents. Metro Parks is committed to maintaining and improving services for these important park users.

In order to improve access and improve operational sustainability across the system, no construction of new neighborhood centers is recommended. Under the recommended three-tier system, most of the existing neighborhood centers would either 1) proceed unchanged except for renovations as needed or 2) be added to, in order to achieve regional center status.

If a neighborhood center is severely underutilized or located in an area with little demand, it could be reprogrammed by Metro Parks for an alternative public use, or a partner agency could work with Metro Parks to operate the facility with a program that continues to provide public access and programming to the community.

REGIONAL COMMUNITY CENTERS

The existing seven regional community centers are all the result of recommendations in the 2002 Parks and Greenways Master Plan. Regional centers are typically 25,000 to 40,000 square feet in size and offer a gymnasium, movement studio, indoor track, multipurpose meeting rooms, game room, and other spaces. Some regional centers offer a small swimming pool or dedicated space for senior citizens. Because they have attracted an entirely new generation of users who may not have used the older neighborhood centers, newer centers like Hadley and Sevier have come to be perceived by most Nashvillians as the definition of a community center.

While this facility type is beloved, the geographic area it serves is typically smaller than the "regional" name implies, leaving other areas under-served. Nonetheless, it provides an important service and recreational opportunities to the surrounding community and because of this should continue to be expanded in appropriate areas. Because their functional radius is walkable and bikeable, regional centers will continue to be an appropriate facility type in the more urban transects. Well-distributed service can be achieved by upgrading select existing neighborhood centers to regional centers. The square footage of new regional centers should be increased to average 40,000.

MEGA (OR MULTIGENERATIONAL) CENTERS

Averaging 100,000 square feet in size, mega community centers are a new classification for Metro. Megacenters may include multiple gymnasiums suitable for tournament-scale sports events, large fitness centers, indoor walking tracks, an aquatic center that includes pool(s) and a sprayground, large multipurpose meeting spaces, performing and visual arts spaces, a senior center, and other amenities.

Megacenters are a good fit within the suburban transect because they require large sites and offer recreation services to a larger geographic area (larger service radius).

Each should be developed in lieu of multiple new regional centers unsupported by the surrounding development patterns. Consideration should be given to co-locate megacenters with a field house or some of the outdoor sports complexes as recommended in Section 7.3.12. Shared parking and other efficiencies should also be targeted with their development. Note that nearly all existing community centers will require renovation over the course of the next ten years.

FIELD HOUSE

A field house is a large, 85,000 to 100,000 square foot sports complex that includes some combination of six to eight basketball courts that can be converted to 12 volleyball courts, two indoor soccer fields, one or two ice rinks, or a tennis center. It includes a large fitness and wellness space or a 50-meter pool. Centennial Sportsplex is a version of a field house although it lacks a gym. Given the cost to build and operate such a facility, and given some overlap in program between this and the proposed megacenters, Plan to Play recommends that a business plan be developed to explore the feasibility of any field house.

Center Name	Current Classification	Proposed Classification	Additional SF estimate	Project
Antioch	Neighborhood	Neighborhood		
Bellevue	Neighborhood	Mega	100,000	Replace in area
Cleveland	Neighborhood	Neighborhood		
Easley/Rose Park	Neighborhood	Regional	35,000	Replace in area
Hermitage	Neighborhood	Mega	80,000	Add or replace in area
Kirkpatrick	Neighborhood	Regional		Replacement in design by MDHA
Looby	Neighborhood	Mega	100,000	Renovate/add or replace
Madison	Neighborhood	Mega	70,000	Add
McFerrin	Neighborhood	Regional	5,000	Add locker rooms and movement studio
Morgan	Neighborhood	Senior Center		Repurpose/renovate
Napier	Neighborhood	Regional		Work with MDHA on replacement
Old Hickory	Neighborhood	Regional	10,000	Renovate/add
Paradise Ridge	Neighborhood	Neighborhood		
Parkwood	Neighborhood	Neighborhood		
Shelby	Neighborhood	Reprogram		Repurpose/renovate
South Inglewood	Neighborhood	Regional	5,000	Add locker rooms and movement studio
Watkins	Neighborhood	Neighborhood		
West	Neighborhood	Regional	35,000	Replace in area
Coleman	Regional	Regional		
East	Regional	Regional		
Hadley	Regional	Regional		
Hartman	Regional	Regional		
McCabe	Regional	Regional	1,000	Add locker rooms
Sevier	Regional	Regional		
Smith Springs	Regional	Regional		
Southeast	Regional	Mega	40,000	Basement can accommodate some of this expansion
Elizabeth	Senior	Reprogram		Repurpose/renovate. Shift users to Morgan.
TOTAL PROJECTED ADDITIONAL SF Excluding MDHA-funded projects			481,000	

Figure 7-9 Community Centers: Proposed classifications

Add Five Outdoor Pools and up to Five Spraygrounds.

7.3.5 Outdoor Aquatics

The recommendations for outdoor aquatic centers in Plan to Play are preliminary. The development of business plans for these facilities is recommended in order to confirm feasibility. For the purposes of business planning, outdoor aquatics – both pools and spraygrounds — should have a true regional service radius, and consideration should be given to co-locating them with megacenters and indoor pools for operational and maintenance efficiency. This approach would result in up to five new outdoor pools and five new spraygrounds countywide.

Plan to Play's needs assessment indicates strong desire for additional swimming pools and other aquatic facilities such as spraygrounds. These facilities offer multigenerational health, life skill learning, and recreational benefits. But building, operating, and maintaining this type of facility comes at a high price, especially when attempting to build small swimming facilities at the neighborhood service level as Metro Parks has for the last decade. Larger facilities that have the capacity to serve regionally are a more sustainable and cost-effective model. Because of the cost implications, pools, like community centers, should have the benefit of a business plan before building more. Additional aquatic facilities should be constructed only after a business plan confirms a sustainable financial path forward. A business plan may include a partnership model with other providers.

Plan to Play's preliminary level of service recommendation is to add five outdoor pools (with an average assumed size of 25,000 square feet each) or one facility per 85,000 people.

SPRAYGROUNDS

Spraygrounds are often considered a playground with water that offers an inexpensive alternative to swimming pools. In fact, spraygrounds serve different recreation purposes than swimming pools, but have similarly high unit costs. There are opportunities to expand the number of spraygrounds, but should be done so with the following considerations:

- Co-locate spraygrounds with staffed facilities such as community centers and pools.
- Include spraygrounds in the swimming pool business plan/feasibility study to determine where and how many spraygrounds should be built.
- The study should recommend how many spraygrounds should be developed regionally.
- A cost-effective method to serve neighborhoods is to include small non-recirculating water features (single-nozzle) into neighborhood playgrounds.

7.3.6 Playgrounds

Add 65 Playgrounds

Add 60 neighborhood playgrounds and five regional destination playgrounds with a level of service of one playground per 3,500 people.

Playgrounds are valuable to encourage healthy outdoor activities among all ages and abilities. Traditionally these have been neighborhood-scaled for convenient access to families with children. In addition to these neighborhood playgrounds, Plan to Play recommends five large, regional playgrounds that are destinations in themselves. Over the next 10 years Metro Parks should incorporate a wider variety of design variations and target age levels to accommodate the changing needs of its diverse population and recreation opportunities.

- The new category of regional destination playgrounds describes large, one-of-a-kind, custom-designed playgrounds that offer unique experiences and hours of play. Some of these facilities may provide seasonal staffing for certain features.
- Partner with non-park public agencies with available land or facilities, like libraries and schools, in areas with playground deficits to provide additional neighborhood access to playgrounds.
- Begin a systematic upgrading and replacing of out-dated playground equipment as part of a routine maintenance process.
- Incorporate universal inclusive-play access elements into all playground facilities to accommodate people of all abilities.



REGIONAL PLAYGROUNDS

Gone are the days where playgrounds were only for the youngest children looking for a swing or a slide. Today, playgrounds are for people of all ages and abilities.

Metro Parks has over 156 playgrounds countywide. This equates to one playground per 4,236 residents, which is on par with peer cities. As Nashville grows, so should its collection of playgrounds – 38 more are recommended by 2027. As playgrounds are remodeled and added, Metro Parks should make a concerted effort to improve the quality and variety of playground experiences. The existing nature playgrounds at Shelby Bottoms and Edwin Warner Park, as well as the adventure playground at Cumberland Park, are good models for future projects. In addition to the type of playground often found in a neighborhood

park, Plan to Play recommends the development of five regional destination playgrounds.

A destination playground may be measured in acres rather than square feet and include one-of-a-kind design elements and features that make it worth a drive across town. These playgrounds allow people of all ages to recreate and spend several hours in active and imaginative outdoor play.



Add Eight Dog parks

7.3.7 Dog Parks

Add eight dog parks with a level of service of one dog park per 50,000 persons.

- The addition of dog parks into the park system has been very popular in recent years, and more facilities has been identified in the needs assessment process. These needs will become increasingly keen as Metro densifies and urbanizes.
- Prioritize distribution so that there is equitable countywide service of general-use dog parks before building specialty or small dog parks.
- Develop a large, amenity-rich destination dog park in a central location for all of Metro.
- Maintain a minimum 2-acre standard for all dog parks except in very urban locations where smaller dog runs are appropriate due to land availability and acquisition cost.

Enrich Historic Sites

7.3.8 Historic Sites

Metro Parks is currently the steward of more than 50 historic sites and structures. As additional park land is acquired, additional historic resources will be added to this collection. These properties present unique challenges and opportunities. Challenges may include high maintenance costs and, in some cases, no obvious contemporary use. Several unique opportunities exist, however, to achieve multiple goals of Plan to Play by tapping into the potential of some of Metro Parks' most at-risk historic properties.

- Historic buildings in Shelby, Centennial, Sevier, and other urban parks are well-suited for adaptive re-use as restaurant or café space. In fact, the Plan to Play needs assessment found that additional food concessions are desired (see Section 7.3.11). Historic buildings offer unique place-making opportunities unsurpassed by most new buildings while enriching the experience of urban parks. Revenue from restaurant leases may be used to reinvest in the preservation of the historic property.
- Fund and implement the historic preservation components of existing master plans, including those for Two Rivers Mansion, Centennial Park, Sevier Park, Shelby Park, and others.

7.3.9 Community Gardens

Expand Community Gardens and Urban Agriculture

Metro Parks currently permits community gardens to interested groups. While community gardens emerged as a high unmet need in the Plan to Play needs assessment, there is in fact an inventory of untapped park land for any organization wishing to start one. In addition to community gardens, opportunities also exist to develop related facilities such as food forest and edible landscapes, and to scale up from community garden programs to urban agriculture. Metro Parks should promote the availability of land for these purposes.

- As individual master plans are developed for new or existing parks, opportunities to incorporate gardens, food forests, large-scale urban agriculture, and similar spaces should be explored.
- Otherwise, please note that community gardens are considered more of a program than a facility and are further discussed in Section 7.4.6.
- Metro Parks should resolve issues related to the sale of food produced on Metro Parks-owned land. Refer to Section 7.4.6 for more information.



HISTORY, FOOD, AND COMMUNITY GARDENS

Metro Parks is the owner and steward of Nashville's largest single collection of historic properties with over 35 designated sites. Some of the challenges of historic preservation include significant cost in the face of limited resources and, in some cases, no obvious contemporary use. Successful and sustainable preservation often requires the creative and adaptive reuse of historic properties for financially viable purposes.

Adaptive reuse of historic buildings in parks for cafes or other food concepts creates a rationale for investment in their preservation. Public input in Plan to Play and recommendations in Mayor Barry's Gear Up 2020, place high priority on two companion subjects: quality food

service in parks and urban agriculture. The best urban parks offer memorable food experiences, from small cafes to destination dining. Centennial, Shelby, and Sevier parks are some examples with historic buildings suited for adaptation as restaurants.

Urban agriculture is one opportunity made possible with Metro Parks' land holdings and a scale-up of the existing community garden program. Growing food in parks to be served in park restaurants housed in historic buildings links together great opportunities: creative place-making, history, food ethics, environmental education, tourism, nutrition, and entrepreneurship.

Develop the Blueway System

7.3.10 Blueways

There are 350 miles of waterways in Davidson County. This is a unique strength of Davidson County's size, geography, and climate that has not been fully tapped. These rivers and creeks offer unique recreational opportunities and access to nature that more and more Nashvillians are enjoying. Metro Parks' recently created outdoor recreation program, along with outfitters and clubs, are getting more people on the water than ever before in canoes, kayaks, stand-up paddle boards, and other non-motorized craft. Key to facilitating further growth is improving water access. Plan to Play recommends the following:

- Develop a blueways access plan to guide and prioritize safe water access, and identify priority access points along water corridors.
- Continue to acquire rights to land suited to the development of access points. Since many greenways are waterway-based, they offer particular opportunities for adding access points.
- Complete Cayce Landing, an area beneath the I-24 bridges southeast of downtown that proposes access for small marine craft and non-motorized crafts as a phase of the Riverfront Concept Plan.
- Facilitate the development of a boathouse on park property below Rolling Mill Hill.
- Implement water access recommendations in the Shelby Park Master Plan.
- Add a launch at Lock One Park.

Bring Park Cafes and Concessionaires to Parks

7.3.11 Cafes and Concessions

Many cities have activated and promoted their parks through food service and related uses that bring people to the park and also add a social element. Currently, there is no food service in the parks that offers a high-quality cafe or restaurant experience. There is great opportunity to grow this type of facility. Key considerations:

- Park cafes should focus on quality food, unique experiences and settings, and local offerings.
- Consider adapting historic properties in urban parks as restaurant space.
- Utilize leases and concessionaires to provide this service.
- Interface with recommendations for urban agriculture (Section 7.4.6), by which food produced in parks can be served in parks, historic sites (Section 7.3.8) where historic buildings can serve as unique restaurant space, and through programs (Section 7.4), which can extend the benefit to environmental education and health and wellness activities.

7.3.12 Multipurpose Fields

Add 46 Multipurpose Fields

Add 46 fields for a level of service of 1 per 6,000 people. Multipurpose fields are designed to accommodate soccer, rugby, lacrosse, cricket, and other field sports.

- Develop a tier system of community and regional complexes.
- Consideration should be given to incorporating the idea of a large tournament-level complex into the business plan(s) that are recommended for megacenters and field houses.
- Maintain and improve access to neighborhood (non-permitted) fields by transitioning leagues to the new complexes.
- Add sports lighting to existing and new fields to extend the available hours.
- Adopt uniform design and safety standards for all fields.
- Establish policy on concessions in sports complexes and adjacent to multipurpose field.

7.3.13 Basketball Courts

Add 50 Outdoor Basketball Courts

Add 50 courts for a level of service of one court per 7,000 persons.

- Where appropriate, stripe courts for multisport use.
- Expand per individual park master plans and community demand.

7.3.14 Tennis Courts

Add 25 Tennis Courts

Addition of 25 tennis courts for a level of service of one court per 5,000 persons.

- Remove un-repairable courts and replace with new facilities if the community has demand for tennis at the current location.
- Expand per individual park site master plans and specific community demand; cluster courts to maximize value and economy.
- The size and condition of the existing Centennial Sportsplex Tennis Complex has raised questions for some time about the appropriateness of expanding or relocating/replacing the facility to better serve current tournament-level requirements. Plan to Play recommends the development of a business plan and feasibility study before reaching any final conclusions. Such a facility could potentially be incorporated into the program for one of the megacenters.

Add 43 Baseball Fields

Add 43 adult and youth baseball fields for a level of service of one per 6,000 people.

- Develop a tier system of community and regional complexes.
- Consider co-locating with megacenters or field houses.
- Expand neighborhood (non-permitted) fields per site master plans and community demand.
- Add sports lighting and otherwise bring existing fields to standard.
- Consideration should be given incorporating the idea of a large tournament-level complex into the business plan(s) that are recommended for megacenters and field houses.
- Implement Shelby Park Master Plan youth sports complex.

7.3.15 Adult and Youth Baseball Fields

Add Wheelchair Softball

- Build one wheelchair softball field that is co-located with other ballfields to share support facilities, such as restrooms.

7.3.16 Wheelchair Softball

Add 16 Miles of Mountain Bike Trails

Add 16 miles of mountain bike trails for a level of service of 0.05 miles per 1,000 people.

- Add proposed Cedar Hill Park system trails.
- Consider additional sites as they become available.
- Identify locations for the development of a dirt pump track and an asphalt pump track.
- Consider co-locating trails, tracks, and course(s) for cyclocross and other races as a mountain bike park.

7.3.17 Mountain Bike Trails and Related Facilities

7.3.18 Skate Parks

Expand Skate Parks

Establish two tiers:

- Regional skate parks: Build two 35,000- to 50,000-square foot facilities.
- Neighborhood skatespots: Build three facilities of 5,000 square feet or less, and locate based on community demand.

7.3.19 Sand Volleyball

Develop Sand Volleyball Facilities

- Develop a four-court tournament facility.
- Include two-court facilities per site master plans and community demand.

7.3.20 Outdoor Fitness Equipment

Add 20 Outdoor Fitness Equipment Sites

Outdoor fitness equipment is an increasingly popular element that is often added on or near a fitness trail, loop, or greenway. The equipment can offer a range of bodyweight exercise options without the need for an instructor or class sign-up.

Add 2 Disc Golf Courses

7.3.21 Disc Golf

While disc golf requires extensive land, it can be compatible with a range of nearby recreational uses and enjoyed by an entire family.

Improve Golf Facilities

7.3.22 Golf

Metro Parks' municipal golf courses are among the finest in the Southeast. As the economy has recovered from the recession, revenue from golf has steadily increased. While no new golf courses are recommended, some of the recommended facility improvements from the 2002 parks and greenways master plan that were never implemented remain valid.

- Complete the following improvements:
 - » Harpeth Hills Putting Green
 - » Two Rivers Driving Range
 - » McCabe Maintenance Shop
 - » Replace Shelby Clubhouse
 - » Percy Warner Short Game Area and Driving Range
- Invest in the capital and operational improvements necessary to achieve Audubon certification for all Metro Parks golf courses.

Invest in New Features at Wave Country

7.3.23 Wave Country

In order to remain economically viable, water parks must invest in a new major feature at least every five years. It has been eight years since a new feature was added at Wave Country.

- Add two new major features by 2027 starting with a children's water play area.

7.3.24 Nature Centers

Expand Nature Center Programming

- Before adding new nature centers, expand environmental programming into community centers and other facilities countywide.
- Consider new nature centers as part of individual park master plans and look first to outdoor classrooms and the adaptive use of historic buildings where available before building new facilities.

7.3.25 Regional Maintenance Facilities

Improve and Expand Regional Maintenance Facilities

With the growth of the park system throughout Davidson County, maintenance facilities must also grow. Building new facilities in key locations will also serve to reduce travel time between parks.

- Renovate and re-open Cane Ridge facility.
- Add new downtown maintenance facility.
- Consider long-term relocation of existing facility from Centennial Park to Cockrill Bend site.

7.3.26 Parks HQ Office Space

Renovate and Expand Parks' Headquarters Office Space

Renovate 26,000 square feet of existing parks office space. Add 8,000 square feet.

The operations section of Plan to Play includes numerous recommended additions to the administrative staff that is currently housed in the James H. Fyke Administrative Complex in Centennial Park. In addition to square footage constraints, these buildings have not been renovated since Metro Parks moved into them in 1988.

Implement Key Existing Master Plans

7.3.27 Existing Master Plans

Many individual parks have their own master plans. Most such plans remain relevant and applicable and include significant recommendations that are yet to be implemented. Plan to Play recommends that Metro Parks remain committed to the funding and implementation of the following master plans:

- Shelby Park
- Centennial Park
- Beaman Park
- Warner Parks (various plans currently being synthesized and updated)
- Sevier Park
- Riverfront
- Fannie Mae Dees Park
- Woodmont Park
- Madison Park
- Smith Springs Park
- Two Rivers Mansion
- Aaitafama' Park

Develop New Park-Specific Master Plans

7.3.28 New Master Plans

It is Metro Parks' practice to master plan every new park property that is acquired. Master planning for existing parks has occurred as funds and needs emerge, but many of them remain without a plan. Plan to Play recommends the following:

- Develop a master plan for Hamilton Creek Park that includes the development of a business plan for the marina.
- Develop a master plan that encompasses Buena Vista/Looby and Ted Rhodes parks and integrates them to form a new regional park near North Nashville and Downtown.
- Budget funding to develop master plans for three to five existing parks per year.

7.4 PROGRAMS



For the purposes of Plan to Play, programs are generally defined as staffed, guided, or facilitated activities, or events and activities provided by the issuing of a reservation or permit. Programs range from ballet classes to canoe trips, boot camps to after-school programs, and farmers' markets to history tours. These programs offer cultural, health and wellness, and nature education opportunities for all ages across the county.

Metro Parks currently offers 1,200 programs per week. The majority of programs are based out of seven regional community centers, 19 neighborhood community centers, five nature centers, four cultural arts facilities, and the Centennial Sportsplex. Plan to Play's needs assessment found that the types of programs offered by Metro Parks are very appealing to those using them, which is affirmed by the fact that most current programs are at capacity. **The primary desire of Nashvillians as expressed in public input is more – more program offerings, at more locations in the county, and more promotion about available program offerings.** As a result, many of the recommendations focus primarily on expanding access to existing programs. That said, the list of programs offered should continue to be assessed annually to be dynamically responsive to shifts in the market.

While those who participate in programs tend to rate them highly, a relatively small percent of residents participate. These rates may be accounted for by two key factors: 1) a shortage of available programs and 2) limited promotion. Both likely have to do with the current lack of staff and operational funding capacity within the system.

GOAL 3: PROGRAMS

Grow Metro Parks visibility, facility use, and program participation by offering all residents opportunities to participate in cultural, athletic, and environmental education programs to increase health and to build and support social and community cohesion across the region.



Improve Access to Programs

- Metro Parks should expand the operating hours at community centers with more opportunities over the weekend to meet latent needs. A key finding from community engagement was that users would like to have more access to programs offered. Most regional recreation centers and larger mega recreation centers across the country are open 94-100 hours per week, whereas regional centers in Metro Nashville are open 74 hours a week.
- Improve efficiency of spaces within existing facilities to expand program availability. Where utilization rates for rooms appear to be low, identify programs to increase usage.
- Develop an age segment matrix of users for each type of recreation facility to determine how well each age segment is being served by each program type.
- Create new partnerships with businesses and outfitters to expand recreation program opportunities as they apply to performing and visual arts, outdoor recreation, wellness and fitness, active senior adults, people with disabilities, and after-school and summer programs.

7.4.1 Program Access

Prioritize Program Offerings

Community input via the plan's public engagement process identified a list of existing programs that were highly regarded but were considered in too short of supply, i.e., unmet needs.

OUTDOOR RECREATION

- Expand outreach of outdoor recreation programs across Nashville's broad and diverse communities.
- Continue to expand urban youth programs, and integrate environmental education into outdoor recreation programs.
- Expand program delivery methods through partnerships, outreach, equipment rentals, outfitters, and off-site trips.
- Increase programs on greenways. Responses to Greenway Facility User Surveys indicated that nature and environmental walks, history walks, and fitness/health programs are popular with users.
- Increase outdoor recreation programming in community centers to better serve inner-city areas.
- Initiate a blueways marketing plan to recognize adventure water recreation and promote system.
- Develop blueways interpretive materials and expand user interest through core materials conceptualized around a river history interpretive trail.

7.4.2 Program Offerings

EXERCISE AND FITNESS

- Explore partnering with the Metro Health Department and area hospitals to develop a Park Rx Program for the public that utilizes park facilities.
- Increase capacity to provide increased hours of operation at providing facilities, and deliver more programming opportunities through a combination of staff partners.

SUMMER ENRICHMENT

- A primary limitation on growth of the summer enrichment program is lack of space. Expansion of the community center system is the first step in growing this oversubscribed program.
- Develop themed day camps through partnered or contracted programs.
- Develop a sliding-scale fee, based on ability to pay, for summer programs to offset costs while expanding capacity.

AFTER-SCHOOL PROGRAMS

- A primary limitation on growth of the after-school program is lack of space. Expansion of the community center system is the first step in growing this oversubscribed program.
- Reduce the wait list for this program by:
 - » Increasing capacity to provide expanded services where possible in communities where demand is high and unmet by broadening the number of facilities and increasing the number of trained staff and volunteers.
 - » Working with partners and contractors to increase capacity of the program.
- Develop a sliding-scale fee for after-school programs to offset costs while expanding capacity.

SENIOR CITIZENS

- Establish dedicated staff and dedicated funding to expand programs.
- Provide active and passive program options to address the wide and diverse needs and ages of seniors (60 to 100 years old) including retiring baby boomers.

VISUAL AND PERFORMING ARTS

- Expand arts programming countywide into more community centers.
- Build the Centennial Performing Arts Center and outdoor theater and renovate the existing Centennial Art Center per the Centennial Park Master Plan to strengthen the park as the hub of Metro Parks' arts programming.
- As part of the recommended Ted Rhodes master plan, enhance the capacity of Looby Neighborhood Community Center as an arts destination by upgrading the existing community center to a mega-center with a special focus on performing arts.
- Incorporate arts program space in all new mega-centers.

DISABILITIES PROGRAM

Metro Parks' existing disabilities program is heavily oversubscribed. To meet the need and demand, Plan to Play recommends developing strategies to expand program offerings. Strategies should include utilizing volunteers, identifying potential partners in the community, and add additional locations at megacenters as appropriate.

HEALTH AND WELLNESS

- Integrate parent/child programming as piloted by the Nashville Collaborative, with the goal of using parks and recreation to measurably improve health for both.
- Start young. Develop active programming for preschoolers.
- When diversifying funding streams, include health insurers and integrate parks and recreation into population health approaches.

Expand Environmental Education

- Before building additional nature centers, expand countywide program offerings through existing community centers, especially in areas of the county where residents may not have access to or the ability to visit a nature center.
- Consider new nature centers when master planning new parks with an eye toward the reuse of any available historic buildings.
- Incorporate environmental education into outdoor recreation programs in order to improve the experiential aspect of learning.

7.4.3 Environmental Education

Improve Programming in Urban Parks

Parks downtown and in other densely developed parts of the city often experience extreme pressure from heavy use and from the demands of frequent special events such as concerts and festivals. But the best urban parks are equally adept at offering the day-to-day programs that engage nearby residents and daytime workers.

- Partner with nonprofits, volunteers, and third parties to program and activate downtown parks with frequent planned activities and small-scale performances to encourage daily neighborhood use.
- Increase intentional program space for passive, self-selecting programming (e.g. table tennis, bocce, food service, board games), and a variety of seating types and pop-up installations.
- Provide programs for neighborhood parks in low-income areas that are rarely targeted for permitted events by outside groups.

7.4.4 Urban Parks Programming

7.4.5 History Programming

Improve History Programming

Lectures, classes, tours, exhibits, online resources, and living history are all tools that have been used by Metro Parks to provide history-related programming. The best opportunity to improve such programs is to revisit the Metro Parks organizational structure related to history programming, and create a new management section within Metro Parks.

- Classify all historic properties as a new management section within Metro Parks.
- Program historic sites systematically to offer coordinated interpretation.
- Establish a programmatic strategy that takes advantage of the site's relationship with other historic properties managed by Metro Parks.
- Refer to Section 7.3.8 for historic facility recommendations.

7.4.6 Urban Agriculture

Expand Urban Agriculture and Community Gardens Programming

Metro Parks' existing community gardens program makes land available to outside groups that wish to develop a plot. At the same time, the availability of land in Nashville's park system creates some opportunities to scale up urban agriculture programs.

- Identify opportunities and obstacles to facilitating the use of park property for community food production and urban agriculture, including the sale of produce grown on Parks-owned land.
- Identify opportunities and obstacles to facilitating food production linked to serving produce through concession facilities with Parks property. This would allow food produced in Metro Parks to be served in Metro Parks cafes and restaurants.
- Establish operational policies that remove obstacles, and support and encourage safe production and sale of produce / urban agriculture on property owned and managed by Metro Parks including historic sites and land-banked property.
- Determine potential community garden / urban agriculture nonprofit partnerships that could collaborate with Metro Parks to provide operations and maintenance manpower needed develop to high-performing pilot programs using Parks land.
- Tie urban agricultural programs to health and wellness programs.
- Look to urban as well as rural locations for agricultural sites.

Establish a Volunteerism Program

7.4.7 Volunteerism

Nashville’s park system benefited from over 61,000 hours of volunteer labor in 2015. Volunteers are involved in everything from planting trees, to tutoring children, trail building, and fundraising. Better utilization of volunteers, and more of them, can reduce operating expenses and heighten community/civic pride and ownership of our parks. The presence of volunteers can also contribute to safety with eyes on the park.

Nashville’s current volunteer rate (equal to 6% of staff hours) is notable, but best practice agencies strive for 15% of total staff hours to be attributed to volunteer time and tasks. This is consistent with Gear UP 2020, which asks: How can we facilitate more citizen engagement with everything from tree planting and gardening in public spaces, to tree adoption and maintenance, to public art and entrepreneurship in parks and streets?

To improve the use of volunteers in Metro Parks, Plan to Play recommends the following:

- Establish volunteerism as a formal, centralized, and consistently managed program. With dedicated staff managing and coordinating volunteers, their use can be efficient and invariably effective.
- Develop a volunteer recruitment and training program.
- Identify targeted volunteer projects that ensure a good return on investment.
- Hire a volunteer coordinator to build the program.
- Train staff on how to effectively work with volunteers in park settings.
- The department should be flexible taking on specific projects, but should also have the ability and support to say “no” if the proposed activity does not align with current priorities or offers a poor return on investment.

Expand Bike Sharing Opportunities

7.4.8 Bike Sharing

B-Cycle is an existing bike share program operating throughout the city and managed by the Nashville Downtown Partnership. Many of the most popular B-Cycle stations are in Metro Parks. B-Cycle supports the mission of Metro Parks by facilitating access to parks by bike and by encouraging a healthy lifestyle.

- Work with Nashville Downtown Partnership to expand the B-Cycle network in parks and greenways.
- Set a goal to have a B-Cycle station on every major greenway route.
- Support the goal of increasing the B-Cycle system fourfold as recommended in Gear Up 2020.

7.4.9 Classifying Services

Classify Services

The mission of Metro Parks is incredibly broad. It is a public agency that stewards resources and delivers services that range from sports fields to interpreting archaeological sites, from hosting nationally televised special events to making possible a solitary walk in the woods, from ballet classes to protecting endangered species, from stand-up paddle board trips to meals for low-income seniors. How does a parks department determine which programs are the most important? Which programs should be available to every taxpayer for free and which justify a fee?

Historically, Metro Parks has made these decisions on an ad hoc basis. Acknowledging that the department has limited resources, Plan to Play proposes a more systematic approach to assessing the value and priority of the range of services provided by the department. This system proposes that every program and service be classified by two primary metrics:

1. Its alignment with the mission of Metro Parks, and
2. Where it falls on the spectrum from public benefit to private benefit.

This exercise is a tool to help prioritize the allocation of limited staffing, operating, and capital resources as well as the development of the fee schedule that is annually approved by the Parks Board. Figure 7-10 visually illustrates the continuum into which all of the department’s deliverables to the public can be assigned, and below is a description of the four broad categories into which those deliverables can fall.

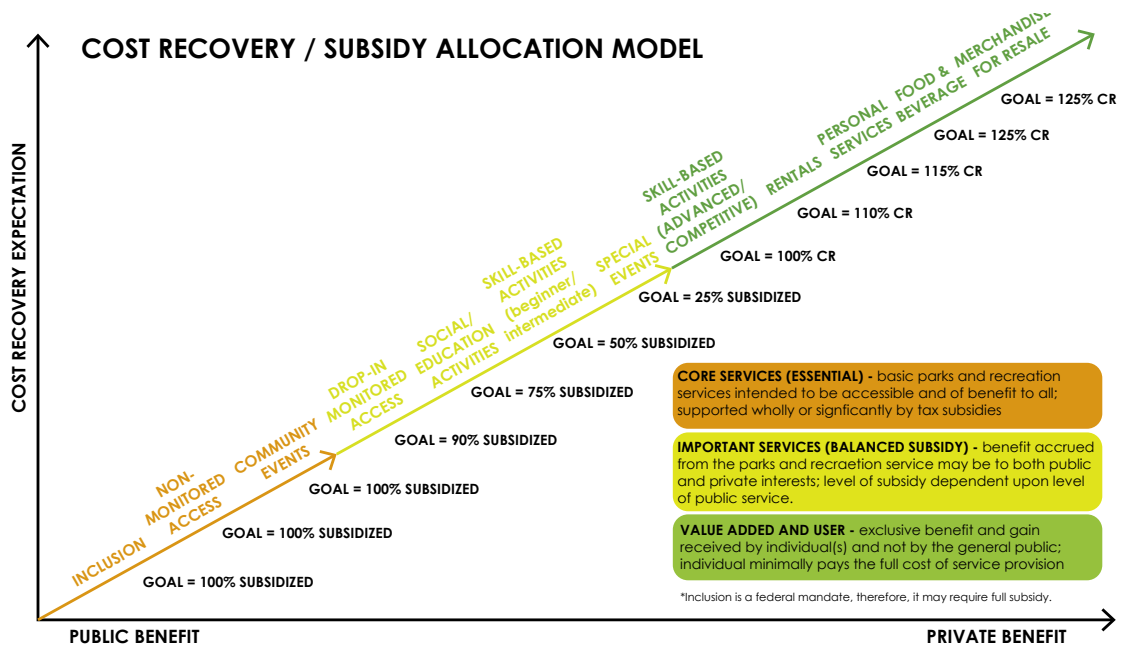


Figure 7-10 Cost Recovery and Subsidy Allocation Model

CATEGORY 1 – CORE SERVICES (ESSENTIAL)

These are programs, services, and facilities that Metro Parks must provide, or are essential to its system in order to capably govern and meet statutory requirements. The failure to provide a core service at an adequate level would be harmful to the system and the people it serves. The criteria for programs or services to be classified as essential are:

- The department is mandated by law, by a charter, or by contractual obligation to provide the program or service.
- The program or service is essential to protecting and supporting the public’s health and safety.
- The program or service protects and maintains valuable assets and infrastructure.
- Residents, businesses, customers, and partners would generally and reasonably expect the department to provide the program or service with tax dollars. It is one that cannot or should not be provided by the private sector and provides a sound investment of public funds.
- The program benefits the public at large.

Examples of core services include playgrounds, trails, and Parks-sponsored festivals.

CATEGORY 2 – IMPORTANT SERVICES (BALANCED SUBSIDY)

These are programs, services, and facilities the department should provide, and are important to governing and effectively serving residents, businesses, customers, and partners. Providing these programs and services expands or enhances the department’s ability to provide and sustain its core services. The criteria for programs or services to be classified as important are:

- The program or service expands, enhances, or supports core services.
- The program or service is considered an appropriate and valuable public good, although those benefits may be balanced by the benefits accrued by the private individuals who choose to participate. Public support may be conditional on the manner by which the program or service is funded.
- The program or service generates revenue that offsets some or all of its operating cost, and is deemed to provide desirable economic, social, or environmental outcomes.

Examples of important services include fitness classes, summer programs and art lessons.

CATEGORY 3 – VALUE-ADDED AND USER-SUPPORTED SERVICES (NON-SUBSIDIZED)

These are programs, services, and facilities that the department may provide when additional funding exists to offset the cost. Programs and services provide added value above and beyond what is required or expected. The criteria for programs or services to be classified as user-supported are:

- The program or service expands, enhances, or supports Category 1 and 2 services,

Figure 7-11 Cost Recovery / Subsidy Allocation Model

and the quality of life of the community.

- The program or service is supported and well-utilized by the community, and provides a worthwhile public benefit.
- The program or service generates income or funding from user fees, partnerships/ sponsorships, grants, or other sources that offsets most or all of its cost.
- The program primarily benefits private individuals participants and should be made available, to the degree possible, with taxpayer dollars.
- Examples of value-added services include sports tournaments and clinics, marina slip rentals, and wedding venue rentals.

CATEGORY 4 – PARTNERSHIP/SPONSORSHIP SERVICES

These are programs, services, and facilities that the department may provide through partnerships or sponsorships. Its services usually provide added value beyond what is required or expected by public mandate. The criteria for programs or services to be classified as partnership services are:

- The program or service expands, enhances, or supports core services, Category 2 and 3 services, and the quality of life of the community.
- The program or service is supported and well-utilized by the community, and provides an appropriate and valuable public benefit.
- The program or service generates income or funding well beyond its costs that can be reinvested in the parks for public benefit.

Examples of Partnership/Sponsorship services include winter outdoor ice rink installation, and concert series.

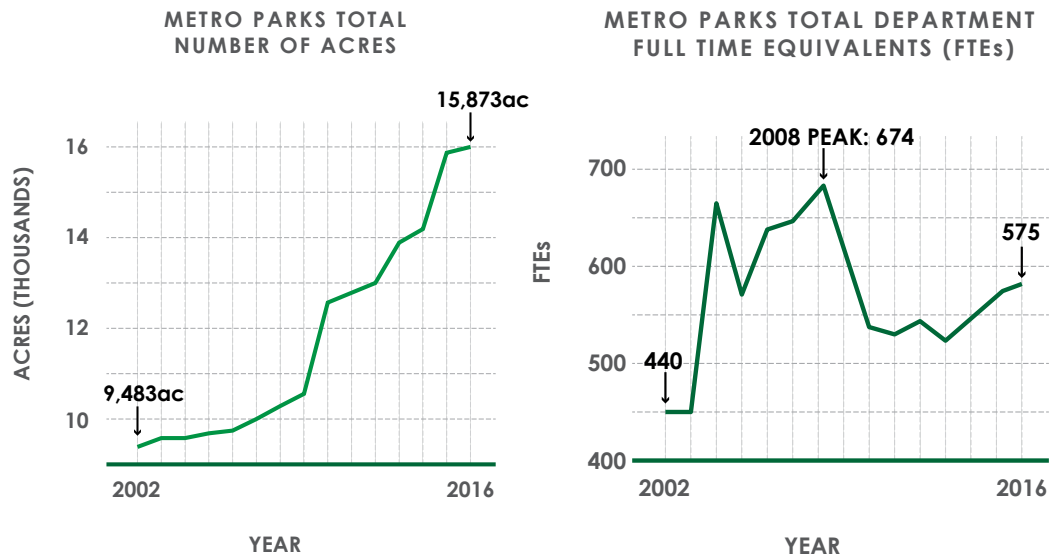
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7.5 OPERATIONS



Over the last 10 years, Metro Parks has made substantial strides with regard to capital investments by adding new facilities and land to the park system. The department, however, has not seen the same amount of operational growth to support the additional facilities and land. This has created a gap between the operational needs of the system and the current operating budget. For a park system to be sustainable, capital and operational investment must be made together since new capital projects require additional operational and maintenance needs. Sections 7.2, 7.3, and 7.4 outline capital and programmatic needs of the park system. This section identifies the operational needs to sustainably support those recommendations. **Combined, these recommendations form a strategy by which the growth of the park system and the capacity of the Parks Department to manage that system grow in tandem.**

Some of these recommendations reflect a more entrepreneurial approach to the management of the department that uses both performance indicators and outcomes to operate the system in a more efficient and measurable manner. In addition, opportunities exist to scale up existing partnerships and other successful strategies already in place to maximize benefits.



GOAL 4: OPERATIONS AND MANAGEMENT

Sustainably manage Metro Parks operations so public tax dollars are being used as responsibly and efficiently as possible, while ensuring residents enjoy first-rate experiences and facilities. Use staff, technology, planning, and best business practices to increase Metro Parks performance and community impact.

Conduct a Staffing Level Assessment

Using the data measures outlined in Section 7.5.1 and business plans recommended in Section 7.5.9., Metro Parks should undertake a full staffing assessment in order to determine appropriate levels throughout the department. Given the known maintenance and operating challenges faced by the existing system, as well as the recommendations to add parks, expand programs, and extend the hours at many facilities, this in-depth study will help ensure that system growth and departmental capacity expand in tandem. The study should also consider opportunities to utilize contract and partner services where doing so helps to achieve sustainability and program goals.

Even before the benefit of a full staffing assessment, there are known and immediate staffing needs within the department. These are detailed in Section 7.6.3.

7.5.2 Staffing Level Assessment

Track Data and Performance

Data and performance tracking recommendations recognizes that, in order to manage it, you must first measure it. This practice allows managers to more efficiently and effectively allocate resources by better understanding the market, true costs, usership, life cycles, trends, and other factors. Using measurable outcomes will allow the department to identify the greatest areas of need, track success, and know where and when additional support is needed. Effective data management will be a key component to the success of this recommendation. The following are examples of performance measures that should be tracked:

- Monthly usership of space and amenities
- True cost per experience
- Revenue earned per square foot
- True cost per unit (to build, maintain, and operate a given facility type)
- Revenue
- Building space productivity
- Customer feedback and satisfaction
- Volunteer hours donated as percentage of total hours of the system
- Employee satisfaction

7.5.1 Track Data and Performance

7.5.3 Office of Collaboration

Create an Office of Collaboration

An Office of Collaboration should be established to lead the process of developing and managing many of the operational and financial recommendations in Plan to Play that relate to alternative revenue streams, scaling up partnerships, and otherwise bringing new resources to the department in order to help fulfill its mission. This office would work in close collaboration with the other divisions of Metro Parks, and have the following responsibilities:

- Develop and manage the recommended business plans
- Data tracking and management
- Marketing, branding, and sponsorships
- Volunteer management (See Section 7.4.7)
- Interacting and coordinating with “friends” groups including the development of memoranda of understanding
- Oversight and tracking of other partnerships
- Grant development
- Oversight of leased facilities



MAINTENANCE AUDIT

The Maintenance Division of Metro Parks is responsible maintaining the various open spaces, athletic fields, greenways, playgrounds, and recreation areas. This equates to over 15,000 acres and over 1.2 million square feet of facilities. In 2015, Metro Nashville conducted an internal audit of the Maintenance Division within Metro Parks. The goal was to determine how well the division was operating and determine if the right resources are in place to effectively maintain the system. Some of the conclusions from the audit include:

1. Overall, Metro Parks is successfully maintaining park areas, playgrounds and facilities with the limited resources they have.
2. The Department should develop maintenance standards for parks

and facilities, and replace the outdated and ineffective work order system.

3. The audit found that the operating expenditures per acre of land managed or maintained falls between the lower quartile and median of comparable parks and recreation agencies.

These conclusions help inform opportunities to improve the efficiency and effectiveness of the division over the next 10 years. As the park system grows, it will be important to ensure the resources are in place to effectively maintain and care for the system.

Improve Public Relations, Marketing, and Branding

7.5.4 Marketing Plan

As outlined in the needs assessment, Metro Parks' current communications staffing level (one person) is far below that of peer cities and even other Metro departments. The agency has historically relied upon the generally positive image it enjoys among Nashvillians. Given the many quantifiable economic and quality-of-life benefits of parks, including tourism and public health, and the more entrepreneurial business model recommended in this plan, it is critical for Metro Parks to invest in additional marketing and communications. Recommendations include:

- Develop a new communications division section with staff to implement the needs of the marketing plan. Develop key positions that focus on print media, social media and website, informational media and signage, and communication media.
- Establish an independent website. Unlike other government departments, Metro Parks provides a unique customer service experience that has a closer resemblance to the private sector. Users regularly need information related to program offerings and events, and most programs requiring reservations or permits must currently be made in person or over the phone. Like all of the peer cities in this study, as well as local agencies such as the Nashville Public Library, Metro Parks should develop its own independent website.
- Public input reveals that most residents are unaware of the many programs offered by Metro Parks, while participation in most of those same programs exceed current capacity and are rated highly by those who participate. As the department's capacity to offer additional programs expands, the programs should be promoted based on a marketing plan.
- Develop a comprehensive marketing plan for the park system, and allocate funding to develop this plan through outside expertise.
- Brand and market unique greenways and parks that are catalysts for surrounding development, investment, and activity.

7.5.5 Technology

Upgrade and Improve Technology

Technology is meant to improve efficiency and operations and allow the department to accomplish more with fewer human resources. Many aspects of the current operational system (rentals, payments, and reservations) are requiring extensive hours to manage. Furthermore, some aspects of these systems create barriers and friction that discourage people from participation, and reduce the customer satisfaction of those who use it. There are several critical technological needs at Metro Parks:

- Improve the current credit card system. To be effective and improve efficiency, the payment system must be consistent and effective across the department. It must also be able to be implemented at any location where fees could potentially be collected. The department is moving toward being able to offer point-of-sale (credit card) services consistently at all needed locations; however, the system remains frustrating for customers and staff alike. As is standard practice in the private sector, the credit card convenience fee should be incorporated into the fee for service rather than as a separate stand-alone fee.
- Implement an online reservation and payment system equivalent to what the private sector uses. All transactional services and user sign-ups should have a user-friendly online reservation and payment system. This system will be an integral component of the Parks Department operating in a business model. A centralized tennis court reservation system should be part of this initiative.
- Consider the use of smart cards by customers to reduce wait times at ice rinks and elsewhere.
- Establish a system-wide building automation system (BAS) in order to improve maintenance and energy efficiency and reduce energy costs.
- Adopt an asset management and work order system and software for the Maintenance Division.
- Adopt a GPS tracking system that informs staff of the best routes to get to parks in the most timely manner.
- Hire dedicated technical support and data management staff to support existing technology and these new systems. Most agencies of this size would have four or five full-time staff to work with other staff and customers. New positions should include coordinators of technology management, program registration, Geographic Information Systems, and user data management.

7.5.6 Program Fee Assessment

Conduct a Program Fee Assessment With New Program Classifications

Annually, the Park Board approves the pricing for all of the fee-based services provided by Metro Parks. As the recommendations in Plan to Play are implemented, fees should reflect goals, priorities, and changing financial realities of a growing and changing park system. Only 6% of public survey respondents said the fees are too high. This is a very low percentage and indicates support for an appropriate usage fee for some programs. At the same time, Metro Parks is committed to ensuring that fair and equitable access remains a hallmark of the department's services. The annual fee reassessment should be informed by the considerations below:

- The fee structure should reflect the new classification system for each program and service, whether it be Core Essential, Important, or Value-Added. Most large park systems have approximately 20% to 30% of their programs provided for free. For Metro Parks, that percentage is well over 50%. In order to provide free programs, others must be provided for a fee. Utilize the program classification to make pricing decisions. Provide a balance of free and fee programs that will support a sustainable financial system.
- Where new fees are instituted for core services and programs, implement a sliding scale to ensure equity and access for under-resourced residents.
- The fee structure should consider demand pricing, cost per experience, and which programs should be revenue-producing.
- The desired increase in operating hours at community centers should be tied to the new fee structure.
- Based on the data to be tracked per recommendation in Section 7.5.1, pricing should be informed by unit cost pricing as it applies to cost per hour, cost per class, cost per experience, cost per facility or amenity, and cost per day.

Expand Strategic Partnerships with Public and Private Groups

7.5.7 Partnerships

Across the country, city governments and park departments, including Metro Parks, are finding creative ways to partner with a variety of entities to benefit their parks, provide programming and services to residents, and build long-term relationships with donors, the business community, and park users. While parks and park maintenance used to be the responsibility of the taxpayer, many cities are finding that partnerships allow them to explore new avenues and means for meeting the growing demand of their park systems and serving the diversity of park users.

Partnerships need to be structured carefully to ensure that parks remain in the public domain and are operated for the public good. Like all relationships, partnerships require a give and take from both parties – the act of giving something up demonstrates the overall partnership is valuable to those involved. Also, partnerships require ongoing nurturing and engagement from both parties in the relationship.

As Nashville’s population continues to boom and the needs and complexities of the system grow, this is a critical time to examine what public-private partnerships exist in Nashville today and what partnerships can grow, evolve, and be augmented to best serve Metro Park’s properties and the area’s residents and visitors into the future.

Section 7.6.4 in Funding the Future details opportunities to strengthen partnerships to support the financial needs of the department. The appendix provides a comprehensive look at best practices related to partnerships from across the county, and the opportunities for Nashville to harness the power of partnerships for the greater good.

PUBLIC/PUBLIC PARTNERSHIPS

Metro Parks works closely and routinely with multiple other Metro departments to achieve shared goals. These include the transfer of flood buyout properties from Metro Water Services to Metro Parks for development as parks and greenways, housing public libraries in Parks facilities, working collaboratively on preservation projects with the Metro Historical Commission, and incorporating public art installations in park facilities with the Metro Arts Commission. Plan to Play recommends the following:

- As needed, develop memoranda of understanding to establish the terms and funding of any agreement.
- Work with the Nashville Public Library, Metro Nashville Public Schools, and other public agencies to identify locations where future facilities can be co-located. **Areas identified in NashvilleNext as centers may be good candidates for this effort, where a public park bordered by civic buildings could be the organizing element of these future communities.** This strategy also presents the opportunity to engage the private sector and incorporate residential and mixed-use elements. Affordable housing could also be wrapped into such a project.
- **Work with the Metro Arts Commission to identify a park property appropriate for programming or repurposing as an art center, gallery, and resident artist studios.** Such a facility could be consistent with Metro Parks' cultural arts mission, justify investment in a potentially under-used building, and offer new programming and services to the public.
- See Section 7.6 for additional discussion of public/private partnerships.

7.5.8 Special Events

Improve Special Events Policies and Management Practices

Generally, special events are defined as those activities that are allowed in parks through a permit issued by Metro Parks. Activities can include races, theatrical performances, concerts, festivals, farmers' markets, weddings, commercial photo and video shoots, and rallies. For most such events, they simply cannot exist without the availability of public parks; however, events at park facilities can require additional maintenance and operational needs that are often never financially recouped by the department. Gear Up 2020 confirms that Metro Parks is rarely recouping real costs for major commercial events in downtown parks. This essentially serves as a subsidy and takes limited Parks resources away from other core mission areas. Plan to Play recommends the following:

- Determine the real costs of managing and maintaining special areas, including long-term maintenance needs.
- Establish permit fees that reflect true costs. New fees must also take into consideration access, equity, and how closely events align with the mission and priorities of Metro Parks as determined in the value exercise.
- For all privately operated revenue-producing ventures including sports leagues, after a predetermined revenue threshold has been reached, a percentage of gross revenue should be captured by Metro Parks. These funds will ensure that private use of public land benefits the public.

Create Business Plans

7.5.9 Business Plans

Plan to Play recommends the development of business plans for community centers, sports complexes/field houses, golf courses, aquatic facilities, Hamilton Creek Marina, and any other facility with yearly revenue of \$100,000 or more. To understand the operational and funding needs of these facilities, business plans should be the first step in the implementation process. For starters, each business plan should include the following:

- A clear understanding of what outcomes the department and the city want to achieve with the particular facility.
- Market research, estimated development and operational costs, staffing needs, program menu, fee schedule, revenue projections, and other considerations.
- Each business plan should be revisited every three to five years to move toward managing in an performance-based system.

7.5.10 Maintenance Management

Establish Maintenance Management Plans

Establishing maintenance plans for each park type will allow the department to develop consistent standards, track costs year-to-year, and assess the appropriateness of contracting some maintenance services.

- Using industry metrics of three to five standards of service, determine the level by which each park is maintained. Determine the appropriate maintenance level of each type to clearly identify which facilities need the most maintenance attention and which require the lowest.
- Track drive time. Two hours should be the maximum total daily drive time for any maintenance crew. Drive time can be improved with development of new regional maintenance facilities, instituting GPS in park maintenance vehicles, and also through the use of contracted services.
- Integrate natural area management principles as appropriate; adopt integrated management practices to reduce dependence on harmful chemicals and the impact on bees and other species.
- Establish maintenance costs for all new parks, trails, and recreation amenities prior to building new facilities, and include these costs in the development plan of the new facility.
- Contract services for facilities that are located outside of a determined distance from a maintenance facility or have high maintenance costs. Include performance indicators in any such agreement.



NASHVILLE'S BEST-KEPT SECRET

Metro Parks currently offers more than 1,200 programs and classes EACH WEEK. This number surprised many even within the department when the data was first gathered for Plan to Play. Metro Parks' mission is extraordinarily broad, and with it comes a wide range of opportunities – boot camp, ballet, kayaking, art exhibits, sports leagues, painting, lectures, bird banding, yoga, music, theater, tutoring, big band dances, astronomy, swimming, camping, nutrition classes. The list can seem endless.

Surveys found that while only about 20% of Nashvillians participate in Parks programs, the vast majority of those rate the programs as good or excellent. They further found that of those who don't participate, the majority do not know the programs exist. However, most of these programs are, in fact, already at capacity. Some parents get in line at 4 a.m. to register their child for the summer enrichment program, or put

their name on a long waiting list for ballet. Plan to Play recommends expanding programs offered and the capacity along with marketing to spread awareness of these low- and no-cost programs.



Improve Maintenance of Existing Facilities

7.5.11 Maintenance of Existing Facilities

In order to elevate annual depreciation costs to calculate deferred maintenance costs, Metro Parks must begin to put mechanisms in place to allow for work order tracking and analytics. Deferred maintenance refers to scheduled maintenance that, for whatever reason, was not performed as scheduled and is still currently not resolved. Deferred maintenance can be used in tandem with an asset's current replacement value (CRV) to calculate a Facility Condition Index (FCI). Essentially, a high FCI indicates that it may make more sense to re-capitalize the asset (or dispose) because the deferred maintenance costs are equal to or similar to the asset's CRV. A low FCI indicates that it may make more sense to complete the deferred maintenance on the asset rather than re-capitalizing. Of course, it is important to factor in an asset's importance to meeting community need(s).

RECOMMENDATIONS FOR DEFERRED MAINTENANCE

Based on the deferred maintenance analysis, Plan to Play recommends the following actions:

- Purchase an enterprise asset management system that allows for work order tracking
- Adopt work order best practices that assign actual costs to closed work orders
- Review work orders on an annual basis to calculate:
 - » Per unit costs
 - » Deferred maintenance costs
- Conduct a full system asset life cycle and condition assessment
- Utilize the deferred maintenance figures along with current replacement costs to help with the budgeting process

7.5.12 Maintenance of Non-Park Properties

Maintenance of Non-Park Properties

This recommendation applies to properties owned or managed by other Metro Nashville government agencies or quasi-government agencies that are currently maintained by Metro Parks. These currently include streetscapes, street trees, and the professional football stadium, among others.

- Partner with other agencies, organizations, or groups only after a strong maintenance agreement is in place that outlines responsibilities and costs, and includes a reimbursement, sharing, or an equal benefit to Metro Parks. This particularly applies to specialty facilities that Metro Parks maintains, but receives no reimbursement or sharing of costs such as the Titans Stadium. In addition, Metro Parks currently maintains 69 playgrounds and other recreational facilities on school grounds with no recovery or sharing of costs.
- Gear Up 2020 recommends that Metro identify one entity or department be responsible for maintenance of all street trees in Metro, and also identify a system for labeling, inventorying, and marketing street trees as valuable assets. With Metro Parks' valuable horticultural expertise, the department should support efforts to identify a sustainable, efficient, and effective strategy for managing trees within the ROW and on other non-park properties owned by Metro Nashville. If the process identifies responsibilities for Metro Parks, they should be spelled out in a memorandum of understanding and be properly funded to ensure that limited resources are not diverted from parks.

7.5.13 Fleet Management

Explore Improving Fleet Management

Currently the management and purchasing of vehicles and other major equipment is done through the General Services Department. General Services manages the equipment for most government departments, which means other departments often get priority (e.g., Police, Fire, Public Works). However, to adequately maintain its facilities, Metro Parks equipment maintenance needs must also be prioritized, especially during critical seasonal periods. Because Metro Parks must follow the maintenance template provide by General Services and does not receive priority, equipment can be taken out of service for extended periods during peak seasons. As a result, Metro Parks is forced to redirect its own funds to repair equipment on a timely schedule in order to maintain basic maintenance levels of service in the parks.

Explore the possibility of establishing a memorandum of understanding with the central garage or the possibility of retaking responsibility, and funding, to repair its own equipment. If given this control, do full accounting of costs (including equipment life cycle costs) and consider costs/benefit analysis of contracting with a major private company to complete all equipment repairs.

Implement the Natural Management Plan

7.5.14 Natural Areas

The geography and natural features of Davidson County have been noted throughout this report as being an integral part of Nashville's park system. They are a valuable resource not only to the park system but to the larger ecosystem. For example, **Metro Parks' existing parks and greenways are home to more than 94 plant and animal species that have been identified as either being of special concern, threatened, or endangered.**

While several Metro Parks sites are currently designated by the State of Tennessee as natural areas, the development of a local natural area designation is one of the few recommendations from the 2002 parks and greenways master plan that has never been implemented. Standards and policies for such a program have been developed, and can be referenced in the appendix; however, staffing levels have never permitted its implementation.

With appropriate staff levels, a proactive natural areas management plan would inform maintenance practices and operational standards for the purposes of resource conservation, habitat preservation, biodiversity, and appropriate recreational use. Given the many invasive exotic plant and animal species that threaten native species, the increasing impacts of overuse in some natural areas, and two additional regional parks with natural areas (Ravenwood/Lytle Bend and Southeast/Antioch) to be master planned in 2017, the need for this program has never been more critical.

Expand Urban Tree Canopy

7.5.15 Urban Tree Canopy

Metro Parks is responsible for more of Nashville's tree canopy than any other single agency or land owner. Chapter 2 of Plan to Play enumerates the benefit of parks, many of which are directly attributable to trees. Trees provide myriad benefits: air quality, stormwater retention, animal habitat, urban heat island mitigation as well as opportunities for play. Metro Parks should continue to scale up the following practices:

- Strategically plant trees throughout the system to help reach tree canopy target percentage goals as outlined in the Metropolitan Nashville Urban Forestry and Landscape Master Plan.
- Produce park tree inventories for management purposes.
- Develop protocol for interdepartmental communication within Metro for urban forestry and landscape activities.

7.6 FUNDING THE FUTURE



The previous sections in this chapter of Plan to Play present land, facilities, program, and operational recommendations that collectively represent a future for Nashville’s park system built on equity, sustainability, and best practices. These recommendations can often be the part of a parks master plan that gets the most attention – the “what” part of the plan. They are the deliverables, the new additions to the park system, or the upgrades needed to existing parks, facilities, or programs. There are few recommendations that do not have a cost for their implementation.

Funding the Future is the “how” part of Plan to Play – how will Nashville fund this bold vision?

This portion of Plan to Play assigns costs to all of the land, facilities, and program capital recommendations previously outlined in Plan to Play. In addition to projecting capital investment needs, the expected operational costs to support the additions to the system were calculated in order to provide a comprehensive understanding of the real cost of developing these new parks and facilities. A variety of input informed the following projections and strategies, with a goal of producing a realistic view of the financial implications for achieving the community’s vision over the next 10 years.

The tables below provide an at-a-glance summary of all projected costs to implement Plan to Play. The subsequent sections provide additional detail on how the numbers have been derived.

7.6.1 PROJECTED INVESTMENT SUMMARY

The Capital Investment Summary shows the total capital investment required to meet the recommended needs and visionary projects, less land acquisition costs. This includes new development, major improvements to existing assets, and the estimated deferred maintenance of the system. The total investment needed to reach capital investment goals set forth in Plan to Play over the next 10 years is estimated to be nearly \$667 million in 2016 dollars. The current land acquisition value for park acreage level of service needs, \$534 million, was excluded from the total capital investment due to the expectation that these assets will be secured opportunistically and through a variety of alternative funding mechanisms.

The Operational Investment Summary below shows the estimated operational and maintenance costs required to implement all land, labor, and capital recommendations from the 10-year strategic action plan. **The total annual value of the operational and maintenance requirements to achieve all strategic actions outlined in Plan to Play is currently estimated at \$67.6 million**, in 2016 dollars.

Capital Investment Summary	Total Capital Investment
Trails and Blueway Access	\$ 49,404,404
Athletic Fields and Courts	\$ 63,886,606
Amenities and Facilities	\$ 237,077,892
Planning Projects	\$ 5,577,500
Capital Investments to Existing Assets	\$ 254,957,466
Maintenance Needs to Existing Assets	\$ 56,000,000
Total Capital Investment*	\$ 666,903,868
*Not Included: Market Value of Land Acquisition Recommendations	\$ 534,362,411

Operational Investment Summary	Annual Operational / Maintenance Cost
Parkland	\$ 26,141,27
Facilities	\$ 16,617,50
Routine Maintenance Needs	\$ 20,490,00
New Staff Positions	\$ 958,40
Staffing Needs at Existing Facilities and Divisions	\$ 3,500,50
Annual Operational Impact of Recommendations	\$ 67,707,67

7.6.2 CAPITAL INVESTMENT

This section expands on the level of service (LOS) analysis and recommendations to forecast the expected capital spending required to implement them. The consultant team worked closely with Metro Parks to develop accurate, per unit costs for the variety of parks, facilities, and amenities identified in the LOS analysis. These costs were derived from similar projects completed across the country, as well as internally from improvements completed within the Nashville market. Once the per unit costs were established, they were applied to the anticipated needs from the recommendations to project the total capital investment.

Every effort was made to provide accurate pricing from an optimal sample; however, these projections simply provide a budgetary magnitude of scale that will be subject to many variables, including shifts in the local market over the course of the next 10 years. Going forward, Metro Parks should prepare more specific and updated estimates annually as part of the capital budget process. The full schedule of per unit cost ranges used to forecast future capital investment can be found in the appendix.

The following assumptions were used to formulate the projected capital investment required over the next 10 years:

Per unit costs were established across three pricing tiers, which establishes a range from low to high as well as an average cost for all pricing evaluated. This tiered approach allows for flexibility in the projections to account for variances in development costs based on the location or quality of assets desired. In most cases, anticipated needs were evenly distributed across each of the three pricing tiers for each asset.

- For consistency, the following facility sizes were standardized:
 - » Shelter = 1,500 square feet
 - » Dog Park = 5 acres
 - » Regional Dog Park = 10 acres
 - » Outdoor Pool = 25,000 square feet
 - » Large Skate Park = 50,000 square feet
 - » Neighborhood Skatespot = 5,000 square feet
 - » Soft Surface Trail = 8 feet wide
 - » Hard Surface Trail = 12 feet wide
 - » Blueway Access Site = 600 square yards
- Five planning projects are estimated to be completed each year – two at the low price tier, two at the average tier, and one at the high end. An additional planning project is included in the 2027 projection to anticipate the systemwide master plan update, valued at \$500,000.
- A 15% design and contingency cost was applied to all developmental costs.
- All costs are estimated in 2016 dollars and will need to be adjusted for inflation and other changes in market conditions as time passes. These should be revisited and adjusted each year as part of the budget process.
- Per unit development costs used to estimate future improvements also account for construction and/or installation of each asset.

MARKET RATE FOR LAND ACQUISITION NEEDS

Land acquisition costs reflect a per-acre estimated average based on park type and probable transect(s) in which the park will be located. Costs are derived from recent sale prices in Davidson County as provided by Metro Parks and the Property Assessor's Office. Like the capital cost projections, actual acquisition costs will vary depending on location within the county and may vary significantly over the Plan to Play time horizon.

The current estimated market rate for acquiring each park typology is as follows:

- » Pocket Parks: \$1,120,318 / acre
- » Neighborhood Parks: \$269,895 / acre
- » Community Parks: \$66,180 / acre
- » Regional Parks: \$66,180 / acre
- » Greenway Corridors: \$66,180 / acre
- » Signature Parks: \$1,120,318 / acre
- » Specialty Parks: \$66,180 / acre

The table below applies the market value estimates to the acreages needed for each park typology as indicated in the LOS analysis. Applying the market rate reveals that Metro Parks would need to spend over \$534 million today to acquire the recommended park land acreages needed over the next 10 years. **However, due to the extremely high cost to acquire some of this land at the market rate, many transactions will require alternative funding sources (see Section 1.3 in this chapter) that ease some of the financial burden off of the tax base.** For this reason, these cost estimates are intended to provide an understanding of the present market value, but the expectation is that land acquisition would be executed through a variety of funding mechanisms outside of the General Fund.

Asset	Unit	Recommended Units by 2027	Total Investment to Meet 2027 Recommendation
Pocket Parks	ac	37	\$ 41,671,894
Neighborhood Parks	ac	226	\$ 61,028,642
Community Parks	ac	379	\$ 25,090,162
Regional Parks	ac	3,187	\$ 210,905,799
Signature Parks	ac	141	\$ 157,924,453
Specialty Parks	ac	440	\$ 29,111,589
Greenway Corridors	ac	130	\$ 8,629,872
Total Market Value			\$ 534,362,411

SUMMARY OF NEW CAPITAL INVESTMENT TO ACHIEVE 10-YEAR RECOMMENDATIONS

The following table summarizes all projected new capital investments to be completed by 2027, as suggested by plan recommendations. A full breakout of per unit development costs and the distribution of capital investment by pricing tier that were used to formulate the spending projections are described in the appendix. In total, the projected capital spending is currently estimated at \$356 million for development of new facilities and amenities recommended by 2027. Please note, these projections do not account for acquisition of park land due to the expectation that acreage will be attained opportunistically through a variety of funding mechanisms.

Asset	Unit	Recommended Units by 2027	Total Investment to Meet 2027 Recommendation
Trails - Hard Surface	mi	53	\$ 32,597,000
Trails - Soft Surface	mi	50	\$ 7,684,951
Mountain Bike Trails	mi	16	\$ 2,408,400
Blueway Access Site (5 Sites)	sy	3,000	\$ 270,000
Multipurpose Fields	ea	46	\$ 28,781,250
Diamond Ballfields	ea	43	\$ 19,749,188
Wheelchair Access Field	ea	1	\$ 683,333
Basketball Courts	ea	50	\$ 3,760,600
Tennis Courts	ea	25	\$ 2,526,000
Sand Volleyball	ea	4	\$ 53,200
Indoor Facility (Recreation Facility, Fieldhouse, Aquatic Center)	sf	481,000	\$ 144,300,000
Shelter	sf	26,145	\$ 3,726,273
Playgrounds	ea	65	\$ 11,811,313
Fitness Equipment Areas	ea	20	\$ 3,621,436
Disc Golf Hole	ea	36	\$ 54,000
Dog Park	ac	35	\$ 2,916,667
Regional Dog Park	ac	10	\$ 1,600,000
Outdoor Pools (5 pools)	sf	125,000	\$ 21,875,000
Spraygrounds	ea	5	\$ 11,125,000
Skate Park	sf	125,000	\$ 4,250,000
Pump Track (Dirt)	ac	0.5	\$ 750,000
Pump Track (Asphalt)	ea	1	\$ 125,000
Planning Projects	ea	50	\$ 4,300,000
Staffing Assessment	ea	1	\$ 50,000
System-Wide Master Plan	ea	1	\$ 500,000
	Subtotal		\$ 309,518,611
	15% Design / Contingency		\$ 46,427,792
	Total Investment by 2027*		\$ 355,946,402

**Not Included: Market Value of Land Acquisition Recommendations = \$534,362,411*

BREAKDOWN OF PROJECTED NEW CAPITAL INVESTMENT TO ACHIEVE RECOMMENDATIONS

Given the 10-year time horizon for Plan to Play, this section and the subsequent section break the plan into two five-year periods. This strategy intentionally front-loads the first five years with more projects while there is new momentum, and fewer economic unknowns. Analysis shows the department is below many service standards for facilities and park land, and early investments within the next five years will allow the department to meet identified service targets. This section details capital investment by category to achieve the recommended levels of service to be completed 2017 to 2022 and 2023 to 2027.

TRAILS AND BLUEWAY ACCESS SITES

The first table below reveals the estimated costs to develop trails and water access points, based on LOS recommended need. The total investment recommended for trails and blueway access is nearly \$37 million by 2022. Development costs for trails account for a 12-foot-wide path for hard surface and 8-foot path for soft surface. A total of three blueway access sites are also recommended during the five-year period.

The estimated costs to develop the recommended level of trails and water access points totals \$12.5 million from 2022-2027. A total of two blueway access sites are also recommended during the five-year period.

Total investment for trails and blueway access sites over the next 10 years is \$49.5 million.

RECOMMENDED UNITS BY 2022

Asset	Unit	Recommended Units by 2022	Total Investment to Meet 2022 Recommendation
Trails - Hard Surface	mi	39	\$ 24,000,667
Trails - Soft Surface	mi	40	\$ 6,082,378
Mountain Bike Trails	mi	12	\$ 1,874,209
Blueway Access Site (3)	sy	1,800	\$ 162,000
Subtotal			\$ 32,119,253
15% Design / Contingency			\$ 4,817,888
Total Investment by 2022			\$ 36,937,141

RECOMMENDED UNITS 2022 TO 2027

Asset	Unit	Recommended Units 2022 - 2027	Total Investment to Meet 2022 - 2027 Recommendation
Trails - Hard Surface	mi	14	\$ 8,596,333
Trails - Soft Surface	mi	10	\$ 1,602,574
Mountain Bike Trails	mi	3	\$ 534,191
Blueway Access Site (2)	sy	1,200	\$ 108,000
Subtotal			\$ 10,841,098
15% Design / Contingency			\$ 1,626,165
Total Investment 2022 - 2027			\$ 12,467,263

ATHLETIC FIELDS AND COURTS

In order to meet recommendations for 2022, Metro Parks will need to invest nearly \$47 million on a variety of sports fields and courts. In addition to LOS needs, items include a fully accessible, wheelchair softball diamond, and two tournament-level sand volleyball courts.

Projections from 2022-2027 indicate a sum of \$17 million on athletic fields and courts. In addition to LOS needs, items include two tournament-level sand volleyball courts.

Total investment for athletic fields and courts over the next 10 years is \$63.9 million.

RECOMMENDED UNITS BY 2022

Asset	Unit	Recommended Units by 2022	Total Investment to Meet 2022 Recommendation
Multipurpose Fields	ea	34	\$ 21,518,750
Diamond Ballfields	ea	31	\$ 14,418,513
Wheelchair Access Field	ea	1	\$ 683,333
Basketball Courts	ea	44	\$ 3,080,000
Tennis Courts	ea	10	\$ 975,000
Sand Volleyball	ea	2	\$ 26,600
Subtotal			\$ 40,702,196
15% Design / Contingency			\$ 6,105,329
Total Investment by 2022			\$ 46,807,525

RECOMMENDED UNITS 2022 TO 2027

Asset	Unit	Recommended Units 2022 - 2027	Total Investment to Meet 2022 - 2027 Recommendation
Multipurpose Fields	ea	12	\$ 7,262,500
Diamond Ballfields	ea	12	\$ 5,330,675
Basketball Courts	ea	10	\$ 680,600
Tennis Courts	ea	16	\$ 1,551,000
Sand Volleyball	ea	2	\$ 26,600
Subtotal			\$ 14,851,375
15% Design / Contingency			\$ 2,227,706
Total Investment 2022 - 2027			\$ 17,079,081

PARK AMENITIES AND FACILITIES

Indoor facility needs could include the development of a variety of regional community centers, large mega-community centers, fieldhouses, and indoor aquatic spaces. These indoor spaces typically range from 30,000 square feet for a regional community center, up to 100,000+ square feet for a mega-community center or fieldhouse.

The projected capital investment for the park amenities and recreational facilities below total \$175 million by 2022. Indoor facility need is estimated at 365,000 square feet, which includes recreation centers, fieldhouses, and indoor aquatic facilities. Additional improvements include: one 18-hole disc golf course, four standard dog parks (5 acres each), one regional dog park (10 acres), one large skate park (50,000 square feet), three neighborhood skatespots (5,000 square feet), five outdoor aquatic facilities (25,000 square feet each), and one half-acre dirt pump track.

The projected capital investment for needed park amenities and recreational facilities totals \$62 million between 2022 and 2027. Over this span, more than half of the needed investment is attributed to indoor facility need, which is estimated at 116,241 square feet and \$35 million. Additional improvements include: one 18-hole disc golf course, three standard dog parks (5 acres each), one large skate park (50,000 square feet), two neighborhood skatespots (5,000 square feet), and one outdoor aquatic facility (25,000 square feet).

Total investment for park amenities and facilities over the next 10 years is \$237 million.

RECOMMENDED UNITS BY 2022

Asset	Unit	Recommended Units by 2022	Total Investment to Meet 2022 Recommendation
Indoor Facility (Recreation Facility, Fieldhouse, Aquatic Center)	sf	364,759	\$ 109,427,700
Shelter	sf	15,690	\$ 2,236,191
Playgrounds	ea	45	\$ 8,204,363
Fitness Equipment Areas	ea	10	\$ 1,810,718
Disc Golf Hole	ea	18	\$ 27,000
Dog Park	ac	20	\$ 1,666,667
Regional Dog Park	ac	10	\$ 1,600,000
Outdoor Pools	sf	100,000	\$ 17,500,000
Spraygrounds	ea	3	\$ 6,675,000
Skate Park	sf	65,000	\$ 2,210,000
Pump Track (Dirt)	ac	0.5	\$ 750,000
Pump Track (Asphalt)	ea	1	\$ 125,000
		Subtotal	\$ 152,232,639
		15% Design / Contingency	\$ 22,834,896
		Total Investment by 2022	\$ 175,067,535

PARK AMENITIES AND FACILITIES (CONT.)
RECOMMENDED UNITS 2022 TO 2027

Asset	Unit	Recommended Units 2022 - 2027	Total Investment to Meet 2022 - 2027 Recommendation
Indoor Facility (Recreation Facility, Fieldhouse, Aquatic Center)	sf	116,241	\$ 34,872,300
Shelter	sf	10,455	\$ 1,490,081
Playgrounds	ea	20	\$ 3,606,950
Fitness Equipment Areas	ea	10	\$ 1,810,718
Disc Golf Hole	ea	18	\$ 27,000
Dog Park	ac	15	\$ 1,250,000
Outdoor Pools	sf	25,000	\$ 4,375,000
Spraygrounds	ea	2	\$ 4,450,000
Skate Park	sf	60,000	\$ 2,040,000
		Subtotal	\$ 53,922,050
		15% Design / Contingency	\$ 8,088,307
		Total Investment 2022 - 2027	\$ 62,010,357

PLANNING PROJECTS

Metro Parks is expected to spend \$2.5 million for planning projects by 2022. This would include site master plans, business plans, and other strategic plans. These projections assume that Metro Parks would undertake five strategic plans per year in addition to an organizational staffing assessment within the next five years, as recommended in this master plan.

Metro Parks is projected to spend \$3 million for planning projects from 2022-2027. In addition to the recurring planning efforts, Metro Parks would also expect to complete an update to the systemwide master plan.

Total investment for planning projects over the next 10 years is \$5.5 million.

RECOMMENDED UNITS BY 2022

Asset	Unit	Recommended Units by 2022	Total Investment to Meet 2022 Recommendation
Planning Projects	ea	25	\$ 2,150,000
Staffing Assessment	ea	1	\$ 50,000
		Subtotal	\$ 2,200,000
		15% Design / Contingency	\$ 330,000
		Total Investment by 2022	\$ 2,530,000

RECOMMENDED UNITS 2022 TO 2027

Asset	Unit	Recommended Units 2022 - 2027	Total Investment to Meet 2022 - 2027 Recommendation
Planning Projects	ea	25	\$ 2,150,000
System-Wide Master Plan	ea	1	\$ 500,000
		Subtotal	\$ 2,650,000
		15% Design / Contingency	\$ 397,500
		Total Investment 2022 - 2027	\$ 3,047,500

CAPITAL INVESTMENT TO EXISTING ASSETS

The table below represents expected capital investment for improving existing assets. Additional capital spending related to updating existing parks and facilities is estimated at more than \$255 million. Details of each line item are described below.

Asset	Unit	Recommended Units by 2027	Capital Investment to Existing Assets
Wave Country Update	ea	1	\$ 3,500,000
Administrative / Maintenance Facilities	sf	347,800	30,678,000
Master Plan Implementation	ea	6	\$ 181,304,144
Golf Course Improvements	ea	5	\$ 6,220,000
		Subtotal	\$ 221,702,144
		15% Design / Contingency	\$ 33,255,322
		Total Investment by 2027	\$ 254,957,466

- Wave Country Update: updating of the facility with the addition of two major features, (e.g., water slide, spray area, lazy river, etc.) at an expected price of \$3.5 million.
- Administrative and Maintenance Facilities: Building additions include two 45,000-square-foot maintenance facilities (one of which is designated for the downtown area), as well as the addition of 8,000 square feet of administrative office space. Also, a 5-acre paved lot is included as part of a new maintenance facility. Building renovations include improvements to 6,000 square feet of maintenance buildings and 26,000 square feet of administrative office space.
- Master Plan Implementation: Accounts for capital spending to fulfill previous planning projects. Pricing for the master plans listed below are included here because they include major elements that are beyond the scope of what has been priced elsewhere in this plan. For example, the Centennial Park master plan includes the rehabilitation of historic buildings and some unique new buildings. These costs have been derived from the estimates for each of the respective plans with an annual multiplier to account for inflation since pricing was complete. The total dollar amount for plans to be implemented includes:
 - » Centennial Park Master Plan: \$103,543,840
 - » Shelby Park Master Plan including the rehabilitation of the Naval Building: \$29,297,591
 - » Two Rivers Mansion Master Plan: \$4,200,000
 - » Riverfront Park Redevelopment (existing park): \$35,000,000
 - » Aaitafama' Archeological Park Master Plan (Kellytown): \$1,500,000
 - » Fort Nashborough Phase Two: \$1,250,000
 - » Sevier Park Master Plan: \$2,408,613
 - » Madison Park Master Plan: \$1,153,900
 - » Smith Springs Park Master Plan: \$2,950,200
- Golf Course Improvements: includes the following projects with development cost estimates:
 - » Harpeth Hills – new 10,000-square-foot putting green and cart staging area: \$120,000
 - » Two Rivers - driving range: \$1,300,000
 - » McCabe - new maintenance shop: \$1,600,000
 - » Shelby – new clubhouse: \$3,000,000
 - » Percy Warner - short game area and driving range: \$200,000

MAINTENANCE OF EXISTING FACILITIES

While it is essential for Nashville to invest in new parks and greenways, it is equally essential for the city to maintain its investments in existing parks and facilities. Existing Metro Parks assets have a current total asset value of nearly \$683 million. **These existing assets should be protected with adequate maintenance funding.** Currently, maintenance funding needs fall into two categories: deferred maintenance and routine maintenance. Routine maintenance is described in detail in Section 7.6.3 Operational Investment.

Deferred Maintenance Needs

Deferred maintenance refers to maintenance activities that have been postponed in order to save costs or meet budget funding levels. In some cases, the failure to perform the repairs has led to asset deterioration. **Metro Parks conducted an internal assessment of deferred maintenance needs at existing facilities and produced an estimated maintenance backlog equal to approximately \$56 million.** This number is derived from actual repair estimates and/or 1%-5% of asset value (depending on the age of the facility or amenity).

Note that implementation of the asset management system as recommended in Section 7.5.5 will include more detailed condition assessments of all facilities and result in more accurate asset protection planning going forward.

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7.6.3 OPERATIONAL INVESTMENT

In an effort to provide a holistic understanding of the financial impact of the proposed capital investment plan, the consultant team also projected the operational and maintenance implications to provide the resources needed to operate and maintain the recommended capital improvements for the next 10 years. These operating cost projections are intended to quantify the current dollar value to fulfill all of the strategic recommendations set forth in this plan, and do not include the operational needs for the system today. The projected operational and maintenance costs were developed on the following assumptions:

- Similar to the projected capital costs, the operational and maintenance costs were estimated, and applied, across a range to allow for fluctuations related to facility type, location, material costs, staffing levels, and other market factors.
- Operational and maintenance costs are based on the assumption that all park assets will be maintained at a Level 2 standard. General duties and task detail for Level 2 maintenance of parkland, facilities, and amenities can be found in the appendix.
 - » Indoor recreational center hours of operation average 95 hours per week, year-round except major holidays.
 - » Outdoor aquatic facilities are expected to operate 70 hours per week, for 101 days during the summer swim season (Memorial Day weekend through Labor Day weekend).
- The per acre and per square foot costs associated with parks and facilities also incorporate the upkeep and operation of a mix of amenities that would be expected to be included within each asset. It is expected that the development of various park land and facilities would include an optimal mix of amenities aimed to satisfy the recommended improvements.
- Projected operational and maintenance costs were categorized by park typology, as well as indoor recreation and outdoor aquatic facilities.
- Projections utilized a best practice efficiency standard of 1 maintenance FTE for every 25 acres developed, 1 Staff FTE for every 8,000 square feet of developed indoor space to cover facility operations, and 2 aquatic staff FTEs for every 8,000 square feet of water.
- The average maintenance staff rate is estimated at \$25.87/hour, based on current maintenance employee salaries. This rate also includes all employee benefits.
- Operating cost projections do not factor any operational revenue, which could significantly offset expenses. Ideally, recreational and aquatic facilities will have established cost recovery goals, and each facility should strive to achieve positive net revenue over expenses.
- The operational / maintenance projections are based on 2016 dollar values and should be updated annually to reflect inflation and other market factors.

PROJECTED OPERATIONAL AND MAINTENANCE INVESTMENT TO MEET 10-YEAR CAPITAL RECOMMENDATIONS

The following estimates the total operational impact associated with the recommended new capital investment for Metro Parks through 2026, as well as the total cost for additional staffing needs for meeting maintenance standard goals. These figures are based on industry norms and Level 2 standard frequency, on an annual, per unit basis, and account for all costs associated with labor, materials, equipment, and overhead for the ongoing operation and maintenance for each asset. In order to meet new capital development recommendations and maintenance standard goals set forth in this plan, Metro Parks would need to incorporate approximately \$42.8 million in additional resources per year for operation and maintenance. The full detail of operational cost ranges and allocations can be found in the appendix.

PARKLAND AND FACILITIES

The table below describes the annual operational and maintenance costs by park typology and facility type, on a per acre and per square foot basis. The total recommended acreage or square footage for each type is multiplied by the annual operational cost to provide an understanding of the expected financial impact associated with the upkeep and operation of new capital investments for the system. Indoor facilities include traditional recreational facilities such as community recreation centers and sports fieldhouses, as well as indoor aquatic facilities.

As a caveat, the total annual cost solely represents operational and maintenance costs, which does not account for the revenue earning potential of a park or facility that could offset expenditures. Also, the acreages described below vary slightly from figures identified in the LOS analysis due to a percentage of acreage that will be maintained as natural area, at a reduced cost. Natural acreage was estimated to be one-third (1,498 acres) of the total recommended acres for 2026, and those acres were extracted from totals for community parks, regional parks, and greenway corridors.

Asset	Unit	Recommended Units by 2027	Total Annual Operational / Maintenance Impact
Pocket Parks	ac	37	\$ 344,068
Neighborhood Parks	ac	226	\$ 2,091,610
Community Parks	ac	229	\$ 1,891,579
Regional Parks	ac	1,913	\$ 11,957,691
Signature Parks	ac	141	\$ 2,960,244
Special Use Park	ac	440	\$ 4,398,850
Greenway Corridors	ac	55	\$ 249,665
Natural Acres	ac	1,498	\$ 2,247,566
Indoor Recreation Facilities	sf	481,000	\$ 14,430,000
Outdoor Aquatic Facilities	sf	125,000	\$ 2,187,500
Total Annual Cost			\$ 42,758,772

*Note: Asset operational costs have potential to be offset by operational revenues, especially indoor recreation and outdoor aquatic facilities.

ADMINISTRATIVE STAFFING RECOMMENDATIONS

Based on recommendations in Section 7.5, a total of 14 new administrative positions should be recommended added as part of the 10-year strategic plan. In an effort to quantify the budgetary impact for implementing these recommendations, the following table estimates the additional labor expense, including benefits, to the system for salaries incurred on an annual basis. These estimates are in 2016 dollars, and budget implications will need to be evaluated and updated on an annual basis to account for phasing of employee hires and wage increases. The current annual value to implement these staffing recommendations is estimated at \$958,400.

Position	Annual Labor Expense
Business Development (2 positions)	\$ 136,600
Data Management	\$ 94,500
Written Media	\$ 68,300
Social Media	\$ 68,300
Image & Website Mgmt.	\$ 68,300
Press/Communication Manager/Initiatives	\$ 109,700
Volunteer/Stewardship (2 positions)	\$ 136,600
Partnership Oversight	\$ 68,300
Grants	\$ 68,300
Program Registration Manager	\$ 46,500
Performance Mgmt. Tracking Manager	\$ 46,500
Geographic Information Manager	\$ 46,500
Total Annual Expense	\$ 958,400

MINIMUM STAFFING LEVELS FOR EXISTING PARKS AND FACILITIES

Section 7.5.2. recommends that Metro Parks undertake a complete staffing assessment in order to determine appropriate staffing levels throughout the department. With the benefit of the assessment, however, there are some known and immediate staffing needs in critical areas. Plan to Play recommends near-term funding for the following needs.

FACILITY STAFFING

Currently, there are multiple community centers and other facilities that are often open to the public with only a single staff member present. This circumstance impacts the quality of customer service, but more critically it can create real challenges in protecting the safety of visitors and staff alike. At a minimum, all staffed public park facilities should have two staff members present during operating hours. In order to accomplish this goal, an additional 15.5 FTEs are needed in facilities countywide with an annual operating budget cost of \$1,055,000. While this interim goal provides a minimum recommendation to address the immediate condition, the comprehensive staffing assessment, as recommended in Section 7.5, will identify the detail of need for the next 10 years.

MAINTENANCE STAFFING

The expansion of Nashville's park system since implementation of the 2002 parks and greenways master plan began has been transformative for the system. During this period, total park acreage has increased by 68% and the total square footage of buildings has increased by 57%. During the same period, Metro Parks staff has grown only by 33%. This has created challenges that are particularly acute in the Maintenance Division. Maintenance staffing levels are typically measured by full time equivalents (FTEs) per designed acre (as opposed to natural areas). **The industry benchmark range is 1 FTE/18 designed acres to 1 FTE/25 designed acres.** Nashville currently is at 1 FTE/37 designed acres. Due to the large gap in need, Plan to Play recommends an interim target of 1 FTE/30 designed acres. Bringing Nashville to this interim target will require 35 additional FTEs with an annual operating budget cost of \$1,900,000. Note that some future maintenance services could be performed by contract. Contracted services would also have a significant budget impact, although without the legacy costs of Metro employees.

PLANNING AND FACILITIES DEVELOPMENT STAFFING

Within the Parks Department, recommendations for new park land and facilities will be led and managed by the Planning and Facilities Development Division. The implementation of Plan to Play will require a strong planning division with appropriate resources to implement the recommendations. This division should be supplemented with additional staff to adequately manage oversight of planning, design, and construction. Adding two planners to this division, at an annual cost of \$111,5000, is a short-term target to fill the current gap in staffing; however, the staffing assessment detailed in Section 7.5 should identify the long-term needs of the division.

PARK POLICE STAFFING

Over the past decade, the full-time staffing level at the Metro Parks Police has been reduced only to be partially compensated with part-time officers. During the same period, the total number of park and greenway acres protected by the Park Police in the county has increased by 62%, along with the development of many new facilities and miles of trail. Adequate policing is a fundamental component of ensuring a safe park and greenway experience. To address the immediate need, **the Parks Department has set an internal goal of bringing the Park Police back to a 2006 baseline staffing level, which would require five additional officers and an annual estimated operating budget cost of \$434,000.** Like facility staff, this interim goal provides a minimum recommendation to address the immediate need. The comprehensive staffing assessment, as recommended in Section 7.5, should address the actual police staffing need of the department.

SUMMARY OF STAFFING NEEDS AT EXISTING FACILITIES

Staffing Need	Annual Operating Budget Cost
Facility Staffing	\$ 1,055,000
Maintenance Staffing	\$ 1,900,000
Planning Staffing	\$ 111,500
Park Police	\$ 434,000
Additional Dollars Needed to Achieve Minimum Staffing Levels	\$ 3,500,500

A general obligation bond is a municipal bond secured by a taxing authority. It is used to improve public assets that benefit the municipal agency in charge of the city's parks and recreation facilities. This has been the primary source of funding for Metro Parks. General Obligation Bonds are a tool used by local governments to borrow money and usually are provided through a voted bond measure. **In 2016 over 80% of the bond issues for parks passed in the United States that garnered over 6 billion dollars in capital dollars for park systems needs in respective communities.** The bonds are guaranteed by the governing body's full faith and credit and backed by property tax revenues. The city can use revenue generated from the sale of general obligation bonds to fund a park project and repay the bonds and interest with future property tax revenue.

Improvements to parks should be covered by these funding sources because there are very little operational revenues associated with parks to draw from and some of the city parks improvements are in need of upgrades and renovations limiting the uses of other revenue sources. These parks help frame the City's image and benefit a wide age segment of users. Updating these parks will benefit the community as a whole and stabilize neighborhoods and other areas of the county.

7.6.4 Funding Strategies

INTRODUCTION

Metro Parks' primary source of both capital and operating funds is and will always be the Metro Budget, allocated by the Mayor and Metro Council and generally sourced from tax revenue and bond sales. Plan to Play's review of peer cities and best practices reveals, however, that Nashville's park system is unusually dependent on this single source of funding. Most other park departments in large cities have between 25 and 30 sources of funds. **Achieving the goals of Plan to Play will require an increase in Metro funding while Metro Parks simultaneously diversifies its revenue streams – not to replace Metro funds but to supplement them.**

The statistical survey conducted as a part of this planning process indicated that 77% of Nashvillians support additional city funding for parks. Many public comments throughout the planning process were about the need for a new facility, the desire for more program opportunities, or the need to complete a greenway connection. These facilities, amenities, and programs are simply not possible without more funding for both development and a lifetime of maintenance and operations.

Funding strategies below provide a menu of tried and true funding strategies and tools currently being used by many larger cities that can collectively transition the department toward diversifying its funding sources.

EARNED INCOME

Metro Parks generates approximately \$12,000,000 in revenue from fees each year nearly all of which currently goes into Metro's General Fund. Nationally, large cities average \$8,800,000 in revenue, and most keep all or a percentage of this revenue without taking a hit to their annual operating budget. Plan to Play recommends that Nashville transition toward a practice of allowing some or all of the revenue produced by Metro Parks to be retained by Metro Parks.

OPEN SPACE ORDINANCE

A thriving community, economy, and environment requires parks and open space. Given the decreasing availability of land, increased land costs, densification, and rapid growth, Metro Nashville must ensure that park infrastructure is built as the city grows. **Cities with great park systems have open space ordinances that require public park land to be set aside or incorporated into private development.** In fact, this may be the only way to systematically establish parks and greenways in urban areas where outright purchase is not affordable. Such a strategy benefits the park system and also functions as an economic development tool since parks are an amenity that increases property values (see Section 2.0).

OTHER LAND ACQUISITION STRATEGIES

- Metro Parks should explore other zoning and land use policies that promote parks and greenways development by the private sector, including trail and park-oriented development.
- Utilize public-private partnerships.
- Pursue innovative funding strategies.
- Share utility corridors.
- In the context of NashvilleNext, identify parcels for private partnerships that could be creatively planned to include parks, greenways, and affordable housing developments. Explore development strategies whereby land can be purchased and master planned around public park spaces and mixed-use/residential development.

BUSINESS IMPROVEMENT DISTRICTS (BIDS)

BIDs are defined areas within which property owners pay a small additional tax assessment in order to pay for projects within the district's boundaries. BIDs often oversee management of beautification projects, visitor service, and park improvements and are overseen by a nonprofit entity. There are two BIDs in Nashville, but none currently fund park projects.

- The Nashville Downtown Partnership, which runs the Central Business Improvement District, is a potential partner in assuming some of the funding responsibilities for programming and maintenance of parks inside of the downtown loop.
- Metro Parks should explore partnerships with all existing BIDs in Nashville.

SPONSORSHIPS

Sponsorship can be a significant source of revenue for a parks department. Metro Parks should be thoughtful and strategic in approaching the issue in order to ensure that the non-commercial character of public parks remains high-value while exploring



A FRIEND INDEED

Metro Parks is perhaps unique among public agencies in the extent to which partnerships are integrated into its business model. In addition to 16 “Friends of the Parks”-type organizations that are recognized by the Park Board, it also maintains 118 partnerships with other not-for-profit agencies to achieve shared goals. A full list of its 2016 partners is can be found in the appendix.

Plan to Play acknowledges and endorses the central role of partnerships. Indeed, many of the best practices that create successful urban park systems are simply not possible without a robust network of partners. Metro Parks is strengthened by its partners and the essential resources they bring to Metro Nashville's parks. It should continue to strengthen these partnerships and scale up collaborative efforts.

opportunities in appropriate locations. Revenue-producing facilities, for example, may offer more opportunities than some other park settings.

- Metro Parks should establish a centralized sponsorship policy and program that identifies the locations and terms by which sponsorship or naming rights will be allowed.
- Sponsorship opportunities should be competitively bid.
- The sponsorship program should be housed in the Office of Collaboration as described in Section 7.5.

IMPACT DEVELOPMENT FEES

Impact development fees are one-time fees assessed on residential or commercial development based on the idea that growth should pay for growth. Revenue from such fees is directed toward public infrastructure like parks.

ENTERPRISE FUNDS

An enterprise fund is a classification for revenue-producing municipal projects by which the managing entity retains earned income for reinvestment. At Metro Parks, the capital improvements identified for golf courses are recommended for the purpose of increasing revenue and transitioning toward an enterprise fund model with the caveat that, like the existing Municipal Auditorium Enterprise Fund, the golf course would still qualify for tradition capital fund improvements.

IMPACT FEES (SPECIAL EVENTS)

For large special events, consider instituting impact fees on top of standard permit fees for the purpose of capturing true costs.

PARKING FEES

Downtown parks like Riverfront and Walk of Fame have never offered free, on-site parking; the private market provides plentiful if expensive parking opportunities. As Nashville grows, more areas of the city will exhibit the kind of density and urban conditions that make the use of park land for car storage less and less desirable. With the recently completed nMotion and WalknBike master plans, biking, walking, and transit will only become more viable.

For these reasons, Metro Parks should explore instituting parking fees and metered parking in its most urban parks. Such a practice would reduce the number of non-park visitors competing with visitors for limited parking spaces, reward more sustainable transport choices, improve the quality of the park experience, and produce revenue for reinvestment in the parks. To accommodate park users who drive, the department can use metered spaces providing a certain amount of time for free parking to allow regular users the continued opportunity to use the park or facility without paying to park.

TAX INCREMENT FINANCING (TIF)

TIF is commonly used in Nashville, although it has rarely been used to benefit parks. TIF is used extensively in other cities for park and greenway acquisition, development, and maintenance. Given the myriad economic benefits of parks and greenways, Plan to Play recommends that the approval of future TIF projects incorporate funding directed toward parks.

GENERAL OBLIGATION BONDS

A general obligation bond is a municipal bond secured by a taxing authority. It is a tool that is used to improve public assets that benefit the municipal agency in charge, in this case Metro's parks and recreation facilities. General Obligation Bonds are used by local governments to borrow money, and are typically provided through a voted bond measure. The city can then use revenue generated from the sale of general obligation bonds to fund a park project, and repay the bonds and interest with future property tax revenue.

General Obligation Bonds can be used for all types of park and recreation facility projects including Neighborhood, Community and Regional Parks, trails, recreation centers, aquatic centers, or sports complexes. Because parks have very little operational revenue to fund future improvements, General Obligation Bonds can be used to to make needed upgrades, additions, and renovations to the system.

LAND AND PROPERTY LEASES

As Metro Parks moves toward revenue-generating lease arrangements with restaurants, local farmers, and other tenants in park properties, Metro should allow this revenue to be retained by Metro Parks for reinvestment into the parks.

SERVICE PROVIDERS

Service providers are contracted third-party entities that provide a fee-based service or program to the public on behalf of the parks. For example, a service provider might offer food in an urban park, rent out canoes and paddle boards in parks with water access, or offer personal fitness training. These are services that help to achieve the mission of a parks department and enhance the quality of the user experience.

Plan to Play recommends that Metro Parks explore opportunities to expand the use of contracted services where they may achieve the following:

- Result in lower costs to the department versus self-performance, taking into consideration fringe benefits and other efficiencies.
- Offer a service of value that Metro Parks does not have the capacity to provide.

HOTEL TAX

Section 2.0 of this plan quantifies the economic value of tourism generated by parks in Nashville. Indeed, most large outdoor events, festivals, and concerts could not occur without parks. For this reason, it is appropriate to consider allocating a portion

of the revenue generated by tourist taxes be directly reinvested into the parks that host and are impacted by such events.

FRIENDS GROUPS

There are currently 16 not-for-profit “friends of ...” organizations that are formally recognized by the Park Board. Each is dedicated to supporting a specific park (like Friends of Shelby Park and Bottoms), park type (like Greenways for Nashville), or program (like Friends of Metro Dance). The recently established Nashville Parks Foundation has a countywide focus as broad as the mission of the Parks Department. Collectively, these groups have raised millions of dollars in private funds and donated thousands of hours for parks. In addition to raising private funds, these groups help to deliver programs, raise public and political awareness of park-related issues, and often function as built-in stakeholder groups with which Metro Parks collaborates on a range of issues.

Nationally, as in Nashville, partner groups like these have proved to be an essential part of running a park system. As Nashville’s population continues to boom and the needs and complexities of the system grow, this is a critical time to explore how these partnerships can grow, evolve, and be augmented to best serve the park system and the department’s public mandate. Indeed, the most highly regarded city parks in the country typically accomplish what they do through successful partnerships. For these reasons, **it is essential for Metro Parks to devote more resources to partnering with and ensuring the success of not-for-profit friends groups.**

Depending on their ambitions, friends groups can be capable of:

- Managing operations and maintenance
- Managing concessions and events
- Providing programming
- Volunteer stewardship and customer service
- Developing mutually beneficial facilities
- Funding master planning
- Supplementing operating budgets and providing facilities and services

As much potential benefit as these partnerships hold, they can turn into contentious and unproductive marriages that offer the public no return on investment. Key ingredients in successful partnerships of this kind include:

- Development of a memorandum of understanding (MOU) or equivalent agreement. An MOU is foundational and will articulate the roles and responsibilities of each partner. For a friends group, an MOU can provide legitimacy to its donors by demonstrating a commitment from the city. For the city, the contract protects the public interest by creating boundaries around unplanned initiatives or donor influence. Because ownership, ultimate authority, and responsibility for parks are granted to the Park Board by the Metro Charter, MOUs must align with its mission and priorities. At the same time, the Park Board should always acknowledge the insight, perspective, and expertise that friends groups may offer. As Nashville transitions toward more robust roles for friends groups, it may be most appropriate to begin the process of developing MOUs with those partners that currently derive

revenue from Parks-owned facilities.

- Create work plans. A shared annual or three-to-five year plan helps to ensure that both partners are working toward shared or synergistic goals.
- Provide dedicated Parks staffing to coordinate with friends. Adequate and consistent city staffing will help to ensure a culture of sharing and collaboration, excellent communication, and alignment of effort. This position should be housed in the Office of Collaboration as described in Section 7.5.
- Track data and performance. Both partners should track the value of the resources they dedicate to their work. By quantifying what each partner gives and gets, the return on investment and other outcomes can be measured and resources can be directed to where they offer the greatest benefit.
- The National Recreation and Parks Association considers it to be a best practice for nonprofits to maintain offices that are separate from city offices so that the non-government office is perceived by the public as separate. If office space is provided by the city, its value should be tracked.

OTHER NOT-FOR-PROFIT PARTNERS

Metro Parks currently maintains dozens of other not-for-profit partnerships beyond friends groups. These include operational collaborations with the Boys and Girls Club and Nashville Aquatic Club, and programming collaborations like GROW and NAZA. As with friends groups, these partnerships are a fundamental strategy for the delivery of public services in Nashville's parks. And like the friends groups, Metro Parks should scale up these relationships through strategies including MOUs.

Metro Parks works closely and routinely with multiple other Metro departments to achieve shared goals. These include the transfer of flood buyout properties from Metro Water Services to Metro Parks for development as parks and greenways, housing public libraries in Parks facilities, working collaboratively on preservation projects with the Metro Historical Commission, and incorporating public art installations in park facilities with the Metro Arts Commission. Plan to Play recommends the following:

- As needed, develop memoranda of understanding to establish the terms and funding of any agreement.
- Work with the Nashville Public Library, Metro Nashville Public Schools and other public agencies to identify locations where future facilities can be co-located. Areas identified in NashvilleNext as centers may be good candidates for this effort, where a public park bordered by civic buildings could be the organizing element of these future communities. This strategy also presents the opportunity to engage the private sector and incorporate residential and mixed-use elements. Affordable housing could also be wrapped into such a project.
- Work with the Metro Arts Commission to identify a park property appropriate for programming or repurposing as an art center, gallery, and resident artist studios. Such a facility could be consistent with Metro Parks' cultural arts mission, justify investment in a potentially under-used building, and offer new programming and services to the public.

BEST PRACTICES IN OTHER CITIES

Many cities have already implemented elements of the previous recommendations. What follows is a table of strategies and the cities using them.

BEST PRACTICE STRATEGY	CITIES USING STRATEGY
GOVERNMENT FINANCE	
Create a Partnership Development Division within Metro Parks	Indianapolis, Oakland County Parks, Dallas, Charlotte/Mecklenburg County, Seattle, and Denver.
Retain Earned Revenue To Support Operations Costs	Austin, Minneapolis, Charlotte/Mecklenburg County, Portland, Louisville, and Denver.
General Obligation Bond	Columbus Ohio, Charlotte Mecklenburg County, Dallas, Denver, Seattle, Miami-Dade County, Portland, Cleveland Metroparks, Phoenix, Great Parks in Cincinnati, Austin, Houston, and San Francisco
OTHER STRATEGIES	
Recreation and Park Impact Fees	Most large systems (80%) have some level of impact fees with the exception of a few cities including Indianapolis, Nashville, and Dallas.
Tax Increment Finance District	Indianapolis, Milwaukee County, Cleveland, Charlotte/Mecklenburg County, Miami/Dade County, Dallas, Fort Worth, Phoenix, Downtown Indianapolis, Millennium Park-Chicago, Pioneer Courthouse Square-Portland
Developer Cash-In-Lieu of Meeting the Open Space Requirement	Standard for most large systems with the exception of Indianapolis, Nashville, and Dallas.
Sales Taxes	Boulder, St. Louis City and county, Great Rivers Greenway in St. Louis, Kansas City, and state parks in Minnesota and Arkansas.
Park Dedication Fee / Open Space Requirement	Most systems have some level of park dedication fee with the exception of Dallas, Indianapolis, Nashville, and Seattle.

BEST PRACTICE STRATEGY	CITIES USING STRATEGY
Business Improvement District	Successful in Philadelphia’s Center City, Washington, D.C.’s Downtown, and Bryant Park in New York.
Impact Development Fees	Most large systems have impact development fees with the exception of Dallas, Indianapolis, Nashville, and Louisville.
Transient Occupancy Tax	Currently being used in Nashville, and will be important to utilize for more parks and greenways.
Land Leases / Concessions	Indianapolis, Phoenix, and Denver.
Parking Fee	Many large systems charge for parking for access to large sports complexes, stadiums, and amphitheaters as well. Chicago Park District owns Soldier Field, which charges for games held there. Many park systems own parking garages as well. Most large cities in Florida, some areas in Texas, and a few large cities in California also collect parking fees.
User Fees	All large systems have a strong user fee program in place with the exception of Charlotte, which is in the process of updating its fee structure.
Maintenance Endowment Fund	Minneapolis, Oakland County Parks, Miami/Dade County, Charlotte/Mecklenburg County
Permit Fees	Most large systems have a strong permitting system in place with the best ones to include the city of Las Vegas, Orlando, Miami/Dade County, Houston, and San Diego.

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PLAN
TO
play

The Nashville Parks & Greenways Master Plan

APPENDICES

Megan Barry, Mayor
Christy Smith, Chair,
Metropolitan Board of Parks
and Recreation
Tommy Lynch, Director



PLAN TO PLAY: METRO PARKS MASTER PLAN

APPENDICES

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8.1 EXISTING PARKS AND GREENWAYS

EXISTING PARKS

NAME	Category	Transect
12th Street Ballfield	Pocket	T4
Ackerman - Planned	Community	T3
Alex Green School Playground	Pocket	T2
Alvin G. Beaman Park	Regional	T2
Amquie School Playground	Pocket	T4
Andrew Jackson School Playground	Pocket	T3
Antioch Park	Neighborhood	T3
Antioch Tennis Courts	Pocket	T3
Azalea Park	Pocket	T4
Bass Park	Pocket	T4
Bellevue Park	Neighborhood	T3
Bellevue Tennis Courts	Pocket	T3
Bells Bend Park	Regional	T2
Bicentennial Capitol Mall State Park	Community	T6
Bordeaux Garden Park	Community	T3
Bordeaux-Timothy Drive Park	Neighborhood	T3
Brookmeade Park	Neighborhood	T3
Browns Creek	Neighborhood	T3
Buena Vista Park	Neighborhood	T4
Cane Ridge Park	Regional	T3
Cecil Rhea Crawford Park	Neighborhood	T3
Cedar Hill	Regional	T3
Centennial Park	Signature	T5
Chadwell School Playground	Pocket	T3
Charlotte Park	Community	T4
Charlotte School Playground	Pocket	T3
Church Street Park	Pocket	T6
City Cemetery	Specialty	T4
Cleveland Park	Neighborhood	T4
Clinton B. Fisk Park	Neighborhood	T4
Cockrill School Playground	Pocket	T4
Cole School Playground	Pocket	T3
Columbine Park	Pocket	T4
Commerce Center Park	Pocket	T6
Cora Howe School Playground	Pocket	T4
Couchville Cedar Glade State Natural Area	Regional	T2
County Cemetery	Neighborhood	T3
Crieve Hall School Playground	Pocket	T3
Crooked Branch Park	Community	T3
Cumberland Park	Signature	T6
Dallas H. Neil Park	Pocket	T4
Dan Mills School Playground	Pocket	T4
Dodson School Playground	Pocket	T3
Dupont School Playground	Pocket	T4
E. N. Peeler Park	Regional	T2
E. S. Rose Park	Community	T4
East Jr. Tennis Courts	Pocket	T4

East Park	Neighborhood	T4
Eastland Park	Pocket	T4
Edmonson Library Playground	Pocket	T3
Edwin Warner Park	Regional	T3
Elizabeth Park	Pocket	T4
Ellington Agricultural Campus	Specialty	T3
Elmington Park	Neighborhood	T4
England	Neighborhood	T4
Ewing Park Tennis Courts	Pocket	T2
Ezell Road Park	Specialty	D
Fall-Hamilton School Playground	Pocket	T4
Fannie Mae Dees Park	Neighborhood	T4
Flora Wilson Community Park	Pocket	T4
Fort Negley	Community	T4
Fred Brake Field	Neighborhood	T3
Fred Douglas Park	Community	T4
Gale Lane Community Park	Neighborhood	T4
Glenciff School Playground	Pocket	T3
Glenciff Tennis Courts	Pocket	T3
Granbery Park	Neighborhood	T3
Granbery School Tennis Courts	Pocket	T3
Grassmere / Nashville Zoo	Specialty	T4
Green Hills Park	Neighborhood	T3
H. G. Hill Park	Neighborhood	T3
Hadley Park	Community	T4
Hamilton Creek Park	Regional	T3
Harpeth Knoll Park	Neighborhood	T3
Harpeth River Park	Specialty	T3
Harpeth School Playground	Pocket	T3
Hattie Cotton School Playground	Pocket	T4
Haywood School Playground	Pocket	T3
Heartland Park	Community	T3
Hermitage Park	Community	T3
Hermitage School Playground	Pocket	T3
Hickman Elm School Playground	Pocket	T3
Hidden Lakes State Natural Area	Community	T3
Hillsboro Tennis Courts	Pocket	T5
Hillwood School Tennis Courts	Pocket	T3
Hope Gardens Park	Pocket	T4
Hull Jackson School Playground	Pocket	T3
Iris Park	Pocket	T4
Isaac Litton School Park	Neighborhood	T4
J. C. Napier Park	Pocket	T4
Joelton Park	Neighborhood	T2
Jones Paideia School Playground	Pocket	T4
Jordonia School Playground	Pocket	T3
Joseph Brown Mullins Park	Community	T4
Julia Green School Playground	Pocket	T3

APPENDICES

EXISTING PARKS AND GREENWAYS

Kings Lane School Playground	Pocket	T3
Kirkpatrick Park	Neighborhood	T4
Lakeview School Playground	Pocket	T3
Lakewood Park	Neighborhood	T3
Lock One Park	Neighborhood	T4
Lock Two Park	Neighborhood	T3
Lockeland Springs Park	Pocket	T4
Long Hunter State Park	Regional	T2
Louise and Rebecca Dudley Park	Neighborhood	T4
Madison Park	Community	T4
Maplewood Tennis Courts	Pocket	T4
Maxwell School Playground	Pocket	T3
McCabe Park	Community	T4
McFerrin Park	Neighborhood	T4
Mcgavock School Playground	Pocket	T3
McKissack Park	Pocket	T4
Mcmurray Tennis Courts	Pocket	T3
Metro Soccer Complex	Specialty	D
Mildred Shute Minipark	Pocket	T4
Mill Creek Park	Community	T3
Monroe Street Playground	Pocket	T4
Morgan Park	Neighborhood	T4
Moss School Playground	Pocket	T3
Mount View Glade State Natural Area	Neighborhood	T3
Mt. View School Playground	Pocket	T3
Neely's Bend School Playground	Pocket	T3
Neely's Bend Tennis Courts	Pocket	T3
Newsom's Mill Historic Site	Pocket	T3
Norman Binkley School Playground	Pocket	T3
Oakwood Park	Community	T4
OHUD Arts center	Pocket	T4
OHUD Community Center	Neighborhood	T4
OHUD Large Baseball Field	Neighborhood	T4
Old Center School Playground	Pocket	T3
Old Hickory Cemetery	Specialty	T4
Overton Tennis Courts	Pocket	T3
Owen Bradley Park	Pocket	T5
Paradise Ridge Park	Community	T2
Paragon Mills Park	Community	T3
Paragon Mills School Playground	Pocket	T3
Park Ave School Playground	Pocket	T4
Parkwood Park	Neighborhood	T3
Parmer Park	Neighborhood	T3
Peay Memorial Park	Neighborhood	T3
Pennington Bend School Playground	Pocket	T3
Percy Priest Reservoir	Regional	T3
Percy Priest School Playground	Pocket	T3
Percy Warner Park	Regional	T3

Pleasant Green Park	Community	T3
Potters Field	Specialty	T4
Providence Park	Neighborhood	T3
Public Square Park	Signature	T6
R. H. Boyd - Preston Taylor Park	Neighborhood	T3
Rachel's Walk	Pocket	T4
Radnor Lake State Natural Area	Regional	T3
Reservoir Park	Neighborhood	T4
Richard W. Hartman Park	Community	T3
Richland Park	Neighborhood	T4
Riverfront Park	Signature	T6
Rosebank School Playground	Pocket	T3
Rosedale Park	Pocket	T4
Ross School Playground	Pocket	T4
Ruby Major School Playground	Pocket	T3
Sally Beaman	Pocket	T5
Schwab School Playground	Pocket	T4
Seven Oaks Park	Community	T3
Sevier Park	Community	T4
Shayne School Playground	Pocket	T3
Shelby Bottoms Park	Regional	T3
Shelby Park	Regional	T4
Shelby Walk Park	Pocket	T4
Smithson School Playground	Pocket	T3
South Inglewood Park	Neighborhood	T4
Southeast Community Center	Neighborhood	T4
Southeast Park Property	Regional	T3
St. Bernard Park	Pocket	T4
Stanford School Playground	Pocket	T3
Stone Hall Park	Regional	T3
Stratford Tennis Courts	Pocket	T3
Stratton School Playground	Pocket	T4
Sylvan Park School Playground	Pocket	T4
Ted Rhodes Park	Specialty	T4
Tom Joy Park	Neighborhood	T4
Tom Joy School Playground	Pocket	T4
Tony Rose Park	Pocket	T5
Tulip Grove School Playground	Pocket	T3
Turner School Park	Pocket	T4
Tusculum School Playground	Pocket	T3
Two Rivers Park	Regional	T3
Una Recreation Park	Specialty	D
Una School Playground	Pocket	T3
Veterans Parks	Pocket	T4
Walk of Fame Park	Signature	T6
Watkins Park	Neighborhood	T4
Wentworth-Caldwell Park	Neighborhood	T4
West Park	Community	T4

APPENDICES

EXISTING PARKS AND GREENWAYS

Whites Creek Community Garden	Neighborhood	T2
Whites Creek Park	Neighborhood	T2
Whitsett Park	Community	T3
Whitsett School Playground	Pocket	T3
William A. Pitts Park	Community	T3
William Coleman Park	Neighborhood	T4
William Edmondson Park	Pocket	T4
William Whitfield Park	Neighborhood	T3
Willow Creek Park	Neighborhood	T3
Woodmont Park	Neighborhood	T3

EXISTING GREENWAYS

Alta Lake Greenway- 0.7 miles, paved: 3808 Dodson Chapel Rd.

One-mile paved trail connecting residential communities and the Percy Priest Lake recreation area.

Brookmeade Greenway - 0.4 miles, paved: 7002 Charlotte Pike

Half-mile paved trail leading to a historic Civil War site overlooking the Cumberland River.

Browns Creek Greenway - .65 miles, paved: 816 Park Terrace

In the Battlemont neighborhood, features a loop among mature trees and landscape dotted with stone walls.

Cumberland River Greenway: Crooked Branch Park - 1.25 miles, paved: 116D Ray Avenue

In Lakewood area, lopped trail off Old Hickory Blvd. on 62 acres featuring views of designated 22 acre wetland.

Cumberland River Greenway: Downtown - 3.5 miles, paved: 170 1st Avenue N.; 50 Titans Way; 231 Great Circle Rd.; 766 Freeland Station Rd.

Paved trail along the Cumberland River that extends from Ted Rhodes Golf Course into Downtown to 1st Ave along Fort Nashborough and Riverfront Park, with spurs along the way to Morgan Park and Bicentennial State Park.

Harpeth River Greenway: Riverwalk Section - 1.7 miles, paved: 1535 Bending River Dr.

One mile of paved trail along the Harpeth River.

Harpeth River Greenway: Harpeth Youth Soccer Association- .6 miles, paved: 7820 Coley Davis Rd.

Half-mile loop accessible through the Harpeth Youth Soccer Association parking lot (but only when the soccer complex is open).

Harpeth River Greenway: Warner Park to Morton Mill - 6 miles, paved: 7311 Highway 100; 621 McPherson Dr.; 7600 Old Harding Pike; 940 Morton Mill Rd.

This paved trail follows the Little Harpeth and Harpeth Rivers through the Ensworth High School and Bellevue Exchange Club campuses over to the Morton Mill and Harpeth Bend communities.

Mill Creek Greenway: Blue Hole Road and Ezell Park Sections - 1.8 & 1.3 miles, paved: 5023 Blue Hole Rd. and 5135 Harding Place

APPENDICES
EXISTING PARKS AND GREENWAYS

Blue Hole Road consists of a two-mile paved trail linking Antioch Community Center and Middle School and Ezell is a one-mile paved trail with creek access.

Mill Creek Greenway: Mill Creek Park Section - 1.8 & 1.3 miles, paved: 6691 Sunnywood Drive and 14363 Old Hickory Blvd

Blue Hole Road consists of a two-mile paved trail linking Antioch Community Center and Middle School and Ezell is a one-mile paved trail with creek access.

Old Hickory Dam Greenway - 1.5 miles paved: 1100 Cinder Rd.

Half-mile paved trail with a boardwalk and wetland observation platform.

Peeler Park Greenway - 4 miles, paved; 3.5 miles hiking; 8 miles equestrian: 2271 Neely's Bend Rd.; 205 Menees Lane; 2043 Overton Lane

Peeler Park is regional park, over 650 acres, tucked away at the end of a long curve in the Cumberland River known as Neely's Bend. It features a 1.9-mile paved multi-use path, equestrian trails, a public boat launch with associated truck and trailer parking, and an air field for remote-controlled planes.

Richland Creek Greenway: England Park – .47 miles, paved: 800 Delray Drive

Trail loops effortlessly through shaded park land centered around a community playground. The one mile connection to Charlotte Pike and the Police West Precinct under construction.

Richland Creek Greenway: McCabe Loop - 3.8 miles, paved: 4617 Sloan Rd.; 101 46th Avenue N.; 22 White Bridge Rd.; 230 Kenner Avenue N.; 26 White Bridge Rd.

Over three miles of paved trail connecting McCabe Park and the Sylvan Park neighborhood with shopping centers along White Bridge Pike and Harding Road, and Nashville State Community College.

Seven Mile Creek Greenway - 0.6 miles, paved: 5301 Edmondson Pike

Half-mile paved trail runs along Seven Mile Creek from Whitfield Park through the Ellington Agricultural Complex.

Shelby Bottoms Greenway - 6.4 miles, paved: 1900 Division Street; 2032 Forrest Green Dr.

Five miles of paved trails run through Shelby Bottoms, with several spurs into the East Nashville neighborhoods bordering the park. It connects to the Cumberland River Pedestrian Bridge that links to the Stones River Greenway as part of the Music City Bikeway.

Stones River Greenway - 10.2 miles, paved: 3778 Bell Rd.; 2330 Jackson Downs Blvd.; 1014 Stones River Rd.; 3135 Heartland Dr.; 3114 McGavock Pike; 2320 Two

Rivers Pkwy.

Ten-mile paved trail system connecting Shelby Bottoms to Percy Priest Lake and linking to the YMCA on Lebanon Road, Heartland Park, and Two Rivers Park along the way.

Whites Creek Greenway: Hartman Park to Mullins Park - 1 mile, paved: 2801 Tucker Rd.; 4001 West Hamilton Rd.

One-mile paved trail extending from Hartman Park to Clarksville Pike.

Whites Creek Greenway at Fontanel - 1.5 miles, paved; 2 miles, hiking: 4125 Whites Creek Pike

1.5 miles of paved trail hug both sides of Whites Creek and connect to two miles of woodland hiking trails over the ridge of Fontanel Mansion through the 186-acre property.

8.2 HISTORIC RESOURCES

Bells Bend
Brookmeade
Cane Ridge
Centennial
City Cemetery
Coleman
Commerce Center
Crawford
Dragon
Dudley
East Park
Edwin Warner
Elizabeth
Elmington
Fort Nashborough
Fort Negley
Grassmere
Hadley
Harpeth River Greenway - Warner - Warner Exchange
Kellytown
Litton
Lock One
Lock Two
Mildred Shute
Mill Creek Greenway - Buchannon Cemetery
Monroe
Moore Farm
Morgan
Old Hickory Arts
Old Hickory Baseball
Owen Bradley
Parmer
Percy Warner
Rachel's Walk
Reservoir
Richland
Sevier
Shelby
St. Bernard
Stone Hall
Stones River Greenway - Lebanon Pk to Dam
Tony Rose
Two Rivers
Watkins
Whites Creek Greenway
Mill Creek Greenway



8.3 PRODUCTIVITY OF SPACE

NARRATIVE

The consulting team conducted a productivity of space analysis to identify current space utilization and recommend improvements. The analysis looked at indoor space at Regional and Neighborhood Recreation Centers as well as sports field space at a variety of locations throughout the system.

1.1 INDOOR SPACE UTILIZATION ANALYSIS

The productivity of space benchmark is 60%. **Figure 1** shows there are two out of seven Regional Recreation Centers and seven out of 19 Neighborhood Recreation Centers that fall below this mark. It should be noted that West Neighborhood Recreation Center is not included as there is not utilization rate data available for this analysis.

Productivity of Space	Indoor Analysis			
	Center Name	Total Available Facility Hours (Indoor)	Total Used Facility Hours (Indoor)	Facility Utilization (Indoor)
	Southeast Regional Center	390	414	106%
	East Regional Center	399	379	95%
	Hartman Regional Center	370	325	88%
	Sevier Regional Center	380	331	87%
	Coleman Regional Center	532	448	84%
	McCabe Regional Center	304	167	55%
	Hadley Regional Center	456	159	35%
	Regional Center Subtotal	2,831	2,222	78%
	Napier	176	235	134%
	Madison	336	385	115%
	Kirkpatrick	180	203	113%
	Elizabeth Senior Center	120	118	98%
	South Inglewood	225	209	93%
	Parkwood	120	100	83%
	Watkins	90	70	78%
	Cleveland*	125	80	64%
	Easley Center at Rose Park	172	110	64%
	McFerrin	160	102	64%
	Looby	280	174	62%
	Paradise Ridge	120	71	59%
	Morgan	200	106	53%
	Bellevue	270	142	53%
	Antioch	192	97	51%
	Old Hickory	225	110	49%
	Hermitage	196	94	48%
	Shelby	532	67	13%
	West*			
	Neighborhood Center Subtotal	3,719	2,472	66%
	Total	6,550	4,694	72%

*Managed by the Boys & Girls Club

Figure 1: Indoor Space Utilization

1.1.1 REGIONAL RECREATION CENTERS

The following indoor space areas are noted for areas of improvement for the regional centers highlighted in red in Figure 1. All spaces are listed with the current utilization rate and are organized in descending order by percentage.

Hadley

- Indoor pool (37%)
- Basketball court (33%)
- Meeting room (16%)
- Computer lab (7%)

McCabe

- Multipurpose room (16%)
- Volleyball court (3%)

1.1.2 NEIGHBORHOOD RECREATION CENTERS

The following indoor space areas are noted for areas of improvement for the regional centers highlighted in red in Figure 1. All spaces are listed with the *current* utilization rate and are organized in descending order by percentage.

Antioch

- Volleyball court (13%)

Bellevue

- Meeting room (49%)
- Performing arts center (20%)

Hermitage

- Volleyball court (6%)

Morgan

- Racquetball court (38%)
- Meeting room (15%)
- Multipurpose room (13%)

Old Hickory

- Meeting room (44%)
- Multipurpose room (33%)

Paradise Ridge

- Fitness room (3%)

Shelby

- Basketball court (30%)
- Meeting room (7%)

APPENDICES

PRODUCTIVITY OF SPACE ASSESSMENT

1.2 OUTDOOR SPACE UTILIZATION ANALYSIS

Figure 2 shows there are two out of 43 facilities/parks that meet the 60% threshold for outdoor space utilization. Outdoor space examined includes multipurpose fields, baseball/softball fields, soccer fields, football fields, volleyball courts, and track and field space (if applicable).

Productivity of Space	Outdoor Analysis		
	Facility/Park Name	Total Available Facility Hours (Outdoor)	Total Used Facility Hours (Outdoor)
Coleman	119	131	110%
Bellevue	119	84	71%
Buena Vista	238	136	57%
Shelby	952	512	54%
Madison	595	313	53%
Metro Soccer Complex	714	372	52%
Cedar Hill	595	240	40%
Douglas	119	45	38%
East	238	82	34%
Joelton	833	287	34%
Charlotte	357	120	34%
Ezell	952	320	34%
Harpeth River	2,380	800	34%
Heartland	2,380	800	34%
Paragon Mills	238	80	34%
Cane Ridge	952	298	31%
Pitts	119	37	31%
Seven Oaks	476	148	31%
Two Rivers	238	74	31%
ES Rose	476	140	29%
Hartman	119	34	29%
Whitfield	595	170	29%
Watkins	238	57	24%
Edwin Warner	952	221	23%
South Inglewood	357	81	23%
Green Hills	476	106	22%
Lakewood	119	25	21%
Ted Rhodes	1,071	204	19%
Morgan	119	21	18%
Hadley	357	62	17%
Old Hickory	119	20	17%
Centennial	238	36	15%
Cleveland	238	36	15%
West	238	34	14%
Whites Creek	357	45	13%
Dudley	119	14	12%
Una	476	48	10%
Elmington	238	23	10%
Parkwood	238	21	9%
McFerrin	119	8	7%
Isaac Litton	119	6	5%
Richland	119	4	3%
McCabe	238	0	0%
Outdoor Space Total	20,349	6,295	31%

1.2.1 FACILITIES/PARKS

The following outdoor space areas are noted for areas of improvement for the facilities/parks highlighted in red in Figure 2. All spaces are listed with the current utilization rate and are organized in descending order by percentage.

<u>Buena Vista</u>	<ul style="list-style-type: none"> • Soccer field (10%) 	<u>Isaac Litton</u>	<ul style="list-style-type: none"> • Multipurpose field (5%)
<ul style="list-style-type: none"> • Baseball/softball field (57%) 	<u>Elmington</u>	<u>Joelton</u>	<ul style="list-style-type: none"> • Baseball/softball field (34%)
<u>Cane Ridge</u>	<ul style="list-style-type: none"> • Baseball/softball field (10%) • Multipurpose field (9%) 	<u>Lakewood</u>	<ul style="list-style-type: none"> • Baseball/softball field (21%)
<ul style="list-style-type: none"> • Baseball/softball field (34%) • Football field (15%) 	<u>ES Rose</u>	<u>Madison</u>	<ul style="list-style-type: none"> • Baseball/softball field (24%)
<u>Cedar Hill</u>	<ul style="list-style-type: none"> • Baseball/softball field (34%) • Soccer field (34%) • Track and field stadium (17%) 	<u>McCabe</u>	<ul style="list-style-type: none"> • Baseball/softball field (0%)
<ul style="list-style-type: none"> • Baseball/softball field (40%) 	<u>Ezell</u>	<u>McFerrin</u>	<ul style="list-style-type: none"> • Baseball/softball field (7%)
<u>Centennial</u>	<ul style="list-style-type: none"> • Soccer field (34%) 	<u>Metro Soccer Complex</u>	<ul style="list-style-type: none"> • Soccer field (52%)
<ul style="list-style-type: none"> • Volleyball court (15%) 	<u>Green Hills</u>	<u>Morgan</u>	<ul style="list-style-type: none"> • Multipurpose field (18%)
<u>Charlotte</u>	<ul style="list-style-type: none"> • Baseball/softball field (27%) • Multipurpose field (8%) 	<u>Old Hickory</u>	<ul style="list-style-type: none"> • Baseball/softball field (17%)
<ul style="list-style-type: none"> • Baseball/softball field (34%) 	<u>Hadley</u>	<u>gon Mills</u>	<ul style="list-style-type: none"> • Baseball/softball field (34%)
<u>Cleveland</u>	<ul style="list-style-type: none"> • Baseball/softball field (15%) 	<u>Harpeth River</u>	<u>Parkwood</u>
<u>Douglas</u>	<ul style="list-style-type: none"> • Multipurpose field (38%) 	<ul style="list-style-type: none"> • Soccer field (34%) 	
<u>Dudley</u>	<ul style="list-style-type: none"> • Multipurpose field (12%) 	<u>Hartman</u>	
<u>East</u>	<ul style="list-style-type: none"> • Baseball/softball field (34%) 	Figure 2: Outdoor Space Utilization	
<u>Edwin Warner</u>	<ul style="list-style-type: none"> • Baseball/softball field (31%) 	<ul style="list-style-type: none"> • field (29%) 	
		<u>Heartland</u>	
		<ul style="list-style-type: none"> • Soccer field (34%) 	

APPENDICES
PRODUCTIVITY OF SPACE ASSESSMENT

- Multipurpose field (13%)
- Baseball/softball field (5%)

Pitts

- Baseball/softball field (31%)

Richland

- Multipurpose field (3%)

Seven Oaks

- Baseball/softball field (31%)

Shelby

- Baseball/softball field (50%)

South Inglewood

- Multipurpose field (30%)
- Track and field stadium (25%)
- Baseball/softball field (13%)

Ted Rhodes

- Soccer field (24%)
- Football field (10%)

Two Rivers

- Baseball/softball field (31%)

Una

- Multipurpose field (13%)

Watkins

- Multipurpose field (27%)
- Baseball/softball field (21%)

West

- Multipurpose field (24%)
- Baseball/softball field (5%)

Whites Creek

- Baseball/softball field (13%)

Whitfield

- Baseball/softball field (34%)
- Soccer field (8%)

1.3 CONCLUSION

The productivity of space analysis shows that there are many indoor and outdoor spaces that can help improve Nashville’s service provision and delivery. Indoor recreation spaces have the highest levels of utilization; however, there are many Neighborhood Recreation Centers that could maximize indoor spaces more. Specifically, volleyball courts, meeting rooms, and basketball courts could be utilized more. Outdoor spaces are utilized less than indoor spaces with 41 of 43 facilities/parks examined utilizing outdoor spaces less than 60%. Baseball/softball fields and multipurpose fields are two of the most available facility types that could be utilized more often.

It is recommended that Metro Parks establish a utilization rate performance measure for indoor and outdoor spaces. Additionally, Metro Parks should collect and review utilization rates on a yearly basis. Incorporating utilization rates will assist Metro Parks with revenue production and an increased level of service through facilities it already owns and operates.

8.4 PROGRAM ASSESSMENT

INTRODUCTION

A recreation program assessment was conducted to examine the Metropolitan Board of Parks and Recreation’s (Metro Parks) current program provision. The analysis looked at several variables for Metro Parks’ current program schedule while also factoring in the results of the statistically-valid community survey. Specifically, the recreation program assessment examined the following key data points:

- Core program areas
- Delivery methods and service provider
- Revenue and expenses

“Program” defined: Structured or unstructured activities that individuals elect to participate in during their discretionary time. These activities are often engaged in for social, physical, spiritual, and mental health reasons.

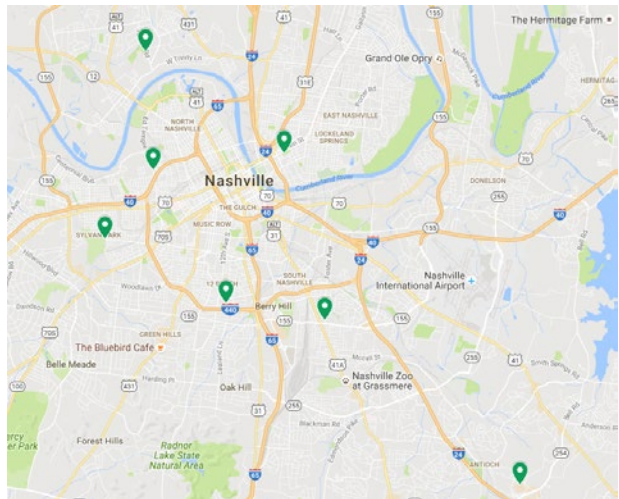
Metro Parks has an expansive recreation program inventory. The Department offers approximately 1,689 programs each year which yielded 725,784 participations in 2015. A participation refers to the total number of times a participant frequented a program. The majority of programs are based out of the Department’s recreation centers. The system consists of seven regional community centers, 19 neighborhood community centers, five nature centers, and four cultural arts divisions.

The core program areas examined in this program assessment include:

- Special Events
- Sports and Aquatics (pools, spray grounds, Cumberland, fields, and ice)
- Fitness and Wellness (Sportsplex and Regional Centers)
- Community Enrichment
- Cultural Arts (theater, dance, and music)
- Nature and History
- Outdoor Recreation
- Specialized Recreation (wave pool, marina, etc.)

1.1 REGIONAL CENTERS

Metro Parks has seven regional community centers. These centers include a fully-equipped fitness center, gymnasium, indoor walking/running track, dance/exercise studio, arts and crafts room multi-purpose meeting space, and a game room. Typical programming based out of the regional centers include group fitness, youth and adult sports, dance classes, senior recreation, art classes, aquatics, free play, and youth out-of-school programs. Membership and program fees are low and many areas of the regional centers are free of charge (except for the fitness center). Additionally, many programs and services are provided at no cost.



1.1.1 PROGRAMMING

Metro Parks provides approximately 218 recreation programs via the regional centers. In 2015, these programs yielded 212,705 participations while also catering to facility visitors which elevated the number served to 567,960. **Figures 1-3** below represent the core areas, delivery methods used, and service provider.

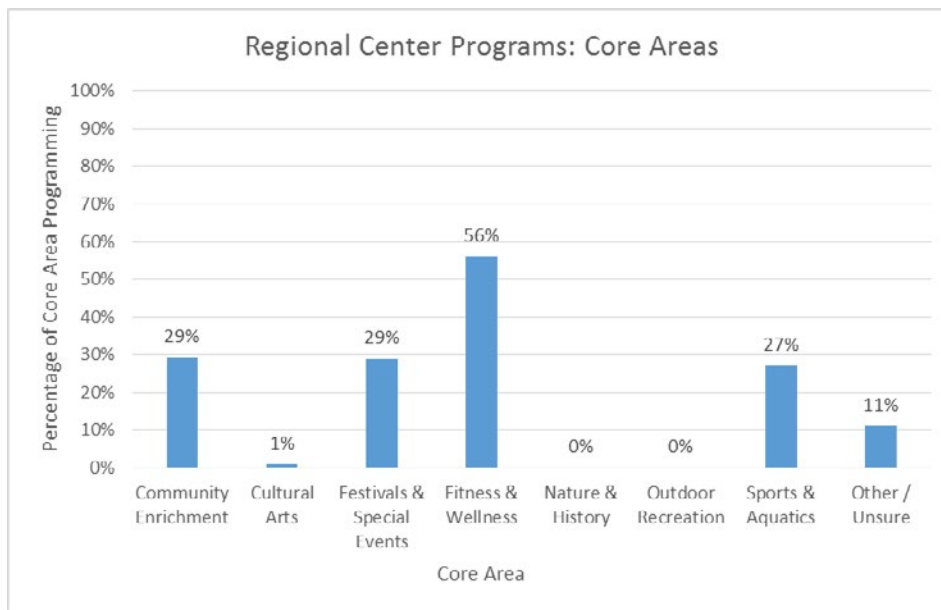


Figure 1: Regional Center Core Programs

Regional Center Programs: Delivery Method	
Delivery Method	Percentage
Organized Clubs/Leagues	40%
Drop-in/Unstructured	25%
Instructional Classes/Clinics	34%
Rentals and Park Use Permits (including private lessons/personal training)	Additional 2,824 recorded
Total	100%

Figure 2: Regional Center Program Delivery Methods

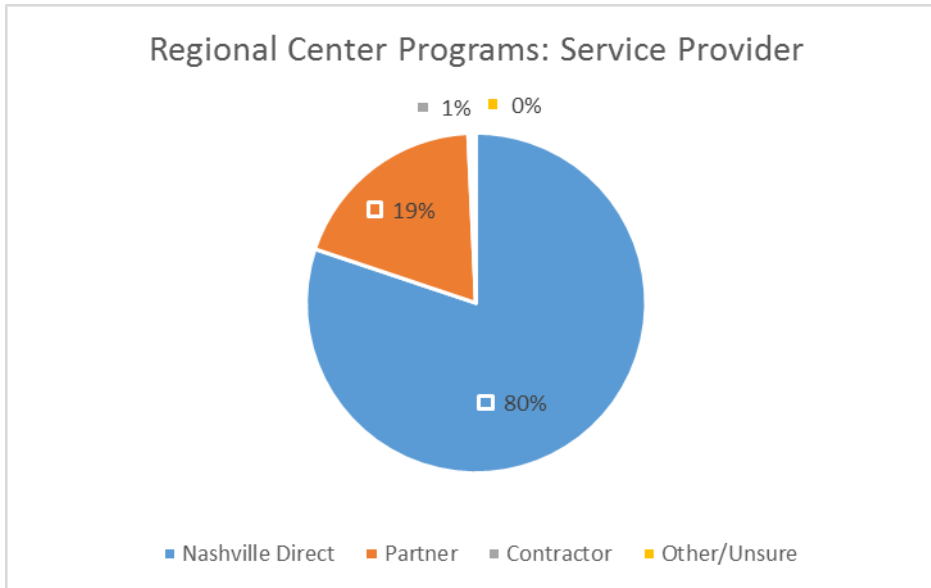


Figure 3: Regional Center Programs Service Provider

As shown in **Figures 1-3**, the regional recreation centers provide a wide array of different programmatic opportunities with the most programs pertaining to fitness & wellness. Nature & history, outdoor recreation, and cultural arts are the least offered program types. Recreation programs are delivered in four different ways with the most used delivery methods being instructional classes, organized clubs, drop-in, and rentals and permits. Metro Parks delivers approximately 80% of all programs itself while utilizing partnerships and contractors for the remaining 20%.

1.1.2 FACILITY DATA

The following information presents participant, volunteer, program, and financial information as denoted by each regional center.

Center Name	Square Footage*	Operating Costs	FTEs	# of Programs (2015)	Free Programs	% of Free Programs	# of Participations (2015)	# of Visitors	Volunteer Hours
Southeast Regional Center	46,000	\$ 738,498	7.95	24	17	71%	21,013	138,856	3,516
Hadley Regional Center	37,776	\$ 854,070	10.52	17	8	47%	35,369	78,555	1,125
Coleman Regional Center	37,000	\$ 846,388	10.46	33	18	55%	49,508	131,092	540
East Regional Center	33,994	\$ 804,824	10.02	30	16	53%	18,305	43,391	1,800
Hartman Regional Center	33,915	\$ 784,485	9.67	53	48	91%	32,548	41,932	3,200
McCabe Regional Center	25,000	\$ 642,288	8.29	32	20	63%	33,511	79,571	250
Sevier Regional Center	20,000	\$ 607,384	8.16	29	16	55%	22,451	54,563	73
Total	233,685	\$ 5,277,937	65.07	218	143	66%	212,705	567,960	10,504

*Chart sorted by square footage

Figure 4: Regional Center Facility Data

Metro Parks manages over 230,000 ft² of regional recreation centers which equates to approximately \$23 in operation costs per square foot. The second largest regional center, Hadley, has the highest operating costs and the most FTEs. However, the Southeast Regional Center has the most volunteer hours donated. It also has the second fewest number of programs offered in 2015. The Hartman Regional Center has the highest number of programs offered (both fee-based and free of charge). Overall, the regional centers offer 66% of their programs free of charge.

Productivity of Space	Indoor Analysis			
	Center Name	Total Available Facility Hours (Indoor)	Total Used Facility Hours (Indoor)	Facility Utilization (Indoor)
	Hartman Regional Center	380	267	70%
	McCabe Regional Center	380	256	67%
	Hadley Regional Center	456	283	62%
	East Regional Center	532	325	61%
	Sevier Regional Center	380	229	60%
	Coleman Regional Center	456	269	59%
	Southeast Regional Center	456	254	56%
	Regional Center Subtotal	3,040	1,882	62%

According to Figure 5 above, the regional centers operate at a combined 62% utilization rate. That is, in aggregate, 62% of the total indoor space is used each week. The Hartman Regional Center has the highest utilization rate at 70% and the Southeast Regional Center has the lowest utilization rate at 56%.

1.1.3 REGIONAL CENTER RECOMMENDATIONS

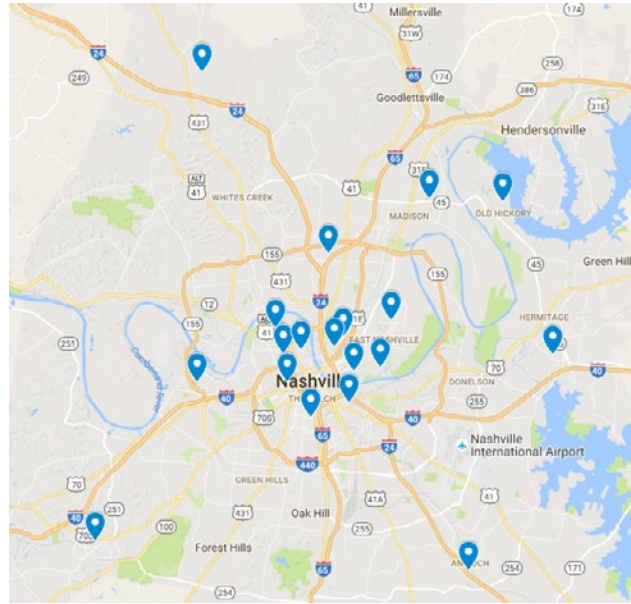
- Given the facility amenities, there is an opportunity for the regional centers to take part in camps and leagues for productivity of space and revenue generation purposes

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- To reduce direct operating costs, increased partnership and contracted programs would be beneficial
- The lowest utilized indoor spaces for regional centers include computer labs, meeting rooms, and multi-purpose rooms; therefore, a focused effort to increase indoor space use could include private party rentals and special events
- Center costs per participant can be decreased by limiting the percentage of free programs available

1.2 NEIGHBORHOOD CENTERS

Metro Parks has 19 neighborhood community centers. These centers include a gymnasium, game room, multi-purpose room(s), playground, and gathering area. Additionally, some neighborhood centers have fitness rooms, indoor walking tracks, and seasonal swimming pools. Typical programming based out of the neighborhood centers include competitive adult and youth sports, arts and crafts, walking clubs, scouting programs, organized games, and social events. All neighborhood centers can be rented outside of business hours for private functions as well.



1.2.1 PROGRAMMING

Metro Parks provides approximately 343 recreation programs via the neighborhood centers. In 2015, these programs yielded 411,710 participations while also catering to facility visitors which elevated the number served to 578,180. Figures 6-8 below represent the core areas, delivery methods used, and service provider.

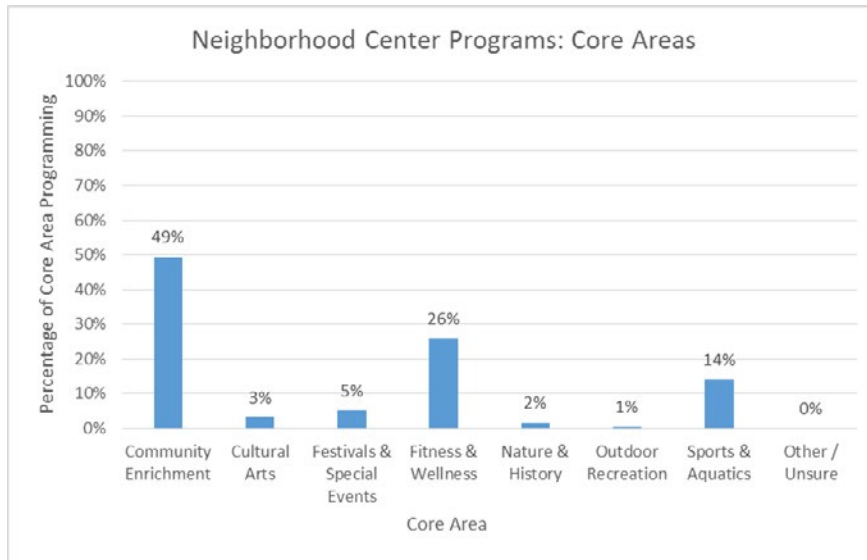


Figure 7: Neighborhood Center Programs by Core Area

Neighborhood Center Programs: Delivery Method	
Delivery Method	Percentage
Organized Clubs/Leagues	44%
Drop-in/Unstructured	44%
Instructional Classes/Clinics	12%
Rentals and Park Use Permits (including personal trainers and private parties)	Additional 4,570 recorded
Total	100%

Figure 7: Neighborhood Center Programs Delivery Methods Used

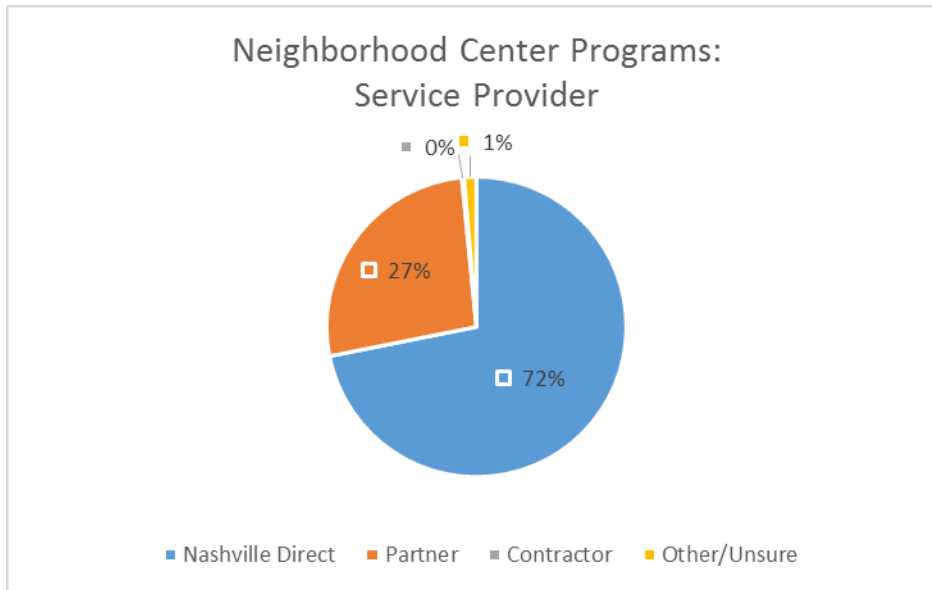


Figure 8: Neighborhood Center Programs Service Provider

The neighborhood recreation centers offer many different program types with the most classified as Community Enrichment. Outdoor recreation programs are offered the least. The neighborhood centers differ from the regional centers in that there are more unstructured, or drop-in, programs available. Additionally, the neighborhood centers utilize more partnerships and only 72% of programs are offered directly by Metro Parks.

1.2.2 FACILITY DATA

The following information presents participant, volunteer, program, and financial information as denoted by each neighborhood center.

Center Name	Square Footage*	Operating Costs	FTEs	# of Programs (2015)	# of Participations (2015)	# of Visitors	Volunteer Hours
Looby	24,307	\$ 291,353	3.49	22	60,734	80,654	450
Napier	23,430	\$ 331,064	3.49	24	11,687	-	2,524
South Inglewood	23,000	\$ 347,213	3.88	14	12,525	31,661	200
McFerrin	22,500	\$ 314,888	3.36	14	12,785	30,800	750
Old Hickory	22,279	\$ 343,245	3.88	10	28,869	39,919	1,568
Easley Center at Rose Park	17,676	\$ 356,317	4.49	16	26,596	33,138	322
Parkwood	16,890	\$ 256,154	2.87	11	9,823	19,509	105
Bellevue	16,801	\$ 226,091	2.35	11	32,548	31,892	20
Shelby	15,928	\$ 236,074	2.61	24	13,420	17,931	688
Madison	15,800	\$ 278,023	3.36	14	29,865	60,105	570
Morgan	15,250	\$ 252,249	2.96	33	17,596	31,274	35
Cleveland	15,000	\$ 197,667	1.96	-	-	-	152
Antioch	13,580	\$ 238,510	2.88	15	32,548	29,118	7,018
Hermitage	13,319	\$ 237,074	2.88	13	8,931	16,074	1,175
Watkins	11,924	\$ 275,149	3.62	17	49,059	64,219	5,000
Kirkpatrick	11,470	\$ 272,651	3.62	18	32,892	52,946	680
Paradise Ridge	9,210	\$ 234,371	3.23	48	13,218	18,070	828
West	9,210	\$ 50,675	-	-	-	-	-
Elizabeth Senior Center	8,854	\$ 114,688	1.16	39	18,614	20,870	240
Total	306,428	\$ 4,853,455	56.09	343	411,710	578,180	22,325

Figure 9: Neighborhood Center Facility Data

Metro Parks manages over 300,000 ft² of neighborhood recreation centers which equates to approximately \$16 in operation costs per square foot. The sixth largest neighborhood center, Easley Center at Rose Park, has the highest operating costs FTEs. Neighborhood center volunteer hours donated more than double the hours donated to regional centers with over 22,000 hours. Interestingly, two of the smallest neighborhood centers have the two highest number of programs offered on-site.

Center Name	Indoor Analysis		
	Total Available Facility Hours (Indoor)	Total Used Facility Hours (Indoor)	Facility Utilization (Indoor)
Paradise Ridge	80	80	100%
Elizabeth Senior Center	120	118	98%
Napier	176	165	94%
South Inglewood	200	178	89%
Watkins	135	120	89%
Parkwood	120	100	83%
Madison	160	130	81%
McFerrin	160	130	81%
Kirkpatrick	135	105	78%
Looby	160	123	77%
Hermitage	147	109	74%
Easley Center at Rose Park	180	130	72%
Old Hickory	200	115	58%
Antioch	144	78	54%
Morgan	200	106	53%
Shelby	120	60	50%
Bellevue	270	116	43%
Cleveland*			
West*			
Neighborhood Center Subtotal	2,707	1,963	73%

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According to **Figure 10** above, the neighborhood centers operate at a combined 73% utilization rate. The Paradise Ridge Neighborhood Center has the highest utilization rate at 100% and the Bellevue Neighborhood Center has the lowest utilization rate at 43%. The meeting rooms have a higher utilization rate than the regional recreation centers.

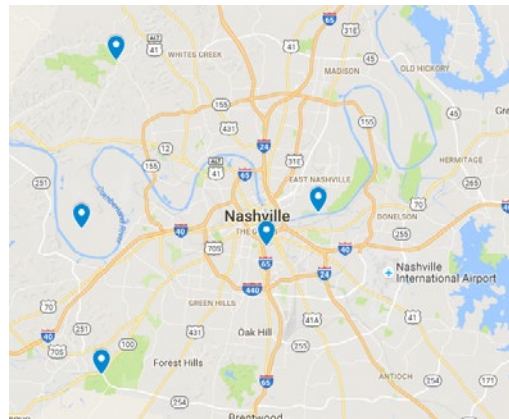
1.2.3 NEIGHBORHOOD CENTER RECOMMENDATIONS

- The opportunity exists for neighborhood centers to increase outdoor recreation programming to better serve inner city areas
- The least utilized indoor spaces are racquetball courts and performing arts centers
 - Examine the possibility to program racquetball courts by offering different opportunities such as volleyball and dodgeball activities
 - Explore day rentals at the performing arts center by senior groups, advocacy clubs, and other local organizations

1.3 NATURE CENTERS AND OUTDOOR RECREATION

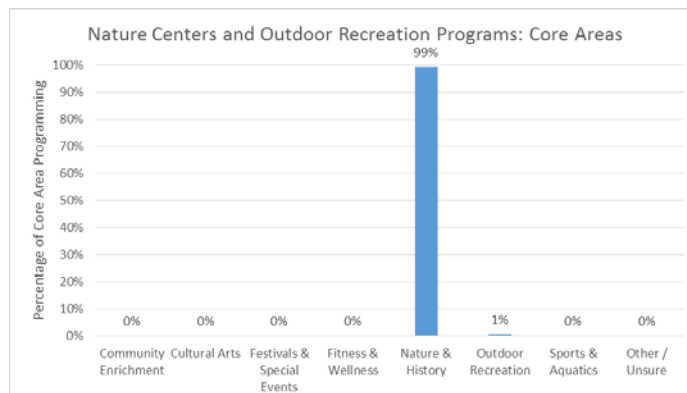
In addition to the 26 regional and neighborhood community centers, Metro Parks offers programming out of their nature centers and performing arts center. There are outdoor recreation programs as well. There are six sites natural and cultural resource programs take place:

- 1) Shelby Nature Center
- 2) Bells Bend Outdoor Center
- 3) Beaman Nature Center
- 4) Warner Nature Center
- 5) Ft. Negley



1.3.1 PROGRAMMING

Metro Parks provides approximately 1,423 recreation programs via nature centers and outdoor recreation sites. In 2015, these programs yielded 33,638 participations (not including private facility use, direct visitor service, or volunteer projects at the nature centers). **Figures 11-13** below represent the core area, delivery methods used, and service provider.



Nature Centers and Outdoor Recreation Programs: Delivery Method	
Delivery Method	Percentage
Drop-in/Unstructured	13%
Organized Clubs/Leagues	2%
Instructional Classes/Interpretive Programs	47%
Rentals and Park Use Permits	8%
Field Trips	27%
Outreach	4%
Total	100%

Figure 12: Nature Centers and Outdoor Recreation Programs Delivery Methods Used

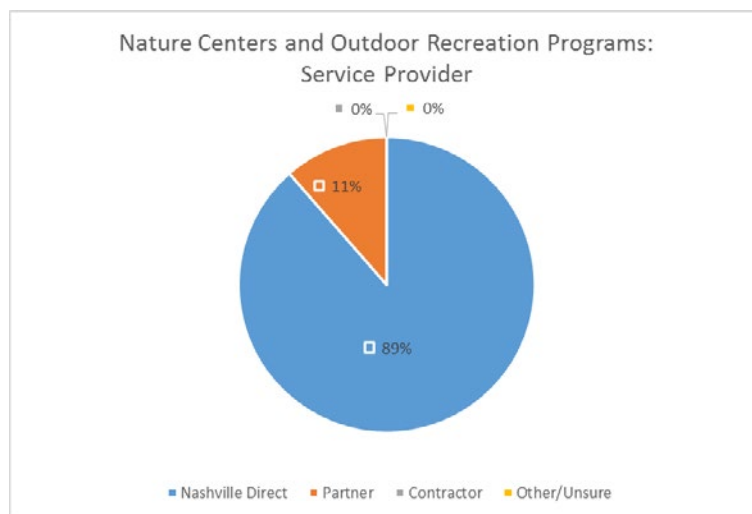


Figure 13: Nature Centers and Outdoor Recreation Programs Service Provider

According to Figures 11-13, all programs are categorized as nature & history with a very small number categorized as outdoor recreation. Almost $\frac{3}{4}$ of all programs are delivered via instructional classes/interpretive programs and field trips. Additionally, almost half of the nature center programs are visitor service and interpretation-related. Many agencies have increased outreach programming in nature & history in order to bring nature programs to communities in lieu of bringing people to nature centers. Outreach programming refers to mobilizing a “brick and mortar” building by offering programs and services off-site. This is typically done to encourage non-users, or those who feel as though they are underserved, to engage in this type of programming.

1.3.2 FACILITY DATA

The following information presents participant, volunteer, program, and financial information as denoted by nature centers and outdoor recreation program areas.



Recreation Program Assessment

Center/Program Name	Square Footage*	Operating Costs	FTEs	# of Programs (2015)	# of Participations (2015)	Volunteer Hours
Warner Nature Center	21,600	\$ 568,715	6	205	11,622	7,970
Ft. Negley	3,500	\$ 150,469	1.75	162	5,830	3,959
Shelby Nature Center	3,175	\$ 279,893	3.5	236	5,974	2,206
Bells Bend Outdoor Center	2,228	\$ 124,726	1.5	152	5,125	708
Beaman Nature Center	2,201	\$ 124,577	1.5	191	3,193	185
Outdoor Recreation	-	\$ -	1	6	904	-
Total	32,704	\$ 1,248,380	15	952	32,648	15,028

*Chart sorted by square footage

Figure 14: Nature Centers and Outdoor Recreation Center/Program Facility Data

Metro Parks manages over 30,000 ft² of natural resource programming space which equates to approximately \$38 in operation costs per square foot. The Warner Nature Center has the highest operating costs and the largest square footage. Outdoor Recreation has the lowest number of FTEs, programs, and program participants; however, program contact hours are generally high due to programming length. The Nature Centers have over 15,000 volunteer hours donated annually.

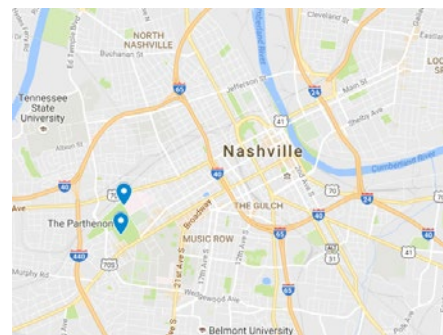
1.3.3 NATURE CENTERS AND OUTDOOR RECREATION RECOMMENDATIONS

- There is an opportunity to expand rental and outreach programming as these delivery methods help agencies bring outdoor recreation activities to underserved communities and residents.
- Special events/festivals are good ways to bring people to nature centers but they are also a good way to bring nature center programming into communities by doing off-site special events.
- Volunteerism should be viewed as a Core Program Area.
- Nature centers have relatively high operating costs (compared to the other program areas); therefore, formally establish Friends Groups for the centers in addition to the ones in place for the park themselves.
- Consider recording and analyzing program contact hours as a performance measure.
- Examine nature center meeting rooms productivity of space separate from interpretive areas.

1.4 CULTURAL ARTS

Metro Parks offers cultural arts programming out of performing arts centers. There are four program offerings offered:

- 1) Dance
- 2) Music
- 3) Theater
- 4) Visual Arts



Recreation Program Assessment

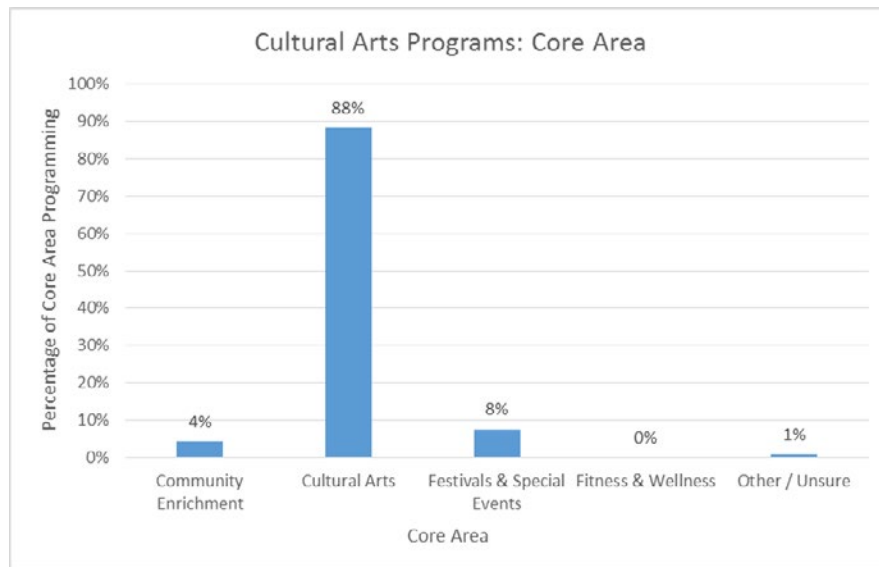
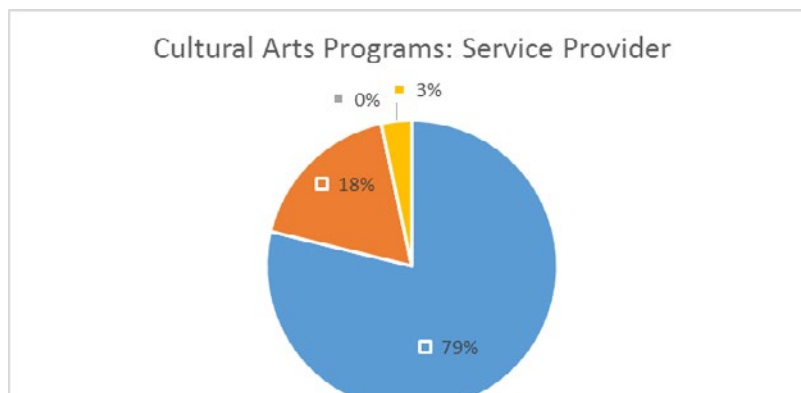


Figure 15: Cultural Arts Programs Service Provider

Cultural Arts: Delivery Method	
Delivery Method	Percentage
Drop-in/Unstructured/Self-Guided/Events	8%
Instructional Classes/Workshops/Clinics/Interpretive Programs	74%
Leagues/Competitions	0%
Organized Clubs/Registered Low-Organized Activities/Staff-guided	0%
Outreach	2%
Rentals and Park Use Permits	17%
Total	100%

Figure 16: Cultural Arts Programs Delivery Methods Used



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According to **Figures 15-17**, Metro Parks offers festivals & special events along with community enrichment programming for cultural arts. The most used program delivery method for cultural arts programs is instructional classes; this delivery method makes up almost ¾ of the delivery methods used. Three other delivery methods are used for cultural arts programs including rentals & park use permits, drop-in, and outreach. Cultural arts programming utilizes partnerships well as approximately 18% of cultural programs are delivered via a partnership. Although a national best practice for partnership services (in terms of a percentage breakdown) is not available, there is a trend to move towards more “facilitative” service in program areas where it makes sense for the Department.

1.4.2 FACILITY DATA

The following information presents participant, volunteer, program, and financial information as denoted by cultural arts program areas.

Center/Program Name	Square Footage*	Operating Costs	FTEs	# of Programs (2015)	# of Participations (2015)	Volunteer Hours
Dance	51,950	\$ 286,684	2.5	36	29,045	-
Music	15,928	\$ 278,082	3	18	22,711	-
Theater	15,928	\$ 242,148	2.5	39	10,943	-
Visual Arts	3,318	\$ 195,258	2	18	13,554	-
Total	87,124	\$ 1,002,172	10	111	76,253	0

*Chart sorted by square footage

Figure 18: Cultural Arts Center/Program Facility Data

Metro Parks manages over 80,000 ft² of cultural arts programming space which equates to approximately \$12 in operation costs per square foot. The dance program has the highest operating costs and the largest square footage. Interestingly, however, dance has an average FTE level (comparatively) but had the most number of participants in 2015 with almost 30,000.

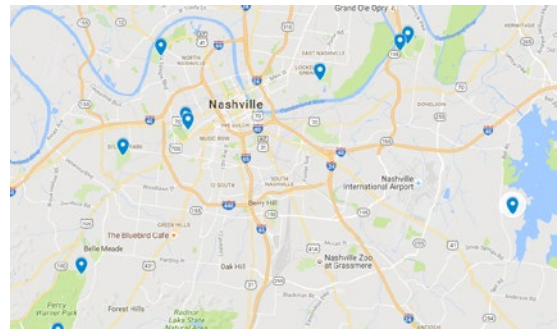
1.4.3 CULTURAL ARTS RECOMMENDATIONS

- Given cultural arts has relatively high operating costs (compared to the other program areas) and that cultural arts programs may have more individual than public benefit, the pricing structure for these programs should be reviewed to ensure a higher cost recovery rate is targeted.
- Staff to participant ratios should be implemented as a performance measure given the relatively low number of FTEs and the wide distribution of program participants.

1.5 SPECIAL SERVICES

Metro Parks operates several golf courses, historic sites, and sports facilities. The 10 special service facilities examined include:

- 1) Harpeth Hills Golf Course
- 2) McCabe Golf Course
- 3) Shelby Golf Course
- 4) Ted Rhodes Golf Course
- 5) Two Rivers Golf Course
- 6) Warner Golf Course



- 7) Marina
- 8) Parthenon
- 9) Sportsplex
- 10) Wave Country

1.5.1 PROGRAMMING

Metro Parks provides approximately 127 recreation programs via special services. In 2015, these programs yielded 961,585 participations. Figures 19-21 below represent the core area, delivery methods used, and service provider for these programs.

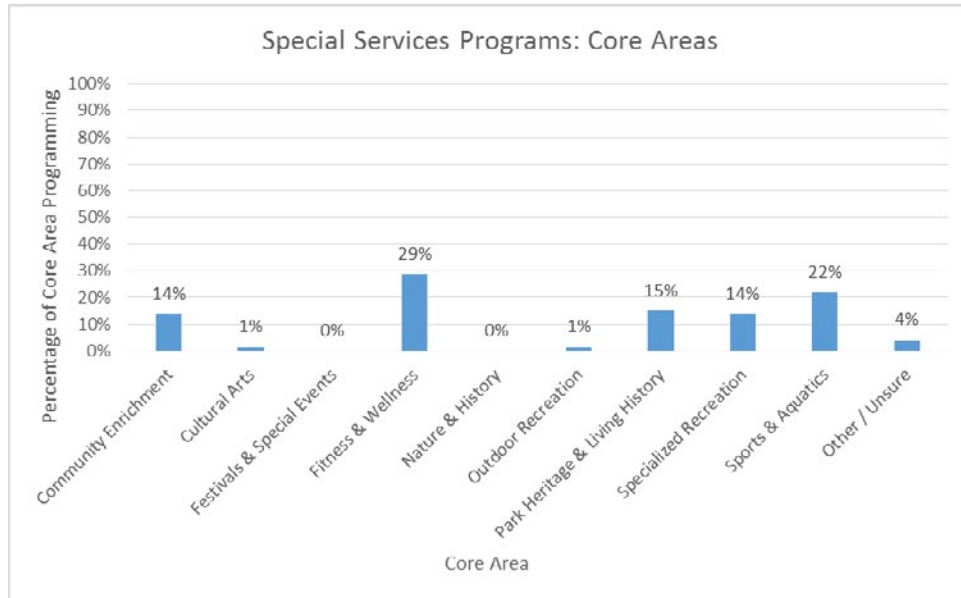


Figure 19: Special Services Core Programs

Special Services Programs: Delivery Method	
Delivery Method	Percentage
Leagues / Competitions	11%
Drop-in / Unstructured / Self-guided / Events	7%
Organized Clubs / Registered Low-organized activities / Staff-guided	7%
Instructional Classes / Workshops / Clinics / Interpretive Programs	57%
Private Lessons	11%
Camps	3%
Rentals & Park Use Permits	1%
Trips & Off-site Tours	3%
Outreach	0%
Other / Unsure	0%
Total	100%

Figure 20: Special Services Programs Delivery Methods Used

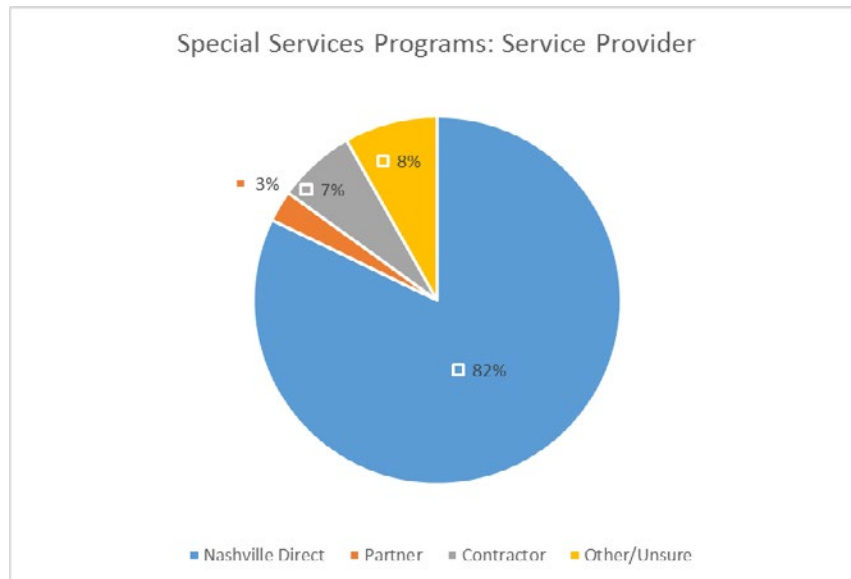


Figure 21: Special Services Programs Service Provider

According to **Figures 19-21**, special services programming is distributed across a wide array of program areas. Over 50% of programs are categorized as either fitness & wellness or sports & aquatics. The remaining programs are distributed amongst park heritage & living history, community enrichment, specialized recreation, cultural arts, and outdoor recreation. Instructional classes are utilized the most with private lessons and leagues/competitions being the next two most used delivery methods. Additionally, special services uses contractors the most (7%) out of all the program areas examined. It should be noted that there are over 100 sports leagues/programs housed within Metro Parks facilities and many of these leagues/programs are ran by partner organizations. Please see **Appendix E** for a listing of example partnership organizations.

1.5.2 FACILITY DATA

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PROGRAM ASSESSMENT

The following information presents participant, program, and financial information as denoted by each special service.

Facility Name	Square Footage*	Operating Costs	FTEs	# of Programs (2015)	# of Participations (2015)
Sportsplex	151,550	\$ 926,508	11	43	274,804
Wave Country	32,000	\$ 152,839	1	-	54,225
Parthenon	22,217	\$ 135,825	8	-	293,800
Ted Rhodes Golf Course	8,348	\$ 51,036	10	44,479	44,479
Two Rivers Golf Course	8,348	\$ 51,036	10	60,388	60,388
McCabe Golf Course	6,750	\$ 41,266	15	111,473	111,473
Harpeth Hills Golf Course	6,208	\$ 37,953	13	68,674	68,674
Shelby Golf Course	6,000	\$ 36,681	7	31,151	31,151
Warner Golf Course	6,000	\$ 36,681	2	24,366	24,366
Marina	3,900	\$ 23,843	1	-	38,952
Total	251,321	\$ 1,493,667	78	340,574	1,002,312

*Chart sorted by square footage

Metro Parks manages over 250,000 ft² of special services facilities which equates to approximately \$6 in operation costs per square foot. The largest special service facility, the Sportsplex, has the highest

Figure 22: Special Services Facility Data

operating costs but the third highest FTE count and the lowest number of programs. The McCabe Golf Course has the most FTE and the most number of programs. The Parthenon has the highest number of total participations at almost 300,000 which is the most number of facility participations examined in this report.

1.6 SPECIAL EVENTS

Metro Parks offers 648 special events annually. Events include everything from free public events to private engagements and ceremonies.

1.6.1 PROGRAMMING

Metro Parks’ special events are separated into six categories:

- 1) Community
- 2) Farmers Market
- 3) Festival/Concert
- 4) Political
- 5) Private
- 6) Run/Walk

Figures 23 and 24 below represent the category breakdown, and classification of each special event.

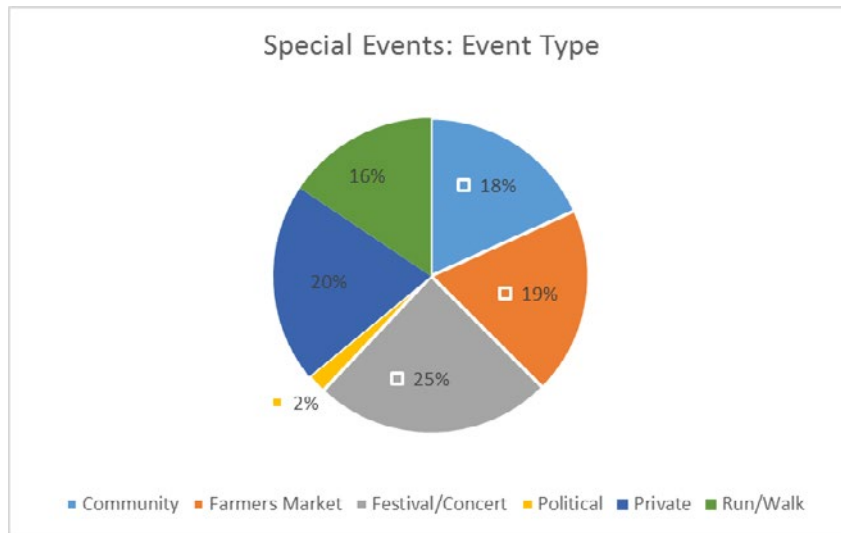


Figure 23: Special Events by Type

There is a relatively even distribution among the special event types except for Political events (2%). Festival/Concerts make up $\frac{1}{4}$ of all special events followed closely by Private (20%), Farmers Market (19%), Community (18%), and Run/Walk (16%).

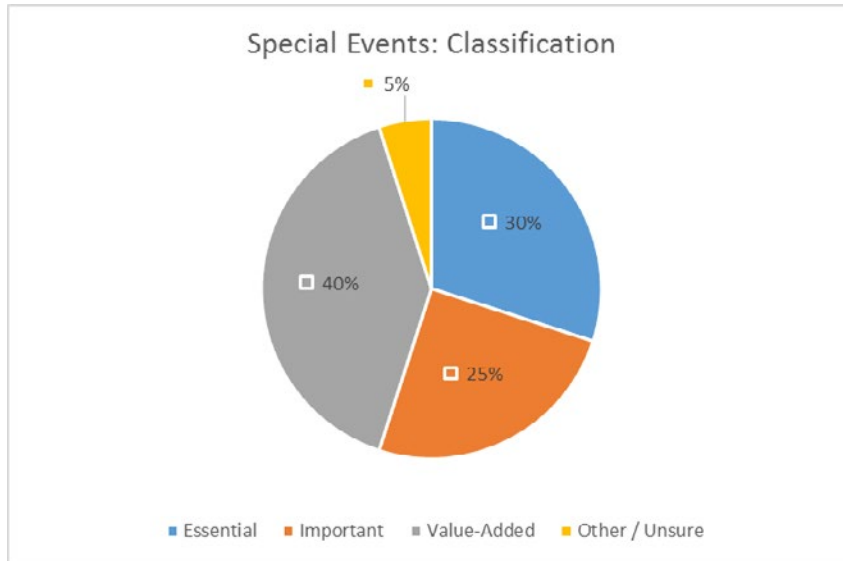


Figure 24: Special Events Classification

Figure 24 shows that the majority of special events are considered to be in the Value-Added classification. The least number of programs are considered to be Essential. Essential programs operate at a net loss and Value-Added programs operate at the highest net profit.

1.6.2 SPECIAL EVENTS RECOMMENDATIONS

- Establish a cost recovery performance measure metric based on classification of services.
- Adopt a full cost of service model (see Appendix A) for Special Events

1.7 COMMUNITY INTEREST

The project team implemented a comprehensive public engagement process to ascertain the public’s opinions regarding needed programs, services, and facilities/amenities in Nashville. The following information presents the community survey results related to programs.

1.7.1 PROGRAM NEEDS

Survey respondents were asked to indicate whether or not they have a need for a particular program and to what extent the need is currently being met. Figures 25 and 26 present the respondent data.

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PROGRAM ASSESSMENT

Figure 25 indicates the top three fully met needs are sports leagues/lessons, exercise/workout classes, and summer programs. Conversely, the top three unmet needs (by combining “Need is Partially Met” and “Need is Not Met” answer choices) are outdoor recreation, health and wellness programs, and swimming lessons. Figure 26 presents the relative ranking of whether or not respondents reported having a need for the program. The three programs that received the most “Yes” responses when asked if they have a need for the program are exercise/workout classes, nature/environmental programs, and outdoor recreation. Of note, exercise/workout classes reported to have the second highest fully met need percentage, nature/environmental programs have the highest reported partially met percentage, and outdoor recreation has the highest percentage of partially met and not met responses indicating the most need. Adult fitness and wellness programs and special events are the top two nationwide “needed” programs with an average of 46% and 40%, respectively. The top two lowest “needed” programs nationwide are programs for people with disabilities and preschool programs with an average of 12% and 14%, respectively.

Programs	1st Choice	2nd Choice	3rd Choice	4th Choice
Exercise/Workout Classes	24.26%	16.80%	9.12%	8.19%
Outdoor Recreation	9.94%	12.76%	12.22%	13.50%
Nature/Environmental Programs	13.65%	11.33%	10.15%	8.41%
Open Gym/Track/Pool	8.85%	9.77%	10.84%	13.94%
Art Classes	9.01%	8.85%	10.67%	9.29%
Health and Wellness Programs	3.88%	7.68%	12.74%	7.96%
Sports Leagues/lessons	6.15%	4.82%	4.13%	7.30%
Swimming Lessons	4.55%	7.03%	4.65%	4.87%
Organized Activities	3.54%	4.04%	6.71%	5.75%
Summer Programs	2.27%	4.17%	5.85%	7.74%
Senior Activities	3.71%	5.08%	5.85%	3.98%
Programs for Toddlers and Small Children	5.39%	3.52%	3.10%	4.87%
Afterschool Programs	2.44%	2.86%	3.27%	2.21%
Programs for People with Disabilities	2.36%	1.30%	0.69%	1.99%

Figure 27: Program Importance

Figure 27 shows the relative importance of each program examined. Survey respondents were asked to indicate the top four programs in terms of importance to themselves and their households. Exercise/workout classes, outdoor recreation, and nature/environmental programs were the highest rated programs. Receiving the lowest program importance were programs for people with disabilities, afterschool programs, and programs for toddlers and small children. It should be noted, however, that survey respondents are self-selected and not a true representative sample to the Nashville community. Further analysis is warranted before making generalizable projections to Nashville as a whole. Adult fitness and wellness programs and special events are also the top two nationwide “most important” programs with an average of 30% and 21%, respectively. The top two lowest “most important”

programs nationwide are programs for people with disabilities and tennis lessons and leagues with an average of 5% and 6%, respectively.

1.7.2 PROGRAM PARTICIPATION AND QUALITY

Respondents were asked to indicate their use of Metro Parks’ programs and the quality of the programs they attended.

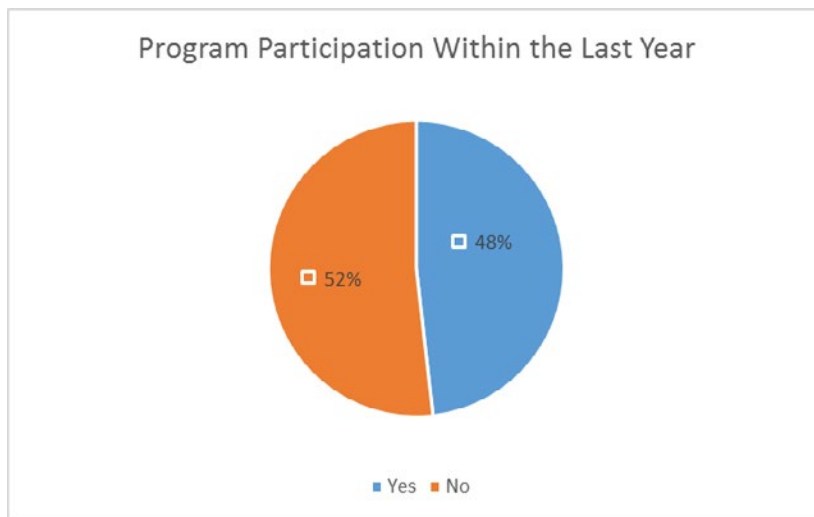
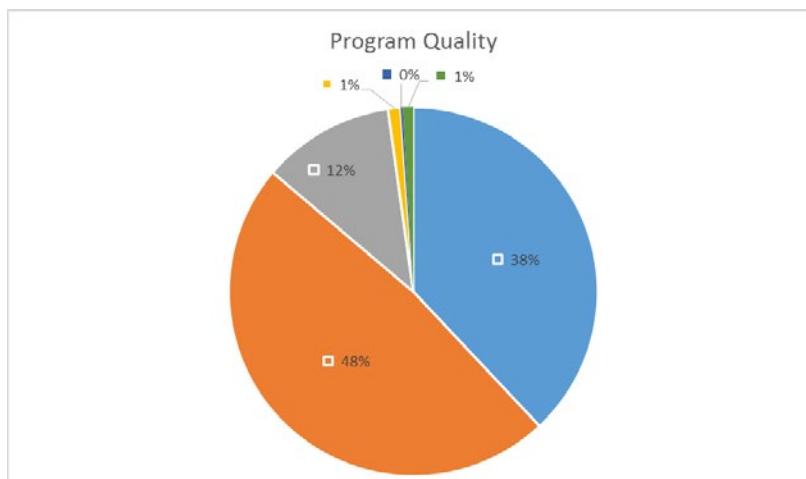


Figure 28: Program Participation

Figures 28 and 29 above provide a snapshot of survey respondents’ familiarity with actual participation in Metro Parks programming and how they viewed the quality of that programming. Slightly more than half of survey respondents have not participated in a program within the last 12 months. Of note, the national average for survey respondent program participation is 34% for statistically-valid community surveys. Of the respondents, 86% reported Metro Parks program quality to be either excellent or good. The national average for this metric is 89%. Only 14% reported programming to be at or below average.



1.7.3 COMMUNICATION METHOD

Figure 30 presents how survey respondents would prefer to learn about Metro Parks programs and services.

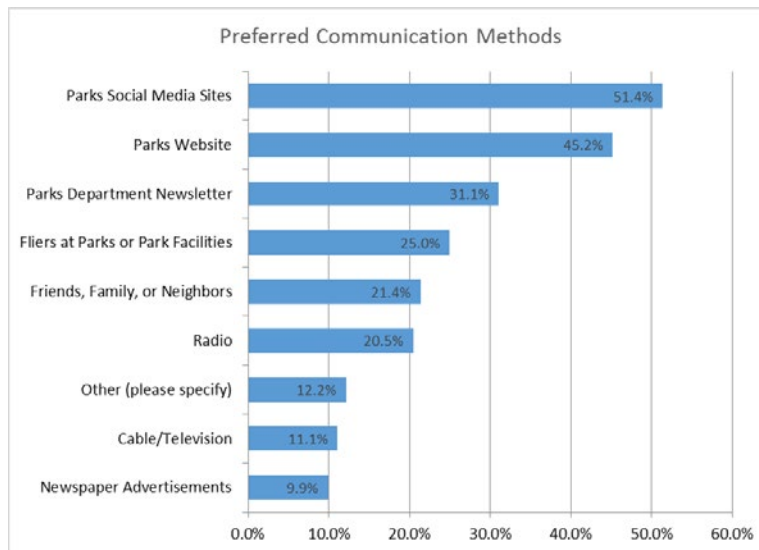


Figure 30: Preferred Communication Methods

The top two communication methods involve technology as the survey respondents reported social media and website communications as preferred contact points with Metro Parks. The least reported desired communication methods are newspaper advertisements and cable/television ads. Interestingly, the newspaper is still the third highest average communication method reported nationwide at 37%. Email bulletins and notifications are the second lowest preferred communication method nationwide at only 11%. These trends are important for Metro Parks to understand as they continue to identify and examine its user base and how they preferred to be communicated with.

1.7.4 COMMUNITY INTEREST RECOMMENDATIONS

- Increase programmatic opportunities based on community unmet need in the following areas:
 - Outdoor recreation
 - Health and wellness
 - Swimming lessons
- Due to the higher productivity of space utilization rates for fitness rooms, seek additional partnerships to increase indoor space for fitness and health and wellness programming opportunities
- Develop a marketing plan that identifies target audiences and includes the preferred communication methods/channels along with the messages Metro Parks wants to transmit through its communications

1.8 SIMILAR PROVIDER ANALYSIS

In order to understand market competition, an environmental scan yielded 24 facilities that are considered to offer similar services to Metro Parks. All facilities are located within Nashville and represent two categories: golf courses and community/recreation centers.

1.8.1 GOLF COURSES

Belle Meade Country Club	Harpeth Valley Golf Center	Nashboro Golf Club
Brentwood Country Club	Hermitage Golf Course	Richland Country Club
Gaylord Springs Golf Course	Hillwood Country Club	Riverside Golf Center

1.8.2 COMMUNITY/RECREATION CENTERS

Andrew Jackson Boys and girls Club	Downtown YMCA	Southern Hills YMCA
Bellevue Family YMCA	Glenview Boys and Girls Club	West Park Boys and Girls Club
Christ Church YMCA	Green Hills Family YMCA	Y-Cap YMCA
Cleveland Park Boys and Girls Club	Margaret Maddox Family YMCA	YMCA of Middle Tennessee
Donelson-Hermitage Family YMCA	Northwest Family YMCA	
	Preston Taylor Boys and Girls Club	

1.9 CONCLUSION AND RECOMMENDATIONS

Based on the information presented in this recreation program assessment, Metro Parks has done a great job providing facility access to residents while delivering different types of programs. The regional and neighborhood community centers, art venues, and nature centers operate at a net loss (in aggregate) which may be compounded by the number of free programs available. Additionally, there is an opportunity to expand contracted and partnership programs and services to increase facility productivity of space.

Survey respondents report a favorable view of Metro Parks programs. Interestingly, respondents report preferred communication methods that are not in alignment with national averages; however, there is an opportunity for Metro Parks to capitalize on this information by examining its current marketing practices to ensure alignment with community desire.

The following recommendations are suggested for Metro Parks and should be considered in addition to the recommendations found at the end of each section in this report:

1.9.1 GENERAL RECOMMENDATIONS

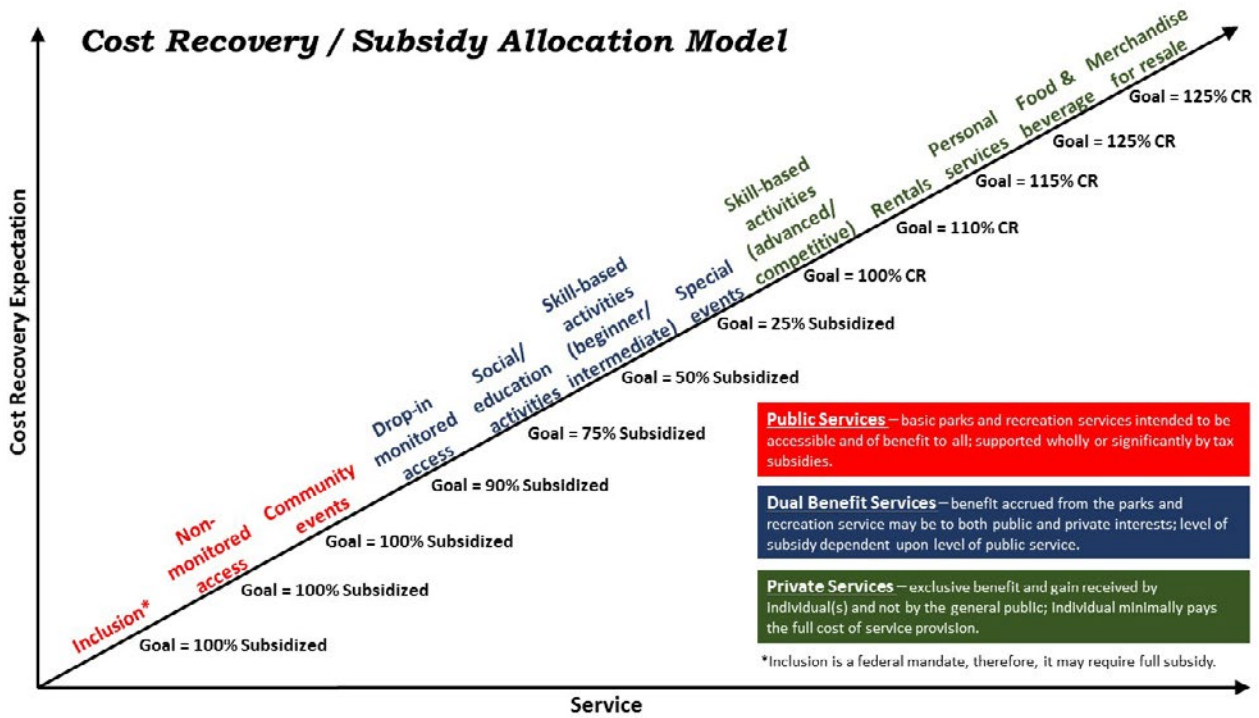
- Conduct an age segment analysis to identify current primary and secondary target audiences while also looking at age segment gaps
- Conduct a time analysis that identifies peak and off-peak time potential users
- Due to the public desire for outdoor recreation, Metro Parks should look into expanding program offerings in this area most likely through outreach, equipment rental, and trips & off-site tour delivery methods
 - Popular national trends include mountain biking, paddle boarding, aerial tours, zip-lining, and kayaking
- There is an opportunity to increase camp programs by programming facility space through partnered or contracted programs

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- Continue to provide special events and community-interest opportunities
- Increase outreach programming by bringing nature center programs and environmental education to communities (i.e., facility extension programs)
- Establish cost recovery goals by program area and facility type (see **Appendix A** for an example model)
- Identify and record program lifecycle stages to ensure there is a balance among program introduction, growth, maturation, saturation, and decline
- Determine how to increase programming opportunities by demand pricing, cost per experience, and creating more hours of availability in recreation centers
- Determine how to support operational costs through effective pricing of services
- Develop partnership agreements (regardless of partner) based on true cost
- Continue to expand earned income opportunities such as sponsorships and advertising to help offset operational costs
- Develop business plans for each community center, golf facility, and special-use facility to maximize efficiency of space, costs, and revenue capability
- Establish performance measures in terms of:
 - Productivity of space
 - Revenue
 - Customer feedback
 - Volunteer hours donated
 - Employee satisfaction
 - Communication & outreach
 - Market control (within each core program area)
- Hire more program staff where high demand exists
- Develop a volunteer development program for recreation services including program and facility staffing and general user inquiries and interface
- Leverage cultural and historic resources for facility programming
- Identify the need for self-guided interpretative displays to help activate facility space

APPENDIX A

1.10 RECOMMENDED COST RECOVERY / SUBSIDY ALLOCATION MODEL



APPENDIX B

1.11 CLASSIFICATION OF PROGRAMS AND SERVICES

Conducting a classification of services informs how each program serves the overall organization mission, the goals and objectives of each Core Program Area, and how the program should to be funded with regard to tax dollars and/or user fees and charges. How a program is classified can help determine the most appropriate management, funding, and marketing strategies.

Program classifications are based on the degree to which the program provides a public benefit versus a private benefit. Public benefit can be described as everyone receiving the same level of benefit with equal access, whereas private benefit can be described as the user receiving exclusive benefit above what a general taxpayer receives for their personal benefit.

The three classifications used in this Recreation Program Assessment analysis are Essential, Important, and Value-Added. A program or service’s classification depends upon alignment with the organizational mission, how the public perceives it, legal mandates, financial sustainability, personal benefit, competition in the marketplace, and access by participants. The table below describes each of the three classifications in these terms.

	<i>ESSENTIAL Programs</i>	<i>IMPORTANT Programs</i>	<i>VALUE-ADDED Programs</i>
<i>Public interest; Legal Mandate; Mission Alignment</i>	<ul style="list-style-type: none"> • <i>High public expectation</i> 	<ul style="list-style-type: none"> • <i>High public expectation</i> 	<ul style="list-style-type: none"> • <i>High individual and interest group expectation</i>
<i>Financial Sustainability</i>	<ul style="list-style-type: none"> • <i>Free, nominal or fee tailored to public needs</i> • <i>Requires public funding</i> 	<ul style="list-style-type: none"> • <i>Fees cover some direct costs</i> • <i>Requires a balance of public funding and a cost recovery target</i> 	<ul style="list-style-type: none"> • <i>Fees cover most direct and indirect costs</i> • <i>Some public funding as appropriate</i>
<i>Benefits (i.e., health, safety, protection of assets).</i>	<ul style="list-style-type: none"> • <i>Substantial public benefit (negative consequence if not provided)</i> 	<ul style="list-style-type: none"> • <i>Public and individual benefit</i> 	<ul style="list-style-type: none"> • <i>Primarily individual benefit</i>
<i>Competition in the Market</i>	<ul style="list-style-type: none"> • <i>Limited or no alternative providers</i> 	<ul style="list-style-type: none"> • <i>Alternative providers unable to meet demand or need</i> 	<ul style="list-style-type: none"> • <i>Alternative providers readily available</i>
<i>Access</i>	<ul style="list-style-type: none"> • <i>Open access by all</i> 	<ul style="list-style-type: none"> • <i>Open access</i> • <i>Limited access to specific users</i> 	<ul style="list-style-type: none"> • <i>Limited access to specific users</i>

With assistance from Department staff, a classification of services was conducted for the recreation programs offered by Metro Parks. *This may not be representative of all program offerings at Metro Parks and staff should check and complete with full program offerings.*

Core Program	ESSENTIAL Programs	Consultant Recommendation
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Area		
Community Enrichment	<ul style="list-style-type: none"> • After school • Summer enrichment • Senior programs • Programs for people with disabilities 	<ul style="list-style-type: none"> • Senior programs • Programs for people with disabilities • Community activities (i.e., family time, seasonal celebrations) • Partnerships
Cultural Arts	<ul style="list-style-type: none"> • Summer camps • Beginner classes • Metro Parks Community Center Programs/NAZA • Metro Parks performances and events 	<ul style="list-style-type: none"> • Beginner classes
Fitness and Wellness	<ul style="list-style-type: none"> • Open gym/track • Fitness center use • Fitness classes 	<ul style="list-style-type: none"> • Open gym/track
Nature and History	<ul style="list-style-type: none"> • Field trips - MNPS • Metro Parks community center programs • Public programs by title/age/max # 	<ul style="list-style-type: none"> • Volunteer projects • Outreach programs
Outdoor Recreation	<ul style="list-style-type: none"> • Metro Parks community center programs • Public programs by title/age/max # 	<ul style="list-style-type: none"> • Volunteer projects • Outreach programs
Special Events	<ul style="list-style-type: none"> • Park-sponsored/cosponsored festivals and events • Partner events • Open community events - free to the public 	<ul style="list-style-type: none"> • Open community events - free to the public • Specialized community events - free to the public
Specialized Recreation	<ul style="list-style-type: none"> • Marina boat access • Marina beach access 	<ul style="list-style-type: none"> • Marina boat access • Marina beach access
Sports and Aquatics	<ul style="list-style-type: none"> • Recreation youth sports • Recreation adult play (i.e., volleyball, badminton) • Fee-based lessons/camps/clinics • Fee-based sports leagues • Learn to swim • Lap swim • Family open pool • Pool exercise classes • Open play - public • MNPS field trips 	<ul style="list-style-type: none"> • Learn to swim • Lap swim • Family open pool • Open play - public

Core Program Area	IMPORTANT Programs	Consultant Recommendation
Community Enrichment	<ul style="list-style-type: none"> • Community activities (i.e., family time, seasonal celebrations) • Partnerships 	<ul style="list-style-type: none"> • After school • Summer enrichment
Cultural Arts	<ul style="list-style-type: none"> • Workshops • Exhibits/galleries • Partner performances 	<ul style="list-style-type: none"> • Summer camps • Metro Parks Community Center Programs/NAZA • Metro Parks performances and events • Workshops • Exhibits/galleries • Partner performances • Open studio
Fitness and Wellness	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Fitness center use
Nature and	<ul style="list-style-type: none"> • Field trips - private and out of the County 	<ul style="list-style-type: none"> • Field trips - MNPS

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History	<ul style="list-style-type: none"> • Other organized groups (i.e., scouts, schools, interest groups) • Volunteer projects 	<ul style="list-style-type: none"> • Metro Parks community center programs • Public programs by title/age/max # • Field trips - private and out of the County • Other organized groups (i.e., scouts, schools, interest groups)
Outdoor Recreation	<ul style="list-style-type: none"> • Fee-based public programs • Partner groups (i.e., scouts, interest groups) • Volunteer projects 	<ul style="list-style-type: none"> • Metro Parks community center programs • Public programs by title/age/max # • Partner groups (i.e., scouts, interest groups) •
Special Events	<ul style="list-style-type: none"> • Runs/walks • Farmers Markets • Specialized community events - free to the public 	<ul style="list-style-type: none"> • Farmers Markets
Specialized Recreation	<ul style="list-style-type: none"> • Golf lessons/clinics • Marina outdoor recreation 	<ul style="list-style-type: none"> • Marina outdoor recreation
Sports and Aquatics	<ul style="list-style-type: none"> • Facility use - partner groups 	<ul style="list-style-type: none"> • Recreation youth sports • MNPS field trips

Core Program Area	VALUE-ADDED Programs	Consultant Recommendation
Community Enrichment	<ul style="list-style-type: none"> • Facility use (i.e., meetings, retreats, private parties, workshops) 	<ul style="list-style-type: none"> • Facility use (i.e., meetings, retreats, private parties, workshops)
Cultural Arts	<ul style="list-style-type: none"> • Specialized classes • Private rentals • Open studio 	<ul style="list-style-type: none"> • Specialized classes • Private rentals
Fitness and Wellness	<ul style="list-style-type: none"> • Personal training • Educational instruction (i.e., GROW, workshops, Metro Health, teaching kitchen) • Private groups/vendors 	<ul style="list-style-type: none"> • Fitness classes • Personal training • Educational instruction (i.e., GROW, workshops, Metro Health, teaching kitchen) • Private groups/vendors
Nature and History	<ul style="list-style-type: none"> • Outreach programs • Facility use (i.e., meetings, retreats, workshops) • Research projects 	<ul style="list-style-type: none"> • Facility use (i.e., meetings, retreats, workshops) • Research projects
Outdoor Recreation	<ul style="list-style-type: none"> • Outreach programs 	<ul style="list-style-type: none"> • Fee-based public programs
Special Events	<ul style="list-style-type: none"> • Private rentals/events 	<ul style="list-style-type: none"> • Park-sponsored/cosponsored festivals and events • Partner events • Runs/walks • Private rentals/events
Specialized Recreation	<ul style="list-style-type: none"> • Golf tournaments • Marina slips • Marina private rentals 	<ul style="list-style-type: none"> • Golf lessons/clinics • Golf tournaments • Marina slips • Marina private rentals
Sports and Aquatics	<ul style="list-style-type: none"> • Fee-based tournaments • Competitive swimming • Private groups and rentals 	<ul style="list-style-type: none"> • Recreation adult play (i.e., volleyball, badminton) • Fee-based lessons/camps/clinics • Fee-based sports leagues • Pool exercise classes • Fee-based tournaments • Competitive swimming • Private groups and rentals

Additionally, the following program areas are often considered “core recreation services” for parks and recreation agencies:

- Adult Enrichment
- Adult Sports
- Aquatics
- Arts
- Environmental and Nature Education
- Fitness and Wellness
- Outdoor Adventure Recreation
- Senior Services
- Special Events
- Youth Enrichment
- Youth Sports

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1.12 COST PER VISITOR BY RECREATION CENTER

Center Name	Net Cost (Revenue - Expenses)	Facility Visitation	Cost per Visitor*
Hartman Regional Center	\$ (640,115)	41,932	\$ (15)
East Regional Center	\$ (617,904)	43,391	\$ (14)
Hadley Regional Center	\$ (756,910)	78,555	\$ (10)
Sevier Regional Center	\$ (485,171)	54,563	\$ (9)
McCabe Regional Center	\$ (503,259)	79,571	\$ (6)
Coleman Regional Center	\$ (618,460)	131,092	\$ (5)
Southeast Regional Center	\$ (652,750)	138,856	\$ (5)
Total	\$ (4,274,568)	567,960	\$ (8)

*Chart sorted by Cost per Visitor

Center Name	Net Cost (Revenue - Expenses)	Facility Visitation	Cost per Visitor*
Hermitage	\$ (237,074)	16,074	\$ (15)
Shelby	\$ (236,074)	17,931	\$ (13)
Parkwood	\$ (256,154)	19,509	\$ (13)
Paradise Ridge	\$ (234,371)	18,070	\$ (13)
South Inglewood	\$ (347,213)	31,661	\$ (11)
Easley Center at Rose Park	\$ (356,317)	33,138	\$ (11)
McFerrin	\$ (314,888)	30,800	\$ (10)
Old Hickory	\$ (343,245)	39,919	\$ (9)
Antioch	\$ (238,510)	29,118	\$ (8)
Morgan	\$ (252,249)	31,274	\$ (8)
Bellevue	\$ (226,091)	31,892	\$ (7)
Elizabeth Senior Center	\$ (114,688)	20,870	\$ (5)
Kirkpatrick	\$ (272,651)	52,946	\$ (5)
Madison	\$ (278,023)	60,105	\$ (5)
Watkins	\$ (275,149)	64,219	\$ (4)
Looby	\$ (291,353)	80,654	\$ (4)
Cleveland	\$ (197,667)	-	\$ -
Napier	\$ (331,064)	-	\$ -
West	\$ (50,675)	-	\$ -
Total	\$ (4,853,455)	578,180	\$ (8)

*Chart sorted by Cost per Visitor

Center/Program Name	Net Cost (Revenue - Expenses)	Program Visitation	Cost per Participation*
Outdoor Recreation	\$ (66,070)	904	\$ (73)
Beaman Nature Center	\$ (124,577)	2,106	\$ (59)
Shelby Nature Center	\$ (279,893)	5,859	\$ (48)
Warner Nature Center	\$ (568,715)	12,960	\$ (44)
Ft. Negley	\$ (150,469)	4,805	\$ (31)
Theater	\$ (203,067)	10,943	\$ (19)
Bells Bend Outdoor Center	\$ (124,726)	7,004	\$ (18)
Visual Arts	\$ (190,607)	13,554	\$ (14)
Music	\$ (271,105)	22,711	\$ (12)
Dance	\$ (247,603)	29,045	\$ (9)
Total	\$ (2,226,833)	109,891	\$ (20)

*Chart sorted by Cost per Participation

1.14 COST PER VISITOR BY SPECIAL SERVICE

Facility Name	Net Cost (Revenue - Expenses)	Program Visitation	Cost per Participation*
McCabe Golf Course	\$ 732,158	111,473	\$ 7
Marina	\$ 152,643	38,952	\$ 4
Parthenon	\$ 390,723	293,800	\$ 1
Two Rivers Golf Course	\$ (37,467)	60,388	\$ (1)
Harpeth Hills Golf Course	\$ (115,032)	68,674	\$ (2)
Warner Golf Course	\$ (93,613)	24,366	\$ (4)
Wave Country	\$ (302,859)	54,225	\$ (6)
Shelby Golf Course	\$ (174,866)	31,151	\$ (6)
Ted Rhodes Golf Course	\$ (332,033)	44,479	\$ (7)
Sportsplex	\$ (2,074,227)	274,804	\$ (8)
Total	\$ (1,854,572)	1,002,312	\$ (2)

*Chart sorted by Cost per Participation

1.15 TYPICAL RECREATION CENTER TYPES AND DEFINITIONS

1.15.1 NEIGHBORHOOD RECREATION CENTERS

Typically are 10,000-20,000 ft² in size. They were very popular in the 1970's. These centers typically operate around 50 hours a week. They have three to four program spaces (typically one gym, multi-purpose program class rooms, game room for youth and seniors, office space and maybe a small fitness area). These facilities focus on afternoon school programs, neighborhood related programs, meeting space for neighborhoods, some senior programs and typically generate approximately 15-20% of their operational revenue.

1.15.2 COMMUNITY CENTERS

These centers were very popular in the 1980's and 1990's. Typical size is 20,000 to 50,000 square feet. They include one or two gyms (10,000-12,000 square feet), small walking track (5-6,000 ft²), small fitness space 2,500 ft², after school and summer camp program spaces, game room for youth and seniors, community meeting spaces that double as program spaces for arts, seniors, wellness fitness classes, drop in child watch area, maybe a flat water pool of 9,500 ft². These centers serve multiply neighborhoods and generate about 50% of their operational money through a membership fee for the pool and fitness center. These centers operate about 60-65 hours a week.

1.15.3 MULTI-GENERATIONAL CENTERS

These centers are typically 75,000 ft² to 150,000 ft², the typically have three or four gyms (21,000 to 28,000 ft², large walking track, Fitness space (15,000 to 20,000 ft²), aquatic space that includes a combination of flat water and moving water space in the 20,000 square foot range, it includes program space, senior space around 15,000 ft² space, child watch areas. These multi-generational centers generate between 80 to 110% of their operational budget. These facilities are open 90 to 110 hours a week.

1.15.4 FIELD HOUSE SPACE

These facilities are typically in the 85,000 to 100,000 ft² level and include 6-8 basketball courts that can be converted to 12 volleyball courts, or two indoor soccer spaces. Sometimes these facilities will have one or two ices rinks with them or a large tennis center. They usually incorporate fitness and wellness space in the 15,000 ft² range. Sometimes instead of tennis they may have a large 50 meter pool. These spaces usually generate 80-110% of their operational cost. Your Centennial Park Center would be considered a Field House. The facilities are open 100 to 120 hours a week.

1.15.5 SENIOR CENTER

These facilities are typically 25,000 to 40,000 ft² and include a large meeting space, stage, small fitness space, kitchen for providing food service, program space for wellness and fitness, arts, music, cards, bingo and a game room. They also include a meeting lounge area. The senior center generate approximate 20% or less of their operational budget. These spaces are very popular in high senior living spaces such as Florida, Texas and Arizona.

1.16 COMMUNITY PROGRAMS DIVISION PARTNERSHIPS

All the King's Men	Hadley Adult Tennis Association
Auto Diesel College	Hands on Nashville
Belmont Program	Memphis Grizzlies NBA Program
Boys and Girls Club	Metro Action Commission
Boy Scouts	Nashville Predators
Charles Davis Foundation	Nashville State Community College
Community Gardens	NAZA After-School Program
Cremona Strings	Oasis
Diabetes - Gold Sneakers MOU - Parks/Health	Pathways to Citizenship
Dick's Sporting Goods	Prevent Child Abuse Tennessee
East Nashville Home School Association	RBI Softball Program
Fifty Forward	Second Harvest Food Bank
Frist Art Trunk	STARS (Students Taking a Right Stand)
Friends of Metro Parks disABILITIES and Magic GENTS	Tennessee Golf Foundation
Girl Scouts	TSU
Goodwill Summer Camp Program	USTA Southern District
Goodwill Collection	Vanderbilt University
GROW	Walgreens

1.17 OUTDOOR RECREATION PROGRAMS PARTNERSHIPS

Big Willies Action Sports	Paddle Adventures Unlimited
Cumberland Kayak	River Queen Voyages
Mayor's Office	Sierra Club
Metro Water Services	Stones River Watershed Association
MNPS	Sup Music City
Nashville Hiking Meetup	Tennessee Scenic Rivers Association
Nashville Paddle Co.	Tennessee Wildlife Resources Agency
Office of Emergency Management	US Coast Guard

8.5 MAINTENANCE ASSESSMENT

MAINTENANCE COSTS

The Nashville Metro Parks system includes over 15,000 park land acres (5,540 are maintained) and over 1 million indoor recreation square footage. To better understand the operations and maintenance costs and corresponding implications, an analysis was conducted to examine unit costs.

According to **Figure 1**, the Metro Parks maintenance budget is divided into three subcategories: operating, open space, and structures. Within each subcategory, costs are associated with utilities, fleet, safety, and capital/deferred maintenance. With a population density of around 1,300 people, the national best practice is approximately \$6,500/acre in terms of operations. Metro Parks' operating dollars per acre is \$963 which is well below best practices. However, the cost per acre rises to \$2,623 for designed, or maintained, acres. Designed acres include the areas in which active operations and maintenance activities are conducted such as mowing, weeding, landscaping, litter clean up and removal, etc. It should be noted that operating costs per acre are directly proportional to population density. As population density increases, it is expected that the cost to maintain an acre of park land will increase as well. Metro Parks has 15,089 acres and 5,540 are designed. With 150 maintenance FTE, Metro Parks operates at 1 FTE/37 designed acre. Typically, the industry benchmark ratio is 1 FTE/30 designed acre.

Total System Acres	15,089	
Designed Acres	5,540	
Building Area Square Footage	1,258,556	

	Operating	Open Space	Structures	Unit Costs	
Operating Budget	\$ 9,621,200	\$ 6,047,200	\$ 3,574,000	Operating dollars/designed acre	\$ 2,623
Utilities	\$ 3,439,977	\$ 99,387	\$ 3,340,590	Operating dollars/total acre	\$ 963
Fleet	\$ 1,332,000	\$ 626,839	\$ 705,161	Open space dollars/designed acre	\$ 1,235
Safety	\$ 140,700	\$ 66,213	\$ 74,487	Open space dollars/total acre	\$ 453
Subtotal	\$ 14,533,877	\$ 6,839,639	\$ 7,694,238	Structure dollars/square foot	\$ 6
Capital/Deferred Maintenance	\$ 1,671,709	\$ 171,500	\$ 2,744,901	Total deferred maintenance/total acre	\$ 304
Total	\$ 16,205,586	\$ 7,011,139	\$ 10,439,139		

Figure 1: Maintenance Budget Breakdown and Unit Costs

Metro Parks has tracked information as to provide a unit cost breakdown based on facility type. **Figure 2** shows unit costs for trails, park land, and select sports fields/courts. The costs were calculated by using Metro Parks' calculations for monthly operations and maintenance costs. Those costs were then multiplied to calculate annual costs which were then divided by the total miles/acres/square feet to arrive at a final unit cost per facility type. According to **Figure 2**, Metro Parks spends \$7,978 per neighborhood park acre. This is the highest park land per acre figure and is close to the best practice range of \$8,000-\$9,500 per neighborhood park acre. Signature and Community Park costs per acre are both over \$5,000. All other park land per acre costs are below \$600/acre. Similar to the directly proportional relationship between population density and per acreage costs, downtown plaza areas are generally more expensive to operate and maintain even though they are smaller in size. This is because they are in high density areas and receive a lot of foot traffic. Additionally, downtown plazas and civic areas are usually high visibility areas within a community and are maintained to a very high level.

Facility Type		Unit Cost	Type	Average Size (Acres)	Fleet	Subtotal	Utilities, Amenities, and Indirect Costs	Total (Month)	Total (Year)	Total Average Cost Per Acre / Field
Trails	Paved (multi-use)	\$ 480	Mile		\$ 68	\$ 548	\$ 68	\$ 616	\$ 7,392.48	\$ -
	Paved (walking/sidewalk)	\$ 480	Mile		\$ 68	\$ 548	\$ 68	\$ 616	\$ 7,392.48	\$ -
	Primitive	\$ 420	Mile		\$ 60	\$ 480	\$ 59	\$ 539	\$ 6,468.36	\$ -
Park Land	Signature park	\$ 306	Acre	14	\$ 44	\$ 4,328	\$ 2,332	\$ 6,660	\$ 79,915	\$ 5,708
	Pocket park	\$ 120	Acre		\$ 17	\$ 137	\$ 138	\$ 275	\$ 3,306	\$ -
	Neighborhood park	\$ 152	Acre	1	\$ 22	\$ 219	\$ 645	\$ 864	\$ 10,371	\$ 7,978
	Community park	\$ 64	Acre	10	\$ 9	\$ 617	\$ 3,436	\$ 4,053	\$ 48,636	\$ 5,120
	Regional park	\$ 10	Acre	428	\$ 1	\$ 4,306	\$ 14,025	\$ 18,331	\$ 219,970	\$ 514
	Natural area	\$ 0.15	Acre	1,137	\$ 0.02	\$ 171	\$ 9,318	\$ 9,489	\$ 113,863	\$ 100
Sports Fields / Courts	Baseball	\$ 1,400	Field		\$ 199	\$ 1,599	\$ 198	\$ 1,797	\$ 21,561	\$ 254
	Soccer	\$ 600	Field		\$ 85	\$ 685	\$ 85	\$ 770	\$ 9,241	\$ 138
	Tennis	\$ 90	Court		\$ 13	\$ 103	\$ 13	\$ 116	\$ 1,386	\$ 9

Figure 2: Unit Cost Breakdown

Additionally, Metro Parks’ staff expenditure is \$24,822,504.20 including salary and benefits. Total operating expenses (excluding capital) is \$33,441,918.23. Therefore, personnel costs account for 74.2%. The 2016 NRPA Field report identified 55% as the industry benchmark for personnel services. However, Metro Parks earns approximately 50% of their personnel costs back through revenue generation with a reported income of \$12,122,959.82 (excluding capital revenue).

1.1 RECOMMENDATIONS

Based on the maintenance and unit costs analysis, the planning team recommends the following actions:

- Conduct a time task analysis to determine productivity rate (i.e., available hours)
- Implement a comprehensive work order management system
- Analyze F/T vs P/T tasks to ensure “right task for right position”
 - Review seasonal, part-time, and full-time staff tasks
- Examine the possibility of adding more seasonal/part-time help or reducing the number of maintained or designed acres to better match industry benchmark ratios
- Revisit operating budget per acre costs for data accuracy
- Establish performance measures that include key performance indicators for:
 - Cost per maintained acre
 - Cost per trail mile
 - Cost per park land type
- Identify why current unit costs are below industry best practices
 - Use a full cost of service model when calculating unit costs

8.6 STATISTICAL PHONE SURVEY: QUESTIONS

Metro Parks Master Plan Survey (4/28/16)

INTRO:

S1. How long have you lived in Nashville/Davidson County? (CROSS-TAB)

Less than 1 year (TERMINATE)

1-5 years

6-10 years

11-20 years

More than 20 years

Don't live in Nashville (TERMINATE)

Q. The Metro Parks and Recreation Department operates 140 public parks, 210 miles of greenways and trails, 26 community centers, and 148 stand-alone sports fields. It also provides a number of programs to the public, such as art, dance, yoga and nature hikes.

Overall, how would you rate Metro's parks and greenways in terms of value, appearance and recreation opportunities? Would you say they are:

Excellent

Good

Average

Not very good

Not good at all

Don't know (Do Not Read)

Q: In the past year, on average, how often have you or members of your household visited a Metro park or facility, such as athletic fields, dog parks, greenways or community centers? Would you say:

More than once a week (Go to Qb)

Once a week (Go to Qb)

Once or twice a month (Go to Qb)

Occasionally (Go to Qb)

Very seldom (Go to Qa)

Never (Go to Qa)

Don't know (DO NOT READ) (Go to Qa)

Qa: What is the main reason that you, or members of your household, don't use, or very seldom use, Metro Parks facilities?

(DO NOT READ – KEY ANSWERS)

Don't have time
Just not interested
Too far away/not convenient
Physical limitations
Safety/security reasons
Other (KEY AND TALLY ONLY; DO NOT LIST)
Don't know

Qb: Thinking about the times you go to a Metro park or greenway, what would you say is the main reason you or members of your household go to a park, or the main activity you participate in?

(DO NOT READ – KEY RESPONSES)

Relax, enjoy nature
Walk, run, hike or ride a bicycle
Play golf
Sports activity (general: softball, soccer, Frisbee)
Swimming (specific)
Participate in a program
Family outing, such as picnics
Dog park
Fitness center/ Weight training
Concert or festival
Other (KEY VERBATIMS)

Q: In the past year, have you, or has a member of your household, participated in Metro Parks programs, such as art classes, athletics, fitness or other programs at a Metro Community Center?

Yes (Go to Qa)
No
Don't know

Qa. How would you rate those programs? Would you say they are:

Excellent
Good
Average
Not very good
Not good at all

APPENDICES
PHONE SURVEY

Don't know (Do Not Read)

Q: Metro Parks has been operating on a tight budget for several years, and to stay on budget, it has cut back on costs in a number of different areas such as services, hours and maintenance.

Under those circumstances, how would you rate the job Metro Parks has done with regard to the overall physical condition and operation of parks, facilities and greenways?

Excellent
Good
Average
Not very good
Not good at all
Don't know (DO NOT READ)

Q: How safe do you feel when you go to a Metro park? Would you say you feel:

Very safe
Somewhat safe
Somewhat unsafe
Very unsafe
Don't know

Q: What about on greenways? Do you feel:

Very safe
Somewhat safe
Somewhat unsafe
Very unsafe
Don't know

Q: In general, how satisfied are you with Metro Parks' sports and aquatic facilities? Would you say:

Very satisfied
Somewhat satisfied
Not very satisfied
Not satisfied at all
Don't know (Do not read)

Q: How much do you value the preservation of natural areas near your residence and across the city? Would you say:

Value it a great deal
Value it somewhat
Don't value it very much

Don't value it at all

Don't know (Do Not Read)

Q: How much would you support the Metro Parks Department's preserving more green space and acquiring additional property to develop more parks and greenways in fast-growing areas? Would you:

Strongly support

Somewhat support

Somewhat oppose

Strongly oppose

Don't know (Do not read)

Q: If Metro Parks received extra funding for improvements, would you prefer that money be used to improve *existing* parks, greenways and community centers, or do you think it should be used to develop *new* parks, greenways and community centers?

Existing

Develop new

Don't know

*If they say both, push to choose one.

Please say how much you agree or disagree with the following statements:

Q: "Having high-quality public parks that are available to people from all walks of life in all areas of the city is important to me personally." Would you say you:

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Don't know (Do Not Read)

APPENDICES
PHONE SURVEY

Q: “Many Metro Parks programs are free, but some – like workout classes and dance classes – have a usage fee. In many cases, these fees do not cover the real cost of the program. Metro should consider increasing the fees so that those using them are paying a bigger share of the costs.”

Strongly agree
Somewhat agree

Neither agree nor disagree

Somewhat disagree
Strongly disagree

Don’t know (Do Not Read)

Q: Currently, the Metro Parks and Recreation Department spends \$51 per resident, while the national average is \$77. Metro should provide additional funding for the Parks Department for improvements to existing parks and facilities, and/or the addition of new ones.

Strongly agree
Somewhat agree

Neither agree nor disagree

Somewhat disagree
Strongly disagree

Don’t know (Do Not Read)

Q. Please name **up to** three Metro parks that you or members of your household have visited the most in the past 12 months?

- Cane Ridge Park
- Cedar Hill Park
- Centennial Park
- Cumberland Park
- East Park and Community Center
- Hadley Park
- McCabe Park and Community Center
- Public Square
- Riverfront Park
- Sevier Park
- Shelby Park
- Two Rivers Park

Warner Parks

Other: KEY ANSWERS (verbatim)

Q. How would you rate the physical condition of the Metro parks, greenways and other facilities that you or members of your household have visited in the past year?

Excellent

Good

Average

Not very good

Not good at all

Don't know (Do Not Read)

Q. If you could name one thing that Metro Parks should be providing, or should be providing more of, what would that be? If you don't have an opinion, just say so.

KEY VERBATIMS:

Demographics

D1. Gender (by observation only)

Male

Female

D2. What is your race or ethnic group?

White

African-American/ black

Hispanic

Asian-Pacific/Other

Refused

D3. Do you have children under age 18 living in your household?

Yes

No

Refused

D4. Are there one or more persons living in your household age 65 or older?

Yes

No

Refused

D5. Age (if decline, provide ranges)

- 18-34
- 35-44
- 45-64
- 65-plus

D6. Which of the following income ranges best describes your annual household income?

- Less than \$30,000
- \$30,001 – \$50,000
- \$50,001 – \$75,000
- More than \$75,000

D7. What is your ZIP code?

- List codes = group into areas
- *Note: 6-8 areas

D8. What is the highest level of education you have completed?

- Some high school
- High school graduate
- Some college
- 2-year college degree
- 4-year college degree
- Postgraduate degree
- Not sure/Refused

8.7 INITIAL ONLINE SURVEY: QUESTIONS

DRAFT Metro Parks Email and Web Survey 1

1. How often do you, or members of your household, visit Metro parks, greenways, community centers or sports fields?

Regularly (once a week or more)
Often
Occasionally
Seldom
Never

2. In general, what is your overall opinion of Metro Parks?

Very positive
Somewhat positive
Somewhat negative
Very negative

3. How much of a priority should it be for Metro to provide Nashville residents and visitors with a high-quality parks system?

A top priority
Middle priority
Low priority
Not a priority at all

4. Metro Parks offers a wide variety of programs, such as art classes, nature programs and fitness classes. How likely are you to participate in one of these programs in the next year?

Very likely
Somewhat likely
Not very likely
Not likely at all

5. What is your ZIP code? (open-ended)

6. What is your race or ethnic group?

White
African-American/black
Hispanic
Asian/Pacific Islander/Other

7. Which age group do you fall into?

18-34

35-44

45-64

65-plus

8.8 COMPREHENSIVE ONLINE SURVEY: QUESTIONS



METRO PARKS COMMUNITY SURVEY

The Metro Parks and Recreation Department offers 185 parks, 143 playgrounds, over 200 miles of greenways and trails, seven dog parks, and more.

As part of Plan To Play – the parks and greenways master planning process – we’d like to hear from you. This survey will help Metro Parks gain a better understanding of Nashvillians’ current and future view of the Parks system. Thank you for your help planning our parks.

PROGRAMS

1. In the past year, have you, or a member of your household, participated in Metro Parks programs, such as art classes, athletics, fitness or other programs?
 - Yes (go to 1a)
 - No (go to 1b)
 - 1a. If you answered yes to Question 1, how would you rate the programming?
 - Excellent
 - Good
 - Average
 - Not very good
 - Not good at all
 - Don’t know
 - 1b. If no, what’s the main reason that you, or members of your household, don’t participate in Metro Parks programming?
 - Don’t have time
 - Unaware programs are offered
 - Just not interested
 - Too far away/not convenient
 - Physical limitations
 - Other: _____
2. Metro Parks sponsors or hosts over 600 special events every year. In the past year, have you or a member of your household participated in a concert, festival, farmers market or other special event at a Metro Park?
 - Yes
 - No



METRO PARKS COMMUNITY SURVEY

FINANCING

3. Currently, the Metro Parks and Recreation Department spends \$51 per resident, while the national average is \$77. Do you think Metro should provide additional funding for the Parks Department?

- Yes (go to 3a)
- No

- 3a. If yes, in your opinion, how should Metro fill the funding gap? *(Check all that apply.)*

- Increased sales tax
- Increased property tax
- Increased fees
- Cut other department budgets
- Don't know
- Other (please explain): _____

Optional comment: _____

ACCESS

4. How do you usually get to a park? *(Check all that apply.)*

- Walk
- Bike
- Drive
- Run
- Bus/Public transit
- Other _____

5. If you usually drive, what are the main reasons you drive? *(Check all that apply.)*

- No safe routes to walk or bike
- I live too far to walk or bike
- Public transit does not have access to this area
- Driving is more convenient
- Other _____



METRO PARKS COMMUNITY SURVEY

NEEDS AND PRIORITIES

6. Please indicate if you or any members of your household have a need for each of the facilities listed below by circling the YES under the appropriate category next to the facility. If NO, leave blank.

If YES, please rate the facilities of this type in Nashville on a scale of 3 to 1, where 3 means “Need Is Fully Met” and 1 means “Need Is Not Met” for your household.

Type of Facility	Do You Have a Need for This Facility? If NO, leave blank.		If YES You Have a Need, How Well Are Your Needs Being Met? (Circle one.)		
	Youth	Adult	Need Is Fully Met	Need Is Partially Met	Need Is Not Met
OUTDOOR FACILITIES					
1. Picnic Shelters	Yes	Yes	3	2	1
2. Soccer Fields	Yes	Yes	3	2	1
3. Football Fields	Yes	Yes	3	2	1
4. Baseball Fields	Yes	Yes	3	2	1
5. Softball Fields	Yes	Yes	3	2	1
6. Multipurpose Fields	Yes	Yes	3	2	1
7. Basketball Courts	Yes	Yes	3	2	1
8. Tennis Courts	Yes	Yes	3	2	1
9. Playgrounds	Yes	Yes	3	2	1
10. Dog Parks	Yes	Yes	3	2	1
11. Equestrian Trails	Yes	Yes	3	2	1
12. Multipurpose Paved Trails	Yes	Yes	3	2	1
13. Mountain Bike Trails	Yes	Yes	3	2	1
14. Unpaved Trails/Hiking Trails	Yes	Yes	3	2	1
15. Boat Ramps	Yes	Yes	3	2	1
16. Canoe/Kayak Water Access	Yes	Yes	3	2	1
17. Outdoor Swimming & Spray Grounds	Yes	Yes	3	2	1
18. Community Gardens	Yes	Yes	3	2	1
19. Skate Park	Yes	Yes	3	2	1
20. Disc Golf	Yes	Yes	3	2	1



METRO PARKS COMMUNITY SURVEY

Type of Facility	Do You Have a Need for This Facility? If NO, leave blank.		If YES You Have a Need, How Well Are Your Needs Being Met? (Circle one.)		
	Youth	Adult	Need Is Fully Met	Need Is Partially Met	Need Is Not Met
	21. Sand Volleyball	Yes	Yes	3	2
22. Park Cafes/Foodservice	Yes	Yes	3	2	1
23. Golf Courses	Yes	Yes	3	2	1
24. Historic Sites	Yes	Yes	3	2	1
25. Camping	Yes	Yes	3	2	1
INDOOR FACILITIES:					
26. Aquatic Facilities	Yes	Yes	3	2	1
27. Fitness Center	Yes	Yes	3	2	1
28. Indoor Track	Yes	Yes	3	2	1
29. Gymnasium	Yes	Yes	3	2	1
30. Meeting Spaces/Classrooms	Yes	Yes	3	2	1
31. Dance/Yoga Studio	Yes	Yes	3	2	1
32. Lounge Area	Yes	Yes	3	2	1
33. Game Room	Yes	Yes	3	2	1
34. Homework Area/Computer Room	Yes	Yes	3	2	1

7. Which **FOUR** facilities from the list in Question 6 are most important to your household? [Using the numbers in the left-hand column of Question 6 above, please write in the number below for your 1st, 2nd, 3rd and 4th choices, or circle 'NONE.']

Most important:

1st: _____ 2nd: _____ 3rd: _____ 4th: _____ NONE

8. Which **FOUR** of the Metro Park facilities from the list in Question 6 do you use most often? [Using the numbers in Question 6 above, please write in the numbers below for your 1st, 2nd, 3rd and 4th choices, or circle 'NONE.']

Used most often:

1st: _____ 2nd: _____ 3rd: _____ 4th: _____ NONE



METRO PARKS COMMUNITY SURVEY

9. Please indicate if you or any members of your household have a need for each of the programs listed below by circling YES under the appropriate category next to the program. If NO, leave blank.

If YES, please rate the following programs on a scale of 3 to 1, where 3 means “Need Is Fully Met” and 1 means “Need Is Not Met” for your household.

Type of Program	Do You Have a Need for This Program? <u>If NO, leave blank.</u>		<u>If YES You Have a Need,</u> How Well Are Your Needs Being Met? (Circle one.)		
	Youth	Adult	Need Is Fully Met	Need Is Partially Met	Need Is Not Met
Programs and Activities					
A. Exercise/Workout Classes	Yes	Yes	3	2	1
B. Swimming Lessons	Yes	Yes	3	2	1
C. Afterschool Programs	Yes	Yes	3	2	1
D. Nature/Environmental Programs	Yes	Yes	3	2	1
E. Health and Wellness Programs (teaching kitchens, nutrition courses, GROW program, etc.)	Yes	Yes	3	2	1
F. Art Classes (dance, music, drama, visual)	Yes	Yes	3	2	1
G. Senior Activities	Yes	Yes	3	2	1
H. Outdoor Recreation (staff-led canoeing, mountain bike classes, etc.)	Yes	Yes	3	2	1
I. Programs for people with disabilities	Yes	Yes	3	2	1
J. Programs for toddlers and small children			3	2	1
K. Sports Leagues / Lessons	Yes	Yes	3	2	1
L. Organized Activities (pickle ball, badminton, line dancing, skating – roller/ice)	Yes	Yes	3	2	1
M. Open Gym / Track / Pool	Yes	Yes	3	2	1
N. Summer Programs	Yes	Yes	3	2	1



METRO PARKS COMMUNITY SURVEY

10. Which **FOUR** of the programs from the list in Question 9 are most important to your household? [Using the letters in Question 9 above, please write in the letters below for your 1st, 2nd, 3rd and 4th choices, or circle 'NONE.']

Most important:

1st: _____ 2nd: _____ 3rd: _____ 4th: _____ NONE

11. Which **FOUR** of the programs from the list in Question 9 do you currently participate in MOST OFTEN through Metro Parks? [Using the letters in Question 9, please write in the letters below for your 1st, 2nd, 3rd and 4th choices, or circle 'NONE.']

Participate in most often:

1st: _____ 2nd: _____ 3rd: _____ 4th: _____ NONE

12. What do you believe are the **THREE** most important public services (or benefits) provided by the Parks system to the Nashville community? (*Check up to three.*)

- Fitness, health and wellness opportunities
- A place to meet friends/ A place to gather and socialize
- Public education
- Recreation opportunities
- A place to relax
- Beauty and inspiration
- Improves the environment
- A safe place for kids and teens
- Promoting active seniors
- Community meeting space
- Host of special events for the Nashville community
- Other _____

SAFETY

13. Have you felt unsafe in a Nashville/Davidson County park or greenway?
- Yes (go to 13a)
 - No

13a. If yes, why? (*Check all that apply.*)

- Poor lighting
- Vandalism
- The people I saw in the park or greenway made me feel unsafe
- The park was not in a safe neighborhood
- I was alone, therefore I felt unsafe
- No presence of staff
- Other trail users passed by too quickly or too close to me
- Other _____

Optional comment:



METRO PARKS COMMUNITY SURVEY

COMMUNICATION

14. How do you find out about Metro Parks' programs and events? *(Check all that apply.)*
- Parks department newsletter
 - Parks website
 - Parks social media sites
 - Friends, family or neighbors
 - Fliers at parks or park facilities
 - Newspaper advertisements
 - Radio
 - Cable/television
 - Other _____
15. What's the best way for Metro Parks to communicate with you? *(Check all that apply.)*
- Parks department newsletter
 - Parks website
 - Parks social media sites
 - Friends, family or neighbors
 - Fliers at parks or park facilities
 - Newspaper advertisements
 - Radio
 - Cable/television
 - Other _____
16. If you would like to receive more information about the park planning process, please provide your email address: _____

DEMOGRAPHICS

17. Gender
- Male
 - Female
18. What is your race or ethnic group? *(Check all that apply.)*
- White
 - African-American/black
 - Hispanic
 - Asian/Pacific Islander
 - Other _____
19. Which age group do you belong to?
- 18-34
 - 35-44
 - 45-64
 - 65-plus



METRO PARKS COMMUNITY SURVEY

20. What is your five-digit ZIP code? _____

21. If there are other comments or thoughts you would like to share, please use the space below:

8.9 FACILITY USER SURVEY: QUESTIONS



Metro Parks User Survey

Please help us evaluate Metro Parks Facilities.

The following survey will help the Parks planning team gain a better understanding of Nashvillians' opinions and needs in regard to specific Metro Parks facilities and programs, and how those needs are currently being met. Thank you for your help planning our parks!

Date: _____

Facility Name: _____

1. On average, how often do you visit this Metro Parks Facility? (Check one)

- Daily
- Weekly
- Monthly
- A few times per year
- This is my first visit

2. When you visit this facility who do you usually go with? (Check all that apply)

- Adult family member
- Child family member
- Child for whom I provide care
- Friends
- Team or league members
- I go alone

3. What activities or programs do you usually participate in while at this facility? (Check all that apply)

- Exercise/ work out
- Picnics
- Swimming/aquatics
- Playgrounds
- Golf
- Community Meetings
- Walk, hike, bike or run on trails or greenways
- Recreation sports. If yes, please name the sport(s) _____
- Programs/classes. If yes, please name the program(s) _____
- Other (If yes, please describe) _____

4. How would you rate the quality of the activities or programs that you have identified above in question #3?

- Excellent
- Good
- Average
- Not Very Good
- Not Good at all

5. How would you rate the overall quality of activities or programs offered by Metro Parks? (Check one)

- Excellent
- Good
- Average
- Not Very Good
- Not Good at all

6. Is there anything you would change about the activities or programs offered? Are there any programs you would like to see added?

7. Many Metro Parks facilities are open limited hours and only on certain days due to budget and staffing constraints. Have the current days and hours of operation limited your ability to participate in a program or your ability to use a facility?

- Yes
- No

Comment: _____

8. How do you usually get to this facility? (Check one)

- Walk
- Bike
- Drive
- Run
- Bus/Public Transit
- Other _____

9. If you drive to this facility, what are the main reasons you drive? (Check all that apply)

- No safe routes to walk or bike
- I live too far to walk or bike
- Public transit does not have access to this facility
- Driving is more convenient
- Other _____

10. Have user fees ever prohibited you from participating in a program at this facility? (Check one)

- Yes
- No

Comments: _____

11. How would you rate the facility for upkeep, maintenance, and physical appearance? (Check one)

- Excellent
- Good
- Average
- Not Very Good
- Not Good at all

12. How would you rate the customer service at this facility?

- Excellent
- Good
- Average
- Not Very Good
- Not Good at all
- Don't know

13. What do you believe are the 3 most important public services (or benefits) provided by this facility to the Nashville community? (Check up to 3.)

- Fitness, health and wellness opportunities
- A Place to meet friends/ A Place to gather and socialize
- Public Education (nature classes, homework help)
- Recreation Opportunities
- A Place to Relax
- Beauty and Inspiration
- Improves the environment
- A safe place for kids and teens
- Promoting active seniors
- A Place for Children/Teens/Adults/Seniors/ (Circle One)
- Community meeting space/rooms
- Other _____

14. If you had \$100 to spend, how would you allocate it among these Metro Parks funding needs? Note that we are not distinguishing capital and operating. They are bundled here so if you vote for greenways, those dollars could be – for example – used to maintain the existing greenways, buy new benches, or buy new land for greenways. Choices: Please indicate the dollar (\$) amount next to each item. The numbers must add up to \$100. You may leave items blank. If your numbers do not add up to \$100, your response to this question will not be counted.

- A. \$___ Athletic facilities (sports fields, tennis courts, basketball)
 - B. \$___ Arts programs and facilities
 - C. \$___ Fitness classes and workout facilities (yoga, bootcamp, Zumba)
 - D. \$___ Outdoor recreation (canoeing, mountain biking)
 - E. \$___ Natural and open space preservation
 - F. \$___ Historic resource preservation
 - G. \$___ Greenways and trails
 - H. \$___ Community centers and nature centers
 - I. \$___ Outdoor facilities (playgrounds, dog parks, picnic shelters)
 - J. \$___ Golf
 - K. \$___ Pools and spray parks (water activities)
 - L. \$___ Special events spaces (for festivals, farmers markets, concerts)
 - M. \$___ Other _____
- \$100 = TOTAL

15. Gender:

- Male
- Female

16. What is your race or ethnic group? (Check all that apply)

- White
- African-American/black
- Hispanic
- Asian-Pacific / Other
- Other

17. What is your age range?

- 18-34
- 35-44
- 45-64
- 65+

18. What is your ZIP code? _____

**This is the end of the survey.
Thank you for participating!**

8.10 GREENWAY USER SURVEY: QUESTIONS

7-19-16

Plan To Play: Greenways Survey

Metro Nashville Parks has over 80 miles of off-street paved greenways. Plan To Play, the Parks and Greenways Master Plan will be a guide for the future growth of these facilities in Nashville. Take this survey to let us know how you use Nashville's greenways and help us plan for the future.

1. **How often do you, or a member of your household, use the greenways in Nashville?**
 - Frequently (at least once a week)
 - Often (at least once a month)
 - Occasionally (a few times a year)
 - Never

2. **Please tell us all the ways you use Nashville's greenways? (Check all that apply)**
 - Exercise
 - Transportation
 - Commuting to work or school
 - Explore the city
 - Enjoy nature
 - Family outings
 - Dog walking
 - Spending time with friends

3. **Which of the following mode(s) do you, or a member of your household, use most often on Nashville's greenways? (Check all that apply)**
 - Walking
 - Running
 - Biking
 - In-line skating
 - Other

4. **If more greenways connected to public transit stops, how likely would you be to use a combination of cycling or walking plus public transit for transportation?**
 - Very likely
 - Somewhat likely
 - Not likely
 - I would not use public transit, even with better connections

5. **Are there obstacles that limit or prohibit you, or a member of your household, from using greenways for transportation?**
 - Yes (if yes, go to 4b)
 - No
 - 5b. **If you answered yes to question 4, what are the obstacles that limit or prohibit you, or a member of your household, from using greenways for transportation?**
 - Weather
 - Steep hills
 - There is not a greenway close to my house

- Lack of sidewalks and/or bikeways to get to a greenway
- Lack of bike stations/racks/showers at my destination
- There is not a greenway route to where I need to go
- Disability/medical condition
- Other _____

6. Please rank the following amenities in order of importance to you, with 1 being the most important. If the amenity is not important to you, you may leave it blank.

- ___ Benches and/or rest areas
- ___ Trashcans
- ___ Restrooms
- ___ Water fountains
- ___ Bike fixit stations
- ___ Exercise stations
- ___ Other _____

7. Do you or a member of your household use greenways to walk or bike to school?

- Yes
- No (go to 7b)

7b. Would you or a member of your household use greenways to walk or bike to school if more connections were available?

- Yes
- No

8. If Metro Parks were able to offer more programming on greenways, what type of programming would you, or a member of your household, participate in? (Check all that apply)

- Fitness/health programs
- History walks
- Nature/Environmental walks
- Organized bike rides
- Organized walking or running groups
- I don't think we need more programming on greenways

9. Have you ever felt unsafe on a Nashville/Davidson County greenway?

- Yes (go to 9b)
- No

9b. If yes, why? (Check all that apply.)

- Poor lighting
- Dog conflicts
- Vandalism
- Bike/Pedestrian conflicts
- I was alone, therefore I felt unsafe
- Other _____

10. How do you, or members of your household, learn about Nashville's greenways? (Check all that apply)

- Trailhead kiosks
- Greenways signage on roads
- Metro Parks' website: nashville.gov/parks
- Greenways for Nashville's website: greenwaysfornashville.org
- Printed maps
- Online maps
- Nash Vitality app.
- Parks or Greenways for Nashville social media sites
- Friends, family or neighbors
- Other _____

11. Which of the following greenway rules are you aware of? (Check all that apply)

- 15 mph speed limit for bikes
- Audible signal when passing
- Dogs on 6-foot leash
- Scoop the poop
- Walkers stay to the right/no more than two across

DEMOGRAPHICS

10. Gender

- Male
- Female

11. What is your race or ethnic group? (Check all that apply.)

- White
- African-American/black
- Hispanic
- Asian/Pacific Islander
- Other _____

12. Which age group do you fall into?

- 18-34
- 35-44
- 45-64
- 65-plus

13. What is your five-digit ZIP code?



8.11 BENCHMARK REPORT

CHAPTER ONE - BENCHMARK ANALYSIS

1.1 INTRODUCTION

PROS Consulting, in collaboration with Nashville Metro Parks, identified operating metrics to be benchmarked against comparable industry-leading park and recreation systems across the country. This analysis aims to provide a direct comparison of peer agencies through a methodology of statistics and ratios to deliver objective information that is relevant and accurate, as best as possible.

It must be noted that the benchmark analysis is only an indicator based on the information provided; however, the consulting team and Nashville Metro Parks made every effort to obtain the most credible information and organize the data in a consistent and comparable format. The information sought was a combination of operating metrics and information on budgets, staffing, and inventories.

This benchmark analysis incorporates a mix of county systems and special districts that are industry leaders, which include the following agencies:

Agency	State	Jurisdiction Population	Jurisdiction Size (sq. mi.)	Population per Square Mile	NRPA Gold Medal Award (Since 2000)	CAPRA Accredited (Year)
Nashville	TN	660,836	526	1,256	-	No
Austin	TX	912,791	298	3,063	2004	2007
Charlotte / Mecklenburg County	NC	1,012,539	524	1,932	2012	2009
Denver	CO	663,862	153	4,339	-	No
Louisville	KY	760,026	365	2,082	-	2007
Portland	OR	619,360	133	4,657	2011	No

Due to difference in how each system collects, maintains, and reports data, variances may exist. These variations have an impact on the per capita and percentage allocations examined; hence, the overall comparison must be viewed with this in mind. Data utilized in the benchmark analysis was primarily sourced from The Trust for Public Land (TPL), then supplemented by information available through the National Recreation and Park Association’s (NRPA) PRORAGIS Database, existing master plans, and official city websites, as necessary, to accurately represent each agency. Also, there may be some instances where the data provided by the benchmarked systems was incomplete or unavailable; therefore, any deviation from information provided by TPL is expressed by footnotes in the related data tables throughout the report.

The benchmark data collection for all systems was obtained by June of 2016. While it is possible that there may have been changes or updates in the data provided, to ensure consistency only the original figures obtained at that time have been used in the benchmark. The goal is to evaluate how Nashville Metro Parks is positioned among peer agencies as it applies to efficiency and effectiveness practices through data that offers an encompassing view of each system’s operations.

1.2 BENCHMARK COMPARISON

1.2.1 SYSTEM ACREAGE

This section provides a general overview of each system within the benchmark analysis. The table below describes the total acreage for each system then compares the percentage of developed acres and the total acreage per 1,000 residents.

The typical acreage for benchmark agencies is around 10-20 thousand acres, and Nashville's 15,000+ acres falls near the middle of the study. In terms of total acreage per 1,000 residents, Nashville ranks second among benchmark agencies with nearly 23 acres per 1,000. Although Denver's service level for acres per capita is well in excess of the other agencies, this is due largely to the inclusion of over 14,000 acres of mountain parks in its inventory. Nashville is well ahead of the curve nationwide, as it provides residents with more than double the national median acreage (9.5 acres per 1,000) for all agencies reporting figures to the NRPA database.

Agency	Jurisdiction Population	Total Acres Owned or Managed	Total Developed Acres	Percentage of Developed Acres	Total Acres per 1,000 Residents
Denver*	663,862	20,420	5,970	29%	30.76
Nashville*	660,836	15,089	5,540	37%	22.83
Austin	912,791	19,391	8,981	46%	21.24
Charlotte / Mecklenburg County	1,012,539	21,293	2,612	12%	21.03
Portland	619,360	11,697	3,539	30%	18.89
Louisville	760,026	12,974	4,977	40%	17.07

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

1.2.2 TRAIL MILES

The table below describes the total trail miles in each park system and compares the number of trail miles to the population of each jurisdiction. Nashville ranks near the top among peer agencies for total trail miles and trail miles per 1,000 residents. Again, the Department is providing a superb level of service for trails, as best practice agencies typically offer between 0.25-0.5 miles of trail per 1,000 residents.

Agency	Jurisdiction Population	Total Trail Miles	Total Trail Miles per 1,000 Residents
Denver*	663,862	284	0.43
Nashville*	660,836	208	0.31
Portland	619,360	152	0.25
Austin	912,791	212	0.23
Charlotte / Mecklenburg County	1,012,539	187	0.18
Louisville	760,026	120	0.16

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

1.2.3 OPERATIONAL EXPENDITURES AND REVENUE GENERATION

This portion covers the annual operational expenditures, earned income, and cost recovery levels. Budget items in this section include the most recent figures. Non-tax revenues and operating expenses are compared to the population of each jurisdiction to determine the revenue / cost per capita. Dividing total non-tax revenue by total operating expense arrives at the operational cost recovery. Cost recovery is a critical performance indicator that measures how well each department’s revenue generation covers the total operating costs.

OPERATING EXPENSE PER CAPITA

Based on expenditure figures, Nashville operates on the second smallest budget among benchmark agencies. In comparison, Nashville ranks near the middle for operating expense per capita, with just over \$50 spent on operations per resident annually.

Agency	Jurisdiction Population	Total Operating Expense	Operating Expense per Capita
Portland	619,360	\$ 82,817,798	\$ 133.72
Denver*	663,862	\$ 56,511,470	\$ 85.13
Austin	912,791	\$ 56,993,543	\$ 62.44
Nashville*	660,836	\$ 33,441,918	\$ 50.61
Charlotte / Mecklenburg County	1,012,539	\$ 35,818,368	\$ 35.37
Louisville	760,026	\$ 21,900,474	\$ 28.82

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

NON-TAX REVENUE PER CAPITA

Nashville ranks second in the benchmark study for both total revenue and revenue per capita, with earned income of \$12 million in total, which amounts to \$18 in revenue generation per resident. These figures highlight the earning capability of Nashville as a strength, which contributes to the overall sustainability of the Department.

Agency	Jurisdiction Population	Total Non-Tax Revenue	Revenue per Capita
Portland	619,360	\$ 28,703,839	\$ 46.34
Nashville*	660,836	\$ 12,122,960	\$ 18.34
Louisville	760,026	\$ 10,400,471	\$ 13.68
Denver*	663,862	\$ 7,295,500	\$ 10.99
Austin	912,791	\$ 4,002,170	\$ 4.38
Charlotte / Mecklenburg County	1,012,539	\$ 2,442,614	\$ 2.41

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

OPERATIONAL COST RECOVERY

Assessing its operating cost recovery, Nashville ranks second among peer agencies, as its 36% trails only Louisville in the study. According to the NRPA, Nashville’s level of sustainability is above the national median cost recovery level of 29%, which points to efficient operations paired with effective revenue generation.

Agency	Total Non-Tax Revenue	Total Operating Expense	Operating Cost Recovery
Louisville	\$ 10,400,471	\$ 21,900,474	47%
Nashville*	\$ 12,122,960	\$ 33,441,918	36%
Portland	\$ 28,703,839	\$ 82,817,798	35%
Denver*	\$ 7,295,500	\$ 56,511,470	13%
Austin	\$ 4,002,170	\$ 56,993,543	7%
Charlotte / Mecklenburg County	\$ 2,442,614	\$ 35,818,368	7%

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

1.2.4 OPERATING COST PER ACRE

The chart below compares the total operating expense to the total acreage for each agency. This comparison provides a high-level understanding of each department’s cost to maintain and operate each acre.

Compared to peer agencies, Nashville has a low operating expense per acre. Although this demonstrates the operational efficiency of the Department, the relatively low price per acre may also be indicative of lower maintenance levels and/or limited offerings in comparison to other benchmark agencies. The Department’s minimal expense per acre can be partially attributed to the inherently low cost to maintain its undeveloped parkland, as over 60% of the system’s total acreage being undeveloped. Top-line findings from the NRPA database reflect a national median of \$6,476 per park acre managed among all reporting agencies.

Agency	Total Acres	Total Operating Expense	Operating Expense per Acre
Portland	11,697	\$ 82,817,798	\$ 7,080
Austin	19,391	\$ 56,993,543	\$ 2,939
Denver*	20,420	\$ 56,511,470	\$ 2,767
Nashville*	15,089	\$ 33,441,918	\$ 2,216
Louisville	12,974	\$ 21,900,474	\$ 1,688
Charlotte / Mecklenburg County	21,293	\$ 35,818,368	\$ 1,682

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

1.2.5 OPERATING REVENUE RETAINED BY AGENCY

Nashville’s current business model returns all earned revenues back to the general fund for appropriation. To develop an understanding of how other agencies manage their revenues, this section quantifies the total dollars retained by each agency, then expresses this amount as a percent of total operating revenues. As evidenced by the table below, all other peer agencies in the benchmark study retain some portion of their total operating revenues, perhaps through an enterprise fund. This might suggest that Nashville could establish a similar fund to capture a percentage of revenues and allow for more discretionary spending by the Department. Enterprise funds can aid an agency in determining total cost of providing services and assist with implementing capital improvements.

Agency	Fees Kept by Agency	Non-Tax Revenue	Fees Kept as % of Non-Tax Revenue
Portland	\$ 26,768,718	\$ 28,703,839	93%
Charlotte / Mecklenburg County	\$ 1,631,000	\$ 2,442,614	67%
Denver	\$ 11,095,320	\$ 17,561,412	63%
Louisville	\$ 5,722,986	\$ 10,400,471	55%
Austin	\$ 2,166,170	\$ 4,002,170	54%
Nashville*	\$ -	\$ 12,122,960	0%

*Figures adjusted from information provided by TPL for Nashville based on internal data.

1.2.6 CAPITAL SPENDING

The table below describes the total capital spending for each agency based on figures from the most recent year, then compares it to the total population served. Nashville is the clear benchmark leader in terms of capital spending, both overall and per capita. While this demonstrates a strong commitment to the future of the city’s parks system, this level of capital spending also requires careful planning and management of resources to ensure effective operation and adequate maintenance of future assets.

Agency	Jurisdiction Population	Total Capital Spending	Capital Spending per Capita
Nashville*	660,836	\$ 35,488,720	\$ 53.70
Denver*	663,862	\$ 23,370,519	\$ 35.20
Austin	912,791	\$ 22,645,132	\$ 24.81
Portland	619,360	\$ 8,516,570	\$ 13.75
Charlotte / Mecklenburg County*	1,012,539	\$ 7,600,000	\$ 7.51
Louisville	760,026	\$ 4,141,951	\$ 5.45

*Figures adjusted from information provided by TPL for Nashville, Denver, and Charlotte / Mecklenburg Co based on internal data.

1.2.7 MARKETING BUDGET

This section reveals the total marketing budget for each system, then compares this figure to the total staff dedicated to marketing and to the total operational budget for each. Nashville ranks last and second to last, respectively, among benchmark agencies for marketing FTEs and annual marketing budget. Nashville’s relatively low spending on marketing per dedicated FTE would indicate that the Department could expend even more marketing dollars without additional human resources. The Department also falls near the bottom of peer agencies for its ratio of marketing to operational expenditures, as it only spends 0.3% of its total operations on marketing efforts.

Agency	Annual Marketing Budget	Total Marketing FTEs	Marketing Budget per Dedicated FTE	Marketing Budget as Percent of Total Operational Expense
Austin	\$ 598,060	4	\$ 149,515	1.05%
Denver*	\$ 392,000	3	\$ 130,667	0.69%
Portland	\$ 400,000	3	\$ 123,077	0.48%
Nashville*	\$ 99,258	1	\$ 99,258	0.30%
Louisville	\$ 27,000	2	\$ 13,500	0.12%

*Figures adjusted from information provided by TPL for Nashville and Denver based on internal data.

Note: Charlotte/Mecklenburg Co budget and staffing levels for marketing were unavailable.

1.2.8 FULL-TIME EQUIVALENTS (FTEs) AND VOLUNTEERS

This section compares levels of staffing for each system by comparing full-time equivalents (FTEs) to the total population and quantifying the volunteer contribution for each.

FTEs PER 10,000 RESIDENTS

Total FTEs per 10,000 residents is a key performance indicator that measures each agency’s ability to meet the demand of its service area. When comparing staffing levels to the overall population of each service area, Nashville’s ratio ranks second among benchmark cities, with 7.51 FTEs per 10,000 residents. Nashville’s service coverage is also above the national median for parks and recreation agencies (7.4 FTEs per 10,000) and all agencies serving populations of 250,000+ (3.9 FTEs per 10,000), as gleaned from the NRPA database. This level of staffing would indicate the Department is well-equipped, in terms of human resources, to operate at a high level.

Agency	Total FTEs	Jurisdiction Population	FTEs per 10,000 Residents
Portland	489	619,360	7.90
Nashville*	496	660,836	7.51
Austin	648	912,791	7.10
Denver	471	663,862	7.09
Louisville	350	760,026	4.61
Charlotte / Mecklenburg County*	435	1,012,539	4.30

*Figures adjusted from information provided by TPL for Nashville and Charlotte/Mecklenburg Co based on internal data.

VOLUNTEER CONTRIBUTIONS

The table below describes staffing levels for payroll employees and volunteers, then calculates volunteer hours as a percentage of the total hours worked by staff. Overlooking Portland as an outlier, Nashville represents the median value (6%) among peer systems for percentage of volunteer hours to staff hours.

Agency	Total FTEs	Total Staff Hours	Total Volunteer Hours	Volunteer Hours as % of Staff Hours
Portland	489	1,017,120	471,638	46%
Charlotte / Mecklenburg County*	435	904,800	81,183	9%
Louisville	350	728,000	57,688	8%
Nashville*	496	1,031,449	61,118	6%
Denver	471	979,680	49,440	5%
Austin	648	1,347,840	42,664	3%

*Figures adjusted from information provided by TPL for Nashville and Charlotte/Mecklenburg Co based on internal data.

1.2.9 LEVEL OF SERVICE FOR KEY AMENITIES

This portion of the benchmark study establishes and compares the level of service for key amenities within each benchmark community. The inventory for each amenity is compared to the population for each city to arrive at the current level of service for a given amenity. Inventory counts of amenities used for this portion of the analysis were sourced through direct contact, and/or available documents, with each individual agency.

RESIDENTS SERVED PER BALL DIAMOND

The table below shows the current inventory of ball diamonds for each city, then establishes the number residents served per ball diamond. Nashville falls just above the benchmark median, with a level of service of 7,775 residents per ball diamond. The recommended level of service for ball diamonds is 12,000 residents per adult field and 10,000 residents per youth field.

Agency	Jurisdiction Population	Ball Diamonds	Residents Served per Diamond
Denver	663,862	137	4,846
Portland	619,360	123	5,035
Nashville	660,836	85	7,775
Charlotte / Mecklenburg County	1,012,539	109	9,289
Louisville	760,026	80	9,500
Austin	912,791	70	13,040

RESIDENTS SERVED PER MULTI-PURPOSE FIELD

Below is the total count of rectangular play fields for each system, which are then compared to each jurisdiction's population. Nashville ranks near the bottom among peer agencies, with a level of service of nearly 8,000 residents per rectangular field. The recommended level of service for rectangular fields is 8,000 residents per soccer field and 15,000 residents per multi-purpose field.

Agency	Jurisdiction Population	Rectangular Fields	Residents Served per Field
Denver	663,862	191	3,476
Portland	619,360	111	5,580
Louisville	760,026	135	5,630
Charlotte / Mecklenburg County	1,012,539	129	7,849
Nashville	660,836	83	7,962
Austin	912,791	102	8,949

RESIDENTS SERVED PER TENNIS COURT

Assessing the level of service for tennis courts for each system, Nashville emerges as a benchmark leader, serving around 4,500 residents per tennis court. Nashville's current level of service mirrors the recommended level of 4,495 residents served per tennis court.

Agency	Jurisdiction Population	Tennis Courts	Residents Served per Court
Denver	663,862	148	4,486
Nashville	660,836	147	4,495
Louisville	760,026	160	4,750
Portland	619,360	123	5,035
Charlotte / Mecklenburg County	1,012,539	149	6,796
Austin	912,791	124	7,361

RESIDENTS SERVED PER PLAYGROUND

When comparing total number of playgrounds each population, Nashville stands out as the benchmark leader with more than 4,236 residents served per playground. This is promising considering that providing recreational opportunities for youth is central to the overall mission of parks and recreation departments. The recommended level of service is 5,000 residents served per playground.

Agency	Jurisdiction Population	Playgrounds	Residents Served per Playground
Nashville	660,836	156	4,236
Denver	663,862	155	4,283
Louisville	760,026	165	4,606
Portland	619,360	128	4,839
Charlotte / Mecklenburg County	1,012,539	193	5,246
Austin	912,791	147	6,209

SQUARE FOOTAGE OF INDOOR FACILITIES PER CAPITA

In general, indoor recreation spaces, such as recreation centers and aquatic facilities, are very desirable amenities among residents. Compared to peer agencies, Nashville is providing an excellent level of service for recreation centers, ranking first among benchmark agencies with 1.38 square feet of indoor recreation space per resident. This level of service falls just below the recommended 1.5-2.0 square feet per resident, which is generally accepted as best practice.

Agency	Jurisdiction Population	Total Square Footage of Indoor Facilities	Indoor Facility Square Feet per Capita
Nashville	660,836	913,262	1.38
Denver	663,862	627,651	0.95
Austin	912,791	592,927	0.65
Charlotte / Mecklenburg County	1,012,539	536,445	0.53
Louisville	760,026	219,781	0.29

*Square footage figures for Portland were unavailable.

RESIDENTS SERVED PER DOG PARK

Dog parks are a trending amenity in communities across the country, and parks and recreation agencies are seeing a high return on investment from these types of attractions, in terms of overall satisfaction of users. Nashville’s nine dog parks rank it just above the benchmark median, with a level of service of 73,426 residents served per dog park. The recommended level of service is 50,000 residents served per dog park.

Agency	Jurisdiction Population	Dog Parks	Residents Served per Dog Park
Portland	619,360	33	18,768
Denver	663,862	10	66,386
Nashville	660,836	9	73,426
Austin	912,791	12	76,066
Louisville	760,026	5	152,005
Charlotte / Mecklenburg County	1,012,539	6	168,757

1.3 2016 NRPA FIELD REPORT COMPARISON

The following chart compares a variety of metrics for Nashville against the national averages found in the 2016 NRPA Field Report. This report is based data collected for the NRPA PRORAGIS database of parks and recreation agencies across the country. Nashville’s metrics are pitted against the median figures for all agencies in the database, as well as against agencies with a jurisdiction population of more than 250,000 residents.

The table below describes how far above or below Nashville is from the median, which is denoted by the variance column for each point of comparison. Figures shaded in green represent performance in excess of the median, while those in red signal results that fall below the median. The information in two columns on the far right are the most illustrative because they focus on larger agencies. However, even these agencies are not necessarily comparable to Nashville Metro Parks because the majority are city-based agencies and not consolidated city-county agencies, which can provide a greater array of services and often serve a much larger geography.

Nevertheless, it’s worth noting that when compared to other agencies with populations of 250,000 or more residents, Nashville has is excelling in the following performance indicators: (a) acres per 1,000 residents, (b) non-tax revenue per capita, (c) operating expenses per capita, (d) operating cost recovery, and (e) full time equivalents (FTEs) per capita. Nashville also boasts a significantly larger annual capital budget than the average, while its operating expense per acre is well below the median among large park agencies.

Key Performance Indicator	Nashville	NRPA Median for All Agencies	Variance	NRPA Median for Agencies with 250,000+ Residents	Variance
Acres per 1,000 residents	22.83	9.5	13.33	12.5	10.33
Non-Tax Revenue per Capita	\$ 18.34	\$ 18.22	0.12	\$ 9.04	\$ 9.30
Annual Operating Expenditures	\$ 33,441,918	\$ 3,459,846	\$29,982,072	\$ 23,588,261	\$ 9,853,657
Operating Expense per Capita	\$ 50.61	\$ 76.44	\$ (25.83)	\$ 42.69	\$ 7.92
Operating Expense per Acre	\$ 2,216	\$ 6,476	\$ (4,259)	\$ 3,533	\$ (1,316)
Operating Cost Recovery Level	36%	29%	7%	29%	8%
Current Capital Budget	\$ 33,500,000	\$ 506,064	\$32,993,936	\$ 5,000,000	\$28,500,000
Total FTEs	496	33	463	229.6	266.4
Total FTEs per 10,000 Residents	7.51	7.4	0.11	3.9	3.61

8.12 LEVEL OF SERVICE MAPS

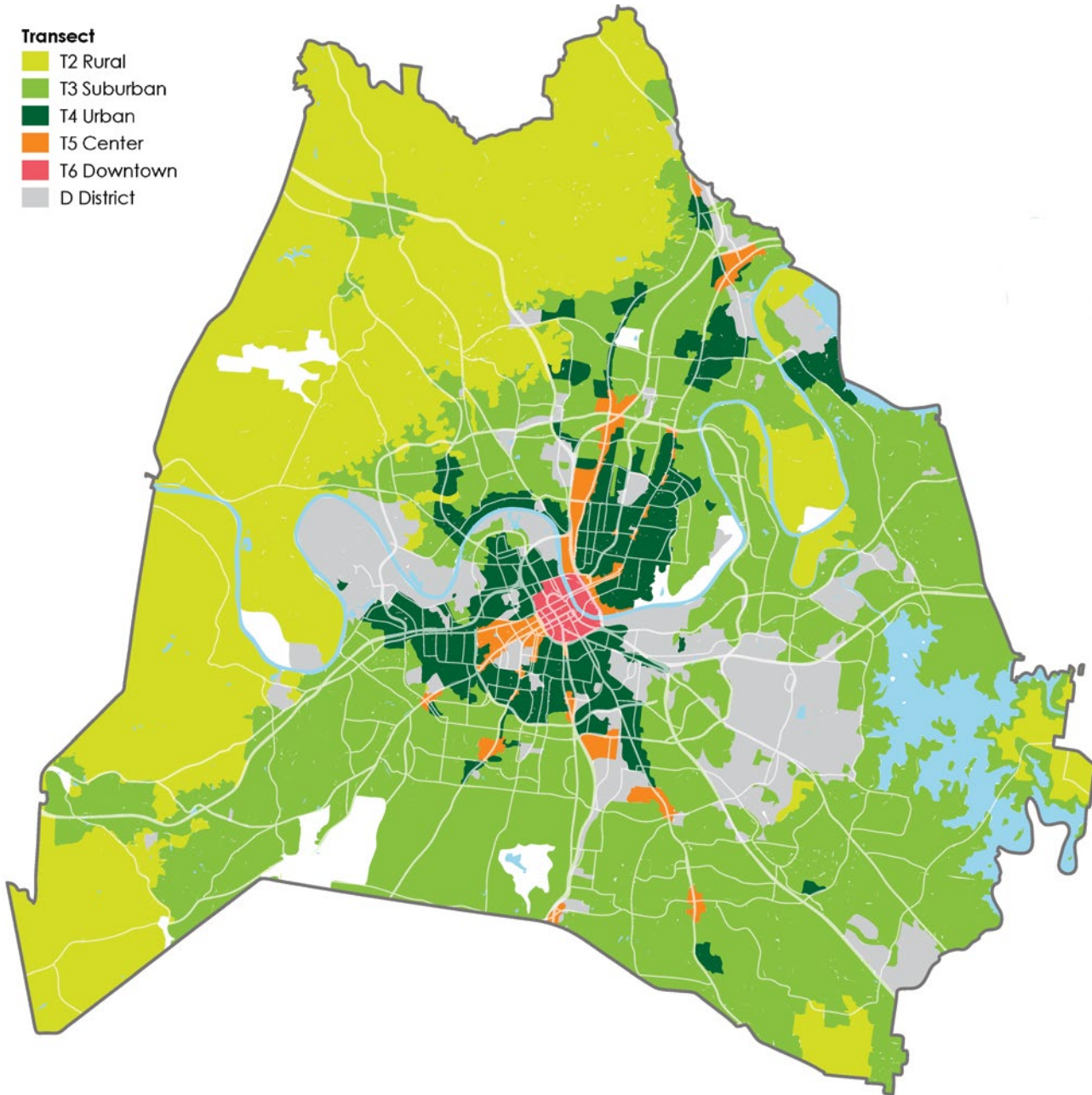


Figure 8-1 NashvilleNext Transect Map

Level of Service Coverage

- Pocket Park
- Neighborhood Park
- Community Park

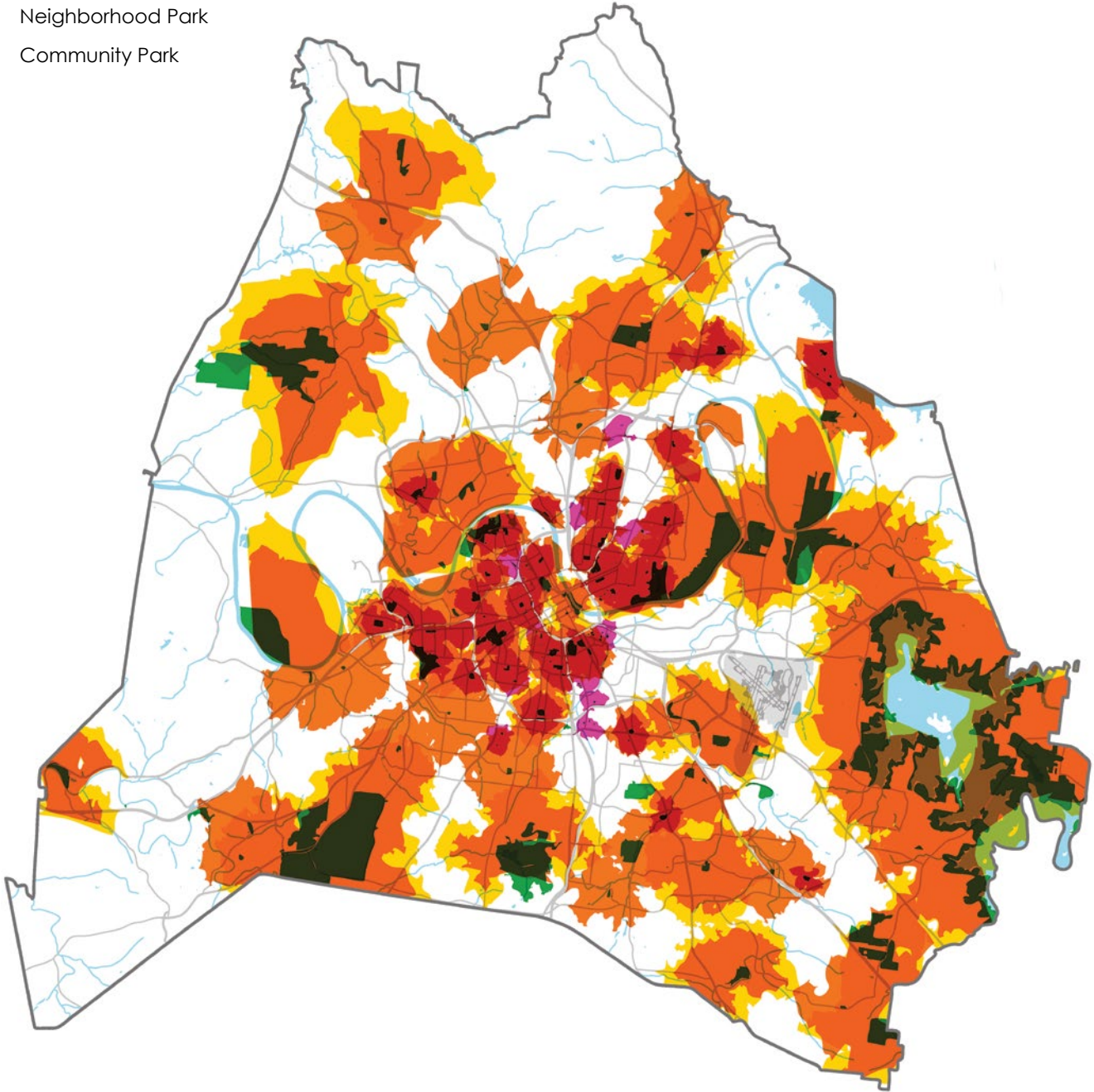
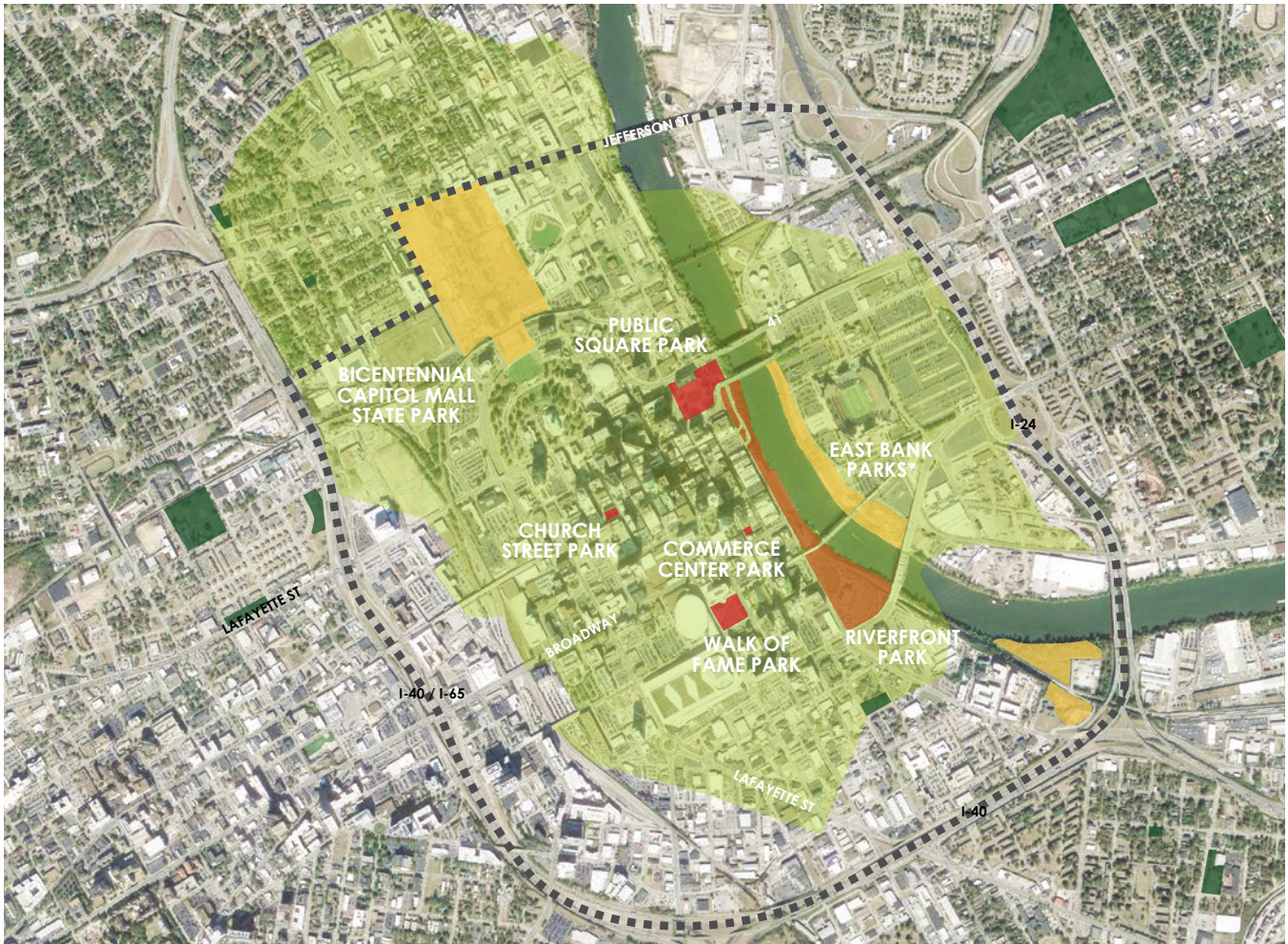


Figure 8-2 Combined Level of Service Areas for Parks (Excluding Regional Park Level of Service)

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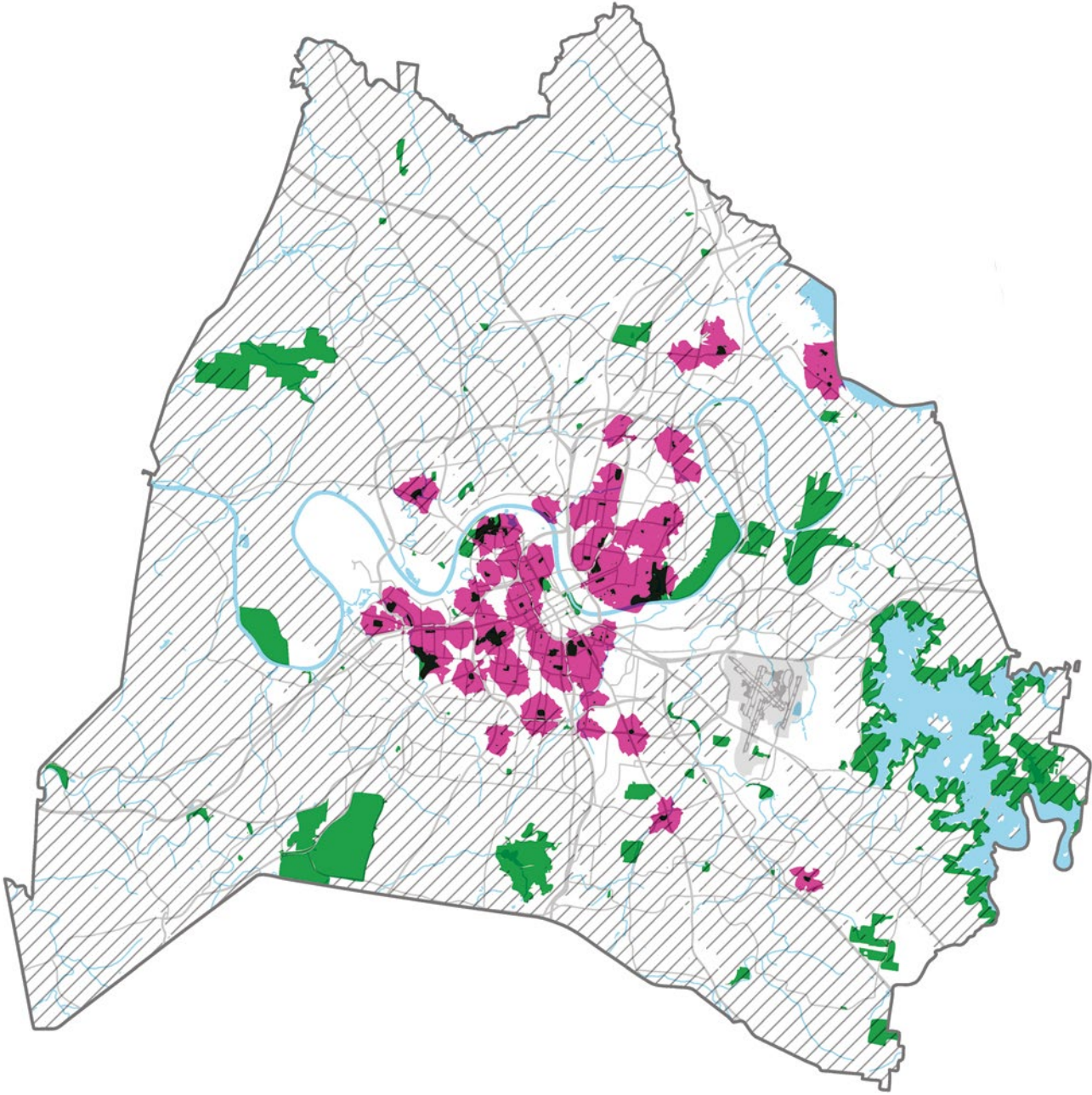


PARK PRESSURE

- VERY HIGH
- HIGH
- MODERATE
- DOWNTOWN PARK SERVICE AREA
- OTHER PARK
- DOWNTOWN (T6) TRANSECT BOUNDARY

THIS MAP SHOWS THE LEVEL OF PARK PRESSURE ON DOWNTOWN PARKS WITHIN THE NASHVILLE NEXT DOWNTOWN (T6) TRANSECT. THE PARK PRESSURE ANALYSIS LOOKS AT PARK ACRES PER 1,000 RESIDENTS LIVING WITHIN A HALF-MILE (10-MINUTE WALK) SERVICE AREA OF EACH PARK. THE SERVICE AREAS ARE BASED ON A DYNAMIC ANALYSIS APPROACH USING A WALKABLE ROAD NETWORK THAT REMOVES INTERSTATES, HIGHWAYS, RIVERS, AND RAILROADS TO DETERMINE HOW AN INDIVIDUAL WOULD WALK TO EACH PARK.

Figure 8-3 Downtown Park Pressure Map

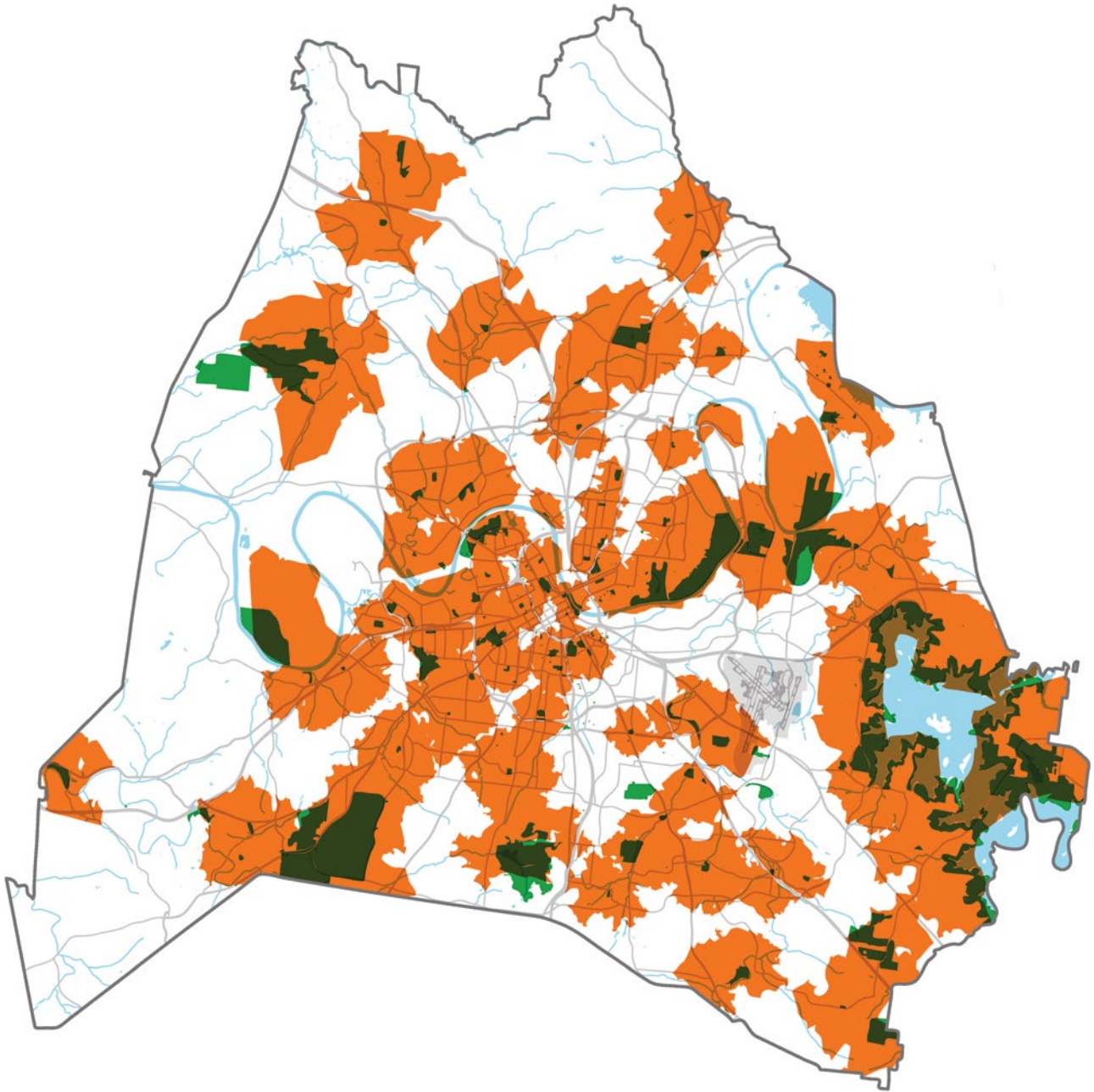


TRANSECT	LOS RADIUS
Rural T2	n/a
Suburban T3	n/a
Urban T4	0.5 miles
Centers T5	0.33 miles
Downtown T6	0.25 miles

The pocket parks analysis includes pocket, neighborhood, community, regional, and signature parks. The pocket park analysis did not include service for the rural (T2) or suburban (T3) transects, indicated in the cross hatching, because Metro focuses on providing pocket parks in more densely populated areas of the city.

Figure 8-4 Pocket Park Level of Service Areas

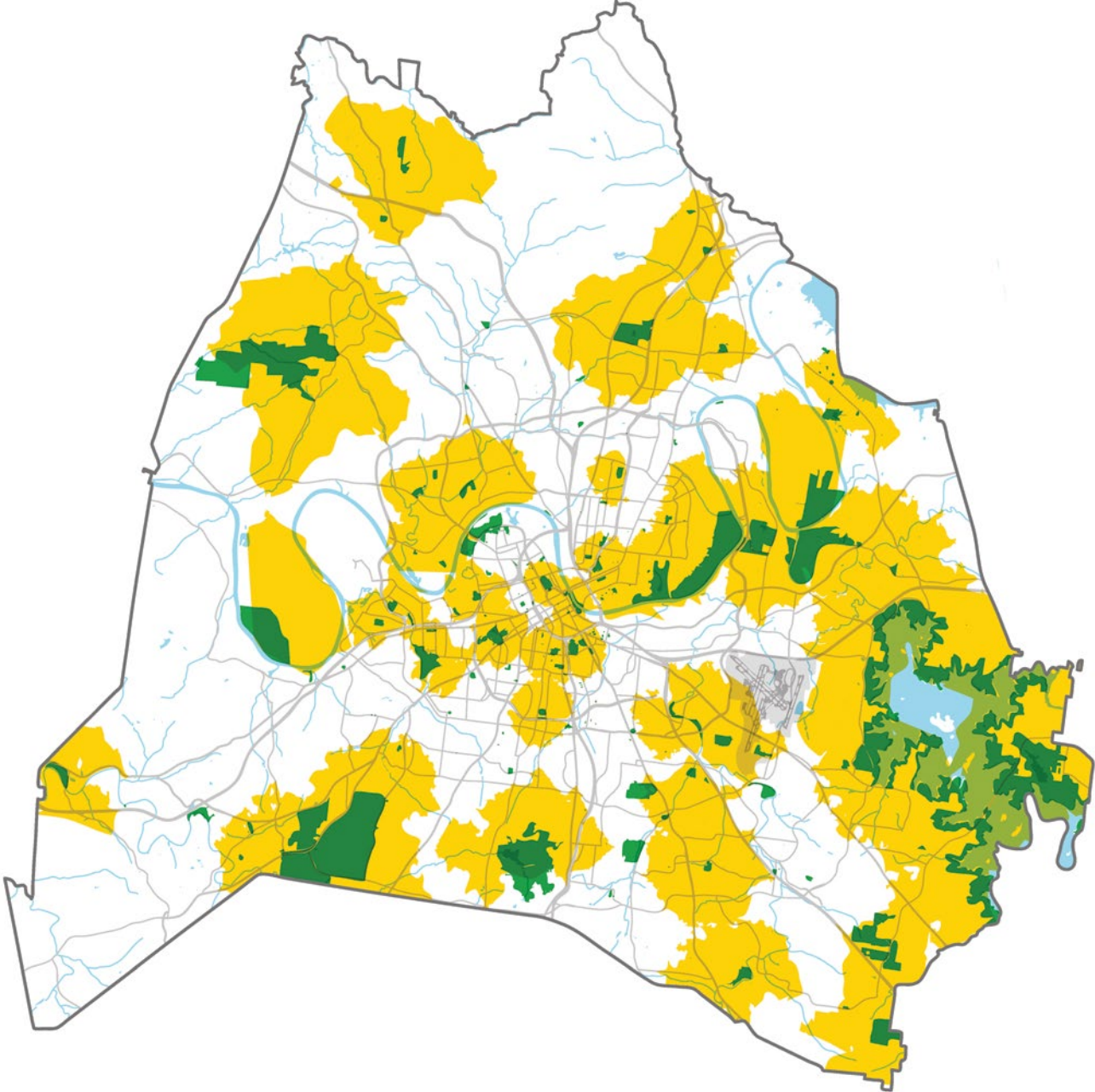
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TRANSECT	LOS RADIUS
Rural T2	2 miles
Suburban T3	1.5 miles
Urban T4	0.75 miles
Centers T5	0.5 miles
Downtown T6	0.33 miles

The pocket parks analysis includes pocket, neighborhood, community, regional, and signature parks. The pocket park analysis did not include service for the rural (T2) or suburban (T3) transects, indicated in the cross hatching, because Metro focuses on providing pocket parks in more densely populated areas of the city.

Figure 8-5 Neighborhood Park Level of Service Areas

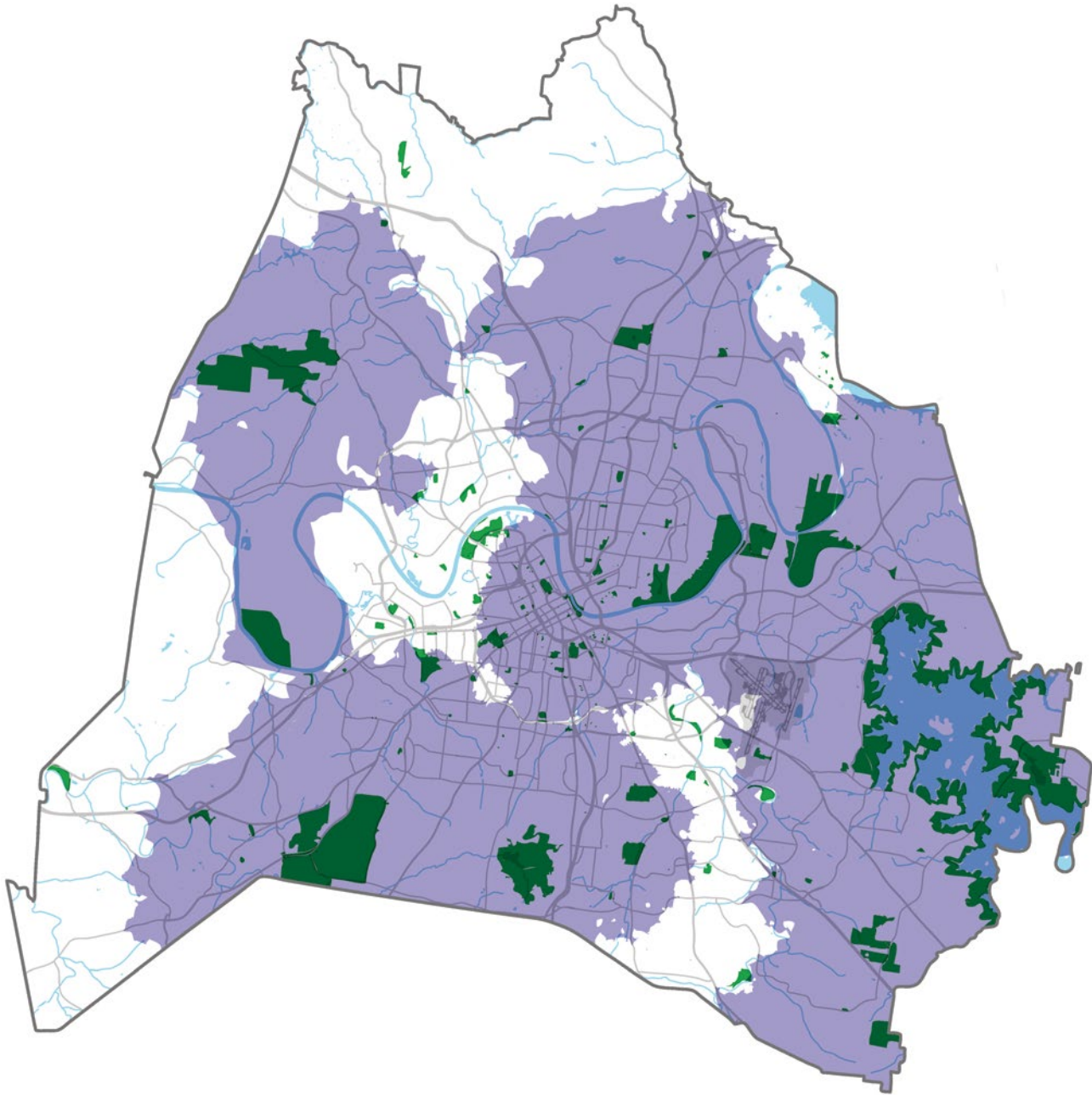


TRANSECT	LOS RADIUS
Rural T2	3 miles
Suburban T3	2 miles
Urban T4	1 mile
Centers T5	0.75 miles
Downtown T6	0.5 miles

The community parks analysis includes community, signature, and regional parks.

Figure 8-6 Community Park Level of Service Areas

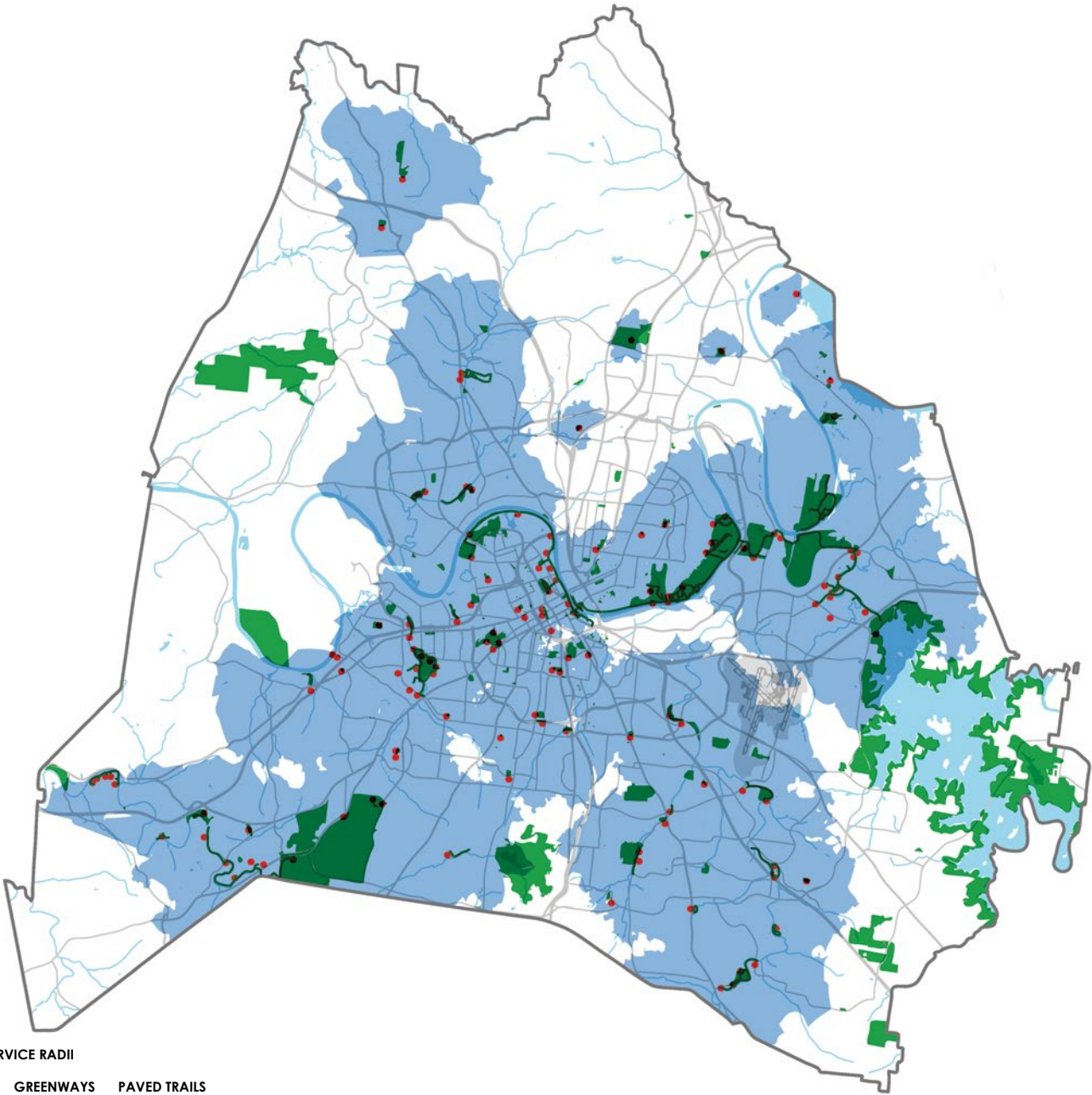
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TRANSECT	LOS RADIUS
Rural T2	5 miles
Suburban T3	5 miles
Urban T4	5 miles
Centers T5	5 miles
Downtown T6	5 miles

The regional park analysis included all parks classified by Metro Parks as regional parks as well as all state and federal parks inside county boundaries. A 5-mile travel radius was used for regional parks for all transects. We acknowledge that regional park locations are based on unique landscape features, and therefore cannot be placed “on a grid.” Regional parks are each a unique destination and everyone should be able to access them. One regional park, Southeast Property, was included in our analysis that is not yet open to the public.

Figure 8-7 Regional Park Level of Service Areas

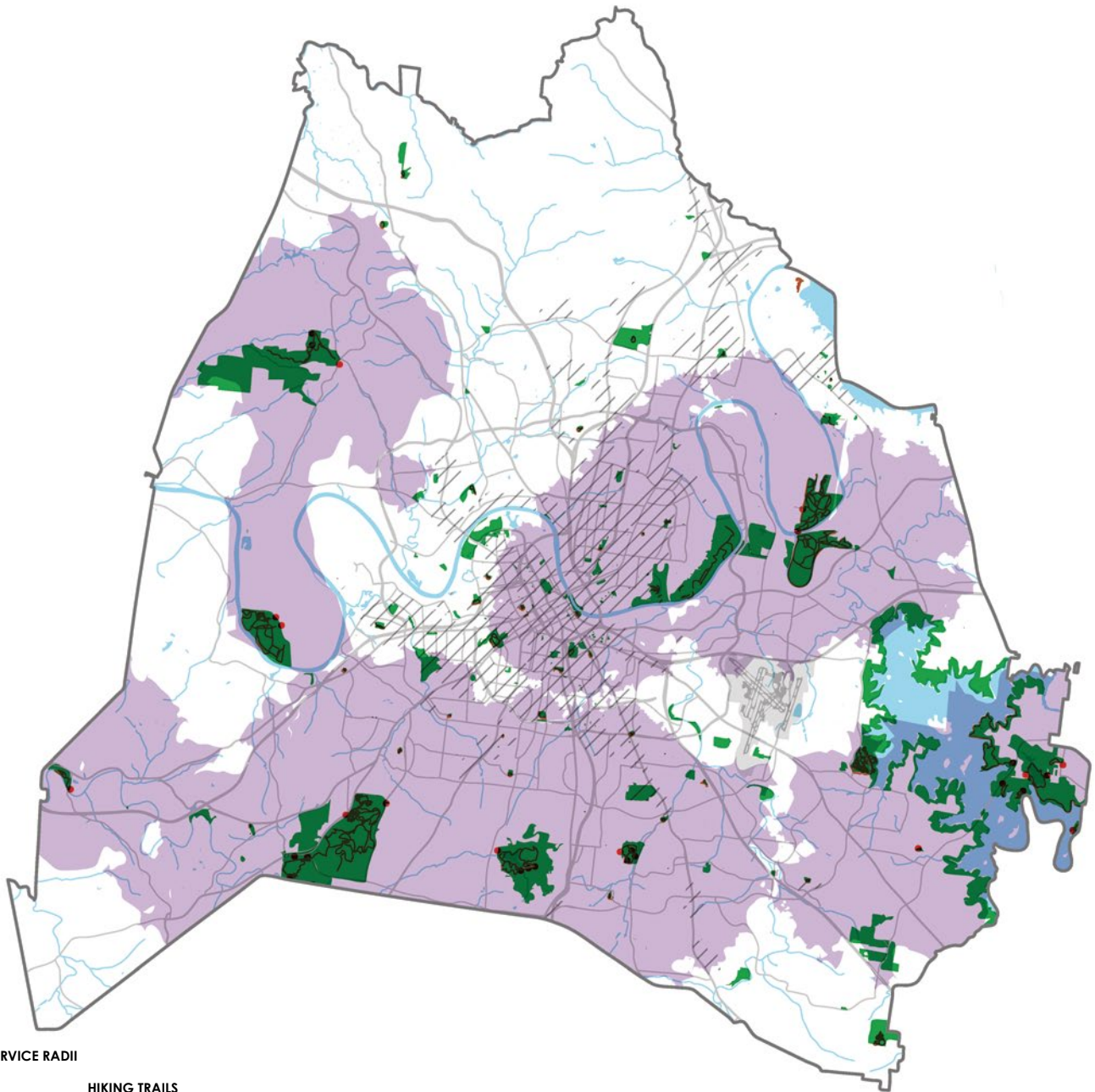


LEVEL OF SERVICE RADII

TRANSECT	GREENWAYS	PAVED TRAILS
Rural T2	3 miles	1.5 miles
Suburban T3	3 miles	1 mile
Urban T4	1 mile	0.75 miles
Centers T5	0.5 miles	0.5 miles
Dtown T6	0.5 miles	0.5 miles

Figure 8-8 Greenway: Paved Trail Level of Service

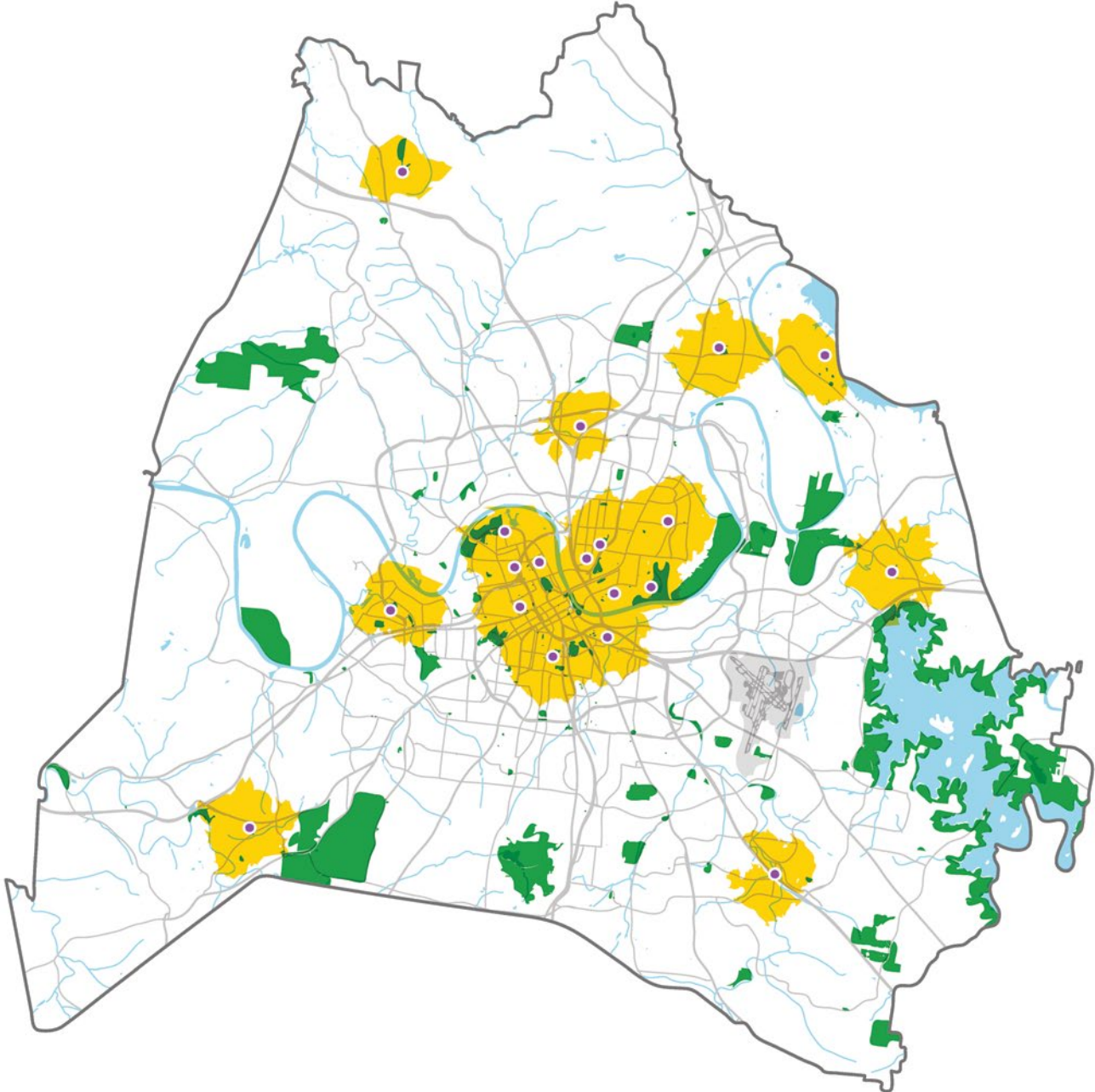
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LEVEL OF SERVICE RADII

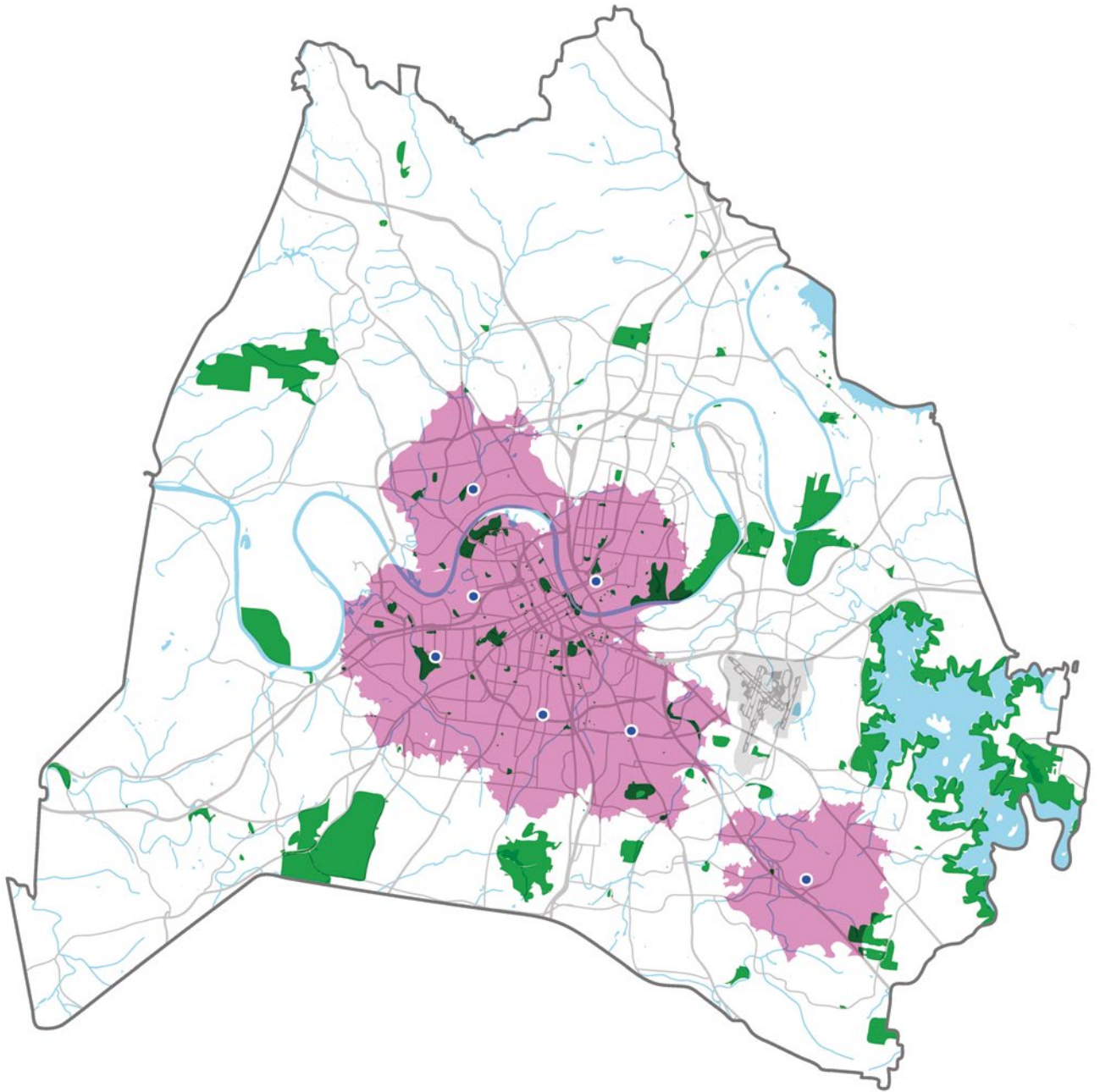
TRANSECT	HIKING TRAILS
Rural T2	5 miles
Suburban T3	5 miles
Urban T4	n/a miles
Centers T5	n/a miles
Downtown T6	n/a miles

Figure 8-9 Greenway: Unpaved Trails Level of Service



- LEGEND**
- Community Center
 - Neighborhood Community Center Service Area (1.5-mile radius)

Figure 8-10 Neighborhood Community Center Level of Service



LEGEND

- Regional Community Center
- Regional Community Center Service Area (3-mile radius)

Figure 8-11 Regional Community Center Level of Service

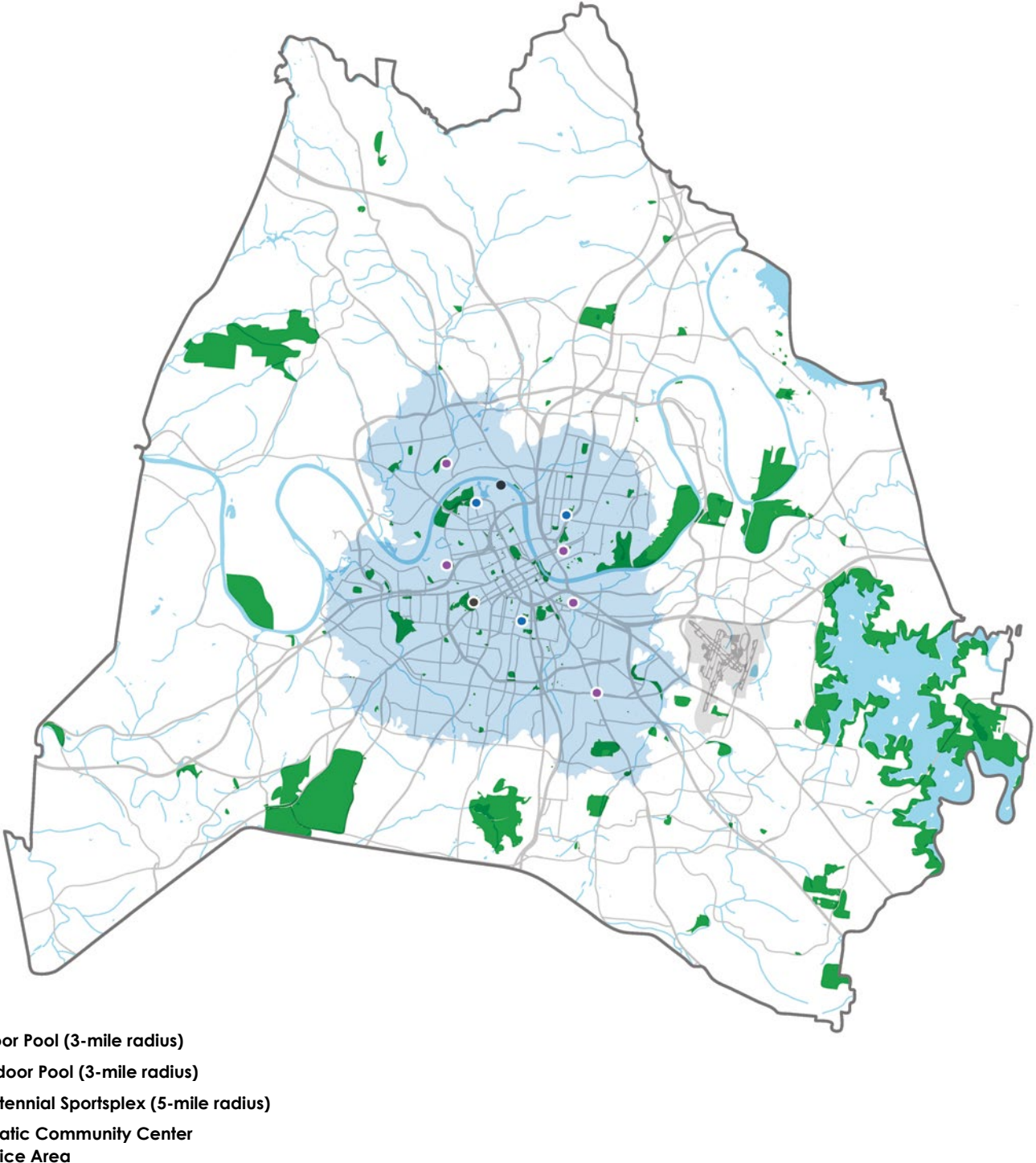
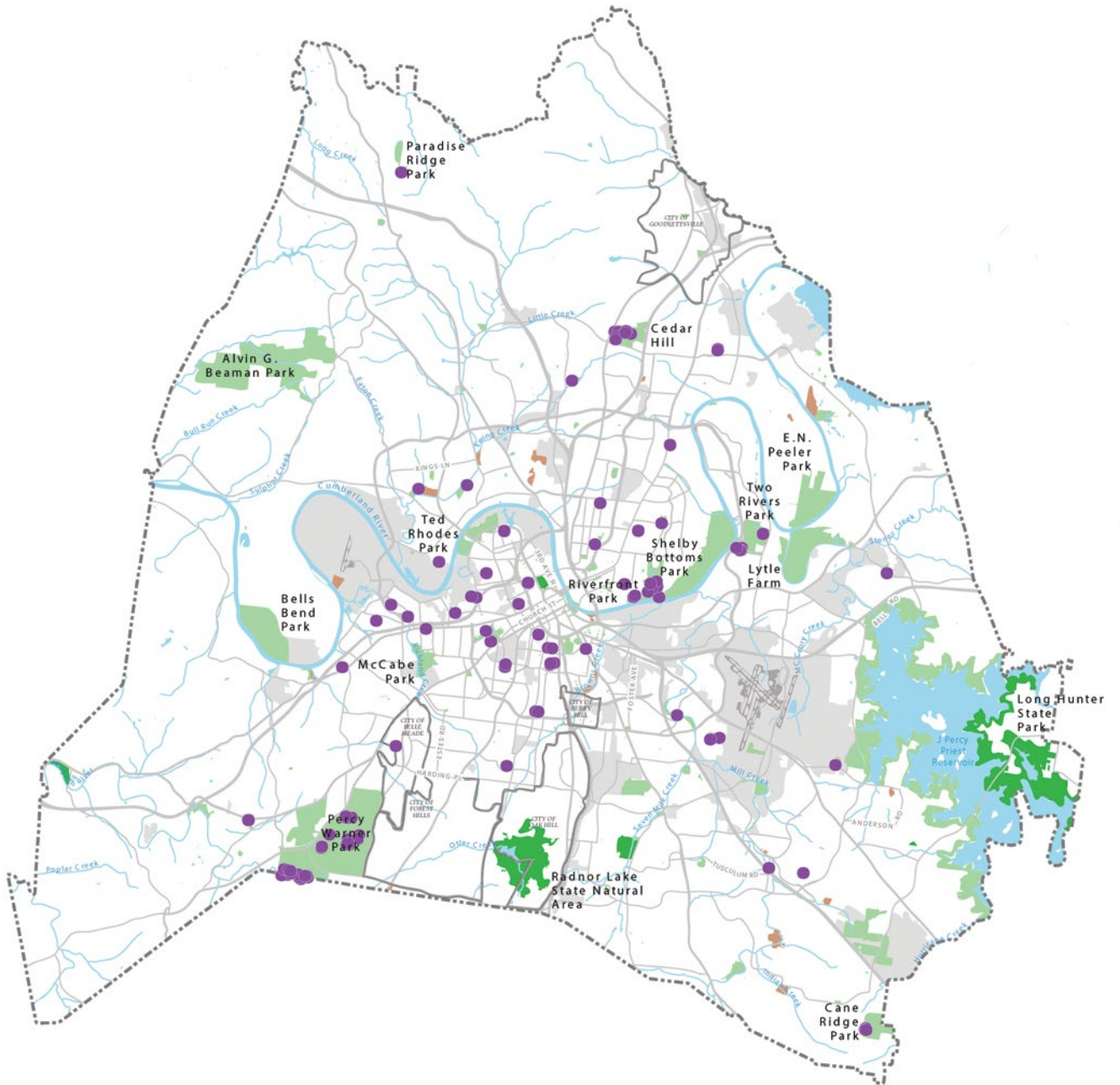


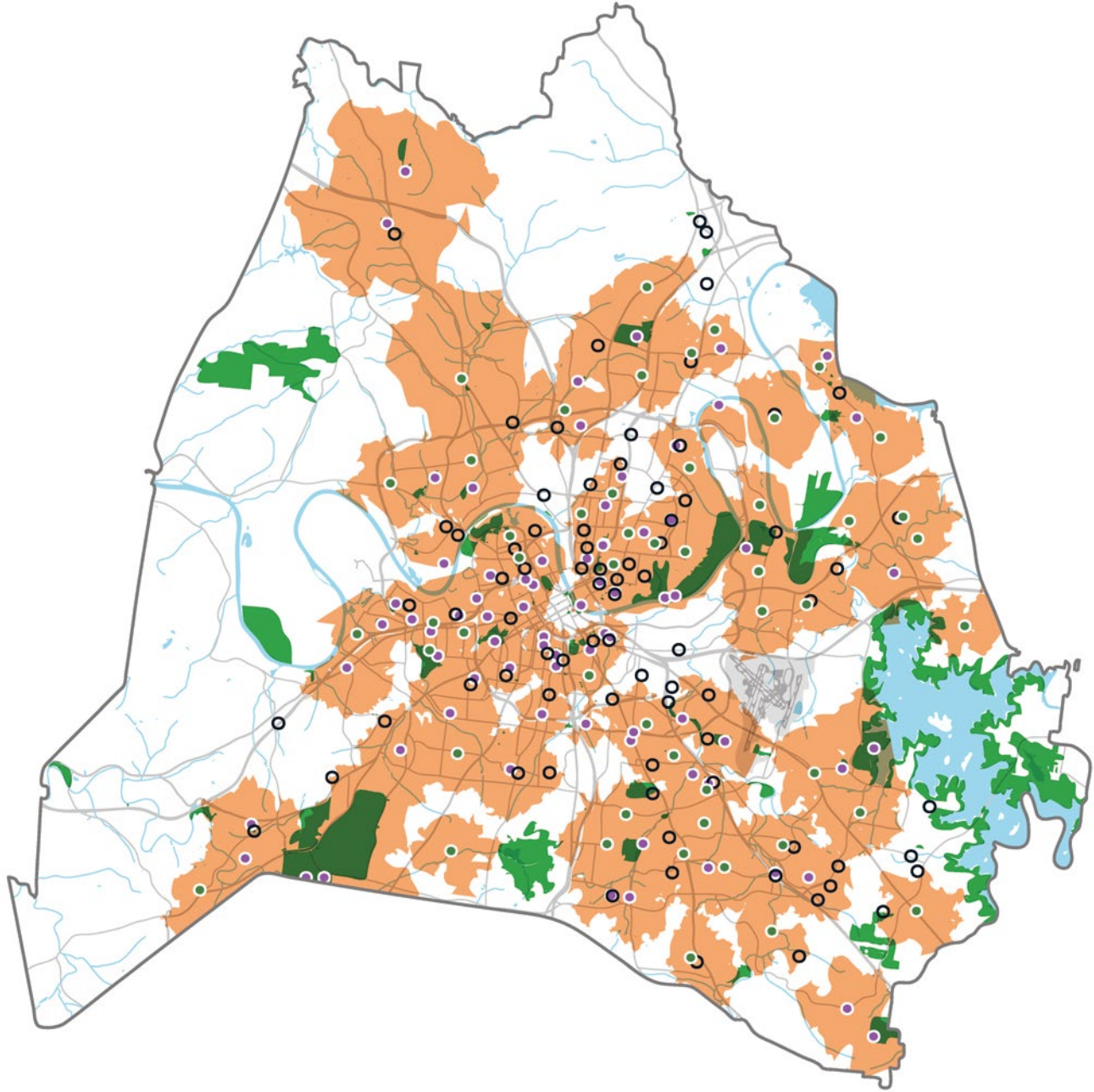
Figure 8-12 Aquatic Center
Level of Service



LEGEND

- Picnic Shelters

Figure 8-13 Picnic Shelter Locations

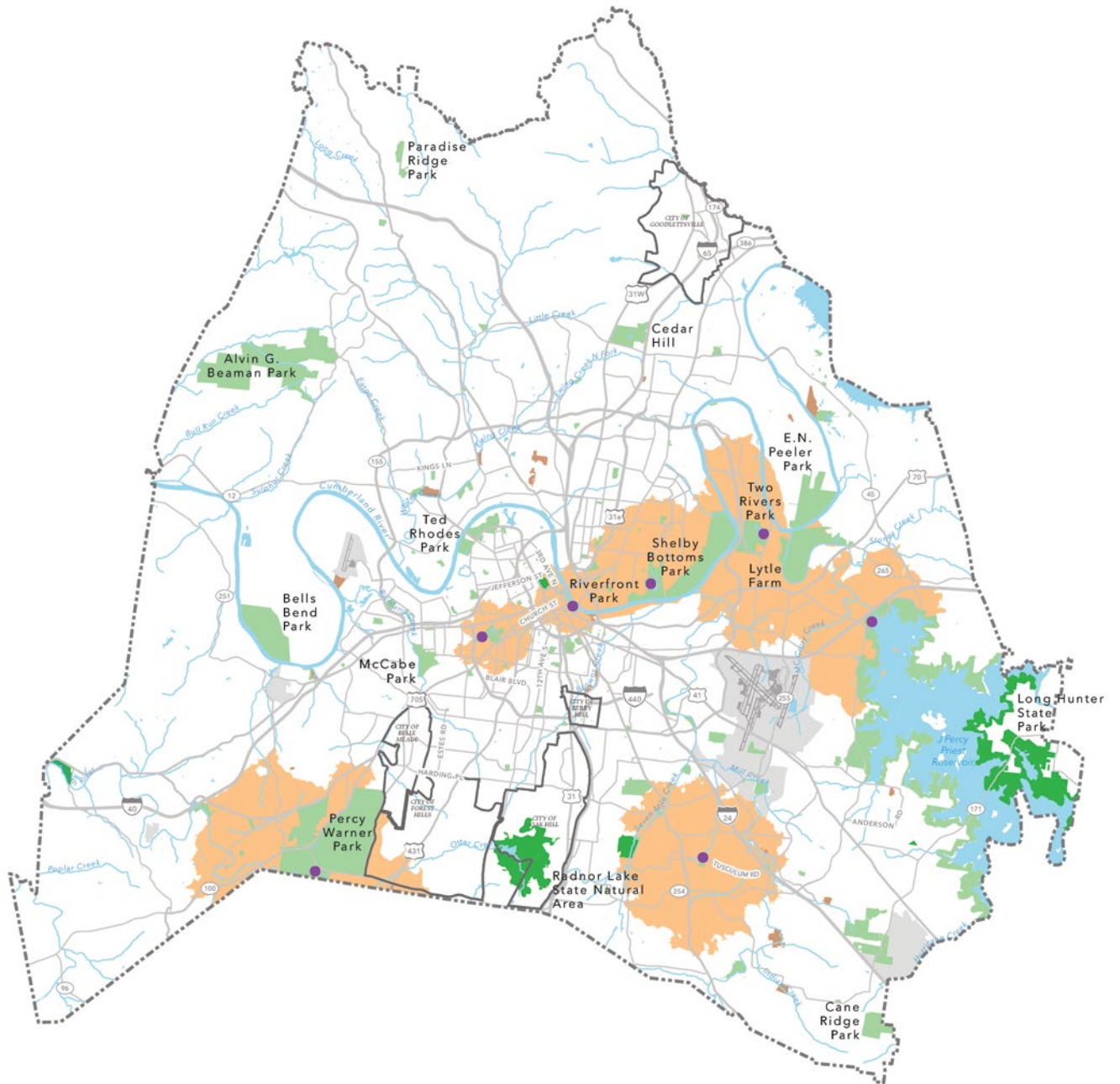


- Park Playgrounds
- School Playgrounds Managed by Parks
- School Playgrounds Not Managed by Parks
- Playground Service Area

LEVEL OF SERVICE RADII	
TRANSECT	LOS RADIUS
Rural T2	N/A
Suburban T3	3 miles
Urban T4	2 miles
Centers T5	1 mile
Downtown T6	1 mile

Figure 8-14 Playground Level of Service

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LEGEND

- Dog Parks
- Dog Park Service Area

LEVEL OF SERVICE RADII

TRANSECT	LOS RADIUS
Rural T2	N/A
Suburban T3	3 miles
Urban T4	2 miles
Centers T5	1 mile
Downtown T6	1 mile

Figure 8-15 Dog Park Level of Service

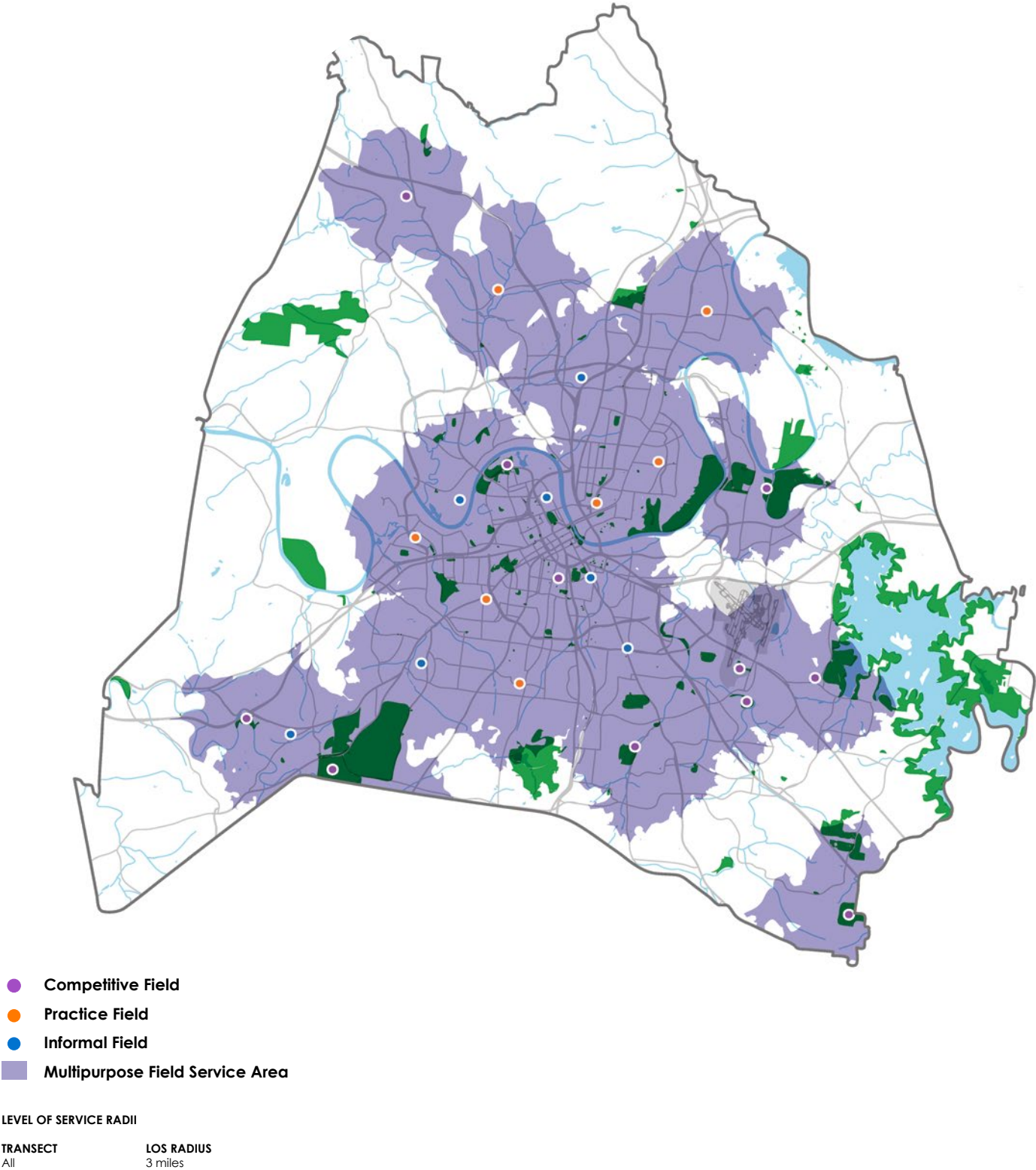


Figure 8-16 MultiPurpose Field Level of Service

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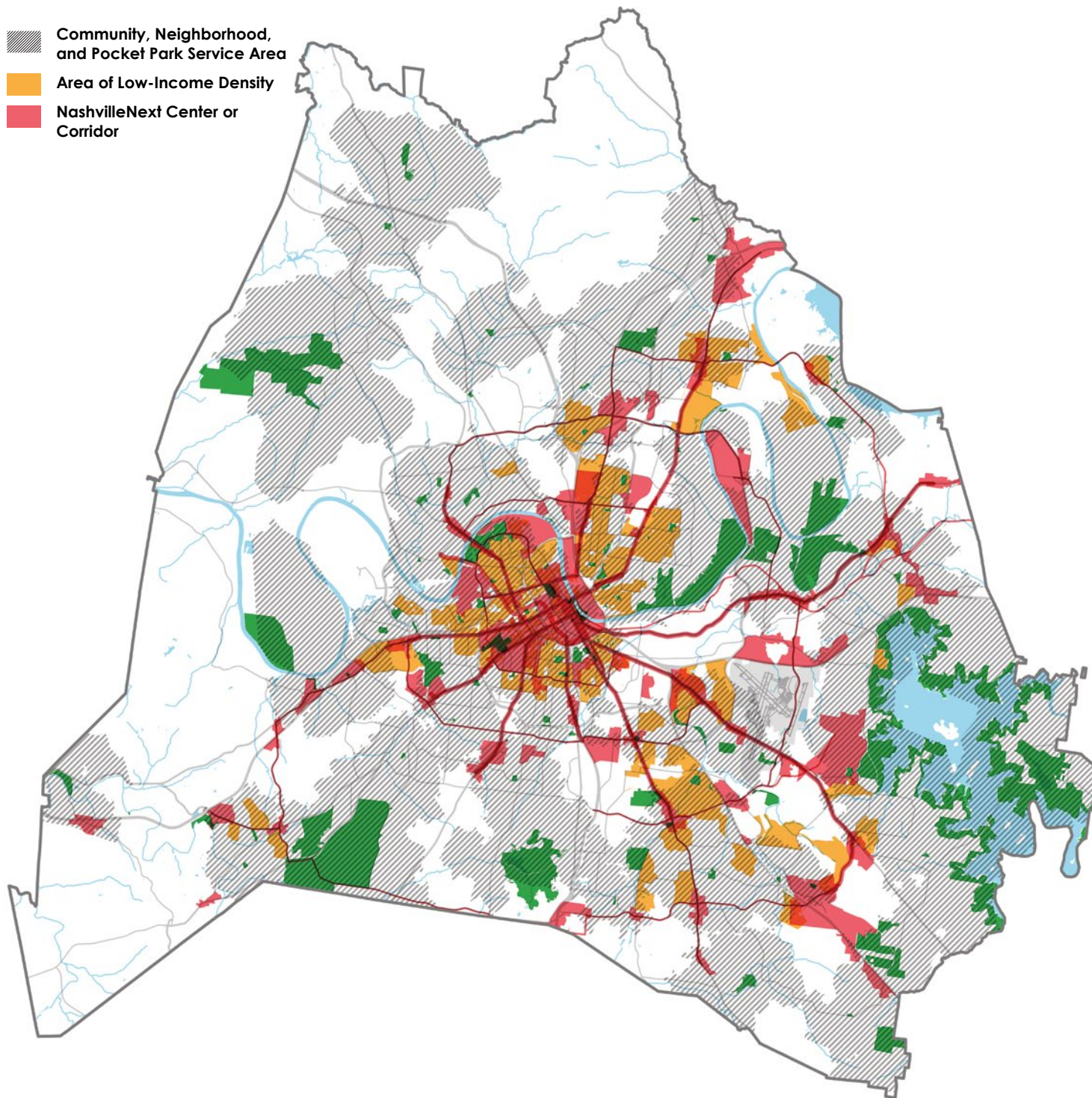


Figure 8-17 Level of Service with Low-Income Density and Centers

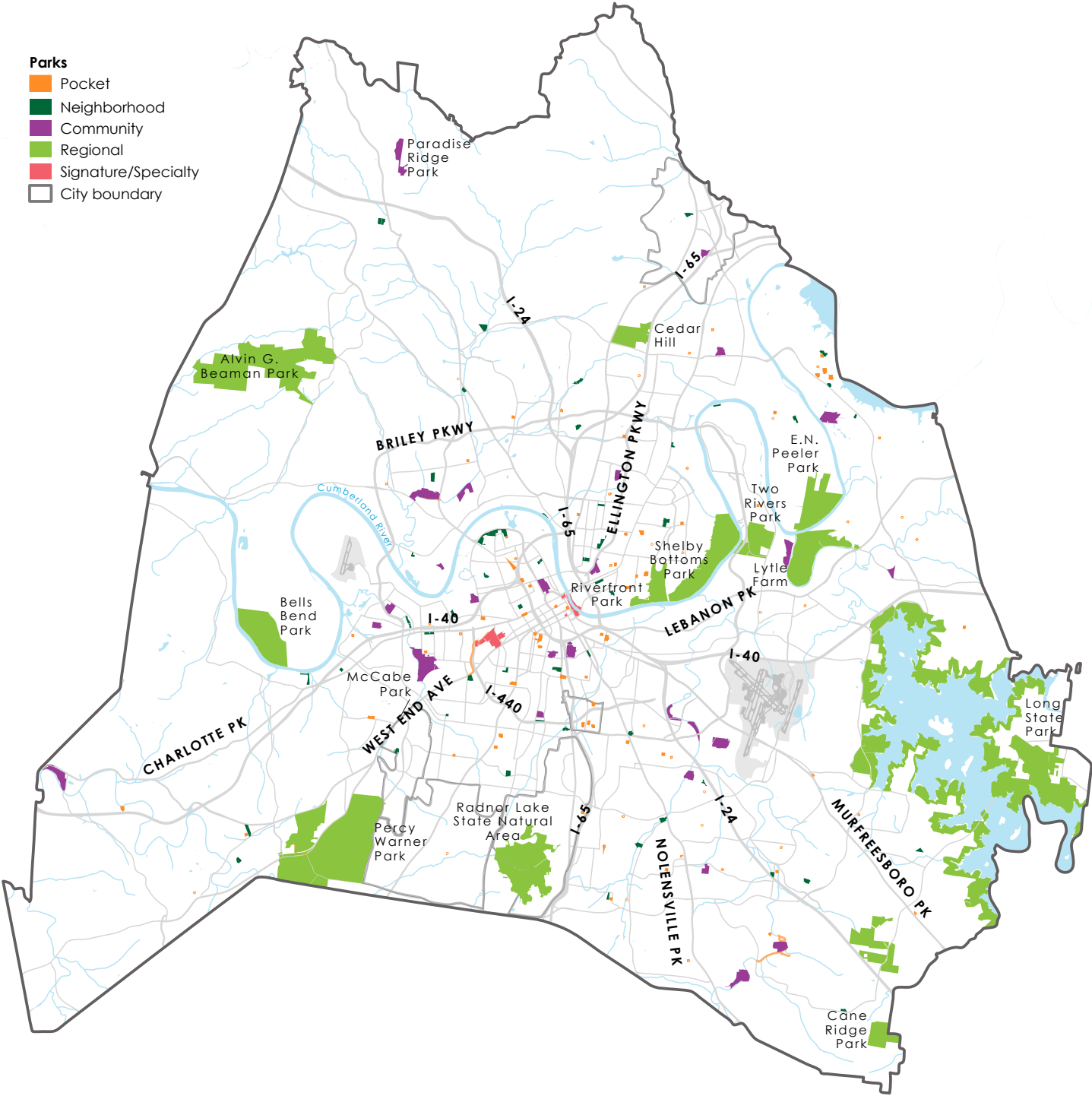
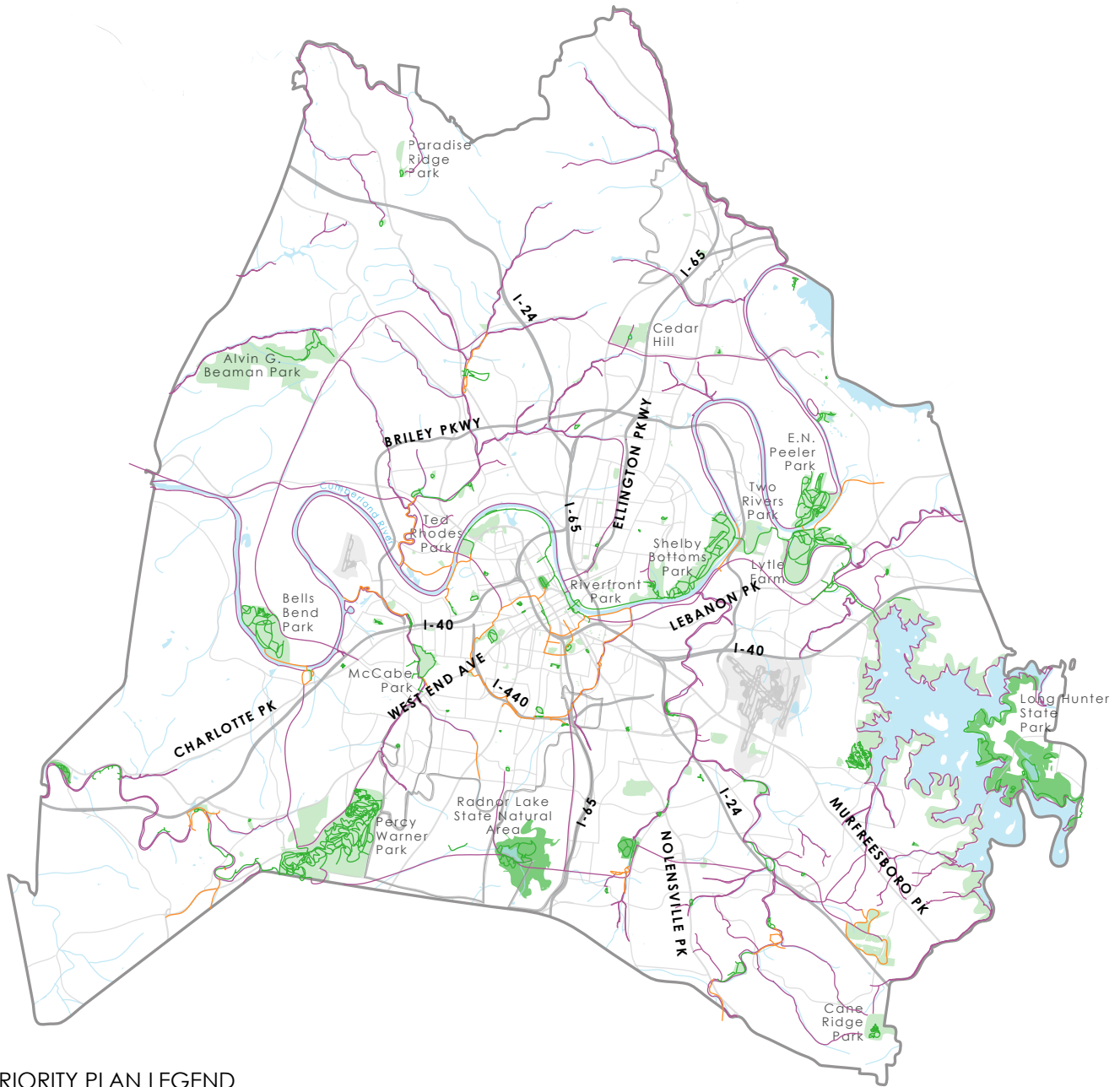


Figure 8-18 Map of Proposed Park Typologies



APPENDICES
LEVEL OF SERVICE MAPS



PRIORITY PLAN LEGEND

- Existing greenway
- Greenway Priority
- Greenway Long Term Vision

Figure 8-19 Greenways Priority Plan

GREENWAY MAP LEGEND







-  Existing Greenway and Trail
-  Park
-  Water Corridor: Framework
-  Water Corridor: Conservation
-  Other Greenway Corridors
-  Greenway Bridge



Figure 8-20 Greenways Vision Plan

8.13 PARTNERSHIPS

Partnerships

Across the country, city governments and parks departments are finding creative ways to partner with a variety of entities to benefit their parks, provide programming and services to residents, and build long-term relationships with donors, the business community, and park users. While parks and park maintenance used to be the responsibility of the taxpayer, many cities are finding that partnerships allow them to explore new avenues and means for meeting the growing demand of their park systems and serving the diversity of park users.

Partnerships need to be structured carefully to benefit and meet the needs of all parties and to ensure that parks remain in the public domain and are operated for the public good. Like all relationships, partnerships require a give and take from both parties—the act of giving something up demonstrates the overall partnership is valuable to those involved. Also, partnerships require ongoing nurturing and engagement from both parties in the relationship.

As Nashville’s population continues to boom and the needs and complexities of the system grow, this is a critical time to examine what public-private partnerships exist in Nashville today and partnerships can grow, evolve and be augmented to best serve Nashville’s Metro Parks properties and the area’s residents and visitors into the future.

Types of Public-Private Partnerships

Public-private partnerships are sprouting up across the country to address a diversity of park needs. These needs range from fundraising and capital improvements to equipment rentals at park facilities and park programming. Nashville already has some public-private partnerships in place, however, it is valuable to scan the field and best practices to understand how the existing partnerships compare with what is being done in peer cities across the country so both Metro Parks and its partners can work together to explore how they can build upon and strengthen their parks together. Below are a few types of park partners that (a) already exist in Nashville but could be made stronger or (b) could be formed to benefit Nashville.

Fundraising Entities

Conservancies, foundations, and trusts are some of the names used by private, nonprofit park-benefit organizations that are working in cities to raise money on behalf of one or multiple parks (going forward these groups will be called “conservancies”). Conservancies engage in fundraising efforts independent of the city, but spend their funds on projects in accordance with an action plan agreed upon with the government. Many conservancies were formed to benefit an older park in need of repair, however, conservancies are also being established as new parks are being conceived. A conservancy or foundation may be formed to support all of the parks in a given city, just as Nashville has a foundation for that purpose. While conservancies are often created through the action of park users and nearby residents, the mayor and city government must be supportive of their establishment and overall goals.

Friends of the Parks Groups

These generally all-volunteer groups play a variety of roles in parks. These groups might be incorporated as a 501c3, or they could operate more loosely as a group of interested citizens that are unincorporated. In larger cities like San Francisco, New York, and Philadelphia staffed, umbrella organizations have formed to bring together the groups across the city to tackle and work on city-wide issues. Friends groups can engage in education, clean-ups and other stewardship-type activities. Many groups advocate on park-related issues—some in support of the parks department others in opposition to it. When a friends group is not in agreement with city government about the allocation of city resources, management of parklands, or other issues, it can result in tension between the group and city managers.

Business Improvement Districts (BIDs)

BIDs are defined areas within which property owners pay a small tax assessment in order to pay for projects within the district's boundaries. BIDs often oversee management of sidewalks, beautification projects, and visitor improvements. A few districts have engaged in park issues—Capital Riverfront BID in Washington DC and the Center City District in Philadelphia to name two. In general, BIDs do not solicit or receive philanthropic donations.

Corporations

Corporate sponsorships of parks and park facilities are one way for businesses to contribute towards and demonstrate their support for local parks and recreation programs. If a conservancy is in place, these sponsorships and donations are often handled by the nonprofit partner which can be more nimble than city governments when working with private donors. Some corporations have volunteer programs which the city could take advantage of if it had a community partnership office that was equipped to work regularly with volunteers on park stewardship projects.

Best Practices

Best Practices for both the Parks Department and Partnering Non-Profit

Given that city parks are public institutions, any entity that seeks to develop a long-term partnership with the city to support and better a park or multiple parks must be committed to the city's public mandate and to working hand and glove with its city leaders and public servants. In the same vein, the city also has to value and work with those who are raising funds or supporting the city's public assets in other ways.

Best practices one through seven below come from the *Friends Group Best Practices Report* written by the National Parks Conservation Association's Center for Park Management.¹ While their case studies come from partnerships in the national park system, the tenants are fitting for city park management as well.

¹ National Parks Conservation Association, Center for Parks Management, *Friends Group Best Practices Report*, https://www.nps.gov/partnerships/best_practices_rpt.pdf, September 9, 2005. Best management practices 1-7 were modified slightly from the original report to be applicable to an urban park program.

1. **Have the same mission and goals:** By mapping out a long-term plan together, the city and the nonprofit can be assured that they agree on the mission and vision of the work they are doing in partnership. This process is also important for establishing roles and responsibilities.
2. **Trust is earned over time:** Start small and grow together. As the park and city complete projects together trust will build and there will be a greater understanding of what is required to work with each other and to implement more complex or larger projects.
3. **Both partners must contribute to the relationship:** Mayors and park directors should find ways of promoting their supporting non-profit partners at every opportunity. This helps the non-profit develop standing with donors and provides a clear signal to all parties that the nonprofits are working with the support and appreciation of the city. The city should allocate funding to build the capacity of its nonprofit partners. Nonprofits need to be developing projects that are in response to city needs while having donor appeal.
4. **Clear and constant communication leads to understanding:** Regular, informal meetings should keep partners on the same page about ongoing activities. As needed, formal communications and agreements should be used to outline the roles and expectations of each partner.
5. **Both partners are in relationship for long haul:** Both partners should have long-term time horizons for the partnership. Maintaining relationships between the organizations' staff at multiple levels will ensure management transitions go as smoothly as possible.
6. **Mutual respect is key:** Ultimately, the success of the partnership depends on the shared respect between the park director and the nonprofit's executive director. Those two leaders set the tone and culture that their staff, the public, and donors will follow. Even when they disagree on an issue, they need to be able to set their differences of opinion aside and work together to implement the decision.
7. **Create culture of sharing and collaboration:** When 1-6 above are established, the park director should be able to share park management with its nonprofit partners. Ultimately, the city has final say in management decisions, however, these groups can offer an important community perspective and provide valuable resources and support to the system which warrants cooperation.

Additional best practices specific to city park departments and their partners:²

8. **Develop formal agreements between partners:** A key factor to success is formalizing partnerships and clarifying each party's roles in the relationship. A memorandum of understanding (MOU) is a

² Center for City Park Excellence, The Trust for Public Land, *Public Spaces/Private Money: The Triumphs and Pitfalls of Urban Park Conservancies*, <https://www.tpl.org/public-spacesprivate-money>, February 2015. Points 8-16 are derived from the *Public Spaces/Private Money* report on conservancies, but expanded in this report to address the multitude of nonprofit partners in Nashville. The report contains many case studies and data from across the country.

valuable tool for formalizing partnerships. For a conservancy in particular, an MOU can provide legitimacy to its donors by demonstrating a commitment from the city. For the city, the contract protects the public interest of the park by creating boundaries around unplanned initiatives or donor influence. Given that each partnership deals with different goals and partners, the city should anticipate that each MOU or agreement will be unique. Agreements should last long enough that they have meaning, but parties should be able to update them on occasion to keep them relevant—a good practice is that agreements shouldn't last more than seven to eight years.

9. Reserve a role for public officials on the board: MOUs and nonprofit bylaws often stipulate a role for park directors or mayors as either a voting or non-voting member of the board of director. This guarantees the public interest will be represented, however it creates the responsibility that the individuals will attend nonprofit board meetings and events, or designate a proxy to attend in their stead. Participation by public officials reaffirms that the nonprofits' work is valuable and appreciated.

10. Master planning and project prioritization: Elected officials, park staff, nonprofit board members, and donors all have different opinions about what issues should be addressed in parks and in what order. A master plan developed with public and expert input is a critical tool for guiding and prioritizing park improvement activities.

11. Cultivate a strong and effective board of directors: A strong and effective board of directors is essential for nonprofit partners. For those partners, such as conservancies, that are raising funds for parks, the board can make or break the success of the group. Board seats must be filled very strategically.

12. Separate money and offices: Nonprofits should have their own accounts for accepting donations and paying expenses. If a nonprofit receives financial support from their city partner, the relationship should be clearly spelled out in an MOU rather than through a shared account. Similarly, it is generally a best practice for nonprofits to maintain offices that are separate from city offices. Ideally these offices are convenient to city offices to facilitate frequent meetings. However, the non-government office should be perceived by the public as separate.

13. Commit to robust fundraising: The Center for City Park Excellence's study on park conservancies revealed that the median annual revenue of existing conservancies was nearly \$1.7 million a year. The Center recommends \$500,000 as the minimum for ongoing success, but acknowledges that there is no minimum fundraising threshold. A Master Plan is critical when fundraising as it dictates what to prioritize and when, and it allows conservancies to guide donors away from "pet projects" that haven't been prioritized by the city.

14. Get recognition right: A challenge is keeping the park public while giving donors recognition for their donations. Some conservancies have annual galas or events that celebrate donors and recognize their contributions to the parks. With careful thinking and foresight, cities and nonprofits can come to agreement on plaques and naming walls that recognize donors while not being over intrusive in the park landscape. Some parks choose to recognize their major donors near the main

entrance. However, unlike libraries, museums, and universities, city parks along with their peers state parks and national parks have strived to minimize naming rights and privatization of public open space.

15. Concessions and earned revenue: Some nonprofits use revenue-generating concessions to supplement and support their budgets. The first and most important filter for concessions is whether or not they are serving and benefitting the public. Concessions come in many forms—promotional goods, food carts, cafes, golf course snack bars, kayak and bike rentals, or skating rinks—to name a few. Concessions can help activate parks, making them a more enjoyable place to spend longer periods of time. However, it is a careful balance, and some park users might find concessions to be quite intrusive. Some conservancies have raised funds by cordoning off sections of parks for private events such as weddings, reunions, or corporate parties—this can be received with harsh criticism as the public can view this as “privatizing” the public’s park.

16. Remember that final authority for policy, permitting, and capital improvements rests with the city. At the end of the day, the city has ultimate management authority for its parks. This applies to park rules, city obligations, land use, law enforcement, group and event use of parks and facilities, other permitting and capital projects. That should give the public peace of mind that their parks aren’t being privatized. But, ideally, park partnerships are serving the same mission and goals so hopefully this is never an issue.

Potential Roles for Non-Profits in Park Operations, Fundraising, and Park Betterment

When non-profits and their local parks department are demonstrating many, if not all, of the best practices above, the following activities can be outsourced from the local government to the non-profit partner if both are in favor of the arrangement:

- Conducting operations and maintenance
 - *Example: Forest Park Forever in St. Louis*
- Managing concessions and events in parks
 - *Example: Randall’s Island Park Alliance in New York City*
- Providing programming
 - *Example: Brooklyn Bridge Parks Conservancy in Brooklyn*
- Volunteer stewardship and customer service
 - *Example: Pittsburgh Park Conservancy at Pittsburgh’s four regional parks*
- Developing mutually beneficial facilities
 - *Example: Prospect Park Alliance in Brooklyn*
- Funding master planning for individual parks
 - *Example: Piedmont Park Conservancy in Atlanta*
- Raising private funds to supplement operating budgets and provide facilities and services
 - *Example: Overton Park Conservancy in Memphis*

1. Opportunities to Expand and Strengthen Partnerships in Nashville

- a. **Establish an office of community partnerships.** Given that Nashville wants to expand on its current partnerships and identify new ways to benefit from public-private and public-public partnerships, an office of community partnerships is a logical place to centralize that activity. Its staff can nurture relationships, be responsible for formalizing partnerships, and creatively exploring this space with Nashville's public and private partners. This office should:
 - i. Develop and maintain department partnership policies.
 - ii. If a sponsorship program is approved, maintain policies and guidelines for this program.
 - iii. Determine costs and benefits of ongoing partnerships and ensure Metro Parks benefits from the partnership and has the capacity to be an engaged partner in each relationship it considers.
 - iv. Coordinate volunteer activities at Metro Parks.
 - v. Manage the permitting of recreation fields.
- b. **Invest strategically in partnerships.** Looking around the country, you will find this is a rich space to explore. And, Nashville already had partnerships with a suite of private and public partners. With this master plan in place, this is an opportune time to evaluate Nashville's highest partnership needs, based on community feedback, gaps in Metro Parks services, and opportunities to leverage public investments with private investment, services, and strengths. In addition to working with private partners (nonprofit and for profit), there are opportunities to expand partnerships with the public sector as well to best serve Nashville's growing population where agency missions overlap.
 - i. Nonprofit Partners
 1. Based on the best practice guidance above, improve functioning of existing partnerships for the organizations whose missions are in close alignment with Metro Parks.
 2. Continue discussions with friends groups to determine if there is interest in coming into close alignment with Metro Parks to become a Metro Parks partner. Where there is alignment, establish MOUs that include areas for immediate collaboration.
 3. Consistent with best practices, develop regular communications with partners. As appropriate, attend board meetings and events and maintain regular communications.
 4. Host a quarterly meeting with all partner groups to align interests and bridge gaps. Include friends groups in this quarterly meeting.
 - ii. Private Partners/Sponsors
 1. Consider and determine if sponsorships are appropriate for Metro Parks. Venues that could be explored for park sponsorship: hockey rinks and sports fields, bike share program, dog parks, stages and concert venues. (If the department determines sponsorships are not appropriate, private entities

can still make donations through an existing conservancy to support these or other venues.)

2. Think strategically about how to bring more private philanthropy into the parks. Work with existing conservancy and foundation to determine if there are ways to boost and support additional private philanthropy into the system. Also, explore whether another nonprofit conservancy is necessary to meet the needs of the growing system.
- iii. Business Improvement District
 1. Nashville Downtown Partnership runs the Central Business Improvement District and has offered to take over maintenance and programming of the Metro Parks inside of the Downtown Loop. Metro Parks and the Nashville Downtown Partnership should develop a plan to explore next steps for some initial urban parks programming by April 2017.
- c. Park programming partnerships
 - i. Despite the fact that Metro Parks already offers many water recreation opportunities, the community survey indicated Nashville residents would like more opportunities to enjoy the rivers and water from Metro Parks properties. Partnering with a nonprofit or private entity that rents canoes, kayaks, and/or stand-up paddle boards at more locations throughout the system could help Metro Parks to serve more of the demand.
 - ii. Metro Parks has unique properties and facility space that could be rented out in the summer to partners to offer camp programming to Nashville's youth. Given that Metro Park facilities are throughout the service area they have an opportunity to service youth in urban and rural setting and from different socio-economic backgrounds.
 - iii. Metro Park's adult recreation program is very popular and it is fully subscribed. However, it is not successfully serving the demographics of Nashville. It would be valuable to revisit the program to determine if it is trying to do too much for too few people. The cost per participant far outpaces the cost of natural and cultural resource programming. Reducing costs on the adult programs is critical—working with partners, volunteers, and outfitters might be one way to reduce costs.
 - iv. Metro Parks' summer enrichment and disability programming are over-subscribed, indicating that these services are valued and in demand in Nashville. Metro Parks could look for partners for this programming to make sure those on the wait-list are able to participate.
 - v. When Metro Parks community centers are underperforming, identify new purposes for the facilities and nonprofit partners that will maintain the facility and provide a valued community service. For example, several community centers owned by Metro Parks are now managed by Boys and Girls club and provide programming to Nashville youth. Other opportunities could include an arts center or other youth activity center.
 - d. Multidisciplinary partnership opportunities

- i. New opportunities may exist for urban infill recreation. Either modeled after the success development of Southeast Community Center, or via innovative partnering with a mixed-use private developer to establish new community park services along a growth corridor to address an underserved area of Metro Parks.
- ii. In the context of Nashville Next, identify parcels for private partnerships that could be creatively planned to include parks and much needed acreage for affordable housing developments. Using techniques implemented by New York and Philadelphia the land could be purchased and subdivided for development prior to becoming parkland so there is no net loss of park acreage. The private developer could participate financially in the costs of developing the facilities that would co-serve the larger community and the private development.

8.14 LIST OF METRO PARKS PARTNERS

Alignment Nash. Healthy Eating Active Living

All the King's Men – (Watkins)

American Assn. of State & Local History

American Canoe Association

Army Corps.

Association of Nature Center Administrators

Auto Diesel College – Work Study Program (East)

Barnard-Seyfert Astronomical Society

Belmont Program – (Easley)

Belmont Tennis

Boom Boom Cup Tournaments

Boy Scouts – (Kirkpatrick, Parkwood, Madison, Old Hickory, Hartman, Looby, McFerrin)

Boys and Girls Club – (West and Cleveland)

Can/Am Hockey

Canadian Hockey Enterprises

Charles Davis Foundation – (Napier)

Cheekwood

Civil War Trust

Community Gardens – (Paradise Ridge)

Connexion Americas

Cornell Laboratory of Ornithology

Cremona Strings – Lisa Spells – (East, Coleman, McCabe, Hadley)

Cumberland River Compact

Cumberland Trail Conference

Diabetes – Gold Sneakers MOU - Parks/Health – (Madison, McFerrin)

Dick's Sporting Goods – Supports youth sports with scholarships/equipment

East Nashville Home School Association – (Shelby)

Fifty Forward – (Hermitage)

Frist Art Trunk – Josh at CAC (All centers)

GENTS – Bridging the gap with seniors and young males

Girl Scouts – (Cleveland, Coleman, East, Hartman, Kirkpatrick, Madison, McFerrin, Morgan, Napier, Old Hickory, Paradise Ridge, Shelby and South Inglewood)

GNASH

Goodwill Collection – Fund raiser for Community Center Gift Funds

Goodwill Summer Camp Program – (Cleveland, Hermitage, Shelby) Integrate Autistic Children

GROW – Childhood Obesity Study (East, Coleman and Antioch)

Hadley Adult Tennis Association - (Hadley Tennis Program)

Hands on Nashville – Bicycle Program, MLK Volunteer Weekend

Harpeth River Watershed Assn.

Harpeth River Watershed Association

HCA

Horseman Association

Inter-Museum Council of Nashville

Leadership Music

Memphis Grizzlies NBA Program – Youth Basketball League

Mitch Korn Hockey School

Nashville Aquatic Club

Nashville Beekeeping Association

Nashville Civil War Roundtable

Nashville Girls Hockey

Nashville Predators

Nashville State Community College – Work Study Program (Southeast)

National Association for Interpretation

National Climbing Access Fund

National Dance Education Organization

National Guild for Community Arts Education

National Recreation and Parks Association

Natural Areas Association

Natural Start Alliance

Nature Conservancy

NAZA After-School Program – (Coleman, Hartman, Southeast, Paradise Ridge)

North American Assn. of Environmental Ed.

NSA

NTA
 NYHL
Oasis – (Mural at Hadley Park, mural at Antioch, art project at Parkwood)
 Optimum Solutions
 Opus 29
Pathways to Citizenship – (Madison, West, East, Southeast and Coleman)
 Planet Hockey Camps
 Player's Edge Hockey School
Prevent Child Abuse Tennessee – Staff training
 Radnor2River
RBI Softball Program – (All centers)
 Richland Creek Watershed Association
 RockStar
Second Harvest Food Bank – Food Bank (Napier, Watkins)
 Shootout Hockey
 Sierra Club
 SORBA
 Southeastern Climbers Coalition
STARS (Students Taking A Right Stand)– Trained community center staff to deal with bullying
 Stones River Watershed Assn.
 Stratford High STEM Advisory Board
 TDEC
 Team Green Adventure
 Tennesseans for the Arts
 Tennessee Academy of Sciences
 Tennessee Association of Dance
 Tennessee Bat Working Group
 Tennessee Bike Summit
 Tennessee Environmental Council
 Tennessee Environmental Education Assn.
 Tennessee Every Child Outdoors Coalition
 Tennessee Exotic Pest Plant Council
Tennessee Golf Foundation – The First Tee of Middle Tennessee (VinnyLinks)
 Tennessee Greenways and Trails
 Tennessee Historical Society
 Tennessee Ornithological Society
 Tennessee Scenic Rivers Assn.
 Tennessee Stream Mitigation Program
 TennGreen
 The Conservation Fund
 The Land Trust for Tennessee
 TRPA
 Trust for Public Land
TSU – Student Work Study (Hadley)
 United States Tennis Association
 Urban Green Lab advisory Board
 USTA
USTA Southern District – Training staff to teach junior tennis
Vanderbilt University – Tickets for Kids (All Centers)
 Walden's Puddle Wildlife Rehab Center
Walgreens – Senior Program
 Walk/Bike Nashville
 Weekend Tournaments
 West Meade Conservancy
 Wheelcats
 Wilderness Education Association

8.15 ECONOMIC BENEFITS OF PARKS

The 23,500-acre public park and recreation system in Nashville provides substantial economic benefits to the city's residents. Nashville's vast natural spaces and facilities include numerous parks such as Shelby and Warner Parks, playgrounds, miles of greenways such as Stones River Greenway, dog parks, golf courses, picnic areas, sports fields and courts, and unique places like Centennial Park and the Parthenon.

Parks, greenways, sports fields, and community centers in Nashville, generate numerous economic benefits for residents by providing free and low cost recreation activities.¹ These amenities also enhance property values, provide recreational opportunities, improve human health, attract visitors, and provide natural goods and services such as filtering air pollutants and retaining stormwater. They support local jobs, boost spending at local businesses, and create local tax revenue. Specifically, these park amenities produce the following economic benefits (see Table 1):

- Parks, greenways, sports fields, and community centers increase the value of nearby residential properties because people enjoy living close to these amenities and are willing to pay for the proximity. The park system in Nashville raises the value of nearby residential properties by \$200 million and increases property tax revenues by \$2.15 million a year (see Table 2).
- Parks provide stormwater benefits by capturing precipitation, slowing its runoff, and reducing the volume of water that enters the stormwater system. The park system in Nashville provides stormwater retention valued at \$16.9 million annually (see Table 4).
- Parks with trees and shrubs remove air pollutants that endanger human health and damage structures. Such spaces provide health benefits and reduce pollution control costs in Nashville by \$3.66 million per year (see Table 5).
- Nashville's park and recreation system is essential to the area's ability to attract visitors. In 2015, four of the major festivals hosted in Metro Parks attracted 378,000 attendees that spent \$96.1 million in the local economy. In addition, the Centennial Sportsplex consistently attracts visitors for tournaments. Each year, events at Centennial Sportsplex attract 12,700 visitors who spend \$19.6 million. In total, at least 390,000 visitors spend a combined \$116 million annually (Table 6).
- Residents also enjoy Nashville parks, greenways, sports fields, and community centers. Each year residents of Nashville receive a benefit of \$69.5 million for the recreational use of these park facilities (see Table 8).
- Independent research shows that park use translates into increased physical activity, resulting in medical care costs savings. While all Nashville residents who visit the city's parks, greenways, sports fields, and community centers improve their health simply by visiting, approximately 23,000 adult residents use Nashville's public park and recreation system exclusively to engage in physical activity at a level sufficient to generate measureable health benefits, yielding an annual medical cost savings of \$27.5 million (see Table 9).

¹ These park and recreation system amenities include neighborhood parks, community parks, regional parks, sports complex facilities, special use parks and facilities (e.g. historic sites, golf courses, and community centers), greenways, open spaces, and natural areas.

Table 1. Summary of the estimated benefits of parks, greenways, sports fields, and community centers, in 2016 dollars²

Benefit category	Total (2016\$)³
Enhanced property value	
Total additional property value	\$200,000,000
Additional annual property tax	\$2,150,000
Stormwater retention value	\$16,900,000
Air pollution removal value	\$3,660,000
Tourism value	
Music events hosted in Metro Parks	\$96,100,000
Centennial Sportsplex tournaments	\$19,600,000
Total visitor spending	\$116,000,000
Recreational use value	\$69,500,000
Human health value	\$27,500,000

² All numbers in the text and tables are rounded to three significant digits unless otherwise noted. Because of rounding, some report figures and tables may appear not to sum.

³ These values cannot be summed into a single figure because each estimate represents a different type of value, with different a time frame, that accrues to different beneficiaries. Throughout the economic analyses, dollar values are reported in 2016 dollars, which accounts for inflation and has been noted parenthetically as “2016\$.”

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ECONOMIC BENEFITS OF PARKS

Exhibit 1. Map of the public park and recreation system in Nashville

See map PDF.

Introduction

The public park system in Nashville consists of 23,500 acres.⁴ These vast natural spaces and facilities include numerous parks such as Shelby and Warner Parks, playgrounds, an extensive greenway system,⁵ that includes Stones River Greenway, dog parks, golf courses, picnic areas, sports fields and courts, and unique places like Centennial Park and the Parthenon. The Metro Parks and Recreation Department also provides a diverse set of opportunities involving sports, classes, and special events such as the Celebrate Nashville Festival.

Park amenities enhance the quality of life in Nashville, which is an essential component of any strategy for economic development, especially because the most sought-after employees in today's economy consider more than salary when choosing places of employment. For example, focus groups conducted by Carnegie Mellon University have found that young creative workers, particularly those in high-technology fields, consider lifestyle factors, such as environmental and recreational quality, more heavily than the job itself when choosing where to live.⁶ Another survey of high-tech workers found that a job's attractiveness increases by 33 percent in a community with a high quality of life.⁷ Skilled workers are attracted to places with parks, clean air and water, and diverse opportunities for outdoor recreation. Parks in Nashville, which provide a host of greenways and park-related amenities, as well as ample recreational opportunities, help contribute to making Nashville a desirable place to live and work.⁸

By providing park areas and access to an array of free and low-cost recreation activities, such as picnicking, wildlife watching, walking and hiking, running, bicycling, and exercising, parks in Nashville generate numerous economic benefits. Nashville's public park and recreation system enhances property values, provides recreational opportunities, improves human health, attracts visitors, and provides natural goods and services such as filtering air pollutants and retaining stormwater. The remainder of this economic analysis quantifies these benefits.

Nashville parks, greenways, sports fields, and community centers provide a number of other important economic benefits that cannot be quantified at this time. These include improving scenic beauty, community cohesion, quality of life, and boosting the local economy by attracting businesses and

⁴ In this economic analysis, "Nashville" is used to refer to the Metropolitan Government of Nashville and Davidson County, unless specified otherwise. The public park system, which includes all publicly owned parkland in Nashville, is defined as 23,500 acres.

⁵ The greenway system in Nashville includes paved multi-use trails, park trails, and hiking trails.

⁶ Richard Florida, *Cities and the Creative Class* (New York: Routledge, 2005), accessed Sept 28, 2016, https://books.google.com/books?id=SDeUAqAAQBAJ&dq=quality+of+life+job+attractiveness+workers&source=gs_navlinks_s.

⁷ Garry Sears and Daniela De Cecco, *High-Tech Labour Survey: Attracting and Retaining High-Tech Workers*, Ottawa: KPMG and CATA Alliance, 1998, accessed June 21, 2016, <http://www.cata.ca/files/PDF/misc/High-TechLabourSurvey98.pdf>.

⁸ Businesses are also drawn to these places to recruit the best workers. Companies, particularly those involved with the knowledge-economy, are increasingly moving to places with access to nature and outdoor spaces. One article explains that the debates about public lands argue that public land is a drag on local economies, when in fact they are essential to providing the types of places that attract businesses, talent, and investment. Furthermore, a study by Headwaters Economics described that the "value of public lands lies in its ability to attract people—and their businesses—who want to live near protected lands for quality of life reasons." Sources: Lynn Scarlett, "For Today's Companies, Nature Is a Top Recruiter," *Greenbiz*, August 12, 2015, accessed August 30, 2016, <http://www.greenbiz.com/article/todays-companies-nature-top-recruiter?src=news8-20>; Chris Mehl, *The Economic Benefits of the Land and Water Conservation Fund* (Bozeman, MT: Headwaters Economics, 2009, accessed June 21, 2016, http://headwaterseconomics.org/pubs/protected-lands/LWCF_Economic_Benefits.pdf).

APPENDICES

ECONOMIC BENEFITS OF PARKS

residents. These benefits create substantial and sustained economic value, which is beyond the scope of this report.

Enhanced property value and increased tax revenues

Numerous studies have shown that parks, greenways, and trails have a positive impact on nearby residential property values.⁹ All things being equal, most people are willing to pay more for a home close to a nice park. The property value added by park areas is separate from the recreational use value gained; property value goes up even if the resident never visits the park.

In fact, studies of homes in Tennessee found that parks and open space increase the value of the properties in close proximity. One study in Knox County found that houses that are located closer to parks and greenways are worth more, holding all other factors constant.¹⁰ Another study in Knox County also found that proximity to open space is found to increase home value.¹¹ Another piece of literature found that residents in a rural housing market outside of Nashville consider views when making home purchases and that the implicit price of \$30 per-acre exists for a view of a forested landscape. The implicit price of a forested view would be higher in an area where the amenity is scarcer, like Nashville.¹²

Nashville is experiencing a lot of development that leverages these park and greenway amenities. A recent article in *The Tennessean* highlighted the increasingly evident role that parks and greenways are having in the housing market in Nashville.¹³ While the median home value in Nashville-Davidson County is just over \$165,000,¹⁴ homes adjacent to Shelby Park in Nashville recently sold for between \$700,000 and \$800,000. Several of the new owners mentioned the proximity of the parks and downtown as primary motivators for their decision to buy. In addition, a new development is underway that provides direct access to the Shelby Bottoms Greenway and is designed as a wellness community that encourages outdoor activities. When completed, there will be 62 homes with prices initially set between \$225,000 and \$375,000. Within a week of the first phase, about 60 percent of the homes were sold. In downtown Nashville, a real estate services firm is currently marketing a residence close to the Cumberland River Greenway and Riverfront Park that will offer 71 residences priced between \$500,000 and \$3.2 million. In downtown Nashville there is also development occurring around Centennial Park, including a luxury condo building that overlooks the park and townhomes located just a short walk from the park. Units in these two developments cost between \$400,000 and \$2 million.¹⁵

⁹ Virginia McConnell and Margaret Walls, *The Value of Open Space: Evidence from Studies of Nonmarket Benefits*, Washington: Resources for the Future, 2005; John L. Crompton, "The Impact of Parks on Property Values: Empirical Evidence from the Past Two Decades in the United States," *Managing Leisure* 10, no. 4 (2005): 203–218.

¹⁰ That is, moving 1,000 feet closer to the nearest park increases the average house price (of \$130,000) by \$172, while reducing the distance to the nearest greenway by 1,000 feet increases home values by \$368. This value is found regardless of whether or not the home is proximate to an access point. Source: Seong-Hoon Cho, J. M. Bowker, and William M. Park, "Measuring the Contribution of Water and Green Space Amenities to Housing Values: An Application and Comparison of Spatially Weighted Hedonic Models," *Journal of Agricultural and Resource Economics* 31, no3 (2006): 485-507.

¹¹ In fact, moving 1,000 feet closer to a greenway, park, golf course, or waterbody, increases the mean house price (of \$142,000) by \$171, \$180, \$290, or \$460, respectively. Source: Seong-Hoon Cho, *et al.*, "Spatial and Temporal Variation in the Housing Market Values of Lot Size and Open Space," *Land Economics* 85, no. 1 (2009): 51-73.

¹² Neelam C. Poudyal, *et al.*, "Realizing the Economic Value of a Forested Landscape in a Viewshed," *Southern Journal of Applied Forestry* 34, no. 2 (2010): 72-78.

¹³ Bill Lewis, "Demand Grows for Parkside Homes in Nashville," *The Tennessean*, August 14, 2016, accessed August 15, 2016, <http://www.tennessean.com/story/money/homes/2016/08/14/demand-grows-parkside-homes-nashville/88313288/>.

¹⁴ "Quickfacts: Nashville-Davidson (balance), Tennessee," U.S. Census Bureau, accessed August 15, 2016, <http://www.census.gov/quickfacts/table/PST045215/4752006>.

¹⁵ Bill Lewis, "Demand Grows for Parkside Homes in Nashville," *The Tennessean*, August 14, 2016, accessed August 15, 2016, <http://www.tennessean.com/story/money/homes/2016/08/14/demand-grows-parkside-homes-nashville/88313288/>.

Property value can be affected by two park-related factors: distance from, and quality of, the park. While proximate value can be measured up to 2,000 feet from a park, most of the value—whether such spaces are large or small—is within the first 500 feet.¹⁶ Therefore, this analysis of enhanced property value has been limited to 500 feet.

The Trust for Public Land identified all homes within 500 feet of parks in Nashville.¹⁷ A home consists of a residential structure that is owned and taxed.¹⁸ The Trust for Public Land utilized tax assessment data for 2015. All values and tax amounts were then adjusted to 2016 dollars using the consumer price index for all urban consumers for all items. In 2015, 21,800 of Nashville’s 202,000 homes were located within 500 feet of parks. These park proximate homes had a total market value of \$4.00 billion (2016\$), as shown in Table 2.¹⁹

Moreover, people’s desire to live near a park also depends on the quality of the park. Beautiful natural resource areas with public access, scenic vistas, and bodies of water are markedly valuable. Those with excellent recreational facilities are also desirable, although sometimes the greatest property values are realized a block or two away if there are issues of noise, lights, or parking. Less attractive or poorly maintained parks may provide only marginal value to surrounding property values, and in some cases, these areas may actually reduce nearby property values. Assessing the quality of parks for this type of analysis is difficult given the subjective nature of park quality and the variation in quality across time. As such, this analysis utilizes estimates from the published literature regarding the value of parks on property values.

A conservative value of 5 percent has been assigned as the amount that parks add to the market value of all dwellings within 500 feet. This value takes into consideration lower quality parks that could potentially decrease property values, as well as the high quality parks that could boost property values by as much as 20 percent.²⁰ For example, a 2009 report from the National Association of REALTORS® found the premium for homes near parks can extend three blocks and start at 20 percent for those homes directly adjacent (declining as distance from the park increases).²¹ The 5 percent premium takes into consideration other factors that effect a home’s value and controls for characteristics of the house as well

¹⁶ B. Bolitzer and N.R. Netusil, “The Impact of Open Spaces of Property Values in Portland, Oregon,” *Journal of Environmental Management* 59, no. 3 (2000):185-193; John L. Crompton, “The Impact of Parks on Property Values: A Review of the Empirical Evidence,” *Journal of Leisure Research* 33, no. 1 (2001): 1-31; Brad Broberg, “Everybody Loves a Park: Green Space Is a Premium When Building, Buying, or Selling,” *National Association of Realtors, On Common Ground* (2009): 20–25; John L. Crompton, *The Proximate Principle: The Impact of Parks, Open Space and Water Features on Residential Property Values and the Property Tax Base* (Ashburn, Virginia: National Recreation and Park Association, 2004); Sarah Nicholls and John Crompton, “The Impact of Greenways on Property Values: Evidence from Austin, Texas,” *Journal of Leisure Research* 37, no. 3 (2005): 321-341.

¹⁷ Nashville” is used to refer to the Metropolitan Government of Nashville and Davidson County.

¹⁸ This analysis includes residential property codes for duplex, mobile home, residential condominium, single family, and zero lot line. Other property types were not considered in this analysis because sufficient data were not available to quantify the benefit. Nonresidential property types are rarely studied in the literature as they are much more difficult to statistically analyze because there are more variables that influence value and fewer real estate transactions to compare.

¹⁹ The adjustment to 2016 dollars was made using the Bureau of Labor Statistic’s Consumer Price Index for all urban consumers for all items, specifically utilizing the annual average index from 2015 and the May 2016 unadjusted index, which was the most recent index available at the time of this analysis. Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index, accessed June 30, 2016, <http://www.bls.gov/cpi/data.htm>.

²⁰ Crompton, *The Proximate Principle: The Impact of Parks, Open Space and Water Features on Residential Property Values and the Property Tax Base*.

²¹ Brad Broberg, “Everybody Loves a Park: Green Space Is a Premium When Building, Buying, or Selling,” *National Association of Realtors, On Common Ground* (2009): 20–25.

as locational characteristics such as proximity to transportation networks and central business districts. Holding all other factors constant, The Trust for Public Land assumes that parks alone increase property values by 5 percent.

This analysis estimates that in 2015 an added \$200 million (2016\$) in residential property value existed because of proximity to parks in Nashville (Table 2).²² The residential property tax rates for each parcel were used to determine how much additional tax revenue was raised by local units of government.²³ The total value captured in additional property tax revenue derived from parks in Nashville is \$2.15 million (2016\$) each year (Table 2).²⁴

Table 2. Enhanced residential property value due to proximity to park amenities in Nashville (2016\$)

Number of homes within 500 feet	Total market value within 500 feet	Additional market value due to parks	Additional annual property tax revenue due to parks
21,800	\$4,000,000,000	\$200,000,000	\$2,150,000

²² In addition to the literature cited, this estimate relies on geospatial parks data and parcel and tax assessment data provided by The Metropolitan Government of Nashville and Davidson County.

²³ Residential property tax rates were determined for each district in consultation with the Davidson County Assessor of Property.

²⁴ These estimates are conservative for the following reasons. First, the estimates leave out all the value of dwellings located beyond 500 feet from a park, even though evidence exists for marginal property value beyond such distances. For example, one study in Portland, Oregon, found that public parks within 1,500 feet increases a home sales price by \$2,260 or 3.4 percent of the average home’s value. Other studies have found that value can be measured at distances up to 2,000 feet. Second, these estimates only capture a 5 percent marginal value for parks, though studies have shown higher premiums. One study in Austin, Texas found that direct adjacency to greenbelts increased average home value by 5.7 or 12.2 percent, depending on the greenbelt. Other studies have found that parks can have up to a 20 percent premium. Therefore, these estimates provide a lower bound estimate of the “true” impact of parks on property values. Sources: B. Bolitzer and N.R. Netusil, “The Impact of Open Spaces of Property Values in Portland, Oregon,” *Journal of Environmental Management* 59 (2000):185-193; Brad Broberg, “Everybody Loves a Park: Green Space Is a Premium When Building, Buying, or Selling,” *National Association of Realtors, On Common Ground* (2009): 20–25; Sarah Nicholls and John Crompton, “The Impact of Greenways on Property Values: Evidence from Austin, Texas,” *Journal of Leisure Research* 37, no 3 (2005): 321-341.

Stormwater retention value

Stormwater management is an issue for the Nashville community.²⁵ When rainwater flows off roads, sidewalks, and other impervious surfaces, it can cause flooding, erosion, and declines in water quality by carrying pollutants with it. Untreated rainwater can flow directly into waterways, causing significant and costly ecological problems, such as algal blooms and under-cutting of creek and river banks.

In Nashville, the public park system is one of the largest stewards of tree canopy and open space. As such, the parks system has a significant impact on clean water. Metro Water Services provides drinking water, wastewater treatment, and stormwater management services to Nashville and Davidson County.²⁶ Nashville has made great strides to transition from a combined sewer system to separate sanitary and storm sewers, however, combined sewer systems still exist in some neighborhoods. Despite improvements, combined and sanitary sewer overflows into the Cumberland River do occur. In 2009, the Metropolitan Government of Nashville and Davidson County entered into a consent decree to achieve compliance with the Clean Water Act and reduce overflows.²⁷

The parks in Nashville reduce stormwater by capturing precipitation and/or slowing its runoff. Large pervious (absorbent) surface areas allow precipitation to infiltrate and recharge groundwater. Vegetation provides considerable surface area that intercepts and stores rainwater, allowing some to evaporate before it ever reaches the ground. In effect, parks function like storage reservoirs and are the original form of green infrastructure.

The former Western Research Station of the U.S. Forest Service developed a model to estimate the value of stormwater retained by parks. Inputs to the model consist of geographic location, climate region, surface permeability, acres of parkland, land cover, and vegetation types. First, The Trust for Public Land determined the perviousness of the parks in Nashville using a GIS layer of parks in Nashville, land cover data for Metro Nashville, and the 2011 National Land Cover Database (the most recent data available).²⁸ The remaining areas consist of water bodies or impervious roadways, trails, parking areas, buildings, and hard courts. Nashville parks are 97 percent permeable and 3 percent impermeable (Table 3).

Second, The Trust for Public Land estimated the amount of perviousness of the rest of Nashville (i.e., the city without its parkland) using the same data. The pervious land consists largely of residential front and back yards, and private open space areas such as country clubs, cemeteries, public institution grounds, and office campuses. Impervious land includes sidewalks, streets, parking areas, and rooftops. Nashville, without its parkland, is 84 percent permeable and 16 percent impermeable. Therefore, Nashville's parks are more permeable than the rest of Nashville.

Third, the University of California, Davis, calculated the amount and characteristics of rainfall from U.S. weather data. Typically, Nashville receives 52.1 inches of rain per year.

The model, which combines aspects of two other models developed by researchers at the Forest Service, uses precipitation data for Nashville to estimate annual runoff. The reduction in runoff attributable to parks in Nashville was calculated by comparing the modeled runoff with the runoff that would leave a

²⁵ Nashville” is used to refer to the Metropolitan Government of Nashville and Davidson County.

²⁶ “About Us,” Metro Government of Nashville and Davidson County, Tennessee, accessed July 7, 2016, <http://www.nashville.gov/Water-Services/About-Us.aspx>.

²⁷ “About the Program,” Cleanwater Nashville Overflow Abatement Program, accessed August 26, 2016, http://www.cleanwaternashville.org/_history-and-consent-decree.

²⁸ The National Land Cover Database has a spatial resolution of 30 by 30 meters and the Land Cover dataset for Metro Nashville has a spatial resolution of 3 feet by 3 feet.

hypothetical park site of the same size but with land cover that is typical of surrounding development (i.e., with streets, rooftops, or parking lots). In other words, this analysis does not measure all of the water that is absorbed by parks in Nashville, but instead the amount of water that is retained by parks above what would be retained had the park land been developed similarly to the rest of Nashville.

The final step in determining the economic value of stormwater retention by parks in Nashville is to estimate the cost of managing stormwater with infrastructure (e.g., detention ponds, constructed wetlands, and infiltration basins). It is difficult to estimate the marginal cost of stormwater management because Nashville does not directly treat stormwater. However, Nashville does charge a stormwater user fee and the revenue generated supports stormwater services (such as education and enforcement) across the service area of Metro Water Services. Nashville also requires treatment of stormwater from new and redevelopment activities. National studies have found that construction and annual maintenance costs for common stormwater best management practices range from \$0.04 to \$0.85 per cubic foot.²⁹ To be conservative, The Trust for Public Land uses the lower bound of the stormwater treatment cost range (\$0.04 per cubic foot) to estimate the value of stormwater retention provided by parks.

A total annual stormwater retention value of \$16.9 million (2016\$) is estimated for all public parks in Nashville (Table 4).³⁰

Table 3. Acreage and permeability of all parks in Nashville (2016)

Acres of parks	Acres	Percent of total area
With pervious area	22,800	97%
With impervious area	704	3%
Total	23,500	100%

Table 4. Annual stormwater cost savings from all parks in Nashville (2016\$)

	Inches	Amount
Rainfall	52.1	4,440,000,000 ft ³
Runoff with parks	3.16	269,000,000 ft ³
Runoff without parks	7.64	651,000,000 ft ³
Runoff reduction by parks	4.49	382,000,000 ft ³
Value of stormwater (\$ per cubic foot)		\$0.04
Total park stormwater infiltration value		\$16,900,000

²⁹ City of Overland Park, Kansas, "Overland Park Site BMP Cost Analysis," prepared by Olsson Associates October 31, 2007; James P. Heaney and Joong G. Lee, "Methods for Optimizing Urban Wet-Weather Control Systems," prepared for the U.S. Environmental Protection Agency, July 2006; Ada Wossink and Bill Hunt, "The Economics of Structural Stormwater BMPs in North Carolina," prepared for the Water Resources Research Institute of the University of North Carolina, May 2003; U.S. Environmental Protection Agency, "Preliminary Data Summary of Stormwater Best Management Practices," August 1999; Chesapeake Research Consortium, "The Economics of Stormwater BMPs in the Mid-Atlantic Region," August 1997; James P. Heaney, "Costs of Urban Stormwater Control," prepared for the U.S. Environmental Protection Agency, January 2002.

³⁰ The range of costs to implement best management practices of \$0.04 to \$0.85 per cubic foot was originally reported in 2005 dollars. The value of stormwater per cubic foot was adjusted to 2016 dollars using the 2005 annual average and July 2016 Consumer Price Index (CPI) for all urban consumers and all items. Source: Bureau of Labor Statistics, www.bls.gov/data.

Air pollution removal by vegetation

Air pollution is a significant and expensive problem associated with metropolitan growth that compromises human health and damages structures. Human cardiovascular and respiratory systems are affected, with broad consequences for health care costs and productivity.³¹ In addition, particulate matter, smog, and ozone increase the need to clean and repair buildings and other costly infrastructure.³²

In Nashville, the public park system is one of the largest stewards of tree canopy and open space. As such, the parks system has a significant impact on clean air. Trees and shrubs have the ability to remove pollutants from the air. Leaves absorb gases such as nitrogen dioxide, sulfur dioxide, carbon monoxide, and ozone. Particulate matter, which includes small particles of dust, metals, chemicals, and acids, can also be removed by adhering to plant surfaces. The vegetation in parks plays a role in improving air quality, helping nearby areas avoid the costs associated with pollution.³³

The Northern Research Station of the U.S. Forest Service in Syracuse, New York, designed a calculator for The Trust for Public Land to estimate air pollution removal by urban vegetation. This program, which is based on the Forest Service's earlier Urban Forest Effects (UFORE) and i-Tree Eco models, is location-specific, and takes into account the air characteristics of Nashville.³⁴

The Trust for Public Land determined the amount of tree canopy cover in the parks and greenways in Nashville using 2011 tree canopy data provided by the Metropolitan Government of Nashville and Davidson County. These data were created using a 3 foot spatial resolution. While Nashville has numerous trees on private property as well as on streets, this study measures only the economic value of trees on park properties. Sixty-six percent of Nashville's parkland is covered by tree canopy.³⁵

The i-Tree Eco model was used to estimate hourly changes in annual air pollutant removal and concentration due to air pollution particles depositing themselves onto trees, thereby decreasing the concentration of particles in the air. These changes were then summarized for a year. The calculator then estimates the value of the pollutant removal using the U.S. Environmental Protection Agency's environmental Benefits Mapping and Analysis Program (BenMAP) and the median cost to prevent a unit of pollution from entering the atmosphere. BenMAP estimates the incidence of adverse health effects and associated monetary values resulting from changes in nitrogen dioxide, sulfur dioxide, and fine particle concentrations.³⁶

A total value of \$3.66 million (2016\$) in air pollution removal was estimated for public parks in Nashville (Table 5).

³¹ Janet Currie, "Pollution and Infant Health," *Child Development Perspectives* 7 (2013): 237-242.

³² "R.N. Butlin, "Effects of Air Pollutants on Buildings and Materials," *Proceedings of the Royal Society of Edinburgh. Section B. Biological Sciences* 97 (1990):255-272; U.S. Environmental Protection Agency, *The Plain English Guide to the Clean Air Act*, EPA-456/K-07-001, Research Triangle Park: Office of Air Quality Planning and Statistics, 2007, accessed June 21, 2016, <https://www.epa.gov/sites/production/files/2015-08/documents/peg.pdf>.

³³ David J. Nowak, Satoshi Hirabayashi, Allison Bodine, and Robert Hoehn, "Modeled PM_{2.5} Removal by Trees in Ten U.S. Cities and Associated Health Effects," *Environmental Pollution* 178 (2013): 395-402.

³⁴ David J. Nowak, Satoshi Hirabayashi, Allison Bodine, and Eric Greenfield, "Tree and Forest Effects on Air Quality and Human Health in the United States," *Environmental Pollution* 193 (2014): 119-129.

³⁵ Nashville" is used to refer to the Metropolitan Government of Nashville and Davidson County.

³⁶ Fine particles, also known as PM_{2.5}, are less than 2.5 micrometers in diameter and are so small they can only be detected with an electron microscope. Sources include all types of combustion, including motor vehicles, power plants, and residential wood burning. "Particle Pollution (PM)," AirNow, accessed July 7, 2016, <http://www.airnow.gov/index.cfm?action=aqibasics.particle>; "Environmental Benefits Mapping and Analysis Program – Community Edition (BenMAP - CE)," U.S. Environmental Protection Agency, accessed July 7, 2016, <http://www.epa.gov/benmap/>.

Table 5. Value of air pollution removed by all public parks in Nashville (2016\$)

Pollutant	Pounds removed	Pollutant removal value
Carbon monoxide	19,100.00	\$13,300
Nitrogen dioxide	116,000.00	\$25,900
Ozone	683,000.00	\$822,000
Course dust particles	213,000.00	\$698,000
Fine particles	41,000.00	\$2,100,000
Sulfur dioxide	61,200.00	\$3,320
Total	1,130,000.00	\$3,660,000

Parks, recreation, and tourism

Tourism is a critical component of Nashville's economy and outdoor recreation is an important subset of the tourism industry.³⁷ Nashville is responsible for a large proportion of the state's tourism industry; Nashville and Davidson County received 13.1 million visitors in 2014³⁸ and these visitors spent \$5.43 billion, or 31.6 percent of all visitor spending in Tennessee.³⁹ This spending supported over 57,400 jobs with \$1.24 billion in payroll income and generated \$259 million and \$137 million in state and local tax receipts, respectively.⁴⁰

Parks and greenways enhance opportunities for outdoor recreation and are critical to the related tourism economy. Within Nashville, tourists visit parks and greenways to participate in a wide variety of activities at places like Centennial Park with its iconic Parthenon, which has been on the National Register of Historic Places since 1972, and walking trails, as well as the Centennial Sportplex that hosts numerous tournaments throughout the year. Though not always recognized, parks, greenways, and community centers play a significant role in the tourism economy of Nashville. Tourists' activities, the number of visitors, and tourist spending can determine the contribution of parks and greenways to the tourism economy.

In Nashville, parks and greenways are owned and managed by Metro Parks and Recreation, Tennessee State Parks, Tennessee Department of Environment and Conservation, Tennessee Wildlife and Resource Agency, and the U.S. Corps of Army Engineers. There are also several public-private partnerships between Nashville and nonprofit organizations that help supplement management. Unfortunately, visitor numbers and tourist expenditures are not tracked by all park agencies and organizations – and park visits are not tracked by the tourism agency. For example, according to Tennessee State Parks, Bicentennial Capitol Mall State Park, which is located in Nashville, attracts nearly 354,000 visitors annually;⁴¹ however, other entities that operate parks in Nashville do not track similar numbers. Since it is not possible to extrapolate the number of visitors to all of the parks and greenways in the city based on visitor information, The Trust for Public Land sought an alternative approach to estimating visitor spending attributable to parks visitors.

It is possible to estimate park-related visitor spending by applying to the total tourism expenditures information on the primary purposes of visits, if one of the primary purposes includes parks or park-related activities, such as outdoor recreation. Unfortunately, at the time of this analysis information was not available on the primary purpose of visitor trips to Nashville or Tennessee. The most recent visitor survey results instead included the top activities participated in while on a trip to Tennessee. This survey indicated that 11.6 percent of all Tennessee visitors, and 15.1 percent of Tennessee leisure visitors use parks at some point during their trip;⁴² however, applying these percentages to total tourism spending in Davidson County (\$5.42 billion in 2014 dollars) would overestimate the impact of parks since visiting the parks was not the primary purpose of the visit.⁴³

³⁷ Nashville" is used to refer to the Metropolitan Government of Nashville and Davidson County.

³⁸ Nashville Convention and Visitors Corporation, *Year In Review*, accessed July 28, 2016, <http://www.visitmusiccity.com/KLYearInReview5.6.pdf>. Note: there were 13.5 million visitors in 2015; however, visitor spending was not available for 2015.

³⁹ U.S. Travel Association, *The Economic Impact of Travel on Tennessee Counties 2014*, Washington D.C.: U.S. Travel Association, 2015. Accessed July 7, 2016, <https://www.tnvacation.com/industry/sites/default/files/2014%20TN%20Economic%20Impact%20Report.pdf>.

⁴⁰ *Ibid.*

⁴¹ Renee M. Stewart, Tennessee State Parks, e-mail message to the author, July 15, 2016.

⁴² Jeffrey Eslinger, *2014 Tennessee Visitor Profile*.

⁴³ U.S. Travel Association, *The Economic Impact of Travel on Tennessee Counties 2014*.

Instead, The Trust for Public Land relied on tourism data collected by Nashville’s Metro Park and Recreation Department as well as the Nashville Convention and Visitors Corporation. Nashville’s Metro Park and Recreation Department, along with its nonprofit partners, plays a critical role in providing large greenway networks and an expansive system of parkland within Davidson County. These greenways and parks are vital to the area’s ability to attract visitors from outside the city, and these parklands serve as essential venues that attract attendees for concerts, farmers markets, festivals and races. In 2015, Metro Parks hosted 648 events that attracted 1.62 million attendees. Of these events, 99 festivals were responsible for attracting 1.15 million attendees.⁴⁴ Four major music events alone, including the Country Music Association Music Festival, Let Freedom Sing!, Live on the Green, and New Year’s Eve Bash on Broadway, attracted 378,000 out-of-town visitors who spent an estimated \$96.1 million in the local economy.⁴⁵

In addition to music events that are hosted on the facilities of Metro Park and Recreation, the Centennial Sportsplex consistently attracts visitors due to the tournament and other events that are hosted there. In 2015, Centennial Sportsplex hosted 34 events between the ice rink, aquatics program, and tennis facilities. These events included the Music City Invitational and the Southeastern Long Course Swimming Championships which each attracted over 1,000 visitors. Over the course of 2015, all events at Centennial Sportsplex attracted 12,700 out of town participants. In total, these visitors generated \$19.6 million (2016\$) in spending on commercial accommodations and other expenditures (Table 6).

The Trust for Public Land estimates that 390,000 visitors to Nashville park and recreation system spend at least \$116 million annually in the local economy (Table 6). This estimate is conservative for two reasons. First, due to the limitations of available data it does not take into account the direct spending by tourists who come to Nashville to use the park, greenway, and recreation amenities for purposes other than festivals and tournaments. Second, this estimate does not include spending by festival attendees beyond the 2015 Country Music Association Music Festival, 2015 Let Freedom Sing! Festival, the 2015 Live on the Green, or the 2015 New Year’s Eve Bash on Broadway. Due to limited data availability, tourist spending is not included for out-of-town visitors who attended other festivals.⁴⁶

Table 6. 2015 Visitors and spending to Nashville Metro Parks and Recreation facilities for festivals and tournaments (2016\$)

Category	Out of town visitors	Direct visitor spending
Centennial Sportsplex Tournaments	12,700	\$19,600,000

⁴⁴ Metro Parks and Recreation, *2015 Metro Parks Calendar Data*, provided by Lisa King, e-mail to author, August 9, 2016.

⁴⁵ The Country Music Association Music Festival, which is hosted in part on Metro Park land – in Cumberland Park, Riverfront Park, and Walk of Fame Park – attracted approximately 150,000 attendees in 2015, 83 percent of which reside more than 50 miles away from Nashville. Visitors to the event were estimated to generate \$61.3 million (2016\$) in direct visitor spending. The 2015 Let Freedom Sing! Festival was also hosted in Riverfront Park. This festival attracted 150,000 attendees, 77 percent of which were visitors, and generated \$9.29 million (2016\$) in direct visitor spending. In addition, Live on the Green was attended by 20,000 people, 21.2 percent of which were visitors. These visitors generated \$2.94 million (2016\$) in spending. Approximately 150,000 people attended the 2015 New Year’s Eve Bash on Broadway event which was hosted in Public Square, Riverfront Park, and Walk of Fame Park. Eighty-nine percent of attendees were visitors who generated \$22.5 million (2016\$) in direct visitor spending. Sources: Nashville Convention and Visitors Corporation, *CMA Fest 2013-2015*; Metro Parks and Recreation, *2015 Metro Parks Calendar Data*, provided by Lisa King, e-mail to author, August 9, 2016; Nashville Convention and Visitors Corporation, *2015 Let Freedom Sing! July 4 Visitor Profile*; Nashville Convention and Visitors Corporation, *Live on the Green 2015*; Nashville Convention and Visitors Corporation, *Bash on Broadway 2013-2015*.

⁴⁶ At the time of this analysis, tourism visitor data were only available for a subset of all the music events that occurred in 2015.

APPENDICES

ECONOMIC BENEFITS OF PARKS

2015 Country Music Association Music Festival	125,000	\$61,300,000
2015 Let Freedom Sing! Festival	116,000	\$9,290,000
2015 Live on the Green Event	4,240	\$2,940,000
2015 New Year's Eve Bash on Broadway	134,000	\$22,500,000
Total	390,000	\$116,000,000

Recreational Use Value

In addition to bolstering the tourism economy, parks, greenways, sports fields, and community centers provide substantial economic benefits through their wide use by local residents. These amenities in Nashville provide direct recreational value to residents by providing access to recreational opportunities such as using playgrounds, picnicking, resting and relaxing, birdwatching, walking or hiking, using dog parks, using the gym and fitness equipment, and taking exercise classes at community centers.⁴⁷

Most recreational uses in public parks, such as Nashville's parks, are free of charge, but economists can calculate their value by determining the consumer's "willingness-to-pay" for the same experience in the private marketplace. In other words, if parks were not available in Nashville, how much would residents have to pay for similar experiences in commercial facilities or venues? Rather than income, the recreational use value represents the amount of money that residents save by not having to pay market rates to indulge in the park activities they enjoy. The value from nonresident park use was excluded from this analysis since it is covered in the tourism section above (see page ____).

The Trust for Public Land first determined the number of visits to parks and facilities in Nashville through a professionally-conducted telephone survey of Nashville residents.⁴⁸ Respondents provided information related to their visitation of Nashville parks and facilities and the types of activities in which they participated. Adults with children under the age of 18 also provided information about the visitation and participation of one of their children.

The survey was conducted in May 2016 and was statistically representative of Nashville residents with an accuracy level of plus or minus 4 percent. The results of the survey indicate that 47.7 percent of adults and 82.6 percent of children have visited parks, greenways, sports fields, and community centers in Nashville in the last 12 months, together making 16.9 million visits. These results are generally consistent with previous research, including outdoor recreation statistics for the state.⁴⁹

The survey also indicated that the most popular activities for adults were general park activities,⁵⁰ followed by walking or hiking, and using gyms, fitness equipment or taking exercise classes. For children, general park activities were followed by playing pickup games or team sports, and biking. See Table 7 for a listing of the five most popular activities overall.

⁴⁷ Nashville" is used to refer to the Metropolitan Government of Nashville and Davidson County.

⁴⁸ The survey was conducted of a statistically-representative sample of 600 residents of Nashville. The survey was administered in English and Spanish and sampled respondents using land lines as well as cellular telephones.

⁴⁹ Statewide statistics compiled by the Outdoor Industry Association indicate that an estimated 58 percent of Tennessee residents participate in outdoor recreation. The results of The Trust for Public Land's survey of Nashville residents indicate lower participation by adults when compared with the Outdoor Industry Association figures, potentially indicating that city residents seek recreational opportunities outside of the city's park system as well or generally engage in less outdoor recreation compared to residents in Tennessee overall. Source: Outdoor Industry Association, *The Outdoor Recreation Economy: Tennessee*, Boulder, CO: Outdoor Industry Association, accessed July 28, 2016, https://outdoorindustry.org/images/ore_reports/TN-tennessee-outdoorrecreationconomy-oia.pdf.

⁵⁰ General park activities include enjoying the outdoor space, picnicking, reading, relaxing, resting, sitting (e.g., on park benches), using playgrounds, exploring nature, or viewing birds and wildlife.

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Table 7. Top five activities of Nashville residents as determined by self-reported participation in parks, greenways, sports fields, and community centers in Nashville (2016)⁵¹

Activity	Participation (annual visits)		
	Total	Adults	Children
General park use ⁵²	6,660,000	4,070,000	2,590,000
Walking or hiking	2,060,000	1,570,000	492,000
Dog parks	1,440,000	1,010,000	420,000
Gyms, fitness equipment, or exercise classes	1,320,000	1,100,000	219,000
Pickup games or team sports	1,270,000	607,000	667,000

To be conservative for the purposes of the recreational use analysis, the self-reported participation data were adjusted to account for over reporting of park use by respondents, as well as for participation in multiple activities during a single visit.⁵³ Once the participation data were adjusted, The Trust for Public Land assigned dollar values to each park use by each participant in each activity. The methodology applied by The Trust for Public Land was developed using the framework of the Unit Day Value method, which is employed by the U.S. Army Corps of Engineers to count park visits by specific activity, assigning each activity a dollar value.⁵⁴ The Trust for Public Land determined the value of recreation activities in Nashville utilizing estimates of outdoor recreation value from Oregon State University’s Recreation Use Values Database as well as market rates, if available. Oregon State University’s database contains use values for over twenty activities and is based on over 350 economic valuation studies that estimated the use value of recreation activities in the U.S. and Canada from 1958 to 2006, adjusted to 2010 dollars. In determining which values to use, The Trust for Public Land’s economists applied the most conservative and relevant values to Nashville. The Trust for Public Land then adjusted all values to 2016 dollars.⁵⁵ The average value per visit of \$4.11 is a unique calculation for Nashville residents across all activities engaged in for all park visitors (Table 8).

In quantifying the benefits of resident use, The Trust for Public Land also recognized that not every visit within a given period has the same value to the visitor. In fact, additional uses of a park are less valuable than the first use. For example, an individual’s first visit of the year to a playground is worth more than

⁵¹ The original participation that individuals reported was adjusted to account for over reporting of park use as well as their participation in multiple activities during a single visit. The numbers included in the table reflect these adjustments.

⁵² General park activities include enjoying the outdoor space, picnicking, reading, relaxing, resting, sitting (e.g., on park benches), using playgrounds, exploring nature, or viewing birds and wildlife.

⁵³ Adjusting for over reporting of park use is consistent with the literature. Source: B. Wyker, *et al.*, *Self-Reported and Accelerometer-Measured Physical Activity: A Comparison in New York City*, New York City Department of Health and Mental Hygiene: Epi Research Report, 2013, http://www1.nyc.gov/assets/doh/downloads/pdf/epi/epiresearch-pa_measures.pdf.

⁵⁴ The unit day values for recreation used by the U.S. Army Corps of Engineers range from \$3.91 to \$11.70 for general park use including things like hiking on trails, and from \$15.90 to \$46.40 for specialized activities that require specialized equipment and expertise. Source: Bruce. D. Carlson, Memorandum for Planning Community of Practice (Economic Guidance Memorandum, 15-03, Unit Day Values for Recreation for Fiscal Year 2015, U.S. Army Corps of Engineers, October 28, 2014).

⁵⁵ This adjustment was made using the Bureau of Labor Statistic’s Consumer Price Index, specifically utilizing the annual average index for all urban consumers and all items from the original year and the most current available index for the current year. At the time of this analysis, the most recent index was available for May 2016, and this analysis utilized the unadjusted index for all urban consumers for all items. U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Price Index*, accessed June 30, 2016, <http://www.bls.gov/cpi/data.htm>.

that same individual’s 10th visit of the year.⁵⁶ The Trust for Public Land also estimated an average season for different park activities to take into account the potential for reduced participation. Although some people are active in parks 365 days a year, the recreational use valuation does not include uses during seasons in which participation rates drop to lower levels—for example, running, biking, and hiking usually peak in the spring and fall, with lower use in the summer and winter. Therefore, 26 week seasons are used for these activities. Furthermore, for activities for which a fee is charged, like golfing at a public golf course, the per-person fee is subtracted from the imputed value and only the “extra” value is assigned. For example, if playing golf costs \$30 at a public golf course in Nashville and \$125 at a private country club, the value of the resident’s first time playing golf at a public course would be \$95. As shown in Table 8, this analysis finds the recreational use value for Nashville is \$69.5 million (2016\$).

Table 8. The annual economic value of recreational use of parks, greenways, sports fields, and community centers in Nashville by residents (2016\$)

	Person visits	Average value per visit	Value
Total	16,900,000	\$4.11	\$69,500,000

⁵⁶ This is consistent with the economic law of diminishing marginal utility, which recognizes that the more of a good one consumes, within a given time and holding all else constant, the smaller the gain in the total utility derived from each additional amount. Utility, in this case, is the amount of satisfaction derived from the consumption of park and greenway amenities.

Helping to promote human health

In this analysis, The Trust for Public Land measured the collective economic savings realized on an annual basis by residents of Nashville who use parks, greenways, sports fields, and community centers in the city to exercise.⁵⁷ Several studies have documented the economic burden related to physical inactivity. Research has found that physical activity can lead to lower health care costs, fewer chronic diseases, and greater longevity.⁵⁸ Many medical problems can result from, or be exacerbated by, physical inactivity. This list of medical problems includes heart disease,⁵⁹ type 2 diabetes, stroke,⁶⁰ mental disorders,⁶¹ and some forms of cancer.⁶² One report released in August 2009 by the U.S. Centers for Disease Control and Prevention (CDC) estimated that obesity cost the U.S. economy \$147 billion in 2008 alone.⁶³ Lack of exercise is shown to contribute to obesity and its many effects, and for this reason experts call for a more active lifestyle.

The CDC recognizes that physical activity helps improve overall health and reduces the risk for chronic diseases. As such, the CDC promotes physical activity guidelines, defining sufficient activity as at least 150 minutes of moderate-intensity activity per week or at least 75 minutes of vigorous-intensity activity per week, along with muscle-strengthening activities at least two days per week.⁶⁴

Having access to places to walk can help individuals meet recommendations for regular physical activity.⁶⁵ Parks have been found to be one of the most commonly reported convenient places for improved physical and mental health, especially if the space is well maintained, safe, and accessible. From a public health perspective, parks provide low-cost, high-yield wellness opportunities.⁶⁶

Based on the CDC's guidelines for physical activity, The Trust for Public Land used the results of a professionally-conducted telephone survey (see page ___) to determine how many adults were using the park and recreation system at a frequency and intensity that would result in medical care cost savings. In accordance with CDC guidelines, The Trust for Public Land defined vigorous-intensity activities to

⁵⁷ Nashville" is used to refer to the Metropolitan Government of Nashville and Davidson County.

⁵⁸ Bing Han et al., "How Much Neighborhood Parks Contribute to Local Residents' Physical Activity in the City of Los Angeles: a Meta-Analysis."

⁵⁹ Jacob Sattelmair et al., "Dose Response Between Physical Activity and Risk of Coronary Heart Disease: A Meta-Analysis," *Circulation* 124 (2011): 789-795; Edward Archer and Steven N. Blair, "Physical Activity and the Prevention of Cardiovascular Disease: From Evolution to Epidemiology," *Progress in Cardiovascular Diseases* 53 (2011): 387-396.

⁶⁰ Larissa Roux et al., "Cost Effectiveness of Community-Based Physical Activity Interventions," *American Journal of Preventive Medicine* 35 (2008): 578-588.

⁶¹ Joshua Hayward et al., "Lessons from Obesity Prevention for the Prevention of Mental Disorders: The Primordial Prevention Approach," *BMC Psychiatry* 14 (2014): 254.

⁶² I-Min Lee et al., "Impact of Physical Inactivity on the World's Major Non-Communicable Diseases," *The Lancet* 380 (2012): 219-229.

⁶³ "Adult Obesity Causes and Consequences," Centers for Disease Control and Prevention, accessed December 15, 2015, <http://www.cdc.gov/obesity/adult/causes.html>.

⁶⁴ "How Much Physical Activity Do Adults Need?" Centers for Disease Control and Prevention, accessed January 27, 2015, <http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html>.

⁶⁵ B. Giles-Corti and R. J. Donovan, "The Relative Influence of Individual, Social, and Physical Environment Determinants of Physical Activity," *Social Science and Medicine* 54 (2002): 1793-1812; K. E. Powell, L. M. Martin, and P. P. Chowdhury, "Places to Walk: Convenience and Regular Physical Activity," *American Journal of Public Health* 93 (2003): 1519-1521.

⁶⁶ Deborah Cohen et al., "The Potential for Pocket Parks to Increase Physical Activity," *American Journal of Health Promotion* 28 (2014): S19-S26; M. A. Barrett and Daphne Miller, "Parks and Health: Aligning Incentives to Create Innovations in Chronic Disease Prevention," *Preventing Chronic Disease, Centers for Disease Control and Prevention* (2014), doi: <http://dx.doi.org/10.5888/pcd11.130407>.

include running, bicycling, and swimming. Moderate-intensity activities included walking, hiking, playing team sports or pickup games, using gyms and fitness equipment, or taking exercise classes. This analysis does not include low-heart-rate activities, such as using dog parks or wildlife watching. Individuals must also utilize the parks, greenways, sports fields, or community centers in Nashville exclusively to an extent that is sufficient to meet the CDC's physical activity guidelines. This analysis does not include individuals who use private facilities in conjunction with parks to meet the CDC's physical activity thresholds.

This analysis finds that 23,000 adult residents in Nashville use parks to a degree that improves their health. While all residents who visit parks improve their health by visiting, not all residents use these areas to an extent that is sufficient to meet the CDC's physical activity guidelines.

Based on previous work in health care economics, The Trust for Public Land assigned a value of \$1,170 as the annual medical cost savings between adults in Nashville who exercise regularly and those who do not. This value was determined based on a careful review of health care economics literature that focuses on the cost difference between physically active and inactive persons. The cost savings was based on the National Medical Expenditures Survey and has been widely cited in the literature.⁶⁷ The medical care cost savings were adjusted for inflation and brought to 2016 dollars.⁶⁸ For persons over the age of 65, health care cost savings are doubled because seniors typically incur two or more times the medical care costs of younger adults.⁶⁹ This doubling of health care cost savings is conservative. For example, one study found that average health care expenses for adults over 65 were over three times those of working-age people.⁷⁰

In 2016, the combined health savings from physical activity in the park and recreation system by the residents of Nashville was \$27.5 million (Table 9).

⁶⁷ M. Pratt, C. A. Macera, and G. Wang, "Higher Direct Medical Costs Associated with Physical Inactivity," *Physician and Sportsmedicine* 28 (2000): 63–70.

⁶⁸ The unadjusted medical cost consumer price index for all urban consumers was used to account for inflation. Specifically, the 1987 annual average was used for the base year and the most current unadjusted medical care index for the current year. At the time of this analysis, the most recent index was available for May 2016. Source: U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Price Index*, accessed June 30, 2016, <http://www.bls.gov/cpi/data.htm>.

⁶⁹ Roland D. McDevitt and Sylvester J. Schieber, *From Baby Boom to Elder Boom: Providing Health Care for an Aging Population* (Washington, DC: Watson Wyatt Worldwide, 1996).

⁷⁰ "The High Concentration of U.S. Health Care Expenditures," U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, accessed August 30, 2016, <http://www.ahrq.gov/research/findings/factsheets/costs/expriach/index.html#HowAre>.

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Table 9. Estimated health benefits of physical activity in Nashville parks, greenways, sports fields, and community centers (2016\$)

Category	
Adults 18-64 years of age	
Number of adults (18-64) physically active in parks*	22,400
Average annual medical care cost difference between active and inactive persons between 18-64 years old	\$ 1,170
Subtotal of health care benefits (18-64)	\$26,300,000
Adults 65 years of age and older	
Number of adults (65+) physically active in parks*	543
Average annual medical care cost difference between active and inactive persons over 65 years old	\$2,340
Subtotal of health care benefits (65+)	\$1,270,000
Total adults physically active in parks	23,000
Total annual value of health benefits from parks	\$27,500,000

* Calculations are based on persons using Nashville parks, greenways, sports fields, and community centers exclusively to engage in sufficient levels of moderate and/or vigorous activity that meet the CDC's physical activity guidelines.

Conclusion

While much previous research has focused on the economics of housing, manufacturing, retail, and the arts, until now, there has been no comprehensive study in Nashville on the economic contributions of the park system in Nashville. The Trust for Public Land believes that answering this question – “How much value does a city park system bring to a city?” – can be profoundly useful. For the first time, parks can be assigned the kind of numerical underpinning long associated with transportation, trade, residences, and other sectors. Urban analysts will be able to obtain a major piece of missing information about how cities work and how parks fit into the equation. Housing proponents and other urban constituencies will potentially be able to find a new ally in city park advocates. And the mayor, council, and chamber of commerce now have a solid, numerical motivation to strategically acquire parkland in balance with community development projects.

This study illustrates that the parks and recreation system in Nashville is a key economic driver that contributes millions annually in economic benefits. As explained above, these park amenities increase the value of nearby residential properties by \$200 million, which increases property tax revenues by \$2.15 million a year.

These park areas also provide natural goods and services. Specifically, by retaining stormwater, parks provide a value \$16.9 million each year. By removing air pollutants that cause damage to structures and endanger human health, the trees and shrubs within parks in Nashville reduce health care costs and lower pollution control costs by \$3.66 million per year.

Nashville’s park and recreation system is essential to the tourism economy. Annually, four of the major festivals hosted by Metro Parks and Centennial Sportsplex tournaments attract 390,000 visitors who spend \$116 million.

People who live in Nashville certainly gain from their parks. Each year residents receive a benefit of \$69.5 million from the recreational use of the parks. In addition, approximately 23,000 adult residents of Nashville utilize parks, greenways, sports fields, and community centers to engage in physical activity at a level sufficient to generate measurable health benefits, yielding annual medical cost savings of \$27.5 million.

Nashville parks, greenways, sports fields, and community centers provide a number of other important economic benefits that cannot be quantified at this time. These include improving scenic beauty, community cohesion, quality of life, and boosting the local economy by attracting businesses and residents. These benefits create substantial and sustained economic value, which is beyond the scope of this report.

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8.16 FUNDING THE FUTURE

APPENDIX – PROJECTED CAPITAL SPENDING DETAIL

SCHEDULE OF PER UNIT DEVELOPMENT COSTS BY TIER

Asset	Unit	Development Cost per Unit		
		Low	Avg	High
Pocket Parks	ac	-	\$ 1,120,318	-
Neighborhood Parks	ac	-	\$ 269,895	-
Community Parks	ac	-	\$ 66,180	-
Regional Parks	ac	-	\$ 66,180	-
Signature Parks	ac	-	\$ 1,120,318	-
Specialty Parks	ac	-	\$ 66,180	-
Greenway Corridors	ac	-	\$ 66,180	-
Trails - Hard Surface	mi	\$ 200,000	\$ 650,000	\$ 1,000,000
Trails - Soft Surface	mi	\$ 56,500	\$ 153,250	\$ 250,000
Mountain Bike Trails	mi	\$ 56,500	\$ 153,250	\$ 250,000
Blueway Access Site	sy	\$ 85	\$ 90	\$ 95
Adult Rectangle	ea	\$ 250,000	\$ 625,000	\$ 1,000,000
Adult Diamond	ea	\$ 250,000	\$ 376,250	\$ 750,000
Wheelchair Access Field	ea	\$ 350,000	\$ 700,000	\$ 1,000,000
Basketball Courts	ea	\$ 50,000	\$ 70,000	\$ 85,000
Tennis Courts	ea	\$ 60,000	\$ 102,000	\$ 138,000
Sand Volleyball	ea	\$ 10,600	\$ 13,300	\$ 16,000
Indoor Facility (Recreation Facility, Fieldhouse, Aquatic Center)	sf	\$ 250	\$ 300	\$ 350
Shelter	sf	\$ 45	\$ 133	\$ 250
Playgrounds	ea	\$ 55,000	\$ 138,215	\$ 350,000
Fitness Equipment Areas	ea	\$ 55,000	\$ 138,215	\$ 350,000
Disc Golf Hole	ea	\$ 1,000	\$ 1,500	\$ 2,000
Dog Park	ac	\$ 20,000	\$ 70,000	\$ 160,000
Regional Dog Park	ac	\$ 160,000	\$ 160,000	\$ 160,000
Outdoor Pools	sf	\$ 150	\$ 175	\$ 200
Spraygrounds	ea	\$ 150,000	\$ 1,525,000	\$ 5,000,000
Skate Park	sf	\$ 30	\$ 34	\$ 38
Pump Track (Dirt)	ac	\$ 1,000,000	\$ 1,500,000	\$ 2,000,000
Pump Track (Asphalt)	ea	\$ 125,000	\$ 125,000	\$ 125,000
Planning Projects	ea	\$ 15,000	\$ 75,000	\$ 250,000
Staffing Assessment	ea	-	\$ 50,000	-
System-Wide Master Plan	ea	-	\$ 500,000	-
Wave Country Update	ea	\$ 3,000,000	\$ 3,500,000	\$ 4,000,000
Building Addition	sf	\$ 200	\$ 250	\$ 300
Building Renovation	sf	\$ 100	\$ 125	\$ 150
Parking Lot	ac	\$ 435,600	\$ 435,600	\$ 435,600

CAPITAL SPENDING DETAIL TO ACHIEVE RECOMMENDATIONS

TRAILS AND BLUEWAY ACCESS

Asset	Unit	Recommended Units by 2022	Investment by Tier to meet 2022 Level of Service Recommendations			Total Investment to Meet 2022 Recommendation
			Low	Avg	High	
Trails - Hard Surface	mi	39	\$ 2,594,667	\$ 8,432,667	\$ 12,973,333	\$ 24,000,667
Trails - Soft Surface	mi	40	\$ 747,481	\$ 2,027,459	\$ 3,307,438	\$ 6,082,378
Mountain Bike Trails	mi	12	\$ 230,327	\$ 624,736	\$ 1,019,146	\$ 1,874,209
Blueway Access Site (3)	sy	1,800	\$ 51,000	\$ 54,000	\$ 57,000	\$ 162,000
Subtotal						\$ 32,119,253
15% Design / Contingency						\$ 4,817,888
Total Investment by 2021						\$ 36,937,141

Asset	Unit	Recommended Units 2022 - 2027	Investment by Tier to meet 2022 - 2027 Level of Service Recommendations			Total Investment to Meet 2022 -2027 Recommendation
			Low	Avg	High	
Trails - Hard Surface	mi	14	\$ 929,333	\$ 3,020,333	\$ 4,646,667	\$ 8,596,333
Trails - Soft Surface	mi	10	\$ 196,945	\$ 534,191	\$ 871,437	\$ 1,602,574
Mountain Bike Trails	mi	3	\$ 65,648	\$ 178,064	\$ 290,479	\$ 534,191
Blueway Access Site	sy	1,200	\$ 34,000	\$ 36,000	\$ 38,000	\$ 108,000
Subtotal						\$ 10,841,098
15% Design / Contingency						\$ 1,626,165
Total Investment 2022 - 2027						\$ 12,467,263

ATHLETIC FIELDS & COURTS

Asset	Unit	Recommended Units by 2022	Investment by Tier to meet 2022 Level of Service Recommendations			Total Investment to Meet 2022 Recommendation
			Low	Avg	High	
Multipurpose Fields	ea	34	\$ 2,869,167	\$ 7,172,917	\$ 11,476,667	\$ 21,518,750
Diamond Ballfields	ea	31	\$ 2,619,167	\$ 3,941,846	\$ 7,857,500	\$ 14,418,513
Wheelchair Access Field	ea	1	\$ 116,667	\$ 233,333	\$ 333,333	\$ 683,333
Basketball Courts	ea	44	\$ 1,211,000	\$ 1,695,400	\$ 2,058,700	\$ 3,080,000
Tennis Courts	ea	10	\$ 195,000	\$ 331,500	\$ 448,500	\$ 975,000
Sand Volleyball	ea	2	\$ 7,067	\$ 8,867	\$ 10,667	\$ 26,600
Subtotal						\$ 40,702,196
15% Design / Contingency						\$ 6,105,329
Total Investment by 2021						\$ 46,807,525

Asset	Unit	Recommended Units 2022 - 2027	Investment by Tier to meet 2022 - 2027 Level of Service Recommendations			Total Investment to Meet 2022 - 2027 Recommendation
			Low	Avg	High	
Multipurpose Fields	ea	12	\$ 968,333	\$ 2,420,833	\$ 3,873,333	\$ 7,262,500
Diamond Ballfields	ea	12	\$ 968,333	\$ 1,457,342	\$ 2,905,000	\$ 5,330,675
Basketball Courts	ea	10	\$ 166,000	\$ 232,400	\$ 282,200	\$ 680,600
Tennis Courts	ea	16	\$ 310,200	\$ 527,340	\$ 713,460	\$ 1,551,000
Sand Volleyball	ea	2	7,067	8,867	10,667	26,600
Subtotal						\$ 14,851,375
15% Design / Contingency						\$ 2,227,706
Total Investment 2022 - 2027						\$ 17,079,081

PARK AMENITIES AND FACILITIES

Asset	Unit	Recommended Units by 2022	Investment by Tier to meet 2022 Level of Service Recommendations			Total Investment to Meet 2022 Recommendation
			Low	Avg	High	
Indoor Facility (Recreation Facility, Fieldhouse, Aquatic Center)	sf	364,759	\$ 30,396,583	\$ 36,475,900	\$ 42,555,217	\$ 109,427,700
Shelter	sf	15,690	\$ 235,350	\$ 693,341	\$ 1,307,500	\$ 2,236,191
Playgrounds	ea	45	\$ 830,683	\$ 2,087,513	\$ 5,286,167	\$ 8,204,363
Fitness Equipment Areas	ea	10	\$ 183,333	\$ 460,718	\$ 1,166,667	\$ 1,810,718
Disc Golf Hole	ea	18	\$ 6,000	\$ 9,000	\$ 12,000	\$ 27,000
Dog Park	ac	20	\$ 133,333	\$ 466,667	\$ 1,066,667	\$ 1,666,667
Regional Dog Park	ac	10	\$ 533,333	\$ 533,333	\$ 533,333	\$ 1,600,000
Outdoor Pools	sf	100,000	\$ 5,000,000	\$ 5,833,333	\$ 6,666,667	\$ 17,500,000
Spraygrounds	ea	3	\$ 150,000	\$ 1,525,000	\$ 5,000,000	\$ 6,675,000
Skate Park	sf	65,000	\$ 650,000	\$ 736,667	\$ 823,333	\$ 2,210,000
Pump Track (Dirt)	ac	0.5	\$ 166,667	\$ 250,000	\$ 333,333	\$ 750,000
Pump Track (Asphalt)	ea	1	\$ 41,667	\$ 41,667	\$ 41,667	\$ 125,000
Subtotal						\$ 152,232,639
15% Design / Contingency						\$ 22,834,896
Total Investment by 2022						\$ 175,067,535

Asset	Unit	Recommended Units 2022 - 2027	Investment by Tier to meet 2022- 2027 Level of Service Recommendations			Total Investment to Meet 2022 - 2027 Recommendation
			Low	Avg	High	
Indoor Facility (Recreation Facility, Fieldhouse, Aquatic Center)	sf	116,241	\$ 9,686,750	\$ 11,624,100	\$ 13,561,450	\$ 34,872,300
Shelter	sf	10,455	\$ 156,825	\$ 462,006	\$ 871,250	\$ 1,490,081
Playgrounds	ea	20	\$ 365,200	\$ 917,750	\$ 2,324,000	\$ 3,606,950
Fitness Equipment Areas	ea	10	\$ 183,333	\$ 460,718	\$ 1,166,667	\$ 1,810,718
Disc Golf Hole	ea	18	\$ 6,000	\$ 9,000	\$ 12,000	\$ 27,000
Dog Park	ac	15	\$ 100,000	\$ 350,000	\$ 800,000	\$ 1,250,000
Outdoor Pools	sf	25,000	\$ 1,250,000	\$ 1,458,333	\$ 1,666,667	\$ 4,375,000
Spraygrounds	ea	2	\$ 100,000	\$ 1,016,667	\$ 3,333,333	\$ 4,450,000
Skate Park	sf	60,000	\$ 600,000	\$ 680,000	\$ 760,000	\$ 2,040,000
Subtotal						\$ 53,922,050
15% Design / Contingency						\$ 8,088,307
Total Investment 2022 - 2027						\$ 62,010,357

PLANNING PROJECTS

Asset	Unit	Recommended Units by 2022	Investment by Tier to meet 2022 Level of Service Recommendations			Total Investment to Meet 2022 Recommendation
			Low	Avg	High	
Planning Projects	ea	25	\$ 150,000	\$ 750,000	\$ 1,250,000	\$ 2,150,000
Staffing Assessment	ea	1		\$ 50,000		\$ 50,000
Subtotal						\$ 2,200,000
15% Design / Contingency						\$ 330,000
Total Investment by 2022						\$ 2,530,000

Asset	Unit	Recommended Units 2022 - 2027	Investment by Tier to meet 2022 - 2027 Level of Service Recommendations			Total Investment to Meet 2022 - 2027 Recommendation
			Low	Avg	High	
Planning Projects	ea	25	\$ 150,000	\$ 750,000	\$ 1,250,000	\$ 2,150,000
System-Wide Master Plan	ea	1	\$ -	\$ 500,000	\$ -	\$ 500,000
Subtotal						\$ 2,650,000
15% Design / Contingency						\$ 397,500
Total Investment 2022 - 2027						\$ 3,047,500

APPENDIX – DETAILED OPERATIONAL & MAINTENANCE COSTS
SCHEDULE OF ANNUAL PER UNIT OPERATIONAL & MAINTENANCE COSTS

Asset	Unit	Operational and Maintenance per Unit Costs		
		Low	Med	High
Pocket Parks	ac	8,500.00	9,250.00	10,000.00
Neighborhood Parks	ac	8,500.00	9,250.00	10,000.00
Community Parks	ac	7,500.00	8,250.00	9,000.00
Regional Parks	ac	5,000.00	6,250.00	7,500.00
Signature Parks	ac	17,000.00	21,000.00	25,000.00
Special Use Park	ac	5,000.00	10,000.00	15,000.00
Greenway Corridors	ac	3,000.00	4,500.00	6,000.00
Natural Acres	ac	1,000.00	1,500.00	2,000.00
Indoor Recreation Facilities	sf	25.00	30.00	35.00
Outdoor Aquatic Facilities	sf	15.00	17.50	20.00

PARK AND FACILITY OPERATIONAL & MAINTENANCE COSTS BY TIER

Asset	Unit	Recommended Units by 2027	Operational and Maintenance Costs for Capital Investments by 2027			Total Annual Operational / Maintenance Impact
			Low	Med	High	
Pocket Parks	ac	37	\$ 105,390	\$ 114,689	\$ 123,988	\$ 344,068
Neighborhood Parks	ac	226	640,673	697,203	753,733	2,091,610
Community Parks	ac	229	\$ 573,206	\$ 630,526	\$ 687,847	\$ 1,891,579
Regional Parks	ac	1,913	\$ 3,188,718	\$ 3,985,897	\$ 4,783,076	\$ 11,957,691
Signature Parks	ac	141	\$ 798,796	\$ 986,748	\$ 1,174,700	\$ 2,960,244
Special Use Park	ac	440	\$ 733,142	\$ 1,466,283	\$ 2,199,425	\$ 4,398,850
Greenway Corridors	ac	55	\$ 55,481	\$ 83,222	\$ 110,962	\$ 249,665
Natural Acres	ac	1,498	\$ 499,459	\$ 749,189	\$ 998,918	\$ 2,247,566
Indoor Recreation Facilities	sf	481,000	\$ 4,008,333	\$ 4,810,000	\$ 5,611,667	\$ 14,430,000
Outdoor Aquatic Facilities	sf	125,000	\$ 625,000	\$ 729,167	\$ 833,333	\$ 2,187,500
Total Annual Cost						\$ 42,758,772

APPENDIX – MAINTENANCE STANDARDS

LEVEL TWO MAINTENANCE STANDARDS FOR PARKS

The following list outlines the general Level 2 maintenance standards that serve as a basis for the projected operational and upkeep costs for Metro Parks assets. Maintenance standards can change by season and month depending on environmental factors and level of use. Standards will be calculated by time and equipment needed to develop the required operation budgets.

- Turf Maintenance
 - Mowing will occur once weekly
 - Mowing heights
 - 2½ ” during cool season (day time highs consistently below 75 degrees)
 - Edging of all turf perimeters will occur weekly during season and every 2 weeks in off-season
 - 88% turf coverage
 - 8% weed infestation
 - 4% bare area will be acceptable after play begins
 - Remove grass clippings if visible
 - Aerate once annually in low use areas
 - Aerate twice annually in high use areas (additional if needed)
 - Inspect thatch layer regularly and remove as needed
 - Test soil and water annually
 - Additional testing will occur if deemed necessary
 - Soil moisture will be consistent
 - No wet areas
 - No dry areas
 - Firm enough for foot and mower traffic
 - Apply wetting agents to assist in uniform soil moisture
 - Hand water as needed
 - Inspect weekly for insects, disease, and stress, and respond to outbreaks within 24 hours
 - Fertilize twice yearly
- Tree and Shrub Maintenance
 - Prune/trim trees and shrubs as dictated by species at least once annually
 - Apply fertilizer to plant species only if plant health dictates
 - Remove sucker growth as needed

- Inspect regularly for insects and diseases. Respond to outbreaks within 48 hours
- Place 2” of organic mulch around each tree within a minimum 18” ring
- Place 2” of organic mulch around shrub beds to minimize weed growth
- Remove hazardous limbs and plants immediately upon discovery
- Remove dead trees and plant material within 30 days of discovery
- Remove or treat invasive plants yearly
- Storm Cleanup
 - Inspect drain covers at least once monthly and immediately after flooding occurs
 - Remove debris and organic materials from drain covers within every other month
 - Inspect and clean drains before forecasted storms begin
 - Maintain water inlet height at 100% of design standard
 - Invasive plant removal once a year or as needed
 - Drain system maintenance done once a year
- Irrigation Systems
 - Inspect irrigation systems a minimum of once per month and as necessary
 - Initiate repairs to non-functioning systems within 48 hours of discovery
 - Annual back flow inspection done yearly
- Litter Control
 - Pick up litter and empty containers at least every other day or as needed
 - Remove leaves and organic debris once a week
- Playground Maintenance
 - Audit each playground to insure compliance with the current version of ASTM Performance Standard F1487 and the Consumer Product Safety Commission “Handbook for Public Playground Safety”
 - Complete low-frequency playground inspections at least bi-monthly or as required. All low-frequency inspections are to be completed by a Certified Playground Safety Inspector (CPSI). Complete safety-related repairs immediately and initiate other repairs within 48 hours of discovery
 - Complete high-frequency inspections at least weekly
 - Grooming surface two times weekly
- Hard Surface Maintenance
 - Remove debris and glass immediately upon discovery
 - Remove sand, dirt, and organic debris from walks, lots, and hard surfaces every 30 days
 - Remove trip hazards from pedestrian areas immediately upon discovery

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- Paint fading or indistinct instructional/directional signs every other year
- Remove grass in the cracks monthly
- Outdoor Court Maintenance
 - Inspect basketball courts at least once monthly. Complete repairs within 10 days of discovery
 - Repaint lines at least once every 2 years
 - Replace basketball nets within 10 days when frayed, broken, or removed
 - Maintain basketball goal posts, backboards, rims, fencing, and hardware to original design specifications. Complete repairs within 10 days of discovery
- Trail Maintenance
 - Inspect hard and soft surface trails at least once monthly
 - Remove dirt, sand, and organic debris from hard surfaces at least once monthly
 - Remove organic debris from soft surfaces at least once monthly
 - Maintain a uniform 2-4” depth of compacted material on soft surface trails
 - Mechanically or chemically control growth 24” on either side of the trails
 - Remove overhanging branches within 84” of the trail surface at least once annually
 - Inspect signs, benches, and other site amenities at least once monthly. Complete repairs within 10 days of discovery
- Site Amenity Maintenance
 - Inspect benches, trash containers, picnic tables, grills, bicycle racks, drinking fountains, and other site amenities at least monthly. Complete repairs within 5 days of discovery
 - Cleaning and washing annually
 - Inspect daily for insects, disease, and stress and respond to outbreaks within 24 hours
- Athletic Field Grounds Maintenance (baseball, soccer, softball, and rugby)
 - Fields that are dedicated to soccer, baseball, softball and rugby only
 - Mowing will occur twice weekly
 - Mowing heights
 - 2 ½” during cool season (day time highs consistently below 75 degrees)
 - 3” during warm season (day time highs consistently above 75 degrees)
 - Edging of all field perimeters will occur once monthly
 - 80% turf coverage at the start of every season
 - 65% turf coverage after play begins
 - 20% weed infestation

- 5% bare area at the start of every season
- 15% bare and weak areas will be acceptable after play begins
- Remove grass clippings if visible
- Aerate once annually
- Inspect thatch layer regularly and remove as needed
- Test soil and water annually
 - Additional testing will occur if deemed necessary
 - Soil moisture will be consistent
- No wet areas
- No dry areas
- Firm enough for foot and mower traffic
- Inspect weekly for insects, disease, and stress, and respond to outbreaks within 24 hours
- Fence and Gate Maintenance
 - Inspect fences, gates, and bollards at least once annually. Complete safety-related repairs immediately, and complete other repairs within 5 days of discovery
 - Clean debris annually
- Sign Maintenance
 - Inspect sign lettering, surfaces, and posts at least once every 3 months
 - Repair/replace signs to maintain design and safety standards within 5 days of discovery
 - Clean sign once a year
- Pest Control
 - In accordance with the Department's Integrated Pest Management Program (IPM), inspect problem areas monthly and remedy immediately upon discovery
- Vandalism and Graffiti Removal
 - Initiate repairs immediately upon discovery. Document and photograph damage as necessary
- Picnic Shelters
 - Reserved units cleaned and litter removed prior to and after each reservation
 - Minor repairs are made immediately upon discovery
 - Non-reserved units are cleaned bi-weekly, or as necessary
- Lighting Security/Area
 - Inspect quarterly
 - Repairs/bulb replacement will be completed within 72 hours of discovery

INDOOR FACILITY MAINTENANCE STANDARDS

The following maintenance management schedule is recommended for various components of an indoor recreation center:

- General Facility Maintenance
 - Windows exterior cleaned twice a year
 - Carpets vacuumed Daily
 - Trash / recycling emptied Daily
 - Desks wiped down
 - Lights cleaned monthly
 - Tables and Chairs cleaned daily or on a as needed basis
 - Window sills cleaned daily
 - Windows cleaned on inside weekly
 - Storage closets cleaned one time a year
 - HVAC cleaned quarterly
 - Doors cleaned weekly
 - Offices painted every (7) years
 - Light switches cleaned daily
 - Counters wiped down daily
 - Lights cleaned monthly
 - Phone wiped down daily
 - Floor swept daily and mopped weekly
 - Carpets vacuumed daily
 - All equipment wiped down daily
 - Annual cleaning of cabinets
 - Overhead directional signs cleaned monthly and wiped down monthly
 - Corridors cleaned daily
 - Carpets deep cleaned every two weeks
 - Clean upholstered chairs monthly and replace chairs as needed
 - Furniture deep cleaned quarterly
 - Deep clean hallway monthly
 - Coat closet racks need wiped down quarterly
 - Restroom cleaned on every shift and deep cleaned monthly
 - Walls cleaned weekly

- Utility closet cleaned every quarter
- Stairwells swept / mopped daily and sealed yearly
- Floors and tile cleaned daily
- Carpet cleaned daily
- Cob webs checked daily
- Trophy case cleaned monthly and glass cleaned inside and outside
- Office Break Room
 - Cleaned daily
 - Counter cleaned daily
 - Refrigerator cleaned out quarterly
- Storage Area
 - Annually clean
 - Janitor closet cleaned quarterly
 - Sweep monthly
- Entry Corridors
 - Cleaned daily
 - Carpet vacuumed daily, deep cleaned every two weeks
 - Floor swept daily, mopped weekly
 - Tile cleaned daily and not sealed
- Banquet Space
 - Duct Work Cleaned Yearly
 - ADA Lift inspected on a monthly basis
 - Light and Storage Area cleaned monthly
 - Stage cleaned weekly and before and after each event
 - Curtains taken down and cleaned every (2) years
 - Storage cleaned yearly
 - AV and Sound System checked monthly
 - (7) years replacement on tables in the Banquet room
 - Green Room deep cleaned annually and cleaned once a month for routine maintenance
 - Dance floor cleaned before and after each event
 - Dance floor replacement every 10 years
 - Carpets vacuumed daily

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- Deep cleaning of carpets every two weeks
- Monthly cleaning of lights in the Banquet Room
- Tables cleaned before and after every event
- Chairs-resin deep cleaned quarterly, upholstered chairs cleaned quarterly
- Linens replaced annually
- Blinds cleaned every two months and replaced every 5 years
- Replace air walls as needed
- Trash removed daily and before and after every event
- Trash cans washed out weekly inside of the can
- Walls painted at least annually
- Banquet Kitchen
 - Deep cleaned weekly including all surfaces and after every event
 - Floor cleaned weekly and after every event
 - Phones wiped down weekly
 - Lights cleaned monthly
 - Warming ovens cleaned as needed
 - Bar area cleaned before and after each event
 - AV area cleaned quarterly
 - Refrigerators cleaned quarterly
 - Filters changed on Refrigerators annually
 - Refrigerators replaced every (15) years
 - Windows and AV room cleaned quarterly
 - Wipe down tables as needed
- Arts Studio
 - Floor cleaned daily and mopped surfaces weekly
 - Kiln room cleaned weekly
 - Counters and tables cleaned daily
 - Storage room cleaned monthly
 - Clay wheels cleaned daily
 - Windows and counter tops cleaned daily
 - Kiln replaced every 20 years
 - Walls painted annually

- Program Room
 - Floors cleaned daily
 - Tables and counter cleaned daily
 - Windows cleaned twice per year
 - Blinds cleaned every month
 - Clean lights and air vents every month
 - Wall repainted every year
- Computer/Program Room
 - Computers wiped down weekly
 - Computers need to be replaced every five years
 - Deep clean behind computer cases (2) times a year
 - Carpets cleaned daily and deep clean every (3) months
 - Wipe down window sills daily
 - Windows cleaned monthly
 - Replace clock batteries at the time when the Fall changes time
 - Storage room cleaned annually
 - Walls painted annually
- Elevators
 - Wiped down daily
 - Annually inspection required
 - Carpet surfaces cleaned daily
 - Lights cleaned monthly
 - Door mechanics checked monthly
- Outside Brick Cleaning
 - Spots cleaned as needed
 - Yearly cleaning of the bricks
- Building Exterior
 - Sidewalks/ brick cleaned monthly and power washed
 - Trash removed daily and cans cleaned monthly
 - Bike racks painted in the spring annually
 - Concrete evaluated annually and calked as needed
 - Lights cleaned monthly and bulbs replaced as needed

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- Childcare Area
 - All floors and surfaces cleaned by shift including kick plates
 - Deep clean weekly all surfaces including windows and play stuct
 - Restrooms cleaned by shift
 - Lights cleaned monthly
 - Multi-purpose room cleaned by shift and deep cleaned weekly
 - Janitors Closet cleaned monthly
- Multi-purpose Rooms
 - Floor cleaned and mopped daily
 - Lights cleaned monthly
 - Surfaces cleaned by shift
 - Windows cleaned every two weeks
 - Kitchen deep cleaned quarterly
- Main Lobby
 - Telephone and camera system checked quarterly
 - Floors cleaned on every shift and carpets swept by shift
 - Cushions cleaned on a quarterly basis
 - Lights cleaned on a monthly basis
 - Stairs cleaned by shift and annually resurfaced
 - Lobby desks cleaned once a day
- Building Entryways
 - Pressure wash concrete but not the pavers monthly
 - Ledges cleaned daily
 - Lights cleaned monthly
 - Trash removed daily and cans cleaned weekly
 - Hand rails cleaned daily
 - Glass cleaned daily
- Office Space
 - Carpets swept daily
 - All phones and counters wiped down daily
 - Trash / recycling removed daily
 - Lights cleaned once a month

- Desks wiped down daily
- Indoor Pool
 - Clean daily all tile
 - Deep clean all tile weekly
 - Steps cleaned daily
 - Outside and inside glass cleaned weekly
 - Tables deep cleaned weekly and cleaned daily in viewing area
 - Tile deck floor acid washed once a year
 - Bleachers cleaned weekly
 - Surfaces cleaned weekly
 - Drain the pool ever year and clean the pool
 - Repaint pool every 5 years
 - Remove trash / recycling daily
 - Paint lifeguard and first aid room every five years
 - Dectrone and UV filters inspected every 6 months
 - Aquatic staff will provide water inspections on the hour
 - Staff locker room cleaned daily
- Indoor Concession Area
 - Deep cleaning quarterly
 - Daily cleaning of floors and sinks
 - Grease Traps cleaned out every (2) weeks
 - Food equipment cleaned daily by concession staff
 - Counters wiped down as needed -concession staff
 - Floor mopped by maintenance staff daily
 - Coolers cleaned every month
 - Wall wiped down every month
 - Trash / recycling removed daily and washed out once a week
- Party Rental Room
 - Tile surfaces cleaned daily and after every use
 - Deep cleaning on a weekly basis
 - Windows cleaned daily
 - Storage area cleaned out annually

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- Gym
 - Floors refinished annually
 - Floors stripped and refurbished every (5) years
 - Backboards cleaned monthly and wall mounts
 - Dust mop the floors during the day and scrub the floors at night
 - Curtains wiped down quarterly
 - Storage room cleaned out annually
 - Scoreboards and sound system inspected quarterly
 - Emergency door inspected weekly
 - Bleachers cleaned weekly
 - Every two years deep clean
 - Windows cleaned inside weekly
 - Electrical room inspected weekly and cleaned quarterly
- Restrooms / Family Locker Rooms
 - Clean by shift all floors and surfaces and baby changing areas
 - Power wash floors daily with floor scrubber weekly
 - Lockers cleaned quarterly
 - Toilets cleaned every shift
 - Inspection done on a per shift basis
 - Water softener checked daily
 - Trash / recycling removed by shift
 - Add inspection sheets to the back of each room door
- Pool Locker Rooms
 - Floor and restroom areas cleaned every shift
 - Floor scrubber used weekly
 - Painting done every seven years
- Fitness Center
 - Wipe down equipment after every shift
 - Clean restrooms on every shift including showers, restrooms and removal of trash
 - Clean carpets on every shift and deep clean nightly
 - Clean glass inside once a week
 - Remove trash daily

- Clean counters once a day and window sills
- Inspect all equipment that they are working on a daily basis
- Inspect all TV's are working on a daily basis
- Fitness Program Rooms
 - Clean floors every shift and mop daily
 - Clean widows and mirror on a daily basis
 - Clean and wipe down all equipment on a daily basis
 - Remove trash / recycling on a daily basis

8.17 NATURAL RESOURCE MANAGEMENT PLAN

Natural Resource Management of Metro Parks Natural Areas and Open Spaces

I. **Mission statement for the Natural Resource Management Program**

A. **Metro Parks 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.

B. **The three-part mission of the Metro Parks Natural Resources program is to:**

1. Manage and oversee the restoration, protection and perpetual preservation of natural areas
2. Designate appropriate and sustainable recreational use and development within natural areas
3. Promote research and education that contributes to the ongoing conservation of natural areas

II. **Definition of natural areas and levels of designation**

A. **Metro Parks Natural Area definition:**

A tract of park land possessing scenic, ecological, geological, or recreational value which provides significant habitat for native plants and animals, provides land and open space for passive recreational opportunities and is worthy of restoration, protection and preservation. Natural Area parks also offer substantial educational, interpretive, and research opportunities.

B. **Designation of Natural Areas within Metro Parks**

The Natural Resources Management staff will perform initial assessment on Parks properties under consideration to determine their potential for natural area designation. Properties that exhibit sufficient characteristics of the natural area definition will then be presented for review by the Parks Planning, Maintenance and Greenways sections. Upon agreement that the property should receive specific designation, a recommendation will be made to the Director of Parks for authorization.

C. **Metro Parks classifies Natural Areas into three Levels:**

1. **Level One:** Exhibits significant ecological diversity and contains undisturbed natural features and intact native plant and animal communities.
2. **Level Two:** Exhibits unique ecological, natural and recreational features and contains fragmented native plant and animal communities.
3. **Level Three:** Exhibits notable natural features and limited native plant and animal communities with potential for restoration.

III. **Overview of Natural Resource Management policy and plans**

The purpose of this policy document is to provide a foundation for establishing resource management practices, guide facility development plans, and identify appropriate recreational program uses for natural area properties of Metro Parks.

A. Developing individual NRM plans for specific properties

A top priority of the Natural Resources Management Program is to develop a specific individual management plan for each of Metro Parks' designated natural area properties. These plans will include, but are not limited to, a natural resource inventory database linked to GIS mapping, a long-term schedule of routine maintenance procedures, identification of appropriate specialized management strategies, identification of areas suitable for restoration procedures, and a long-term plan for the protection, restoration and reclamation of the entire property.

B. Natural resource information and inventory data

Resource inventories will be on-going projects to locate, identify and document specific examples of biologic, historic, archaeologic, geologic or scenic value found within, or adjacent to, Park properties. Creating and continually updating resource inventories will be a collective process involving Metro Parks' staff, trained volunteers, partner agencies and educational institutions. Records will be linked to mapping data for use in developing specific management and programming plans.

C. Evaluating impacts on natural resources

The Natural Resource Management Program will be the section of Metro Parks that reviews the impacts of proposed development plans, maintenance procedures and natural or artificial disturbances on natural area properties. Natural Resource Management staff will make recommendations to the Director of Parks on issues related to the management and protection of natural areas.

D. Identifying appropriate uses for natural areas

The Natural Resource Management Program will identify and recommend appropriate recreational facilities and programs for natural area properties. Recommendations will be made after thorough evaluation of physical conditions of sensitive natural features, potential impacts on natural areas, accessibility of scenic features, and best management practices.

IV. Identifying partner agencies and organizations for natural resource management

The Metro Parks Natural Resources Program may enter into agreements and partnerships with other government agencies and private organizations for resources, cooperation, guidance, policy implementation assistance, and regulatory oversight. These organizations may include, but are not limited to:

A. Metropolitan Government of Nashville & Davidson County departments

1. Water Services
2. Fire
3. Health
4. Agricultural Extension Service
5. Soil and Water Conservation
6. Police
7. Codes
8. Airport Authority

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NATURAL RESOURCE MANAGEMENT PLAN

9. Planning
10. Legal
11. Nashville Electric Service
12. Public Works

B. State of Tennessee Departments and Agencies

1. Department of Agriculture
2. Department of Environment and Conservation
 - a. Division of Air Pollution Control
 - b. TN Geological Survey
 - c. Division of Remediation
 - d. Division of Solid Waste Management
 - e. Water Resources Division
 - f. Division of Archaeology
 - g. Division of Natural Areas
 - h. Office of Sustainable Practices
 - i. Parks and Recreation
3. Department of Health
4. TN Department of Transportation
5. TN Wildlife Resources Agency

C. Federal Agencies

1. US Department of Agriculture
 - a. Agricultural Research Service
 - b. Animal and Plant Health Inspection Service
 - c. Forest Service
 - d. Natural Resources Conservation Service
2. US Department of Interior
 - a. Bureau of Land Management
 - b. Bureau of Reclamation
 - c. Fish and Wildlife Service
 - d. National Park Service
 - e. US Geological Survey
3. Federal Aviation Administration
4. Environmental Protection Agency
 - a. Office of Air and Radiation
 - b. Office of Chemical Safety and Pollution Prevention
 - c. Office of Water
5. Federal Communications Commission
6. Federal Emergency Management Agency
 - a. Region IV Mitigation Division
7. Federal Interagency Committee for the Management of Noxious and Exotic Weeds
8. US Department of Transportation

9. National Flood Insurance Program
10. TN Valley Authority
11. US Army Corps of Engineers

D. Other Agencies, Businesses and Non-Governmental Organizations

1. Cumberland River Compact, Harpeth River Watershed Association, and other local watershed associations
2. TN Exotic Pest Plant Council
3. Invasive Plant Control, Inc.
4. Nashville Natives, GroWild, and other local native plant nurseries
5. University of TN Agricultural Extension Service
6. Other local university and college biology, agriculture, natural resource, wildlife and fisheries, and sustainability departments
7. The Nature Conservancy
8. Land Trust for TN
9. TN Parks and Greenways Foundation
10. Barnard Seyfert Astronomical Society, Cumberland Astronomical Society, and other local astronomical associations promoting dark skies initiatives

V. Restoration of natural systems and communities

In general, restoration of natural systems and communities should be achieved through a strategy of allowing natural processes to reclaim ecological balance over time with limited human intervention. Disturbed areas should be allowed to progress through natural succession to the native state. In some circumstances, intervention may be required to control the spread of invasive plant and animal species, or to repair overly disturbed and/or altered land and water conditions. Any restoration or reclamation initiatives, whether actively or passively managed, should have the intent of establishing the native community that is typically indigenous for the specific property. Actively managed or constructed habitats that are not naturally occurring in a specific area should be considered only on a limited basis, where there is significant ecological or educational value. Landscapes disturbed by natural events such as fires, landslides, storms or floods should be allowed to recover naturally, unless intervention is required for reasons of human safety or potential damage to park structures.

VI. Plant species used in landscaping and tree planting

In situations where intervention in natural successional process is required, or where landscaping or tree planting occurs within or adjacent to a designated natural area, all plant species introduced must be native to the specific park area. All plant lists for contracted development projects are to be reviewed and approved by Natural Resources Management and Parks Landscaping staff prior to installation.

VII. Research projects, inventories, collecting, and monitoring activities

Metro Parks will encourage appropriately reviewed natural resource studies whenever such studies are consistent with applicable laws and policies. These studies support the Natural Areas mission by providing Metro Parks, the scientific community, and the public with an understanding of park resources, processes, values, and uses that will be cumulative and constantly refined. This approach will provide a scientific and scholarly basis for park planning, development, operations, management, education, and recreational activities.

A. Definitions

As used here, the term studies means short- or long term scientific or scholarly investigations or educational activities that may involve natural resource surveys, inventories, monitoring, and research, including data and specimen collection. Studies include projects conducted by researchers and scholars in universities colleges and high schools, federal, state, or local agencies, not-for profit and non-governmental organizations and Metro Parks staff and volunteers. The data and information acquired through studies conducted in parks will be made publicly available, and records of studies and their results will be saved, maintained, and disseminated by Metro Parks staff.

B. Approvals and methodologies

Studies in parks will be preceded by an approved Natural and Cultural History Research Agreement including a scope of work, proposal, or other detailed written description of the work to be performed. Proposed projects will be submitted to either the Superintendent of Natural Resources or Nature Center Manager for initial review. All studies in parks will employ nondestructive methods to the maximum extent feasible with respect to resource protection, research methodology, and the scientific and management value of the information and collections to be obtained. Although studies involving physical impacts to park resources or the removal of objects or specimens may be permitted, studies and collecting activities that will lead to the impairment of park resources and values are prohibited.

C. Staff conducted research projects

Nature Center Managers may authorize staff and volunteers to carry out routine inventory, monitoring, study, and related duties without requiring an approved Natural and Cultural History Research Agreement. With or without an approved Research Agreement, staff will comply appropriately with professional standards and with general and park-specific research and collecting permit conditions. All research and data and specimen collection conducted by Metro Parks employees and volunteers will be appropriately documented and carried out in accordance with all laws, regulations, policies, and professional standards pertaining to survey, inventory, monitoring, and research. Staff will be expected to make their findings available to the public, such as by publication in professional journals or presentation in interpretive programs. Park inventory, monitoring, and research needs and specific research objectives will be identified in the appropriate management plans for each park, or Department-wide program plans.

VIII. National, state and local special designations

To provide for the highest level of protection for natural features and maximize resources available for management and conservation, Metro Parks will work with state and federal agencies to actively pursue appropriate special designation status for species and natural areas whenever possible. Examples of designations may include, but are not limited to, Designated State Natural Area, State Scenic River, National Historic Register, Watchable Wildlife Area, Stream Mitigation Program site, and state or federal status for species of concern.

IX. Managing biological resources

A. Plant and animal management strategies

Natural processes should be relied upon to maintain a natural balance of native plant and animal species populations. For plant species, intervention may be necessary when managing for certain specific habitats, or if plants are rare or threatened. Intervention may also be acceptable for attracting wildlife and providing public education opportunities. Plant management strategies may include use of controlled burning, removal of exotic plants, reforestation, replanting of certain species, establishment of wildlife plots (ex: butterfly gardens) or encouraging growth of a particular species. Animal populations can be passively managed by providing nest boxes, discouraging exotic species through habitat manipulation (i.e. no edge effect, choose host plants for native species) providing ground cover, etc. Removal of any animals, native or non-native, will be based on sound science and best management practices with sensitivity to public perceptions. If human health is seriously threatened or an animal population is unnaturally high, management decisions will be made in cooperation with the Tennessee Wildlife Resources Agency and United States Fish and Wildlife Service. Unusually low population numbers of a species should be reviewed in a similar manner and appropriate management strategies put into place.

B. Management of exotic species

Exotic species are defined as species not native to Davidson County and not having any natural origins in the area. Species of concern are invasive by nature, considered to be an ecological threat by the Tennessee Exotic Pest Plant Council (TNEPPC) and were originally introduced into the ecosystem by human actions. These species may have origins in another country or another part of the United States. For plant species, it is the intent of NRM to actively control the spread of invasive species that pose a threat to native forests. Most invasive exotic control projects involve partnerships with organizations such as TNEPPC, TDOF, and others. Initiatives to remove invasive exotics may include hiring professional services, working with private organizations, coordinating volunteers, and scheduling staff work days. Methods of invasive exotic plant removal may include manual pulling of individual plants, mechanical cutting, targeted herbicide treatment, controlled burning, and other professionally recognized methods of removal. Exotic animal species may also have negative impacts on Park ecosystems and require management strategies. Management plans for problem animal

species are to be developed individually for specific properties in cooperation with the Tennessee Wildlife Resources Agency and the United States Fish and Wildlife Service. Any management plan that calls for removal of animal species will also include an education component to address public perceptions

C. Management of threatened, endangered or other listed species

NRM will work directly with the Tennessee Division of Natural Areas, Natural Heritage section for assistance with management of rare species. Rare species need extra consideration and protection. Species identified as endangered or threatened are protected under federal and state laws designed to safeguard and promote recovery of the species. Protective measures for rare species include preparation of recovery plans, acquisition of additional essential habitat, and protection from disturbance (pursuing, harming, collecting, harvesting, mowing, etc.) for listed species. Natural Resources Management staff will conduct on-going monitoring and inventory of listed species within Metro Parks properties.

D. Pest management

Pests are defined as living organisms that interfere with the purposes or management objectives of a specific site within a park, or that jeopardize human health or safety. Exotic pests should be managed according to policies outlined in the section on exotic species. Native pests should be allowed to function unimpeded unless they endanger rare species, endanger cultural resources, pose human health problems, or pose serious threats to safety. Management strategies include exterminating insect pests that are detrimental to structures, removing species that pose serious threat (ex: wasps at the front door), and educating park visitors on safety (ex: ticks, mosquito interactions, poison ivy). Pest management strategies should focus on identifying and eliminating the root cause of a pest problem and implementing effective, long term management solutions through the use of a broad range of expertise, a combination of treatment methods and a comprehensive monitoring and evaluation, while promoting non-chemical control strategies. The best practices of integrated pest management will be followed. Wherever possible, cultural or manual controls should be instituted before pesticide application is considered.

X. Fire management

While naturally ignited fires are a natural process and part of the ecologic balance of native communities, the proximity of Metro Parks natural area properties to neighboring residential and commercial areas places limits on the use of fire as a land management tool. In cases of wildland fires and other unplanned incidents of fire, Metro Parks cooperates with fully with the Metro Fire Department and Tennessee Division of Forestry in controlling fires for the purpose of public safety. In some natural areas, prescribed controlled burns can be appropriately and effectively used as a management tool to eliminate invasive exotic species and restore or maintain natural communities. Metro Parks will coordinate with the appropriate agencies, including the Metro Fire Department, Tennessee Division of Forestry, Tennessee Wildlife Resources Agency, Metro Health Department, local police, and airport

authorities to conduct prescribed burns while adhering to best management practices and safety protocols.

XI. Water resource management

Metro Parks Natural Resources Program will adhere to all applicable regulations and follow best management practices to preserve, restore and protect all park surface waters and groundwaters as integral components of aquatic and terrestrial ecosystems.

A. Water Rights

Water for the preservation and management of the Metro Parks will be obtained and used in accordance with legal authorities. Metro Parks’ consumptive use of water will be efficient and frugal. Park surface waters or groundwaters will be withdrawn for consumptive use only when such withdrawal is absolutely necessary for the use and management of the park. All park water withdrawn for domestic or administrative uses will be returned to the park watershed system once it has been treated to a degree that ensures there will be no impairment of park resources.

B. Water Quality

Metro Parks will avoid, whenever possible, the pollution of park waters by human activities occurring within the parks by:

1. working with all appropriate government bodies to obtain the highest possible standards available for the protection of park waters;
2. taking all necessary actions to maintain, and restore when possible, the quality of surface waters and groundwaters within the parks;
3. entering into agreements with other agencies or governing bodies, NGO’s, and other Metro departments to secure their cooperation in maintaining or restoring the quality of park water resources.

C. Floodplains

Metro Parks should (1) manage for the preservation of floodplain values by protecting, preserving, and restoring the natural resources and functions of floodplains; (2) minimize potentially hazardous conditions associated with flooding by avoiding the long- and short-term environmental effects associated with the occupancy and modification of floodplains; and (3) avoid direct and indirect support of floodplain development and actions that could adversely affect the natural resources and functions of floodplains or increase flood risks. When it is not practicable to locate or relocate development or inappropriate human activities to a site outside and not affecting the floodplain, Metro Parks should:

1. use nonstructural measures as much as practicable to reduce hazards to human life and property while minimizing the impact to the natural resources of the floodplains; and
2. ensure that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program and comply with Metro Stormwater Floodplain Requirements.

D. Wetlands

In managing wetlands, including palustrine (marshes, bogs, swamps, bottomland forests, and small ponds), lacustrine (lakes, reservoirs, and impounded rivers), and riverine (un-impounded rivers and streams), Metro Parks should (1) provide leadership and take action to prevent the destruction, loss, or degradation of wetlands; (2) preserve and enhance the natural and beneficial values of wetlands; and (3) avoid direct and indirect support of new construction in wetland unless there are no practicable alternatives and the proposed action includes all practicable measures to minimize harm to wetlands. For proposed new development or other new activities, plans, or programs that are either located in or otherwise could have adverse impacts on wetland, MPNRM will employ in the following sequence:

1. Avoid adverse wetland impacts to the extent practicable.
2. Minimize impacts that cannot be avoided.
3. Compensate for remaining unavoidable adverse wetland impacts by restoring wetlands that have been previously destroyed or degraded at an acre for acre rate.

E. Watershed and Stream Processes

In managing streams and watershed processes, Metro Parks should:

1. Manage watersheds as complete hydrologic systems and minimize human-caused disturbance to the natural upland processes that deliver water, sediment, and woody debris to streams, except where these processes potentially cause hazards to human life or property. These processes include runoff, erosion, and disturbance to vegetation and soil caused by fire, insects, meteorological events, and mass movements.
2. Manage streams to protect stream processes that create habitat features such as floodplains, riparian systems, woody debris accumulations, terraces, gravel bars, riffles, and pools except where these processes potentially cause hazards to human life or property. Stream processes include flooding, stream mitigation, and associated erosion and deposition.

Metro Parks will protect watershed and stream features primarily by avoiding impacts on watershed and riparian vegetation and by allowing natural fluvial processes to proceed unimpeded. When conflicts between infrastructure (such as bridges and pipeline crossings) and stream processes are unavoidable, Metro Parks should first consider relocating or redesigning facilities rather than manipulating streams. Where stream manipulation is unavoidable, techniques that are visually unobtrusive and protect natural stream processes should be used.

XII. Geologic resource management

Metro Parks will work to protect geologic features from the intentional and unintentional negative impacts of human activity while allowing natural processes to continue.

A. Definition of geologic features

The term “geologic features” describes the products and physical components of

geologic processes. Examples of geologic features in parks include rocks, soils, minerals, cave and karst systems, canyons and arches in erosional landscapes, dramatic or unusual rock outcrops and formations, and paleontological and paleo-ecological resources such as fossilized plants or animals or their traces. Metro Parks will allow natural geologic processes to proceed unimpeded and will (1) assess the impacts of natural processes and human activities on geologic resources; (2) maintain and restore the integrity of existing geologic resources; (3) integrate geologic resource management into park operations and planning; and (4) interpret geologic resources for park visitors.

B. Intervention into geologic processes

Natural geologic processes will be addressed during planning and other management activities in an effort to reduce hazards that can threaten human safety and the long-term viability of the park infrastructure. Intervention in natural geologic processes will be permitted only when necessary in emergencies that threaten human safety and property; there is no other feasible way to protect natural resources, park facilities, or historic properties; intervention is necessary to restore impacted conditions and processes, such as restoring habitat for threatened or endangered species.

C. Karst and cave formations

Metro Parks will manage karst terrain to maintain the inherent integrity of its water quality, spring flow, drainage patterns, and caves. Karst processes (the processes by which water dissolves soluble rock such as limestone) create areas typified by sinkholes, underground streams, caves, and springs. Local and regional hydrological systems resulting from karst processes can be directly influenced by surface land use practices. If existing or proposed developments significantly alter or adversely impact karst processes, these impacts will be mitigated. Where practicable, these developments will be placed where they will not have an effect on the karst system.

XIII. Viewsheds, historic landscapes, soundscapes, lightscaapes and communications towers

A. Viewshed management

In some cases, there may be significant public value in creating and maintaining scenic overlooks and other viewing points within natural areas. These opportunities are to be reviewed on a case by case basis in cooperation with the natural resources management, maintenance, planning and landscaping divisions. Any removal of trees or other native vegetation should be minimal, allowing for viewing of important natural or cultural features while preserving the natural integrity of the site.

B. Historic landscapes

Associated with some natural area properties are specific tracts of land that have been historically maintained in a condition other than the natural successional state. These areas may include features such as agricultural fields, cemetery sites, clearings associated with historic structures, or other historic designed landscapes. In these cases, Parks may determine that these features should be maintained in a condition that is historically documented and beneficial for interpretive or recreational use. The Natural Resources Management section will work cooperatively with Parks maintenance,

planning and other appropriate divisions to prescribe appropriate management strategies. Management strategies may include, but are not limited to, mowing, bush-hogging, disking, controlled burning, livestock grazing or hay harvesting.

C. Soundscape and lightscape issues

Artificial lighting and sound amplification can have significant negative impacts on the natural activities of native animal species. Natural behaviors like mating, nesting and feeding can be altered by the presence of artificial light and sound disturbances. Additionally, the presence of high intensity lighting, such as security and athletic field lights, interfere with the viewing of the night sky, which is an important part of the natural area visitor experience. For this reason, the permanent installation of artificial lighting and the use of sound amplification devices should not be permitted in designated natural areas.

D. Cell phone and other communication towers

The installation of cell phone and other communications towers within natural areas and open space recreation lands of Metro Parks will not be permitted. This will serve to protect and maintain the aesthetic and undisturbed character of the outdoor experiences that Metro Parks provides for citizens and visitors, and to eliminate the negative impacts that these structures have on wildlife and human health. Outlined below are specific issues and concerns related to the installation of these towers:

1. The construction and on-going maintenance of these structures results in large scale initial disturbance and permanent impact on the physical condition of the surrounding land area and required access roads. Destruction of natural features, erosion from excavation and road clearing and removal of vegetation result in considerable damage to fragile natural areas.
2. The scenic viewsheds and aesthetic features that contribute to Metro Parks visitor experiences are permanently impacted.
3. Current research indicates that the high levels of electro-magnetic radiation (EMR) emitted by cell communication towers is potentially harmful to both wildlife and human health. The “downward scatter” of cell tower radiation has been shown to have negative effects on both animals and plants. Children are believed to be at greater risk from EMR.
4. Communication towers pose a well-documented hazard to migratory birds. Studies show that millions of birds are killed each year in tower collisions, many of which include threatened and endangered species.
5. The vast majority of Metro Parks natural areas and open space recreation lands are located in areas of adequate to very good cell phone coverage, so there would be little benefit to park visitors in terms of communications connectivity.

Summary Chart for Natural Areas Designations and Recommended Management Strategies			
Natural Areas Designation Definitions	Recommended Principal Uses	Special Restrictions and Management Items	Potential Areas for Consideration
<p>Level One: Exhibits significant ecological diversity and contains undisturbed natural features and intact native plant and animal communities.</p>	<p>Passive, recreation activities including:</p> <ul style="list-style-type: none"> • Hiking and walking on designated trails • Wildlife viewing • Nature photography (amateur) • Picnicking in designated areas • Environmental education programs • Permitted research projects 	<p>All natural features are protected</p> <p>All waste items are to be packed out</p> <p>Use of measures to control spread of seeds (i.e. boot brushes) will be utilized</p> <p>Access to caves is by permit only</p> <p>No structures other than trail signage will be installed</p> <p>Use of pesticides for invasive species management will be minimal and follow all BMPs</p> <p>Prohibited activities:</p> <ul style="list-style-type: none"> • Mountain biking • Horseback riding • Trail running • Camping and fires • Special events and large gatherings • Motorized vehicles • Fishing and hunting • Metal detectors • Pets (other than service animals) • Swimming • Geocaching • Drones or other model aircraft • Climbing/rappelling • Golf ball hitting • Collecting of any natural items • Sledding 	<p>Hill Forest at Edwin Warner Park</p> <p>Burch Reserve at Edwin Warner Park</p> <p>Beaman Park (all areas within SNA acreage)</p> <p>Hamilton Creek Park (cedar glade area)</p>

APPENDICES
NATURAL RESOURCE MANAGEMENT PLAN

Natural Areas Designation Definitions	Recommended Principal Uses	Special Restrictions and Management Items	Potential Areas for Consideration
<p>Level Two: Exhibits unique ecological, natural and recreational features and contains fragmented native plant and animal communities.</p>	<p>All recreation activities from level one plus:</p> <ul style="list-style-type: none"> • Mountain biking on designated trails • Horseback riding on designated trails • Trail running (individuals) • Road cycling • Geocaching by permit • Camping and fires in designated areas • Pets on leash • Climbing and rappelling by permit 	<p>All events and private classes require advance approval. Examples of activities considered for permits include:</p> <ul style="list-style-type: none"> • Organized road runs and races • Mountain biking and road cycling events • Outdoor weddings • Land navigation classes • Outdoors skills training classes • Fitness training programs • Art and photography classes • Group horseback trail rides • <p>Prohibited activities:</p> <ul style="list-style-type: none"> • Motorized vehicles • Fishing and hunting • Metal detectors • Drones or other model aircraft • Golf ball hitting • Collecting of any natural items • Sledding 	<p>Percy and Edwin Parks (areas south of Hwy 100 excluding golf course, steeplechase, special event fields, athletic fields, cross country course and Harpeth River picnic areas)</p> <p>Shelby Bottoms Nature Park</p> <p>Bells Bend Park</p> <p>Paradise Ridge Park (excluding community center, playground and athletic fields)</p> <p>Peeler Park</p> <p>Hamilton Creek Park</p> <p>Greenway corridors including:</p> <ul style="list-style-type: none"> • Harpeth River • Richland Creek • Mill Creek • Stones River • Whites Creek

Natural Areas Designation Definitions	Recommended Principal Uses	Special Restrictions and Management Items	Potential Areas for Consideration
<p>Level Three: Exhibits notable natural features and limited native plant and animal communities with potential for restoration.</p>	<p>All recreation activities from levels one and two plus the following activities with some applicable restrictions:</p> <ul style="list-style-type: none"> • Disk golf in designated areas • Fishing in designated areas • Cross country running events and training • Cyclocross events by permit • Adventure races and obstacle courses by permit • Canoeing and kayaking • Leash-free pet experiences • Swimming (at own risk) in designated areas • Off-trail activities by permit 	<p>Appropriate permanent structures and features recommended include:</p> <ul style="list-style-type: none"> • Ropes course elements • Picnic shelters • Gardens • Nature play areas • Disk golf 	<p>Cane Ridge Park (undeveloped areas) Stones River Farm Cedar Hill Park (undeveloped areas) Two Rivers Park (undeveloped areas)</p>