

Baltimore City Land Preservation, Parks & Recreation 2005 - 2010

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Executive Summary

Baltimore is the most densely developed jurisdiction in the State, with a population of 651,154 people in an area of 87 square miles, or 7,484 people per square mile. Baltimore has been actively developing and changing since the late 1600's, with only fifteen percent of our land area still remaining in parks and open space. Baltimore reached its population peak in the 1950's. Since then Baltimore suffered tremendous population loss for over three decades due to suburbanization. Fortunately, this condition has stabilized, with a slight population increase predicted for the next decade. The restoration and stabilization of our park system will be a major factor in our success in attracting new homeowners and businesses.

Baltimore's park system development began with Patterson Park in 1827. In 1904 the Olmsted Brothers developed a parks plan for Baltimore City that was largely adopted and implemented, establishing the base park systems along the Gwynns Falls, Jones Falls and Herring Run Stream valleys. Urban Renewal projects of the 1960's added more parkland to dense communities. Our City is compact and our parks well distributed throughout for easy access to a variety of recreation activities. Baltimore's park system is one of the oldest and most historic in the State, containing some of our most important regional facilities including the Cylburn Arboretum and Mansion House, Baltimore Conservatory in Druid Hill Park, the Patterson Park pagoda and boat lake, the Hopkins mansion in Clifton Park and the Crimea estate in Gwynns Falls Leakin Park. All of these facilities are not only part of Baltimore's park system, but are elements of the history of the State of Maryland that attract visitors to Baltimore City. Preservation and restoration of the cultural landscape and historic structures in the park system will be a priority for the next decade.

The needs analysis included in the 2005 Land Preservation, Park and Recreation Plan indicates that Baltimore City is able to meet the current and projected needs for recreation with the city's existing park system. Given that Baltimore has a large inventory of older recreation and park facilities, and a slow rate of population growth, our focus for the next decade is projected to be one of modernization and enhancement of existing parks and recreation facilities. While the number of facilities can meet demand in theory, the condition of the facilities will determine if the public will benefit. Outdated recreation centers and worn down parks facilities do little to serve communities, discourage participation in recreation activities and limit staff's ability to provide the necessary programming that urban populations need. The majority of capital investment for Baltimore's park system in the next decade will be renovation of existing park and recreation facilities. Replacing recreation facilities and park infrastructure worn out by heavy use or age and upgrading the recreation and park facilities to meet the latest safety or accessibility codes will continue to be a high priority for the City.

Analysis has also shown that attractive parks are economic engines, while poorly cared for facilities can destabilize surrounding neighborhoods. Investing in our existing park and recreation system will improve the quality of life for children and families in Baltimore and in turn, stabilize city neighborhoods. Any new park development will be

clearly tied to community revitalization. As neighborhoods are redeveloped, each public parcel, including open space, will be evaluated for its ability to become a safe, attractive community asset. Redevelopment may create opportunities to add to existing parkland, re-forest former development sites or exchange several small open spaces for larger more functional open space. Finally, the natural resources protected within our park system are major contributors to the unique character of our city. Funding in the next decade will focus on park projects that include stabilization and restoration of our stream valleys, forests and wetlands to improve our environmental health, enhance wildlife habitat and protect the Chesapeake Bay.

Baltimore has led the country in the use of open space for community revitalization. The Inner Harbor, Baltimore's "Central Park", sparked a downtown renaissance envisioned by cities all over the world. In spite of its declining tax base, Baltimore, often with the critical help of State and private investors, has created the world class waterfront promenade, as well as the Canton Waterfront Parks, Rash Field and the new West Shore Park. All have been major revitalization tools for the City and the State. The past decline in population and especially of the middle class tax base has made it difficult for the City to fund its park maintenance operations. This in turn has created a challenge for the City to take advantage of its population decline by adding open space amenities so desirable by the middle class. There is an incredible opportunity to take advantage of our "densification" by expanding the linear parks along our stream valleys, or creating the "village greens" or town squares that could be vital to redeveloping Baltimore's 19th century neighborhoods. Baltimore City has a unique role in Smart Growth planning as re-development of Baltimore's neighborhoods and associated parks can be an attractive development alternative to suburban sprawl and a wise investment of public funds.

CHAPTER I INTRODUCTION TO THE PLAN

A. PURPOSE OF THE PLAN

The City of Baltimore Land Preservation and Recreation Plan (LPRP) is a state-mandated planning document that is required to comply with Title 5, Subtitle 9 of the Natural Resources Article of the Annotated Code. The contents of this document are prescribed by the Maryland Office of Planning and must be updated every six years in order to maintain eligibility for Maryland Program Open Space funding.

Preparation of the LPRP gives local planners an opportunity to review and compare local and state planning goals and objectives for three open space land use categories that are of special interest to the Maryland Office of Planning: recreation, agriculture and natural resources. As part of this review, the local LPRP documents similarities and differences in planning goals and objectives at the local and state level. The LPRP also evaluates the implementation success of local and state programs established to meet open space planning goals and objectives and makes recommendations for improvements to these programs. The report includes a description of the outdoor recreation needs and priorities of the community and recommends future investment specific to meeting these needs. The report encompasses an analysis of existing conditions, a study of policy and recommendations for future investment and policy changes at the state and local levels. As a result, the LPRP helps ensure proper coordination between State and local programs that influence land use and development as well as ensuring a good return on public investment in land preservation and recreation.

The components required in the LPRP were changed in the early 1990's to fit the State's Smart Growth formula. The plan evolved from a document focused primarily on recreation and parks to one that incorporated broader land preservation and resource planning issues. The State's "Eight Visions" require that development be concentrated in suitable areas; that sensitive areas be protected; that growth be directed towards population centers; that land planning policies and programs consider water quality protection for the Chesapeake Bay and conservation of resources; and that all municipalities encourage economic growth by streamlining regulatory mechanisms and creating appropriate funding mechanisms to achieve the visions. To address these visions, the current LPRP document will be incorporated into Baltimore City's Comprehensive Master Plan "Live, Play, Earn and Learn". The close relationship of the LPRP with Baltimore City's Comprehensive Plan will assure that the LPRP becomes a working document that is implemented through the Comprehensive Planning process. It will also allow us to reference much of the information from the Comprehensive Plan in the LPRP, creating a more stream lined, direct, document and avoiding unnecessary duplication of effort and resources.

While much of the information important to this document may be included/incorporated into other City Planning documents, there will still be a significant amount of data in the LPRP that is pertinent to our Parks and Recreation system and will prove valuable to assisting the State in evaluating our programs. The LPRP and Baltimore's Comprehensive Master Plan will together provide a comprehensive planning document that will be used as the framework for the City's efforts and activities for our park system over the next six years.

B. LOCAL AGENCY PREPARATION OF THE PLAN

The City of Baltimore's LPRP has been prepared in a partnership between the Department of Recreation and Parks and the Department of Planning. The Department of Recreation and Parks and Department of Planning work closely together on a variety of parks related issues in addition to the LPRP. For the purposes of this document, the Department of Planning focused on data gathering, mapping, natural resource protection issues, and demographics. The Department of Recreation and Parks was responsible for completing the State required Parks Databases and Needs Analysis, and establishing park programming and CIP proposals based on the demographic and development trends.

The Maryland Department of Planning has provided assistance with completion of the MEIRS database. Ms. Sandra Trent, Program Administrator for the Department of Natural Resources Program Open Space, provided advice on coordination between local and state open space policies. Ms Trent has been the POS liaison for Baltimore City for the past decade and is quite familiar with the special issues of open space in an urban center.

C. THE PLANS RELATIONSHIP TO THE COMPREHENSIVE PLANNING PROCESS

Baltimore City's Comprehensive Master Plan is the City's business plan for coordinating and leveraging City investment, policy and programming to maximize economic opportunity and improve the quality of life for all citizens of Baltimore. The Comprehensive Master Plan is divided into four elements, LIVE, EARN, PLAY, LEARN. The Baltimore City LPRP and the Comprehensive Master Plan goals for our natural resources and recreation opportunities were conceived and drafted at the same time from the same information. While the natural resource and recreation elements of the LPRP will be elements of virtually all sections of the Comprehensive Plan, the majority of the discussion will be found in the PLAY section of the Plan, where it is the most relevant.

The time frame for the Plan covers a six- year period beginning in April 2006. Baltimore's draft Comprehensive Master Plan will be under review in the winter of 2005/06. Adoption by the Planning Commission is expected in late spring 2006. The LPRP will be included in the Comprehensive Master Plan as an appendix and, as such, will be adopted along with the Comprehensive Master Plan. The community outreach component of the LPRP has been incorporated into the Comprehensive Master Plan process for efficiency and maximum public input. The Department of Planning has posted the documents on its web site and has scheduled public meetings for review of the Comprehensive Master Plan (including the LPRP) in each of the city's 9 planning districts from February to April 2006.

D. DEFINITIONS USED IN THE PLAN

Schoolyard Park – The grounds surrounding Baltimore City Public Schools often include playing fields and athletic courts that are open to the public after school hours. The fields and courts can be reserved for team or league play. Recreation Center sports programs often take place on neighborhood school fields.

Park Maintenance District – For organizational purposes, the Department of Recreation and Parks has divided the city’s park system into 5 districts, Druid Hill, Clifton, Patterson, Carroll and Gwynns Falls. The districts each have at least 1 large urban park and a variety of community, neighborhood and mini parks. Planning issues are similar in each of the 5 park districts.

CHAPTER II FRAMEWORK FOR THE LOCAL PLAN

A. CITY'S PHYSICAL CHARACTERISTICS

Baltimore, as the largest city in Maryland, is both the geographic and economic hub of the State. Covering 82 square miles, the City is located on the Patapsco River, a deep-water tributary of the Chesapeake Bay. The Baltimore-Washington metropolitan area constitutes the southern end of the eastern seaboard megalopolis, and it is the furthest west of any port on the entire East Coast. The Baltimore metropolitan region includes Baltimore City and the surrounding counties of Anne Arundel, Baltimore, Carroll, Harford and Howard.

Baltimore is one of the oldest cities in Maryland and can be considered to be a fully developed urban center. According to the Department of State Planning (1985) land use data approximately 15% of the area is vegetated open space. The remainder has been developed into industry, commercial and residential land uses (Map 2.0 Baltimore Land Use). Baltimore has historically been crossed by an intricate pattern of streams. The Gwynns Falls, Jones Falls and Herring Run stream systems served as the basis for much of the early development patterns, acting as a major source of water-based power for economic production for the mills built in the stream valleys. Baltimore's deep-water harbor (the western-most deep water port on the East Coast) also fueled development associated with shipping on the Chesapeake Bay and Eastern Seaboard.

Baltimore City has a dense urban development pattern. As a result, the City's natural resource areas are substantially different in scale and type from that of suburban and rural counties. Baltimore's recreation assets are described in detail in Chapter III and its natural resources (steep slopes, tree canopy, wetlands, streams and Chesapeake Bay shoreline) are described in detail in Chapter V. Baltimore has no areas of agriculture to report. The level of protection of natural areas does not approach that of rural and more suburban areas because virtually the entire City was "built out" before the environmental movement began and legislation was created to protect open spaces. However, our natural resources are extremely important to maintain and enhance in Baltimore in order for the city to remain an attractive place to live, work and play.

B. CURRENT AND PROJECTED DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS

1. Demographic & Socioeconomic Characteristics

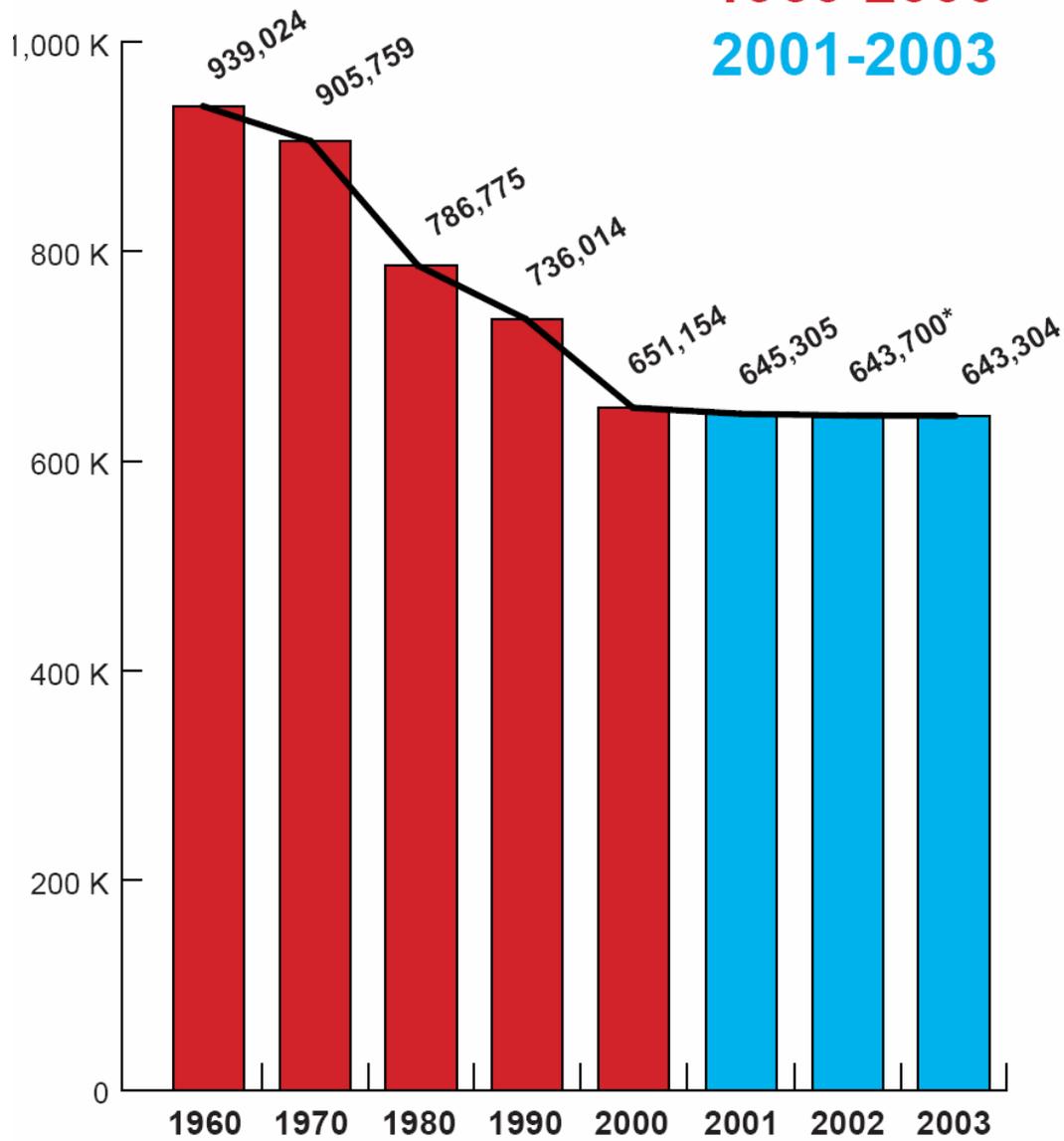
A broad perspective on the City of Baltimore's demographic and socioeconomic trends is available in the new comprehensive plan for the City to be adopted in 2006. Population characteristics are discussed and estimated, as well as social and economic trends such as employment, income and housing information.

The demographics and socioeconomic characteristics included here provide a general picture of past and expected population changes. In addition, the population characteristics that most influence park and recreation planning in the City of Baltimore are analyzed. Demands on parks and recreation services specific to an urban community are revealed through this detailed look at Baltimore residents.

BALTIMORE CITY POPULATION

1960-2000

2001-2003



* Estimated based on new 2003 population count

Population Change by Race and Age Group Baltimore City 1950, 1990, 2000				
1950				
	White	Nonwhite	Total	Percent
Less than 5 yr	66,790	25,940	92,730	9.8%
5 - 19	140,190	52,540	192,730	20.4%
20 - 44	290,110	97,645	387,755	41.0%
45 - 64	164,115	39,105	203,220	21.5%
65 and over	59,960	9,545	69,505	7.3%
Total	721,165	224,775	945,940	100.0%
Percent	76.2%	23.8%	100.0%	
1990				
	White	Nonwhite	Total	Percent
Less than 5 yr	18,232	40,497	58,729	8.0%
5 - 19	41,826	103,673	145,499	19.8%
20 - 44	117,491	185,703	303,194	41.2%
45 - 64	53,599	75,106	128,705	17.5%
65 and over	57,893	41,994	99,887	13.6%
Total	289,041	446,973	736,014	100.0%
Percent	39.3%	60.7%	100.0%	
Source: U.S. Census Bureau (Modified Age, Race, & sex Data for 1990)				
2000				
	White	Nonwhite	Total	Percent
Less than 5 yr	9,651	32,043	41,694	6.4%
5 - 19	30,998	110,515	141,513	21.7%
20 - 44	82,723	161,356	244,079	37.5%
45 - 64	48,530	89,417	137,947	21.2%
65 and over	38,940	46,981	85,921	13.2%
Total	210,842	440,312	651,154	100.0%
Percent	32.4%	67.6%	100.0%	
<p>* The Census Bureau's Population Estimates Program modified the Census 2000 race data for use in the production of post-2000 population estimates and projections. This was done by distributing those that were in the "other race" category to specific race categories.</p> <p>Prepared by the Maryland Department of Planning, Planning Data Services Source: Census 2000 Modified Race data (MR (31)-CO.txt) prepared by the U.S. Census Bureau, 2004.</p> <p>http://www.mdp.state.md.us/msdc/Pop_estimate/estimate_00to03/by_age_race_sex/MDCO_B00.xls</p>				

Table 2.1: Population Change in the City of Baltimore from 1950 -2000

Population Projections

Population projections for the City of Baltimore indicate reversal of the past trend of a steadily declining population. However we do expect the past trend of a 10% decline in youth under the age of 19, experienced between 1990 and 2000, to continue. Also, the number of residents ages 20-44 decreased by 59,115 in the same time period. Given current development patterns, it is unclear whether these trends will continue. As the following table indicates, the city population is expected to decrease slightly through 2005 and increase slightly through 2025. The total projected population change from 2000 to 2025 is a 0.8% gain.

Year	2000	2005	2010	2015	2020	2025
City Population	651,154	644,291	652,995	652,360	653,995	656,476
5 Year Percent Change	N/A	-1.1%	1.4%	-0.1%	.25%	.38%

Table 2.2: Baltimore City Population Projections through 2025
Source: Round 6A Project Forecast for the Baltimore Metropolitan Council.

The population projections used, while not providing age cohort projections, allow analysis of projected population distributions in the City. As Map 2.1 indicates, growth will occur mainly in the southern portions of the City, while the population in the remainder of the City is expected to be stable or show slight losses. This pattern is also reflected in the distribution of expected population among Baltimore park districts (Chart 2.1). Both Patterson Park District (8.6%) and Carroll Park District (10.5%), in the southern portions of the City, expect increases in population. Clifton and Gwynns Falls/Leakin Park Districts expect slight decreases, while the population of the Druid Hill Park District is expected to decrease by 4.5% by the year 2025.

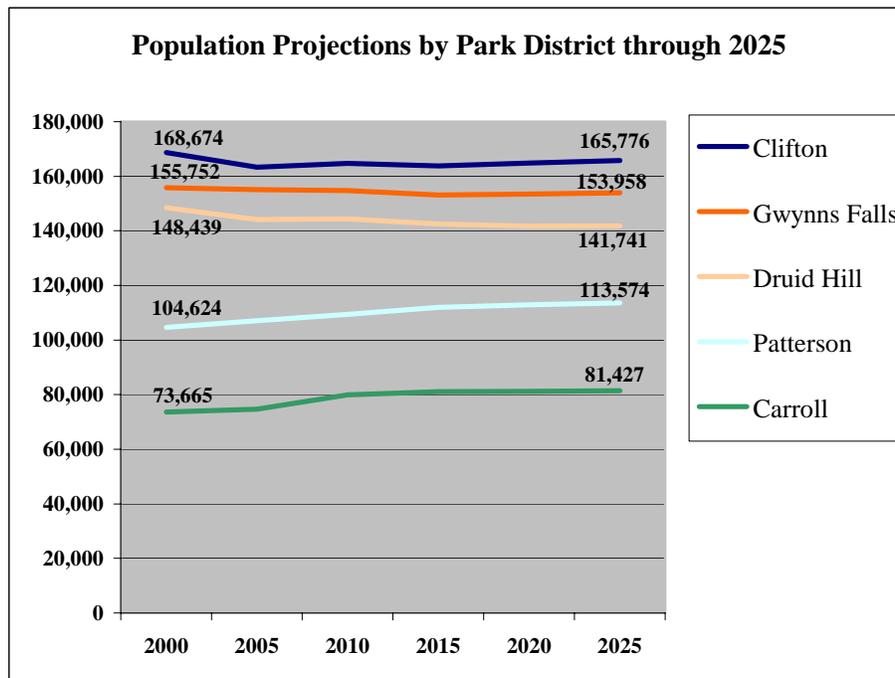


Chart 2.1: Population Projections through 2025 for Baltimore City Park Districts.
Source: 6A Project Forecast for the Baltimore Metropolitan Council.

Population Distributions

To understand the demands upon an urban recreation and park system it is necessary to look beyond population loss and gain. The following analysis of race, income, age and disability provides a detailed look at the City population and how it influences the objectives of the Baltimore City Department of Recreation and Parks.

Race and Ethnicity

The following pie chart shows the racial composition of Baltimore City in the year 2000. Black residents account for 64.3% of the City. A growing diversity within Baltimore City is reflected in the increasing population of residents who report themselves as “Other Race,” which has doubled since 1990. Similarly, residents identified as “Two or More Races,” a new census category, account for 1.5% of the total Baltimore population.

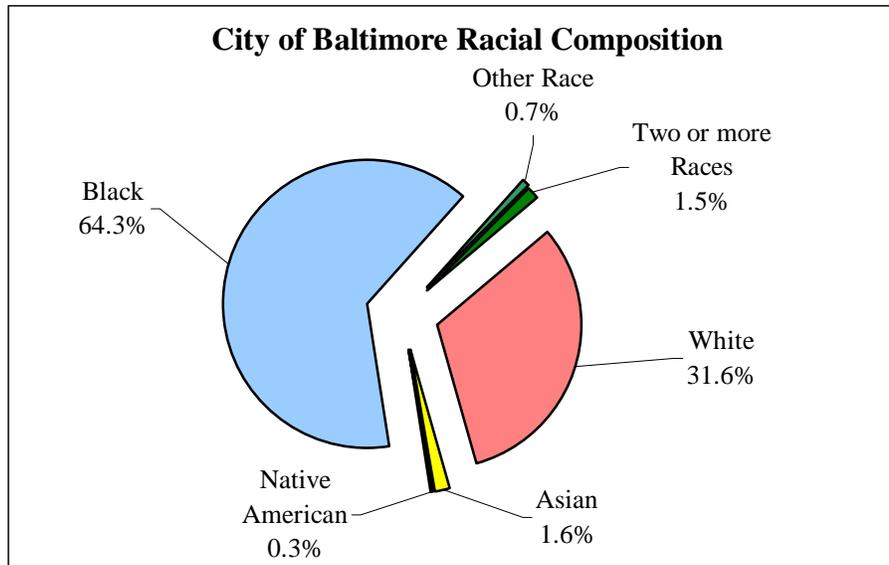


Chart 2.2: City of Baltimore Racial Composition, Census 2000

The distribution of race among City Park Districts indicates a small and fairly consistent proportion of residents who are of a race other than black or white (Chart 2.3). There is a high concentration of black residents (90%) in the Gwynns Falls/Leakin Park District and in the Clifton Park District (69%), while the highest concentrations of white residents are in the Carroll Park District (59%). Druid Hill Park District and Patterson Park District are more evenly split between races. While the 5 park management districts in the city vary in size (due to distribution of industrial lands) the ratio of population to parkland is similar for each management area.

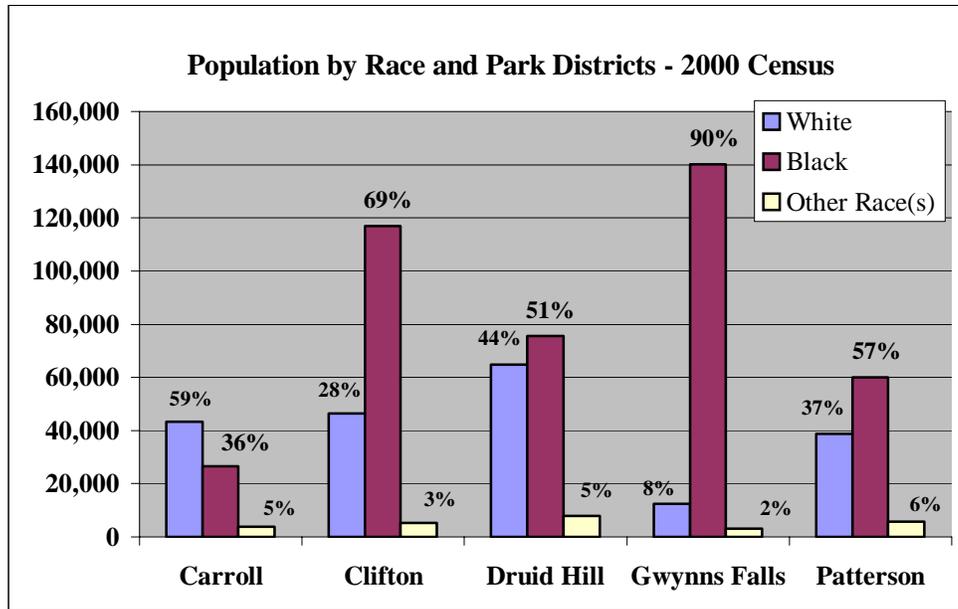


Chart 2.3: Distribution of population by race among Baltimore Park Districts, Source: Census 2000

Household Income and Poverty

Map 2.2 shows the distribution of household income in Baltimore. Households with higher incomes are concentrated in the north and in the neighborhoods around the Harbor. The City of Baltimore has a large population of residents living in poverty. In particular, youth living in poverty are at risk for a variety of problems including violent crime and teen pregnancy. Subsequently, a focus of the Department of Recreation and Parks is programming for “at risk” youth. As Table 2.3 indicates, 23% of City residents live in poverty and they are distributed across all five park districts. All five park districts show at least 19.8% of the youth population living in poverty. Youth poverty is especially high in Carroll (34.6%) and Patterson (44.6%). The high levels of youth poverty are clearly seen in Map 2.3, where youth poverty is concentrated in the oldest neighborhoods of east and west Baltimore.

	*All Individuals	All Individuals in Poverty	Percent of Individuals in Poverty	All Individuals 18 & under	All Individuals 18 & under in Poverty	Percent of 18 & under in Poverty
Carroll	72,000	17,925	24.9%	15,755	5,450	34.6%
Clifton	165,740	25,719	15.5%	42,210	8,353	19.8%
Druid Hill	136,025	31,359	23.1%	30,485	8,963	29.4%
Gwynns Falls	152,465	38,284	25.1%	41,435	13,770	33.2%
Patterson	93,585	29,145	31.1%	24,770	11,040	44.6%
Total	619,815	142,432	30.8%	154,655	47,576	23.0%

Table 2.3: Baltimore City residents living in poverty, Source: Census 2000

*Note: Table includes individuals living in households only

Youth, Recreation Facilities and Poverty

The Baltimore population of youth 18 years and younger is distributed fairly evenly among park districts, as Chart 2.4 indicates. The parks, schoolyard parks and recreation centers are also distributed evenly among park districts (Map 2.6). However, as Maps 2.3 and 2.4 illustrate, it is important to consider how the youth population is distributed within these boundaries. Significantly, there are concentrations of youth living in poverty, especially in the older neighborhoods just east and west of downtown. The numbers of schools and recreation centers is greater in these high-density, low-income neighborhoods to meet the needs of “at risk” youth (Map 2.3).

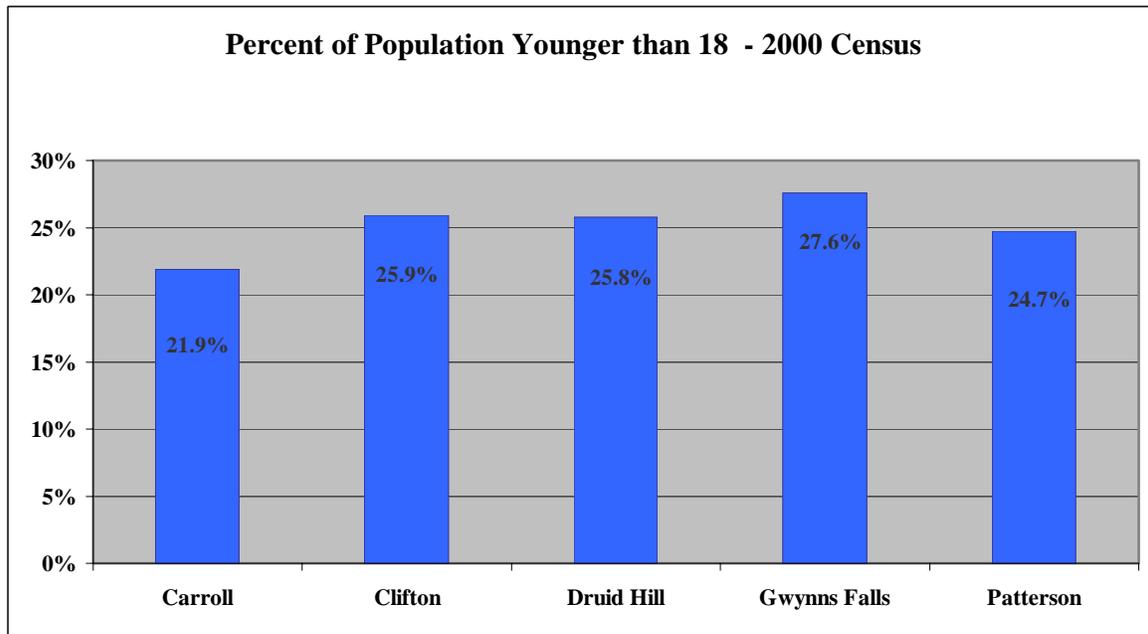


Chart 2.4: Distribution of the youth population in the City of Baltimore, Source: Census 2000

Senior Population

The number and percentage of older residents in the City of Baltimore is expected to increase in the next two decades as baby boomers age, resulting in an increased demand for park services by this group. This group represents one of the greatest investment opportunities in Baltimore’s history, as the baby boom generation begins to seek the cultural and recreational amenities available only in our urban areas. Map 2.5 indicates that the current population of resident’s ages 65 years and older are widely distributed among the City’s neighborhoods. However, there are generally more senior residents in the neighborhoods surrounding downtown and in the east and west portions of the City. There is a lower density of older residents in the neighborhoods in the extreme northern and southern portions of the City.

Disabled Population

The City of Baltimore has an extraordinarily large population of disabled individuals, although it is important to note that disability is self-reported and includes a wide range of conditions. Over 25% of the City population reports being disabled and this group is fairly evenly distributed among the City's neighborhoods. In addition to at risk youth and seniors, disabled residents are a population targeted for park and recreation services

Demographic Summary

The City of Baltimore decreased in population during the 1990's; however, this population decline is leveling off and population will likely increase slightly through the year 2025. In addition, the senior population in the City is expected to grow in the next two decades. Youth in poverty, senior residents, and disabled residents present real challenges to the Baltimore City Department of Recreation and Parks and create a focus for programming. Identifying how these important groups of residents are distributed in the City allows programs and services to be targeted where there is the most need.

2. Economic trends

In 2005, 46% of Maryland's civilian labor force lived in the Baltimore-Towson Metropolitan Statistical Area (MSA). Of this MSA work force; over 247,000 resided in Baltimore City. Baltimore City's employed population represents 9% of Maryland's total.

Baltimore City is where jobs are, too. In 2000, the U.S. Bureau of Economic Analysis counted over 450,000 jobs located in the City, equaling 29.5% of all the jobs in the MSA and 14.6% of all the jobs in Maryland. Baltimore County had slightly more jobs, 29.6% of the MSA total, and Anne Arundel County had less, 19.5% of the MSA total.

Employment projections by the Maryland Department of Planning show Baltimore City – based jobs declining to 432,700 in 2005, then rebounding to 444,500 in 2010, and increasing to 452,900 in 2015 and to 455,100 in 2020. Since earlier projections of City – based jobs had estimated the 2000 job count would be 442,800, which turned out to be underestimated by 1.8%, these projections may also be conservative in their judgment of amount of future employment.

Current Trends

State estimates now project that Baltimore will gain 0.54% in jobs from 2005 – 2010, and continue job growth at a 0.38% rate from 2010 – 2015. The State’s projections are:

<i>Jobs by site</i>	<i>2000</i>	<i>2005</i>	<i>2010</i>	<i>2015</i>	<i>2020</i>
Baltimore	450,940	432,700	444,500	452,900	455,100
Baltimore MSA	1,528,029	1,589,400	1,685,100	1,733,100	1,759,400
Maryland	3,091,547	3,268,700	3,518,700	3,650,900	3,720,600

Translating the figures above into percentages, the State has concluded:

<i>Employment change by site</i>	<i>2000 - 2005</i>	<i>2005 - 2010</i>	<i>2010 - 2015</i>	<i>2015 - 2020</i>
Baltimore	- 0.82%	0.54%	0.38%	0.10%
Baltimore MSA	0.79%	1.18%	0.56%	0.30%
Maryland	1.12%	1.48%	0.74%	0.38%

In the Census of 2000, Baltimore City had 507,534 residents age 16 or older, of which 286,735 were in the civilian labor force. Of those, 256,036 were employed, resulting in an unemployment rate of 10.7% for working City residents. By February 2005, local unemployment had declined to 7.8%. The decrease is, in part, related to population losses in the very early part of the decade, which has now slowed.

The Job Market

Census 2000 statistics showed the continuing diversity of the City’s employed workers’ job sectors:

<i>Employed in:</i>	<i>Number of persons</i>	<i>% Of resident workforce</i>
Education, health and social services	68,499	26.8
Professional, scientific, mgmt., administrative	26,088	10.2
Public administration	23,757	9.3
Retail trade	22,881	8.9
Arts, entertainment, recreation, accommodation & food service	21,174	8.3
All other economic sectors	93,637	36.5

The significance of the education/ health care/ social assistance sector could be represented by another employment statistic from early 2005. From January to February 2005, the Baltimore – Towson MSA gained 1,200 jobs in this sector. Of those, Baltimore City, which already had 46% of this employment sector’s jobs in the metro area, gained 1,000 jobs. This reflects the City’s continuing attraction to employers in this economic sector and those employers’ business growth within the City.

Short-term Forecast

In 2003 Maryland's Job Opportunities Task Force (JOTF) prepared forecasts of employment growth for the Baltimore MSA. Through 2006, JOTF predicted 58% of new hires would be filling vacancies and 42% would be filling new jobs. Of over 18,000 annual job growth openings, JOTF forecast that over 11,000 would be low-skill.

The JOTF forecast expected 2,000 annual growth job openings for persons with vocational, post-secondary training, or associate diplomas, but over twice that many openings for baccalaureate degree-holders and holders of post-graduate degrees. These latter jobs represent the higher-income employment levels for which the City, the entire region, and the nation compete. Combining replacement hiring with employment-growth hiring, JOTF forecast about 43,000 annual openings in the region, with over 9,000 of them requiring bachelor's level and above professional education.

Another group, the Baltimore Workforce Investment Board (BWIB), has studied the recent trends in employment for the region and the City. From 1990 to 2002, health care and social assistance sector employment grew 9.3% and business services grew 8.3%, while information technology remained level, and hospitality/ tourism fell 8.2% and construction employment fell 32.6%.

Summary

Baltimore and the Baltimore MSA are experiencing continued economic diversification and an overall growth of employment that are expected to continue through 2020. Given the increasing competitiveness of the health, education, and scientific sectors of the economy, attracting and retaining businesses in these thriving sectors of the economy requires attracting favorable attention from site-planners and executive decision-makers in those sectors. While part of each "location" decision will be based upon local work-force availability and its characteristics, and upon local transportation and communication linkages to national and international resources, an important part will be the amenity package that a location offers to workers in that sector.

Baltimore is still the business heart of the MSA and at the same time the location of the greatest concentration of regional amenities such as parks and publicly accessible waterfront. These are factors which attract mobile professionals and which contribute to the higher quality of life enjoyed by all workers in the City of Baltimore.

C. COMPREHENSIVE PLAN FRAMEWORK

Baltimore's Comprehensive Master Plan is the City's business plan for coordinating and leveraging City investment, policy and programming to maximize economic opportunity and the quality of life for all citizens of Baltimore. The time frame for the Plan covers a six-year period. The Plan's structure includes five Principles:

- Focus on measurable implementation
- Build on Plan Baltimore (the previous Comprehensive Plan)
- Incorporate Agency Missions, Work Plans and Programs
- Create a priority list for City Capital Improvements
- The Plan is easily understandable to non-planners.

The Plan is divided into four elements, LIVE, EARN, PLAY, LEARN.

LIVE creates the business plan that will guide Baltimore as it readjusts its residential land use to account for changes in population to capture an increasing share of the expected 1 million new residents who will settle in the region by 2020.

EARN creates the business plan to capture job opportunities, create larger tracts of industrial land near transportation centers and connect residents to available employment. LEARN strengthens the connections between neighborhoods and the City Public School system, maximizes opportunities for city children to learn, and creates better connections between the fourteen higher education institutions in Baltimore and the school system.

PLAY creates a plan to guide Baltimore as it improves our park system, expands our cultural attractions, and protects and improves our natural resources for the enjoyment of all City residents and visitors.

Most of the planning policies and goals for recreation and natural resource conservation are included in the analysis and recommendations of the Comprehensive Plan's section titled PLAY. There is some overlap with other sections as recreation issues are also discussed in the LEARN section and conservation issues are discussed in both LEARN and LIVE. Even though the issues and strategies for open space planning and management have been folded into the four elements of the Comprehensive Plan, the LPRP will still be included as an appendix to the Comprehensive Plan. A copy of the draft Baltimore Comprehensive Plan can be found in Appendix C of this plan.

CHAPTER III - RECREATION, PARKS AND OPEN SPACE

A. STATE GOALS FOR RECREATION, PARKS AND OPEN SPACE

The Maryland Department of Planning and the Department of Natural Resources have established 6 goals to protect the natural environment of Maryland and the Chesapeake Bay, provide adequate recreation resources for citizens and insure coordination with the Eight Visions for State Growth.

1. Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens, and thereby contribute to their physical and mental well-being.
2. Recognize and strategically use parks and recreation facilities as amenities to make communities, counties and the State more desirable places to live, work and visit.
3. Use State investment in parks, recreation and open space to complement and mutually support the broader goals and objectives of local comprehensive / Master plans.
4. To the greatest degree feasible, ensure that recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile, and help to protect natural open spaces and resources.
5. Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.
6. Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

B. CITY PARKS AND RECREATION PROGRAMS

The mission and goals that guide the policies and projects of Baltimore's Department of Recreation and Parks are compatible with the State goals for recreation, parks and open space. The mission, goals and policies of Baltimore's Comprehensive Plan are also compatible with the State goals. The City Comprehensive Plan ensures that the work of each city agency promotes the long term health of Baltimore City and the region with projects that improve the quality of life for children and families, improve public safety, improve existing public infrastructure (including public buildings and city utilities), promote existing commercial corridors, protect the cultural and environmental resources of the city and encourage private investment and redevelopment of existing industrial, commercial and residential areas.

The Baltimore City Department of Planning has incorporated the State's Eight Visions into their planning documents as they worked with the goals of each city agency to develop citywide policies for environmental protection and open space planning. Baltimore City's goals and policies to guide growth, development, and communities have been summarized in Appendix A: Plan Baltimore 1999 and will be updated in Baltimore City's Comprehensive Plan 2006 (A draft of the 2006 Comprehensive Plan can be found in Appendix C).

B 1. Goals: Baltimore City Comprehensive Plan and the Eight State Visions

Compatibility between Baltimore City Recreation and Open Space Planning and 8 State Visions

1. Development is concentrated in suitable areas.

The majority of land in Baltimore City has been developed for over 100 years and the entire city is designated as a state growth area. Baltimore City's recreation facilities are distributed across the city within residential areas and are accessible by walking or public transportation. The majority of park and recreation investments are renovation of existing facilities rather than development of new structures. Re-investment in existing facilities strengthens neighborhoods by keeping public facilities attractive.

(Plan Baltimore section: A,C,D,E,G / Comp Plan: Live 1,2,3, Earn 1,3 Play 3 Learn 1)

2. Sensitive areas are protected

Sensitive landscape features in Baltimore City include areas of steep slope, wetlands, streams and Chesapeake Bay shoreline. Significant areas of steep slope and stream valleys were protected by park expansion following implementation of the 1904 Olmsted Park Master Plan. Private areas of steep slope, wetlands and the Chesapeake Bay Critical Area are protected by regulations on development set by the Planning Department.

(Plan Baltimore section: C,E,H / Comp Plan: Live 2, Play 3)

3. In rural areas, growth directed to existing population centers, & resource areas protected

Because of the long history of development in Baltimore City, there are few remaining areas of significant natural resources outside of public parkland and no agricultural land.

Reinvestment in the city and region that retains or promotes growth in Baltimore City complies with the Eight Visions.(Plan Baltimore A,B,C,D,E,H/Comp Plan:Live1,3 Earn 1,3)

4. Stewardship of the Chesapeake Bay and the land is a universal ethic

Baltimore City monitors all shoreline development proposals for compliance with the regulations of the Chesapeake Bay Critical Area and has used the resulting funds to enhance the habitat value of both public and private shoreline areas. The Planning Department closely monitors all public and private development projects to reduce impervious pavement, encourage storm water infiltration and comply with the State forest conservation laws. Between 2002 and 2016, the City of Baltimore will invest \$900 million dollars to renovate and expand its storm water and sewer systems.

(Plan Baltimore section D,E / Comp Plan: Live 1,2, Play 3, Learn1,3)

5. Conservation of resources, including a reduction in resource consumption is practiced

Baltimore City recreation facilities are located within residential communities, often adjacent to schools and in walking distance from home. As a result, the facilities (playing fields, playgrounds and parking areas) can be shared which conserves resources by reducing the need for more development and promotes sharing of maintenance and operational staff.

(Plan Baltimore section A,E,G / Comp Plan: Live 1, Earn 3, Play 2,3, Learn 1,4)

6. To assure the achievement of 1-5 above, economic growth is encouraged and regulatory mechanisms are streamlined

Baltimore actively promotes economic growth including infill residential development and re-development of commercial and industrial areas. The City's policy of enhancing

existing public facilities ensures that parks and recreation facilities will remain functional through regular upgrades and be an attractive asset to the communities surrounding them. (Plan Baltimore B,E,G,H/Comp Plan: Live 1,2,3 Earn 1, Learn 1,2)

7. Adequate public facilities and infrastructure under control of the county or municipal corporation are available or planned in areas where growth is to occur.

Baltimore operates an extensive system of public recreation facilities and parkland. Planning and management of the park and recreation system is given the highest level of importance in city government; the Department of Recreation and Parks is one of 9 separate city agencies with a mayor's cabinet level director as its head.

(Plan Baltimore E,G,H / Comp Plan: Live 1,3, Earn 3, Play 2,3 Learn 1,3,4)

8. Funding mechanisms are addressed to achieve this policy.

While the Department is able to make steady progress each year on the 8 Capital Project areas (pg 3.4), with an average capital budget of 6-9 million dollars, the need for more funding is significant. A quick calculation of basic renovation needs in park and recreation facilities, documents a need for over \$138 million in renovations.

(Comp Plan: Live 1, Play 3 / Appendix B: Overview of Agency Capital Needs)

B 2. Goals: Baltimore City Department of Recreation & Parks

The Baltimore City Department of Recreation and Parks drafted a mission statement and goals to guide park and recreation programs and policies as part of the *Strategic Plan for Action 1991*. The Department continues to use this mission statement to guide recreation programming and open space policies. (See notes following Goals statements for compatibility between Department, State and City Goals)

Baltimore City Department of Recreation and Parks Mission Statement

Baltimore's parks and recreation resources and opportunities play a central role in making the city a desirable and distinctive place to live, work, play and learn. Baltimore will develop a park and recreation system that is responsive to and directed by the diverse and changing needs of its people and communities. The Department of Recreation and Parks invites and encourages individuals, families, communities, schools, business and other government and non-profit agencies to become partners in its efforts to invigorate and sustain the city's natural and leisure resources.

(State Goals #1, #2, #3 / Plan Baltimore Goals A, E, G / Comp Plan: Play 2,3)

Baltimore's Department of Recreation and Parks embraces its responsibility as a steward of the natural fabric of the city. We will preserve, protect and enhance its parklands and public green space to improve the physical and mental health of its people and the ecological health of the region, and to invigorate the human spirit for generations to come.

(State Goal #1, #6, / Plan Baltimore Goals A, E, G / Comp Plan: 3)

Baltimore will operate its recreation and parks system in a fiscally responsible manner with a commitment to the citizens that both public and private funds will be used in an efficient and effective manner. Baltimore will demonstrate that this investment in the city's unique and diverse recreation opportunities and natural resources will realize outstanding returns for the quality and prosperity of urban life.

(State Goal # 3, #4, #5 / Plan Baltimore Goals A, B, D, E, G / Com Plan: 3)

Baltimore City Department of Recreation and Parks Goals:

1. To provide innovative and safe, customer-driven, recreational opportunities reflecting the diversity of the people and communities of Baltimore City.
(State Goal #1, #2, #4, / Plan Baltimore Goal A, B, D, F, G / Comp Plan: Play 1,2,3)
2. To expand current programming opportunities without increasing maintenance costs by careful reuse and renovation of existing facilities.
(State Goal #3, / Plan Baltimore Goal G / Comp Plan: Live 1, Play 2,3)
3. To protect and enhance Baltimore's natural resources such as wildlife habitat and waterways and to consider the ecological health of the City, region and Chesapeake Bay in the planning and design of capital improvements.
(State Goal #3, #6 / Plan Baltimore Goal E / Comp Plan: Live 1,2, Play 3, Learn 1)
4. To preserve and enhance the natural, recreational, cultural and historic features which define Baltimore's park system.
(State Goal #1, #6 / Plan Baltimore Goal D / Com Plan: Live 1,2, Play 3)
5. To strengthen partnerships with individuals, communities, business and other government agencies for the support of the park and recreation system by inviting public participation whenever possible during planning, management and fund raising.
(State Goal #5 / Plan Baltimore Goal A, C, D, E, G, H / Comp Plan: Play 2,3)

B 3. Programs

Recreation and Open Space Planning in Baltimore City Department of Recreation and Parks

The Department of Planning is responsible for guiding the capital improvement programs of each city agency, ensuring coordination between agencies and overall compatibility with citywide goals, the City Comprehensive Plan and the 8 State Visions for Planning. Planning Department Staff work closely with the Capital Development Division from the Department of Recreation and Parks to prepare the annual and 6 year Capital Improvement Program as well as a variety of small community plans that impact park issues.

The Department of Recreation and Parks, Capital Development Division, has identified several "long-term" Capital Development programs that help the City to remain focused on the goals of the Land Preservation and Recreation Program, the Baltimore Comprehensive Plan and the Eight State Visions. These programs were developed to ensure steady progress on all aspects of providing open space and recreation opportunities in Baltimore City. They support care, operation, and improvement of general neighborhood recreation facilities, special recreation facilities, and our citywide network of open space greenways. The eight programs for capital development are:

1. Recreation Center Rehabilitation & Development
Renovation and new construction of recreation centers and special facilities
2. Park Rehabilitation & Development
Renovation & new construction of park features, greenways, ADA upgrades etc.
3. Swimming Pool & Bathhouse Rehabilitation & Development
4. Baltimore Playground Program (Both park and school sites)
5. Athletic Field and Court Rehabilitation & Development (including lighting)

6. Park Building Modernization (picnic shelters, restrooms, historic structures, etc.)
7. Park Plazas, Fountains and Medians
8. Park Land Acquisition

Suggestions for park and recreation improvement projects come from many sources:

1. Community or city staff generated plans: Recommendations from individual park or neighborhood master plans, Small Neighborhood Action Plans (SNAP), Urban Renewal Plans, Commercial Corridor Plans, the Mayor’s Playground Task Force Report, and other community assistance projects from the Department of Planning
2. Individual suggestions from city agencies or citizen calls: Recreation and Parks staff, Planning Department staff, the Mayor’s Office of Neighborhoods, individual park “friends” organizations, private citizens and community organizations.

Each fall, staff and the Director of the Department of Recreation and Parks evaluate all suggestions from the previous year. Staying within the projected capital budget, projects are selected to enhance the park system and support recreation programming. The completed capital budget is submitted by the Director of the Department of Recreation and Parks to the City’s Department of Planning. After revisions are made to meet citywide goals, the Planning Department submits the capital budget of all city agencies to the City’s Planning Commission for public review and the formal acceptance process.

During staff and public review, several factors are considered as each capital project or land acquisition proposal is evaluated:

1. Contribution to departmental goals (Land Preservation and Recreation Program)
2. Contribution to goals or programs of other City agencies
3. Contribution to goals of City Comprehensive Plan (8 State Visions)
4. Value of the facility or resource in relation to the entire park system with priority for those with at least one of the following factors:
 - A. High attendance and use
 - B. Multi-use facilities
 - C. Proximity to neighborhood with special needs (such as communities with a high percentage of low-income and at-risk populations)
 - D. Special needs groups (senior citizens, teens, children, or disabled populations)
 - E. Historical significance
 - F. Local regional landmark
 - G. High scenic or aesthetic value
 - H. Wildlife habitat enhancement value
 - I. Environmental quality improvement value
5. Evidence of strong community support or the potential for community involvement and partnerships
6. Critical needs of repairs, issues of public safety or need for ADA compliance
7. Budget constraints such as capital costs of project, operating cost of project and the potential for funding.

The scope of projects covered in the eight capital programs and the evaluating criteria used by the Department of Recreation and Parks, work together to identify projects which will have the greatest value for the public while finding a balance between all the competing goals of our Department. The close coordination between the Department of Recreation and Parks and the Department of Planning ensures that capital investments in park and recreation facilities will meet the recreation programming needs of the public as well as support environmental and community enhancement projects or economic development projects initiated by other City agencies. Each year, there are far more suggestions for capital improvement projects than funding will support. Projects that are given a high rank based on the seven department review criteria and also contribute to citywide goals for economic development and community support are given a higher funding priority as the Department's Capital Improvement Program is reviewed.

The Department of Recreation and Parks manage capital and operating funds for recreation and open space in Baltimore. In the last decade, the operating budget of the Department of Recreation and Parks has averaged \$25 million/year (75% City General Funds (taxes & revenues) and 25% private grants and donations). The Capital budget of the Department of Recreation and Parks has averaged \$7.5 million/ year for the last 5 years. (32% Maryland Program Open Space, 10% Community Parks and Playground grants, 23 % Federal (UPARR and ISTEA), 4 % City General Funds, 18 % City Bond Funds, 2 % State Bond Funds, 11 % Motor Vehicle Revenue). Program Open Space funds are generally used to fund renovation of existing facilities (recreation center renovation, renovation projects in the city's large urban or community parks, neighborhood playground renovation). Occasionally, Program Open Space funds are used for park acquisition or new development. The funding sources and project list for FY06 (total capital budget of \$10.19 million) are shown in Table 3.0.

C. NEEDS ANALYSIS & CITY PRIORITIES FOR LANDS, FACILITIES & REHABILITATION

C 1. Supply of Parkland and Open Space

C 1a. Summary of Open Space and Recreation Facilities owned by Baltimore City

Much of the Baltimore City park system was developed based on the 1904 Olmsted Brothers report Development of Public Grounds for Greater Baltimore. The report studied development patterns and the natural features of the city and identified key parcels for large park development, stream valley parks, boulevards, small parks, and water supply reservoirs. The Olmsted Report was updated in 1926 and again in 1941. Because the recommendations of the Olmsted firm were based upon an appreciation for natural landscapes, Baltimore's early park system preserved much of the environmentally sensitive land of the City. In the urban renewal era of the 1960's, the park system went through a second phase of expansion (Simonds and Simonds, 1964) adding active recreation sites to neighborhoods across the city (recreation centers, playgrounds, fields and courts).

Today, Baltimore residents have a variety of "close to home" parks, recreation facilities and natural open spaces (See Map3.1 of Baltimore Parks and Recreation Centers). Baltimore City has 5,913 acres of parks and school/recreation sites within city boundaries and another 965 acres of

parks just across the city line in Baltimore and Anne Arundel Counties. Large wooded parks and boulevards are interwoven across the city, forming a network of open space. Playfields, playgrounds, courts and recreation centers are found in nearly every neighborhood, increasing in number as population density increases. Athletic fields, playgrounds and courts are offered in a variety of settings. Many playgrounds and basketball courts have been developed in small urban parks (> 0.5 acres) but they are also found in more natural settings in the city's large parks. Multi-use athletic fields have been developed in many neighborhoods parks and schools.

The large city parks include significant areas of undeveloped woods (Gwynns Falls/Leakin Park, Druid Hill Park, Herring Run Park, Cylburn Arboretum) or mature tree groves (Patterson Park, Carroll Park, Clifton Park). While these parks cannot be considered "truly wild", they are "natural" in contrast to the surrounding urban development and they successfully support a variety of natural resource based recreation. Hiking, kayaking, and fishing are popular activities utilizing the trails and streams of Gwynns Falls/Leakin Park. Cylburn Arboretum, Druid Hill Park, Gwynns Falls/Leakin Park and Patterson Park are well known locations for bird watching. The National Audubon Society has established a year-round office adjacent to Patterson Park so its staff can take advantage of the mature tree groves & a naturally landscaped lake for urban nature and bird watching programs.

In addition, City owned undeveloped watershed lands in the surrounding counties (17,580 acres: Loch Raven Reservoir and Pretty Boy Reservoir in Baltimore County and Liberty Reservoir in Baltimore & Carroll Counties) have extensive trail networks that are open to the public for recreation activities such as hiking, cross country skiing, horseback riding and mountain biking.

Tables 3.1 and 3.2 summarize the variety of open space resources and recreation facilities currently available. A listing of current City owned open space and recreation facilities can be found on the State MEIRS system (Appendix D). The MEIRS data is managed by the Maryland Department of Planning. MEIRS data for Baltimore City was last reviewed in 2005 and will be updated annually by staff from the Department of Recreation and Parks.

C 1b. Greenways and bicycles in Baltimore City

In the last two decades, Baltimore City has been successful in planning and constructing a new greenway system that expands our existing park system by making new connections between communities and open space. The three main trails follow the city's major stream valleys: Gwynns Falls, Jones Falls and Herring Run. These three separate greenways work as a network whose hub is downtown Baltimore, linking residents with points of interest at the neighborhood level (schools, parks and shopping areas) as well as the major cultural attractions of the Inner Harbor. The greenway network alignment has been designed to allow connections to trail projects of the surrounding communities in Baltimore County and the East Coast Greenway, a national trail system traveling from Maine to Florida.

The Department of Recreation and Parks, with support from the Department of Planning and the Department of Transportation, is responsible for trail construction and management. The Gwynns Falls Greenway was completed in 2005, the Jones Falls Greenway is under construction and the Herring Run Greenway Master Plan will be begin in the next 5 years. The greenway network offers "off road" trail opportunities for both recreational use (bicycles, skateboards,

roller blades, walking) and daily commuting. In addition to the greenway trails, the city has drafted a Bicycle Network Master Plan (2006) to promote safe bicycling routes on city streets. The Bicycle Master Plan, will guide the Department of Transportation as it adds signs and designated bicycle lanes to promote use of bicycles for daily errands and commuting to work.

The increasing popularity of bicycle riding in Baltimore can be seen each year with the growing demand for bicycle racks at the train station and downtown, increasing numbers of greenway trail users and increasing participation in local bicycle events. The “Tour de Parks” is sponsored by the Friends of Carroll Park & Mayor’s Bicycle Advisory Committee (since 2001). The event includes a race and family ride on a 30 mile loop that passes through the city’s 5 large parks including 7 miles of the Gwynns Falls Greenway. “BikeJam” has been sponsored by Friends of Patterson Park since 1998. The day-long festival includes 11 races held on roads within Patterson Park. The events range from a 40 mile race for professional road racers (the KBS Cup ProRace Circuit) to 5 and 10 mile amateur and youth races and a sprint for city messenger bikes.

Gwynns Falls Greenway: The Gwynns Falls Greenway extends 14 miles along the Gwynns Falls stream valley, linking over thirty neighborhoods with 2000 acres of parkland. Parks located along the Trail’s route include Gwynns Falls/Leakin Park, Leon Day Park, Carroll Park, Middle Branch Park and the Inner Harbor. A spur trail (2 miles) connecting the Gwynns Falls Greenway to the I-70 park-n-ride in Baltimore County is expected to be completed in 2006.

The landscape character of the northern and southern sections of the Gwynns Falls Greenway is quite distinct. From Gwynns Falls Park to Carroll Park, the trail weaves along the steep slopes of the stream valley. The trail is completely surrounded by mature woodlands full birds and wildflowers with dramatic views of the rushing stream from the trail bridges. New visitors to this section of the trail are amazed to find so much natural beauty inside the city limits. From Carroll Park south to the Inner Harbor and Middle Branch Park, the trail is a completely different experience. The trail weaves through the streets of row house communities and industrial areas. One spur cuts through Ravens Stadium to reach Federal Hill and the Inner Harbor while the main trail continues south along the industrial shoreline of the Chesapeake Bay to reach Middle Branch Park and the Baltimore Rowing Club.

Jones Falls Greenway: The master plan for the Jones Falls Greenway (2000) proposes a new 10 mile bicycle trail for central Baltimore City, roughly following the Jones Falls Stream Valley from the city line to the Inner Harbor. This trail system will connect over 20 neighborhoods and 1500 acres of parkland, including Druid Hill Park, Cylburn Arboretum and Robert E. Lee Park in Baltimore County. The northern portions of the trail will pass through a series of wooded parks (Cylburn Arboretum, Woodberry Park and Druid Hill Park) while the southern portion of the trail will be “share the road” from Pennsylvania Railroad Station, south through the residential and commercial streets of the Midtown Cultural District and the Inner Harbor. Phase I of the Trail, between Druid Hill Park and Penn Station was completed in 2005. Phase II, from Penn Station to the Inner Harbor will be designed in 2006. Phase III, 2 miles of Trail through Druid Hill Park will be built in 2006. Phase IV, Druid Hill to Cylburn Arboretum is in design and will be built in 2007. Designs and construction for the final phase, Mt Washington, are expected to begin in 2008/9.

Herring Run Greenway: Baltimore plans to design and build the Herring Run Greenway by 2020. The trail will connect Herring Run Park, Chinquapin Park, Moore's Run Park and Clifton Park as well as the Lake Montebello water treatment facilities (1122 acres) to Morgan State University. The trail will wind through low-density residential neighborhoods to connect a series of parks that have popular athletic fields.

C 1c. State and National Parks near Baltimore City

There are no State parks inside the Baltimore City limits. Nearby State parks include Gunpowder Falls, Patapsco Valley, Patuxent River, Rocks and Sandy Point. Recreational opportunities in the State parks offer a variety of activities including hiking, fishing, swimming from a beach, nature study, and other passive recreational experiences that compliment the recreational activities found in more urban parks. City visitors reach these State parks by private automobile, as well as organized school, camp and club bus trips.

Ft Mc Henry is a national park located within Baltimore City boundaries. The grounds around the fort are free to the public and low impact recreation activities such as picnicking, fishing, bird watching and jogging are allowed.

C 1d. Semi Public & Private Open Space and Recreation Facilities in Baltimore

Baltimore City is home to many universities, colleges and private schools. These institutions have extensive recreational facilities and landscaped grounds. Universities such as Johns Hopkins University, Morgan State University and Loyola College are often generous about allowing the public to utilize their playing fields, courts and running tracks during “off-peak” hours. Private and Catholic secondary schools also allow informal public use of their outdoor athletic facilities outside of school hours. In addition, Baltimore has many historic cemeteries that act as passive open space for walking and bird watching. Combined, these facilities provide an additional 1,975 acres of open space and recreational opportunities. While the acres and facilities of these additional privately managed open spaces are not included in our inventory, we recognize that these assets compliment and expand the public park system.

Another “uncounted” but contributing resource for the citizens of Baltimore City is privately operated recreation facilities. Private fitness clubs, and specialized recreation facilities are available at competitive fees in neighborhoods across the city and many people visit both public and private special facilities. A quick inventory from the Yellow Pages listed more than 10 pools operated by community associations, more than 20 health and fitness clubs, 3 private tennis clubs, 1 private ice skating rink and 4 private boxing gyms.

C 2. Supply of Recreation Center Programs

C 2a. Neighborhood Recreation Centers

The City's recreation system includes neighborhood based recreation centers, special use athletic facilities and a citywide network of courts and fields in parks and school sites. The Department of Recreation and Parks operates 46 recreation centers and 19 more are operated by the Police

Athletic League (Map 3.1). Programming varies from center to center often reflecting the culture of individual neighborhoods and the interests and skills of the center staff. Many centers offer unstructured, "drop-in" recreation as well as structured programs. Programming content changes to match the skills and interest of different age groups (youth, teens, adults and seniors) but can be generally classified into two categories: Sports or Personal Skills.

Team and Individual Sports Sports programs may be instructional for skill development, informal for general recreation, or competitive as teams play inner squad / within the center or travel to other recreation centers, cities or states. Each neighborhood recreation center offers a variety of team or individual sports that change with the season. Sports commonly offered include; aerobics, badminton, baseball, basketball, bowling, dance (ballet, modern, ethnic), football, golf, horseshoes, ice skating, martial arts, lacrosse, ping pong, swimming, roller hockey, roller skating/blading, skateboarding, soccer, softball, t-ball, tennis, track & field, gymnastics, volleyball, weight training and conditioning.

Sports programs are designed to provide supervised instruction and fitness training with an emphasis on teamwork and cooperation, sportsmanship, discipline and raising self-esteem among participants. Most programs are focused on youth, but a variety of adult opportunities for fitness and skill building are available such as softball and basketball leagues, aerobics classes, aquatics and weight training.

The Department of Recreation and Parks "Division of Youth and Adult Sports" and several non-profit organizations have developed partnerships to promote team sports and offer citywide league play. Football, Lacrosse and Soccer programs are offered throughout the year. Teams play on fields in city parks and schoolyards as well as in the city's two indoor soccer arenas, in Canton Park (Du Burns Arena) and Farring Baybrook Park (Myers Arena). Basketball programs begin with center-based teams and build to organized leagues and citywide tournaments. Basketball games are held in gyms at schools and recreation centers and tournaments are held in the outdoor court complexes of Druid Hill Park, Bentalou Recreation Center and Madison Square Recreation Center. The city, community organizations and local foundations all work together to support youth Baseball. Several Baseball leagues operate within the larger framework of "Babe Ruth" and "Little League" organizations and games are played in city parks or schoolyard fields. The Department also sponsors the Baltimore Track and Field Development Program that offers youth training and local competition as well as participation on the Department's Traveling Track and Field Team. This team competes in regional and national events.

The Department of Recreation and Parks, Office of Youth and Adult sports works with many sports teams and organizations to coordinate independent league games in city parks. Each year, over 1,200 sports teams register and pay for field reservation permits for field sports: baseball, lacrosse, soccer, slow pitch softball, fast pitch softball, tackle football, touch football, flag football, kickball, rugby, ultimate frisbee, disc golf and field hockey. Adult recreational league sports seasons extend well beyond the typical season for youth athletics. The "season-length" figures for the Table 3.5 are derived from the field reservation permit records and reflect the playing season habits of the adult teams.

Personal Skills and Social Values: The range of Personal Skills programming reflects the interest of individuals to develop their talents as well as the need for communities to support families and children. Programs often provide opportunities for social interaction, especially for teens, seniors and new families. Each neighborhood recreation center offers a variety of Personal Skills programs that change with the season: arts and crafts, baton, ceramics and pottery, cheerleading, cooking, drama, flower arranging, foreign language, gardening, health & safety, homework assistance, modeling, music (instrumental, band, choir), nature studies, parent-tot groups, personal hygiene, puppets, reading/writing clinics, senior groups, story hour, summer fun camps, teen discussion groups, teen's night in, youth clubs and youth mentoring.

C 2b. Special Use Facilities:

The City's Department of Recreation and Parks operates several facilities, which offer specialized programming for youth and adults. Activities at many of the special use facilities are structured to offer casual recreation use during "public" sessions and also support team-based athletics during "reserved" sessions. Two indoor soccer arenas are programmed to allow reserved time for team practice and competition as well as free-play time. The two indoor ice rinks provide opportunities for skating lessons and general recreation as well as reserved time for figure skating lessons, ice hockey and broomball team competition and practices. The Department also operates a youth boxing center and the only inner city bowling alley/roller skating rink.

The Aquatics Division operates the outdoor pools, indoor pools and many of the wading pools. Swim instruction and pool staffing are provided by city youth who receive American Red Cross Training from the aquatics staff. Three indoor pools offer year round swimming lessons as well as "club" swim teams for all ages. In the summer months, the outdoor pools offer recreational and competitive swimming for all ages.

Farring-Baybrook Recreation Center is the hub of the Department's therapeutic recreation programming and Special Olympics. Recreation facilities (playground, courts, pool etc) in the surrounding park are fully accessible. The center has adapted the traditional recreation programming of personal skills and team sports to meet the needs of mentally and physically challenged individuals. Team sports include swimming as well as wheelchair tennis, bocce, basketball and baseball. Popular sports such as wheelchair basketball are offered in many recreation centers in Baltimore.

C 2c. Environmental Education

Environmental Education through the Department of Recreation and Parks is offered in 3 different settings in Baltimore. The Carrie Murray Outdoor Education Campus in Gwynns Falls/Leakin Park offers environmental education activities in a wilderness park. Carrie Murray participants are primarily school age children who visit as part of a school field trip or attend the summer camps. Carrie Murray has an extensive live animal collection including an insect zoo, reptiles, small mammals and birds. Carrie Murray is a licensed "raptor rehabilitation" center and is home to several hawks and owls. The Rowing and Water Resources Center at Middle Branch Park offers environmental education on the Chesapeake Bay. Boating instruction, fishing derbies and shoreline habitat studies are offered each summer. Cylburn Arboretum and the Druid Hill

Conservatory offer botanic environmental education programs on the arboretum grounds and inside the greenhouses. Arboretum programs change with the seasons and include Master Gardener classes, indoor and outdoor special gardening topics, wildflowers, trees, tropical plants, and bird watching for adults and school-age children.

The National Audubon Society offers pre-school and school age environmental education programs in Patterson Park. They also sponsor adult bird watching sessions and annual species counts of the wildlife that frequent the mature tree groves and lake of Patterson Park.

C 3. Demand

C 3a. Statewide and regional responses to recreation preferences

Demand information for Baltimore City has been provided by the State through two state surveys, *Participation in Local Park and Recreation Activities in Maryland (2003)* and *State Parks and Natural Resources Areas in Maryland: A Survey of Public Opinion (2003)*. These surveys provide information about recreation activity and interests in Baltimore and other regions across the state. Data was gathered for 83 activities and 11 different park facilities. (Summaries of the State Report is found in Appendix E)

Several activities were found to have high levels of interest across the state. Visiting festivals (58%), walking (49%), swimming (45%), picnicking (37%) and visiting playgrounds (34%) were popular in all regions. These activities are not dependent upon natural resources, do not require a high degree of skill or fitness and can be enjoyed by families and individuals of many ages. The statewide survey showed that less than 10% of the public participated in organized field sports (baseball, soccer etc) and only 14% played basketball. While the participation levels for these skill-based team sports are lower than other activities, their impact upon demand is significant because the participants of these sports have significantly higher activity frequently rates than was found for participants of other activities (Appendix E).

The State survey results clearly show regional differences in preferences and interests for recreation. As expected, regional preferences for recreation generally reflect the activities that are natural resource based within the region. Surveys from western and eastern counties indicated a higher interest in hunting, fishing, boating and other activities that are easily available in these rural regions. Surveys from counties with extensive Chesapeake Bay shoreline indicated a higher interest in powerboats and other water related activities. Surveys from the more urban areas of the state, Montgomery County, Prince George's County and Baltimore City, had lower responses for these natural resource based activities. Baltimore City survey responses are more similar to those of Montgomery County and Prince George's County, a similar densely populated urban area, than its adjacent neighbors in suburban Baltimore County (Appendix E).

C 3b. Baltimore City recreation preferences and demand

The 10 most popular recreation activities listed by Baltimore City residents are the same as those reported in the Statewide data for Individual Participation Rates for 46 activities (Table 3.3 and Appendix E Summary Table 1 or Table D-1). Attending festivals had the highest participation rates among survey responses (60.4%) followed by walking (53.2%), beach swimming (37.2%),

pool swimming (36.6%), visiting a playground (34.8%) attending an outdoor concert (33%), picnicking (29.9%), playing basketball (18.6%), hiking (17.7%) and riding bicycles (12.1%). Significantly more people say they participated in passive, family-friendly recreation and children's play (festival, outdoor concerts, picnics, swimming and playgrounds all have participation rates of 30-60%) than organized sports or active recreation (basketball, hiking and bicycle riding have participation rates less than 18%). Basketball is the most popular of the traditional sports (18.6%) in Baltimore City. Participation rates for other traditional sports in Baltimore City are much lower than the rate for basketball: football (9%), baseball (9%), softball (7%), soccer (6%), tennis (6%) and lacrosse (1%).

Baltimore City has lower Individual Participation Rates than statewide reporting for many activities. Exceptions are higher participation in festivals, outdoor concerts, walking and basketball. Baltimore rates are similar to statewide rates for 20 activities (playgrounds, jogging, running, football, baseball, softball, horseshoes, aerobics, volleyball, sailing, nature/garden programs, etc) and lower for 22 activities (swimming beach or pool, picnics, hiking, soccer, tennis, boating & fishing, golf, bicycles, dog walking and ice skating. etc). The Baltimore City participation rate for basketball is higher than any other region in the state except Montgomery County/Prince George's County, the other urban region. Generally, more suburban Baltimore County residents participate in recreation activities than Baltimore City residents. Twenty-one activities have participation rates 10% or higher in the suburbs while only 12 activities have participation 10% or higher in Baltimore City. Some of the most dramatic differences between Baltimore City and Suburban Baltimore County residents were participation rates for water related activities: (Power boat: County (14.5) City (3.9), Fishing from a boat: County (12.4) City (5.6), Fishing from pier: County (5) City (2).

Data reported for activity preferences and participation rates from Households with members participating in specific activities (Table 3.4 and Appendix E: Summary Table 2 or D-4) is quite different between Baltimore City, the state of Maryland and the surrounding suburban counties. In the report, activities are grouped by category and preferences for activity type as well as participation rates show strong regional differences. Generally, there are higher participation rates in the suburbs than in Baltimore City for both family/passive activities as well as more active recreation. Some interesting differences occur in team sports that indicate a strong regional difference in demand for recreation facilities: soccer (city 6%, suburbs 13%) basketball (city 19% suburbs 11%), lacrosse (city 1%, suburbs 7%), golf (city 5%, suburbs 13%) and skateboard (city 2%, suburbs 7%)

C 3c. Baltimore City Needs Analysis and the State Recreation Preference Survey

The regional differences in participation rates across the state for resource based activities (hunting, fishing, boating) and team sports (soccer, lacrosse, basketball) are significant and necessitate separate demand studies and individualized activity lists for each jurisdiction. The Baltimore City demand and needs analysis report will focus on several activities that are popular in this urban region as well as activities that require special facilities. Although they are among the 10 most popular activities in Baltimore City, we have not included walking, jogging or bicycling in the demand study because these activities are not restricted to open space and can happen anywhere on the transportation network (streets and sidewalks) of the City. The Baltimore City reports for Supply (Table 3.5), and Demand (Table 3.6) include data for Field

Sports (Football, Soccer, Lacrosse) Baseball & Softball, Basketball, Tennis, Swimming (Park Pools, Walk To Pools, Indoor Pools), Playgrounds, Golf, Picnics, Ice Skating, Ice Hockey, Skateboarding, and Festival Sites.

C 4. Needs Analysis

C 4a. Field Sports

The Baltimore City Needs Analysis Report is found in Table 3.7. Multi use athletic fields (69) and ball diamonds (213), often with overlapping athletic fields (112), are found in park and schoolyards across the city. The needs analysis shows that there are currently more than enough fields to meet the demands for recreation through 2020, even when allowing for use of overlapping fields. In theory, the demand on athletic fields for fall football and fall softball will be greater than spring baseball and lacrosse because the demand for lacrosse in Baltimore City is much lower than that for Football. The combined field requirement for football and soccer (36 + 43 = 79 fields) can be met by expanding the number of multiuse fields (69) by using only 10 of the fields that overlap baseball diamonds. Baseball / softball demand only requires 112 fields out of 213 available diamonds, so there is no conflict between user groups of ball diamonds and athletic fields. Baltimore City does not need to build more athletic fields or ball diamonds to meet the demands for football, soccer, lacrosse, softball or baseball through 2020.

C 4b. Court Sports

Basketball courts (182) are located across the city in parks and schoolyards. Basketball is quite popular in Baltimore and its participation rates are higher than the statewide average. The Needs Analysis Report indicates that if the city wanted to meet the entire demand for basketball till 2020 with outdoor courts, another 7 courts should be constructed. The annual carrying capacity for basketball courts is actually higher than the data presented in the Supply Report because the report only counted outdoor basketball courts. Public middle and high schools have indoor gymnasiums with basketball courts (52) but these were not included in our Supply Report because access to the public is restricted. Most recreation centers share gymnasiums with schools and provide access to the public during the hours of center operation.

The City currently has 166 tennis courts in city parks and schoolyards. This number of courts is more than double the number of courts required to meet demand, so no new tennis courts are needed.

C4c. Swimming in Pools

Swimming in pools (36.6%) and swimming on beaches (37.2%) were among the ten most popular activities reported in the State survey for the Baltimore City region. While there are a few locations for the public to access swimming areas in the Inner Harbor and Middle Branch, the amount of boat traffic makes this an unsafe activity and the Department of Recreation and Parks does not promote beach swimming in Baltimore City. The Department operates 19 outdoor pools and 3 indoor pools across the city for public swimming.

The Needs Analysis report indicates that the combined capacity of the indoor and outdoor pools exceeds the demand through 2020 and no new pools are needed. The annual carrying capacity for pool swimming in Baltimore City is actually higher than the data given because the report only counted pools open to the public at a low fee. The report does not count contributions to swimming capacity provided by indoor high school swimming pools (limited access) or private neighborhood swimming pools in Baltimore City (restricted access and higher cost).

C 4d. Special Facilities: Ice Rinks, Skateboard Parks and Golf Courses

Baltimore City operates four 18-hole golf courses and one 12-hole golf course. The Needs Analysis report indicates that these courses are sufficient to meet demand through 2020.

The City currently operates one skateboard park. The Needs Analysis report indicates that a second skateboard park should be added to meet demand.

Baltimore City operates 3 different ice rinks: Mt Pleasant is an indoor rink, open year-round, Mimi de Pietro is a covered rink, open during the winter, and Broadway is an outdoor rink, open during the winter. The combined capacity of these three rinks exceeds the demand for ice hockey, but falls short of the demand for ice-skating. The demand for ice-skating through 2020 is about 10% higher than current capacity.

C 4e. Popular Family Oriented Activities: Picnics, Festivals and Playgrounds

Festival attendance was one of the most popular activities listed in the State survey for both Baltimore City (60.4%) and on a Statewide level (55.8%). The Department of Recreation and Parks allows a variety of festivals and concerts to be held in parks on a single day or weekend permit basis. There are nine locations that can host small festivals (maximum two day attendance 10,000) and six locations that can host large festivals (maximum two day attendance 200,000). Over a summer season, the capacity of these 15 locations far exceeds the demand for festival attendance through 2020.

Visiting a playground was one of the ten most popular activities in Baltimore City (34.8%). Public playgrounds are found in many parks and elementary schoolyards across the city. The current supply of public playgrounds (224) meets and exceeds the demand for playgrounds (217) through 2020.

Picnics were one of the ten most popular activities in Baltimore City (29.9%). Picnics in Baltimore can be anything from a large family reunion hosted in a reserved park pavilion to a family or couple with just a blanket on the lawn. Because the activity is not really site specific, we chose to measure a park amenity, the picnic table, which would enhance this activity. Baltimore currently has 150 movable picnic tables, located throughout the park system. The Needs Analysis indicated that Baltimore should have 395 picnic tables to meet current demand and increase the number to 397 by the year 2020. To meet current demands, Baltimore should distribute another 245 picnic tables throughout the park system.

C 5. City Priorities for Land Acquisition, Facility Development, and Rehabilitation

C 5a. Land Acquisition priorities for Baltimore City

The Needs Analysis did not reveal deficiencies in recreation activities that would require acquisition of new land. Baltimore does not need to acquire more land for baseball fields, athletic fields, swimming pools, golf courses or festival sites. The Needs Analysis did include some areas of deficiency, however, it is possible for the City to expand capacity without land acquisition. For example, the need for 7 more outdoor basketball courts or one more skateboard park could be met by converting some of the City's excess tennis courts. Court conversions would be better than new court development because they would be cheaper and avoid expansion of impervious surface in the City. The need to add 10% more capacity for figure skating could be met by adjusting the hours of operation and type of programming in the City's existing ice rinks. The need for more picnic areas could be met by distributing more picnic tables within the current park system.

While the City does not need to expand the park system to meet projections for recreation demands, the City recognizes that redevelopment within the city will create opportunities to enhance the park system. As the City is redeveloped in the next decade, some acquisition will be important both for protection of Baltimore's natural resources and for the general ecological health of the region. The City will continue to monitor trends in land use and land sales to watch for opportunities to enhance the current park system and protect areas of special habitat. Priority will be given to land parcels that directly support the mission and goals of the Department of Recreation and Parks: Land that has high environmental/habitat value, historic or cultural values, or can complement recreation facilities by expanding existing parks or linking existing parks and open space in the greenway network.

Baltimore will also carefully evaluate open space possibilities as older residential areas are redeveloped. Re-configuring street patterns, adjusting housing densities and eliminating underused mini parks to allow development of new "park squares" similar to our historic squares has been shown to be an economic asset to community revitalization at Heritage Crossing in West Baltimore. Park squares such as Union Square, Mt Vernon Place and Patterson Park are good examples of the positive impact of attractive open space on the value of adjacent homes and continue to inspire redevelopment in Baltimore City.

C 5b. Facility Development Priorities for Baltimore City

The Needs Analysis indicated that Baltimore City does not need to develop more Ball Fields or Athletic Fields to meet current and future demands. Baltimore City has also met the current and future demands for numbers of many other facilities including Tennis Courts, Golf Courses, Swimming Pool, Playgrounds and Festival Spaces. The State survey noted that the open-ended responses included a wish for more playgrounds. The city has adequate playground sites to meet demand, however, many city playgrounds are in need of total renovation. Following the results of the Mayor's Playground Task force, the Department of Recreation and Parks and the Department of Education have improved coordination of playground renovation and maintenance. Baltimore City has renovated 113 public playgrounds since 2000 and identified

another 70 school and park playground sites that should be renovated as soon as funding allows (estimate playground renovation at \$100,000 - \$150,000/ site). Every neighborhood in Baltimore City is in walking distance of an elementary school. Once all the school and park playgrounds have been replaced every community will be close to open space with new, CPSC approved, accessible playground equipment without the need for expanding to new sites.

While the State survey did not include specific data for recreation centers, the responses to the open-ended question portion expressed a desire for more indoor recreation activities in Baltimore City. Recreation Centers in Baltimore are well distributed geographically, however the age and size of the centers is quite variable. It is possible that the wish for more indoor recreation opportunities was a reflection of this disparity. Recreation Centers in Baltimore include “free standing centers” and “school wing centers” (10,000-12,000 SF: classrooms, kitchen and gym, sometimes shared with the school) and “field houses” (3,000 SF, one multiuse room with a restroom and office). The freestanding recreation centers and school wing recreation centers were all constructed before the mid 1970’s. Field houses were built in the 1950’s. The City has been steadily renovating recreation centers for the last decade; however, funding availability to one or two sites/ year has restricted the rate of renovation. At least 30 recreation centers should have a complete renovation (windows, doors, roof, electric, HVAC, floors, restrooms, roof) at an estimated cost of \$500,000 to \$1,000,000/ site. In addition to renovation of the free standing and school wing centers, the Department has begun to explore replacement of the aging field houses. In 2005, the Department of Recreation and Parks demolished the old Lyndhurst/Edgewood field house and built a new recreation center (\$850,000). Future development priorities are likely to include a gymnasium for Lyndhurst/Edgewood (\$1,000,000) and replacement of other aging field houses and recreation centers.

The open-ended survey results also included comments expressing strong interest for Greenways and bicycle trails in all regions of the State, including Baltimore City. Baltimore City has just completed a detailed bicycle master plan. The document will be reviewed and adopted as part of the Comprehensive Plan review in 2006. In addition, the Department of Planning continues to work with the Department of Recreation and Parks in completing the Jones Falls Greenway. The Gwynns Falls Trail is largely complete, with over fourteen miles open (2005). The Master Plan for the Herring Run Greenway should begin in 2007. Spurs from the Trail systems into surrounding neighborhoods will continue to be developed as well. The Western Run Feasibility study for a spur of the Jones Falls Greenway will be complete in 2006.

C 5c. Rehabilitation Priorities for Baltimore City

Although the list of recreation facilities available in the city (Table 3.2) is extensive, the condition of these facilities is variable. Routine maintenance and renovation of public facilities have been deferred because of dwindling operating and capital budgets in many city agencies. Facility renovation has been the main focus of the Capital Budget of the Department of Recreation and Parks for the last decade and this trend is not expected to change in the future. Appendix B is a discussion of the scope of renovation needs of Baltimore’s Recreation and Park system (\$138 million dollars). Each year, the city spends the majority of its capital budget on renovation projects for existing facilities: recreation centers, park facilities, swimming pools, playgrounds, park buildings, plazas & fountains and athletic courts & fields. If capital funds were available, Baltimore City would be able to establish a renovation cycle that kept all its

facilities in good condition. For example, playgrounds in the city of Boston are replaced on a 12-year cycle. Baltimore City would need to fund renovation of 19 playground sites each year, indefinitely, to meet this goal (\$2,000,000/ year). Building systems wear out with age and require replacement. For example, a typical roofing system may have a 20-year warranty. If funding were available, the city would expect to replace 3 to 4 recreation center roofs every year. Another capital need that can be projected for continuous cycles is resurfacing of tennis and basketball courts. Resurfacing generally lasts 15 years, while the seal coating should be replaced after 10 years of wear. Baltimore has 182 basketball courts and 166 tennis courts. If funding were available to meet this cycle, the city would resurface 23 courts/year. In the last 5 years the city has averaged 10 courts/year.

Having the numbers of recreation facilities required to meet projected demands for recreation is not sufficient for a successful recreation and open space program. To remain attractive community assets, park and recreation facilities must be renovated and upgraded to meet changing safety and accessibility codes and keep pace with the wear and tear of daily use. Future priorities for renovation are likely to include playground renovation, athletic court renovation, athletic field renovation, park building renovation (pavilions, restrooms) recreation center renovation, system wide ADA upgrades, park infrastructure renovation (roads, walks, lights) and restoration of historic park buildings. In addition, the capacity of the City's most popular facilities can be expanded through careful renovation. For example, upgrades such as night lighting for athletic fields and courts or park pavilions can double a facility's capacity at a lower cost than new development. Table 3.8 includes a list of development and renovation projects that are likely to have high priority in the next decade.

D. ACQUISITION (ACERAGE) GOAL

Baltimore City is exempted from the restrictions on spending for land acquisitions (Natural Resources Article 5-905(b)(1), because the city was fully developed when Program Open Space laws were enacted. If the watershed lands of the city are included in the calculations, the city has about 20 acres of publicly owned open space/1000 people. The extensive areas of open space owned by private institutions such as private schools, colleges and churches was not included in the open space calculations.

Baltimore population 651,154 / 1000 people = 651 units of measure per thousand

6,878 acres parkland
5,860 acres of watershed (1/3 x 17,580)
12,738 acres of public open space / 651 = 19.56 acres/ 1000 people in Baltimore

Baltimore's environment is overwhelmingly developed and opportunities to purchase quality natural resource lands are unusual. As neighborhoods are redeveloped, each public parcel, including open space, will be evaluated for its ability to become a safe, attractive community asset. Redevelopment may create opportunities to add to existing parkland, reforest former development sites or exchange several small open spaces for larger, more functional open space. The focus for natural resource protection in the future will be limited to those lands that are important for habitat enhancement, are required for the development of our Greenway systems or will benefit existing park and recreation facilities.

E. PUBLIC PARTICIPATION

Public review and comments for the 2005 Land Preservation, Parks and Recreation Plan (LPRP) will be combined with the public review process of the City's new Comprehensive Plan. The draft Comprehensive Plan was completed in January 2006 and the LPRP is an attachment to the Comprehensive Plan. Copies of the documents are available for review at the Planning Department and through the Planning Department web site. For the convenience of the public, the Department of Planning will host open meetings in each of the city's 9 planning districts to discuss the draft plan.

February 21, 2006	Northwest
February 28, 2006	East
March 7, 2006	South
March 12, 2006	North
March 13, 2006	Central
March 20, 2006	Southwest
March 25, 2006	Southeast
March 28, 2006	Northeast
April 1, 2006	West

The Comprehensive Plan and the attached LPRP will be presented to the City's Planning Commission for official adoption before June 2006.

Table 3.1. Summary of Baltimore City's Open Space Categories in the 2005 MEIRS Report

11 Large urban / Regional Parks (3,435 acres): Baltimore's large urban parks offer a variety of recreation facilities and historic features within a natural landscape setting. The City's large parks were acquired over 100 years old and their development reflects changing trends in recreation. Tennis and basketball courts, baseball fields and multiuse athletic fields, swimming pools, golf courses, recreation centers, playground equipment, picnic pavilions, restrooms and trails have been developed along with monuments, fountains and landscaped passive areas. Many of these large parks also have exceptional habitat value in undeveloped woodlands, streams and shoreline. Baltimore's large urban parks range from 100 to 1000 acres in size.

21 Community Parks (601 acres): Baltimore's community parks are typically 20 to 100 acres in size. They often contain a playground area and natural landscaping as well as multiple baseball and athletic fields or recreation centers that attract participants from several neighborhoods.

166 School – Recreation Parks (1,231 acres): Elementary schools (124 sites) in the city typically have 1-3 acres of open space with a playground and paved play area adjacent to the building. Middle schools (27 sites) often have 3 – 5 acres of open space that may include a basketball court or a playing field. High Schools (25 sites) provide all the facilities needed for outdoor youth athletics - multiuse fields, baseball fields, basketball and tennis courts and running tracks. Recreation Center wings have been built at 40 of the school-recreation park sites.

84 Neighborhood Parks (318 acres): Neighborhood Parks are generally 1 or 2 acres in size and include several active recreation features – swimming pools, recreation centers, and baseball diamonds with overlapping fields, basketball courts and playgrounds.

109 Mini Parks (48 acres) and 3 Historic areas (3.66 acres): Mini parks are typically less than an acre in size. They can be small recreation areas with just a playground or a basketball court or an urban passive area with landscaping, seating and monuments or fountains.

3 Golf Courses (631 acres): Baltimore City has 5 golf course locations, 3 as single use area and 2 within larger park settings.

14 Special Use Areas (363 acres): Baltimore's park system includes several special facilities such as an arboretum; ice skating rinks, nature centers, indoor soccer arenas, boxing centers, and indoor swimming pools.

15 Undeveloped Parcels (248 acres): The majority of undeveloped parcels are wooded areas, too wet or too steep to permit any recreation development.

Chapter IV: Agricultural Land Preservation

This Chapter is not applicable to Baltimore City.

CHAPTER V – Natural Resource Conservation

A. COMPREHENSIVE PLANNING CONTEXT

Background and Historic Context

Baltimore is the oldest, fully developed jurisdiction in the State of Maryland. As noted in Chapter 1, approximately 15% of Baltimore remains in open space or parkland. Until the 1970's, Baltimore, like the rest of America, did not value natural resources and water quality as highly as we do today. In the past we used our wetlands for dumping trash. Our streams and floodplains were seen as repositories for industrial waste and sewerage. Trees were entirely removed from development sites.

In the 1970's Baltimore's leadership embraced a new vision for our natural environment, recognizing the benefits of our harbor, streams and open spaces as places for citizens to recreate and enjoy, rather than a dumping ground for wastes and industrialization. The Inner Harbor was restored as a destination for tourism and recreation. The junkyards along the southern Middle Branch waterfront were removed, and a waterfront park with small boat access created in their stead. Plans were put into place for a greenway trail system along the Gwynns Falls stream valley. The new vision for Baltimore's natural resources continued with the City's adoption of the Critical Area Management Program in the 1980's, the Forest Conservation Act and Sensitive Areas Plan in the 1990's. Most recently Baltimore updated its water quality standards to meet new, more stringent water quality standards adopted by the State. Each of these programs will be discussed in further detail later in this chapter.

Natural resource protection in Baltimore extends beyond regulations that protect our remaining resources from the impacts of development pressures. The City of Baltimore, community groups and non-profits are also very active in restoring the natural resources that remain. Every watershed in the City of Baltimore: the Jones Falls, Gwynns Falls, Herring Run and Direct Harbor, has a 501c(3) non-profit organization that is dedicated to restoration and clean up of our stream valleys. These groups raise funds for clean ups, re-vegetation and generally rally around the need to improve our streams and watersheds. (See Map 5.1) The City of Baltimore collects fees through the Critical Area Management Program and the Forest Conservation Program that are used to restore habitat, replant riparian forest buffers and green urban neighborhoods. Baltimore has also developed a partnership with the U.S. Army Corps of Engineers to install trash interceptors in the Middle Branch, and create new wetlands at a 3.0 acre site. The Department of Public Works is in the process of evaluating all city streams for bioengineering projects that will improve stream's hydrology for better water quality, enhanced habitat and reduced stream bank erosion. The first construction project, stream stabilization in Stony Run Park, will begin in 2006.

To guide the City in this new era of restoration and protection of natural resources, The Planning Department has included the following City-wide Goals in the draft Comprehensive Plan.

“Vision Statement and Goals” for natural resource and environmental protection:

Increase the attractiveness of Baltimore as a place to live by protecting natural resources from the adverse impacts of development, restoring the quality of our natural environment and integrating our natural resources into the everyday experience of citizens as they live, play, learn and work.

- 1) Maintain a well-managed system of open spaces such as parks, greenways, landscaped property and naturalized areas located throughout the City to provide widely desired amenities for existing and potential residents and support revitalization of neighborhoods.
- 2) Ensure the health and cleanliness of Baltimore’s water resources that enable waterways to be used as recreational opportunities and promote the most cost effective and efficient management of water supply and wastewater systems
- 3) Promote responsible disposal of solid waste and the cleanliness of neighborhoods.
- 4) Promote environmental stewardship through education and partnerships to reduce public health risks and improve the environment.
- 5) Promote and support sustainable development by providing voluntary incentives for use of “green building” architectural features and site design in new and restored buildings for maximum cost and energy efficiency.
- 6) Maximize the availability of Baltimore’s natural assets such as parks, the harbor, and stream valleys as recreational assets for residents and visitors, while also assuring their benefits for water quality and wildlife habitat.

Comprehensive Plan Context

Baltimore’s Comprehensive Master Plan, when finished, will identify specific strategies and programs to accomplish the above goals, focusing on the next six years. The following programs are already included in the draft Comprehensive Plan (Appendix C):

- Baltimore City Bicycle Master Plan – A plan that will identify appropriate bicycle route facilities throughout the City, making connections to important places of employment, shopping and recreation
- Integration of the goals, programs and operations of the Department of Public Works, Recreation and Parks and Transportation to maximize stewardship of Baltimore’s natural resources
- Implement the Jones Falls Trail Master Plan
- Begin the planning process for the Herring Run Trail system and the Western Run Trail system
- Adopt Landscape Ordinance & Landscape Manuel
- Update Forest Conservation Ordinance to strengthen protection of specimen trees

The strategies recommended by the Comprehensive Master Plan are in concert with the State Goals for conservation of natural resource lands. The Comprehensive Master Plan recommends expanding protection and restoration efforts through a variety of permit regulations, increased park funding, creation of a specific parks/open space zone, and expansion of private partnership programs for park stewardship. The Department of Recreation and Parks includes natural resource protection and habitat enhancement in the list of criteria used to determine funding priorities for capital improvement projects and land acquisition (pg 3.5) and the Forestry Division has several programs for improving the quality of the urban forest (pg 5.16). These efforts will help preserve, expand and enhance the remaining natural systems of stream valleys and linked open spaces in Baltimore.

The Department of Planning and the Department of Recreation and Parks, Forestry and Capital Projects Divisions, work closely to utilize the latest natural resources mapping technology to study the conditions of natural resources in the City. The two most recent sources of natural resources information for Baltimore City include a GIS based Sensitive Areas Plan (created by the Department of Planning 2002) and the data derived from the October 2001 Ikonos multi- spectral image of Baltimore City. With assistance from MD-DNR, this image was used to extract a high resolution, generalized land cover grid for Baltimore. The resolution of the image, 4 meter near infrared and 1 meter panchromatic, far exceeded any previous mapping of Baltimore's "green infrastructure." (See Map 5.2) The Mayor's Office of Information Technology (MOIT) maintains the city's GIS based information for all agencies. Data sharing occurs through MOIT for Statewide information (DNR, MDP), urban tree canopy mapping studies through the US Forest Service, a variety of student research projects and miscellaneous private requests.

B. DESIGNATED CONSERVATION AREAS

This section describes natural resources that contribute to the overall biodiversity of Baltimore City and the state of Maryland. These resources or resource areas may be protected public park lands owned and managed by the Department of Recreation and Parks or they may be designated and protected as special areas of environmental interest through regulatory programs managed by the Department of Planning.

Baltimore City's 87 square miles of land are more highly developed than any other comparable region in the State. According to the State Department of Planning land use data (1985) and the City land use maps (2002), approximately 15 percent of the City's land remains as undeveloped. Despite this loss of natural lands, the City has preserved some important areas that have a unique natural resource value in a highly urban area.

During the late 19th Century, as the rate of urbanization increased, the City began acquiring land to be set aside for parks. This effort, stimulated by the 1904 Olmsted Brothers plan, emphasized the need for a comprehensive park plan linking and expanding the City's existing parks with landscaped boulevards and scenic wooded slopes in the

stream valleys. To a great extent, the 1904 Olmsted plan was implemented and the stream valleys have become the foundation of Baltimore's extensive park system. Today, large parks protect the wooded stream valleys of the Gwynns Falls (Gwynns Falls/Leakin Park), the Jones Falls (Druid Hill Park and Cylburn Arboretum) and Herring Run (Herring Run Park and Chinquapin Park). Carroll Park, Farring Baybrook Park, Clifton Park and Patterson Park are not associated with streams, but they have enough wooded acreage to provide significant opportunities for recreation and habitat protection in Baltimore.

The majority of Baltimore City's Chesapeake Bay shoreline has been developed. In the 1970's, Baltimore began to acquire shoreline parcels to create a public waterfront along the Patapsco River. Reedbird Park and the Middle Branch Park both preserve important habitat along the Patapsco River estuary of the Chesapeake Bay. Other waterfront parks that preserve important waterfront open space include Canton Waterfront Park and Swann Park. (See map 5.1.1 and 5.3)

Baltimore's Critical Area Program monitors both public and private lands that extend 1000' from the shoreline. The Department of Planning has identified twelve sites as Designated Habitat Protection Areas (DHPA list page 5.12 and Map 5.4) within the Critical Area. The DHPA status highlights and protects waterfront areas that have special value for migrating shorebirds and other wildlife that depend on the estuary environment.

These wooded and shoreline natural resource areas have an important value to the environment of the City. Aside from their recreation benefits, parks and natural lands function to moderate the climatic conditions in the City. The trees, fields and natural stream valleys offer an aesthetic alternative to a continuous landscape of roads and buildings. These areas also provide habitat for many species of animals and plants including migratory woodland birds and waterfowl. In the Chesapeake Bay Critical Area, a relatively few small pockets of vegetated open space comprised of various stages of secondary growth vegetation and wetlands serve to support migratory and resident waterfowl. Because the park system includes large forested areas, stream valley parks and medians with mature tree canopy, the city's open space network has preserved significant north/south wildlife corridors that lead to adjacent County open space and the Chesapeake Bay. In addition to preserving land as parks and establishing specific sites as important habitats for protection, Baltimore has a variety of environmental regulations and policies to protect sensitive natural resources that are privately owned.

Forested Areas and Street Trees

Recent analysis of the 2001 Ikonos image of Baltimore provides a more detailed look at the City's land cover. When calculated as a percent of the City's land area, almost 20% of the City is covered by tree canopy and 27% is made up of non-woody groundcover. This tree cover is spread over all types of land uses, not just parks. The largest stands of forest in Baltimore are clustered around the major stream valleys of Herring Run, Jones Falls and Gwynns Falls.

Not surprisingly, of the four major watersheds in Baltimore, the Direct Harbor watershed has the greatest amount of impervious surface at 74% and the lowest amount of tree canopy at a little over 6.5%. The Jones Falls watershed, largely due to the presence of Druid Hill and Cylburn Parks and the leafy residential neighborhoods in the northern part of the City, has the highest percent of tree canopy at 28% (See Map 5.2) The Gwynns Falls stream valley has the highest concentration of forest, contained primarily within Gwynns Falls/Leakin Park. In Baltimore City 4,843 acres of land have been included in the Chesapeake Bay Critical Area, however, due to Baltimore's history as a waterfront industrial city, only 85 acres of this is forested.

The Department of Planning combined the 2001 Ikonos data (3 broad categories: impervious surface, non-woody groundcover and tree canopy) with a recently completed land use map for Baltimore City. As a result it is possible to compare the Ikonos types of land cover with land use. The results reinforce previous assumptions about natural land cover but also include some surprises. Of all land uses, cemeteries and parks contain the highest percentage of tree cover at 34%. Golf course and low-density residential areas have the next highest percent of tree canopy at 27%. Parks, due to the variety of sizes and types, have the greatest variance in the amount of tree canopy (as measured by standard deviation). Private schools, garden apartments and railroad right of ways all have about 14% tree canopy. Industrial land uses have a higher percent of tree canopy than rowhouse neighborhoods, 7% compared to 3%.

The forest composition within the city's major parks reflects the different soils and microclimates of the parks. Robert E. Lee Park, Cylburn Arboretum, Druid Hill Park and Wyman Park are all located within the steep and rocky valley of the Jones Falls. The dominant forest species of these parks are Beech/tulip Poplar. The Gwynns Falls stream valley is also steep and rocky, but the extensive wooded parkland has been less disturbed by development. Three tree associations are found in Gwynns Falls Park: Oak-Hickory, Beech-Birch, and Maple-Ash-Box Elder. While portions of the stream valley of Herring Run include steep slopes, the majority of the stream valley is wide and flat. The forest associations found in Herring Run Park and Chinquapin Park are Oak-Hickory and Maple-Box Elder.

Old field/shrub & scrub vegetation areas

An inventory of land cover (DNR 1993) and a Habitat Assessment Study (Baltimore City Department of Planning 1989) both discuss the presence of shrub/scrub habitat in the city. The DNR report classified 760 acres as shrub/scrub vegetation and the Habitat Assessment Study identified the largest concentration of this habitat type in lower Herring Run Park and Middle Branch Park (within the Critical Area).

Wetlands

Baltimore has both tidal and non-tidal wetlands. These systems are but a fraction of what was found in the area before development of the city. Today, tidal wetlands are located on the Patapsco estuary, extending for a short distance upstream into the tributaries of the Patapsco. These areas consist of a few fragments associated with the remaining natural

shoreline of Baltimore. Non-tidal wetlands in the city are associated with streams and are usually narrow and linear in configuration as they follow the stream channels. The tidal wetlands are classified as estuarine according to U.S. Fish and Wildlife Service classification system. Tidal water is brackish, ranging in salt content from less than one part per thousand to ten parts per thousand and decreasing in salinity on the upstream end of the estuary. The non-tidal wetlands include riverine, palustrine, and lacustrine systems.

Using air photos, field surveys and information from the 1981 National Wetlands Survey data, the Baltimore Department of Planning has inventoried wetlands in the Critical Area. This study has identified approximately 110 acres of tidal marsh and 10 acres of non-tidal wetlands remaining within the Critical Area. The most significant habitat is found in Masonville Cove (70 acres), a dredge material disposal site that includes high and low marsh habitat (map 5.4).

Streams & 100-year Floodplain

Baltimore lies within two major drainage basins: the Patapsco River and the Back River basins. The Patapsco's two main tributaries are the Gwynns Falls, which drains the northwest part of the city, and the Jones Falls, which drains the central part of the city. Herring Run drains the eastern part of the city, emptying into Back River in Baltimore County. These three major stream systems are fed by several tributaries: Herring Run is fed by Chinquapin Run and Moore's Run, Jones Falls is fed by Stony Run and Western Run and The Gwynns Falls is fed by Maiden's Choice and Dead Run. (See Map 5.3)

Baltimore historically was crossed by an intricate pattern of small streams. However, many of these tributaries have dried due to urbanization or have been channelized and piped into the city storm water system. The remaining major streams and tributaries have been impacted by urbanization with sedimentation and erosion occurring throughout most segments. The Department of Public Works has designed a bio-engineered stream bank stabilization project for the entire length of Stony Run in an effort to reduce erosion and sedimentation. Construction will begin in 2006. The city plans to complete similar bio-engineered projects to improve the habitat, stream bank stability and water quality of other Baltimore streams in the next decade.

The 100 year floodplain of the streams and shoreline of Baltimore vary depending on topography of the Piedmont and Coastal plain formations. The Federal Emergency Management Administration (FEMA) has mapped all floodplain areas in Baltimore City. To facilitate accessing the FEMA data, the Department of Planning has transferred the information onto GIS topographic base maps and is completing an inventory of all property, private and public within the designated floodplains.

Steep slopes

Baltimore is located within two physiographic regions: the Piedmont Plateau and the Atlantic Coastal Plain. The juncture of these two provinces is called the "fall line." This line roughly bisects the city in a northeast/southwest direction. Extending northwest from the "fall line" is the Eastern Division of the Piedmont Plateau. This area is underlain with a complex series of metamorphic rocks that result in a highly diverse topography. In contrast, the Atlantic Coastal Plain topography is relatively flat and consists of unconsolidated sand, clays and gravel.

Many of the City's steep slopes (20% slope or greater) are located in the Piedmont portions of the major stream valleys of the Jones Falls, the Gwynns Falls, and Herring Run and their tributaries. For the most part, undisturbed steep slopes are found within or adjacent to City-owned parklands. For example most of the steep stream banks of the Gwynns Falls and the Dead Run are found within the mature forests of Gwynns Falls Leakin Park or within undeveloped private land associated with residential areas adjacent to the park. Significant areas of steep slopes in the Jones Falls stream valley are currently protected as mature forested parkland within Cylburn Arboretum and Druid Hill Park. Industrial and institutional land uses are more common than residential lands in the Jones Falls valley. Many of these privately held slopes appear to have been disturbed in the past but have stabilized with the naturally re-vegetated woods. (While these re-generated woods are dominated by invasive species, they are still valued for their ability to stabilize steep slopes). Steep slopes are only found in the northern sections of the Herring Run. About a third are found in wooded land held by institutions, a third are found in Herring Run Park and another third in wooded residential property. The few steep slopes found in South Baltimore are the result of landfill development as the natural topography of this area is level coastal plain.

Critical Habitat for Endangered Species

The only known natural habitat for endangered species in the city is Cylburn Arboretum, where an important State-listed species is known to occur. The endangered Peregrine Falcon has nests on both the USF&G building in downtown Baltimore and the Interstate 695 Bridge. The falcon's choice of food sources depends on the feeding habits of the fledgling bird's parents. As a result, the falcons nesting at the USF&G building prefer the abundant downtown pigeon population and those on the I-695 Bridge prefer waterfowl found in the Middle Branch environs.

Robert E. Lee Park, a city-owned park located in Baltimore County, includes extensive areas of a rare serpentine barren ecosystem that harbors a unique and rare natural plant community. This park has an official COMAR designation as a State Natural Heritage Area, one of only 32 in Maryland.

Designated Habitat Protection Areas in the Critical Area

Twelve sites have been identified as significant habitat areas within the City's Critical Area. Those sites were found to meet State criteria for Designated Habitat Protection Areas. (See Table 5. 5.1 and Map 5.4)

Table 5.1: Baltimore City Designated Habitat Protection Areas

1. Upper Middle Branch Park: The site of an historic waterfowl staging and concentration area. In addition, portions of this shallow water area have been used as wetland mitigation sites for various waterfront development projects. (Public & Private ownership)
2. Gwynns Falls Greenway –South: The site of a greenway trail, needing protection as a wildlife corridor. This corridor connects the upland forests of the upper Gwynns Falls watershed with the wetlands and tidal waters of the upper Middle Branch. (Public ownership)
3. Lower Middle Branch Park - The site of tidal wetlands and waters of a tributary stream and an adjacent area of mature oak forest on steeply sloped land. (Public ownership)
4. Reedbird Park: The site of tidal wetlands, reforested meadows and active recreation facilities (ball fields, courts, pools, greenway trail). (Public ownership)
5. Masonville Cove – The site of an historic waterfowl staging and concentration area with wetlands. This is the largest waterfowl staging area in the City, and one of the largest in the State of Maryland. (Private ownership)
6. Stonehouse Cove - The site of an historic waterfowl staging and concentration area. The cove contains vegetated tidal wetlands bordering upland forested areas. The upper reach of the cove contains an intermittently tidal stream that is heavily vegetated along both banks. (Private ownership)
7. Cabin Branch - The site of vegetated tidal wetlands along a stream bank. (Private ownership)
8. Hawkins Point - The site of an historic waterfowl staging and concentration area. (Private ownership)
9. Quarantine Road – The site of an historic waterfowl staging and concentration area and a wooded drainage area adjacent to a forest. (Public & Private ownership)
10. Thoms Cove – The site of an historic waterfowl staging and concentration area. (Private ownership)
11. Fort Armistead Park – The site of a large tidal wetland with an adjoining upland forest. (Public & Private ownership)
12. Colgate Creek/ Holobird Park – The site of a tidal tributary stream with vegetated shoreline. (Public & Private ownership)

Current and Historical Rare, Threatened, and Endangered Species

The Maryland Nongame and Endangered Species Conservation Act list three bird species and thirteen plant species as rare, threatened or endangered. Our Green Infrastructure (GI) Hubs, Cylburn Arboretum and Gwynns Falls/Leakin Park (page 5.13) are all potential habitat or resting areas for migration of these species. These Green Infrastructure Hubs are integral to providing flyways, natural habitat corridors, and blocks of contiguous forest for a wide variety of plant and animal species. The City protects these Green Hubs as well as other significant areas of woodland habitat through park ownership and forest management plans.

Gwynns Falls/Leakin Park A State Green Infrastructure Hub
999 acres of mature forest,

Druid Hill Park
744 acres, including natural forest, and lawns with mature tree canopy

Cylburn Arboretum A State Green Infrastructure Hub
100 acres of natural forest, and meadows

Among these City parks, Gwynns Falls/Leakin Park and its stream valley is the most significant in terms of wildlife habitat. There are sections of the Gwynns Falls stream that pass through highly resistant rock and forested buffers. These segments have not been as severely impacted by urbanization as other streams and can support a surprisingly large population of fish (27 species were identified in a 1989 study).

Gwynns Falls/Leakin Park, Cylburn Arboretum and Druid Hill Park each contain large forested areas where trees have not been disturbed for over 100 years. The presence of water and the size and diversity of the plant communities are the most significant features in these parks, which are known to support populations of a variety of wildlife including forest interior dwelling birds.

C. REGULATORY AND MANAGEMENT PROGRAMS

This section describes the planning, management and regulatory strategies of the Department of Planning and the Department of Recreation and Parks to preserve and restore the natural resources of Baltimore City. Both agencies include protection and enhancement of natural resources in their Department goals, but the implementation tools and scope of influence are different.

As stated in the City Charter of Baltimore, the Department of Recreation and Parks is responsible for the care and maintenance of all city parklands, from small paved passive parks to large areas of undisturbed woodlands. The Department has identified protecting and enhancing natural resources found within the park system as 1 of the 5 goals in the agency mission statement (pg 3.4). Day to day park operations in park maintenance, forest management and street tree care as well as capital projects for park acquisition, tree canopy expansion and habitat restoration all contribute to improving the quality of the natural resources on publicly held lands.

As stated in the City Charter, the Department of Planning is responsible for shaping the character of Baltimore City including the stewardship of natural resources on both public and private land. Sensitive natural resources throughout the city are mapped by the Department of Planning and regulations are triggered any time that change is proposed for individual parcels. The Critical Area program, Forest Conservation Program, Flood Plain Management Program and Sensitive Areas Plan were all crafted to protect as much of our sensitive natural resources as possible while also allowing for continued economic growth and redevelopment in Baltimore. As a composite system, public ownership (city parkland), public easements and designated protected areas (public and private lands) support each other to preserve open space and provide essential habitat for plants and animals in the city.

Sensitive Areas Plan

The Baltimore City Sensitive Areas Plan, adopted in 1998, identifies and describes protection policies for the following natural resource systems:

- 1) Streams and their buffers
- 2) 100-year floodplains
- 3) Habitats of threatened and endangered species
- 4) Steep slopes
- 5) Urban Forests including parkland forests, landscape trees in parks, forest on private lands, the tree canopy in residential neighborhoods, and the 500,000 street trees maintained by the City.

Every public or private development or renovation project in Baltimore is required to file site plans as part of the building permit process. Projects must be adjusted if the Planning Department review determines that the work cannot meet city standards for each of these sensitive natural features.

Forest Conservation Act

The Maryland Forest Conservation Act was passed by the General Assembly in 1991 and is intended to conserve the State's forest resources. The Forest Conservation Act regulates all development proposals (on public or private land) that disturb or subdivide parcels 20,000 square feet of land or more. For each development project, the owner must submit a Forest Stand Delineation (FSD) and Forest Conservation Plan (FCP) or Landscape Plan for review by the Environmental Division of the Department of Planning as part of the City's building permit review process. If a site is forested, the applicant may not present the project to the City Site Plan Review Committee until the Department of Planning has approved the FSD.

Forested Sites: The applicant is required to submit a full Forest Stand Delineation (FSD) for the site that contains a detailed environmental assessment according to the guidelines found in the State of Maryland, Department of Natural Resources Forest Conservation Manual. The applicant is also be required to submit a Forest Conservation Plan (FCP), which may include preservation of existing trees and on-site or off-site planting.

Non-Forested Sites: If no forests exist on the site, the applicant may provide a simplified FSD and landscape plan to meet the Forest Conservation requirements. Specimen trees located on these sites may also be required to be preserved. The City can not issue construction permits until the Forest Stand Delineation and Forest Conservation Plan are reviewed and approved.

Forest management & urban street trees

The Department of Recreation and Parks, Forestry Division and Office of Park Conservation are responsible for drafting and implementing forest management plans for Baltimore. While the tree species mix is different in individual parks, the management issues are similar across the city: removal and control of invasive species in the forest, regeneration of mature tree canopies where trees are planted in lawn areas, increasing species diversity and improving the survival rate of new tree plantings. Many of the wooded parks, including the city's two Green Infrastructure Hubs, already have forestry management plans (Gwynns Falls 1990, Druid Hill 1995 & update 2006, Cylburn 2005, Wyman Park 2005) and more are underway (Chinquapin 2006 and Herring Run 2007). Baltimore park staff has worked closely with park managers from New York City to develop "entitiation" forest management plans that break down large forest areas into distinct management strategy areas (Closed canopy, invasive dominant, herbaceous dominant, etc). Classifying the forest areas by dominant species and plant type allows better project scheduling and prioritization of work as well as more efficient use of volunteers and grants.

The Office of Park Conservation works with the Department of Planning to match developers that cannot meet their Forest Conservation Plan or Critical Area Mitigation Program requirements "on site" with park areas that can benefit from habitat restoration/expansion projects. Private developers have funded a variety of reforestation and invasive removal projects in the park system. The Office of Park Conservation also trains and leads volunteers (from watershed assoc, school groups, park friends assoc, etc) in identification and removal of invasive trees and vines in the forests, and park tree plantings. Volunteers interested in assisting with street tree care and pruning are trained in the Community Tree Steward program.

Based on the percentage of tree canopy in Baltimore City provided through the Ikonos imaging and data evaluation, the Department of Planning's Comprehensive Master Plan recommends increasing the number of trees and the tree canopy (Appendix C). Baltimore City expects to adopt the Urban Tree Canopy (UTC) program from the Maryland Department of Natural Resources in 2006. After studying the manpower of current volunteer programs and the projected workforce of the Forestry Division, Baltimore City has set a UTC goal of 38% for 2030 – 2036 which will double the City's tree canopy.

To help meet the goal of an increased tree canopy, the Forestry Division is revising the Baltimore Tree Ordinance to increase the survival rate of new street trees. Changes will include a revision of the city's tree planting code, new construction standards for tree pits, and new standards for planting street trees. The Planning Department and the

Forestry Division are also developing a new section of the building permit review process that will incorporate incentives for homeowners and developers to plant more trees on private land (2006).

Critical Area Management Plan

In 1984, the Maryland General Assembly passed the Chesapeake Bay Critical Area Protection Law. This law requires all jurisdictions abutting the Chesapeake Bay, including Baltimore City, to designate all lands within 1,000 feet of tidal waters as Critical Areas and to require environmental protection and mitigation for the effects of development and redevelopment within these zones. (See Map 5.4) This law also designates all lands within 100 feet of tidal waters as the Critical Area Buffer and requires the City to restrict development within the Buffer. The program has been successful in contributing to a reduction of phosphorus and other pollutants into the Bay as well as increasing and enhancing shoreline habitat.

Baltimore City's Critical Area Management Program (CAMP) is administered by the Department of Planning. Development or redevelopment projects that are within the Critical Area may be subject to restriction or mitigation at the building permit stage, or at an earlier stage of approval if any of the following public actions are required:

- Subdivision
- Rezoning
- Zoning variance
- Conditional use or special exception
- Building permit
- Building permit within a Designated Habitat Protection Area (DHPA) or certain changes or use or expansion of existing uses in a Designated HPA.

All building, grading and use permit applications for properties in the Critical Area are reviewed by the Environmental Division of the Department of Planning. The Department of Planning works with owners of each project to improve the habitat of the shoreline of the redevelopment parcel, or alternatively to provide funding that can be used to enhance the habitat within another section of the Critical Area or a Designated Habitat Area.

Flood Plain Areas

To minimize the incidence of flood damage, the City has enacted special provisions of the Building Code, Zoning Ordinance, and Subdivision Regulations applying to all public or private properties that lie within flood plain areas. The federal government has defined flood plain areas within Baltimore City and these areas are described generally on Flood Insurance Rate Maps (FIRM) available for reference at the Department of Planning.

Because these FIRM maps are only approximations, the Environmental Division of Department of Planning carefully reviews any development proposal for property in or near a known flood plain area. The precise elevation and coordinates of the proposed development are submitted and the proposed grading changes evaluated to determine

if the improvement is inside a flood-hazard area. If the property and the proposed development lie within a flood plain area, all of the special requirements of the Building Code, Zoning Ordinance, and Subdivision Regulations must be met. Included among the flood plain regulations (Article 7, Flood Plain Management, Baltimore City Code) are:

- Private development, including residential, commercial, and industrial development, may not take place within the floodway
- Selection, placement, and stabilization of fill materials must be done in accordance with the specifications of the Maryland Department of Natural Resources, Water Resources Administration.
- The lowest floor elevation of new or substantially improved residential structures must be at a minimum of one (1) foot above the 100-year flood level. A certificate confirming the “as built” elevation for new construction projects is required prior to issuance of an occupancy permit.
- Any flood plain development approved shall be in conformance with the requirements of the permit programs of the Maryland Department of Natural Resources, Water Resources Administration and the U.S. Army Corps of Engineers.
- Buildings constructed within the flood plain area must meet requirements for resistance to flotation and ability to resist hydrostatic forces as detailed in the United States Army Corp of Engineers Flood proofing Regulations #EP 1165-3-314.

Habitat Protection through Land Acquisition

The existing natural resources and the potential for contribution to the overall environmental quality of the park system are as important as the potential for recreation facility development when evaluating a parcel for park acquisition. Baltimore City does not need to acquire new lands to meet its recreation facility demands or population acreage goals but the Department continues to consider park expansion when there is an opportunity to protect important natural resources (pg 3.17). In the past decade, the Department has purchased only three new parcels of parkland and each of these were undeveloped lands, with significant habitat value, located adjacent to existing wooded parkland. By focusing the majority of the Department’s acquisition funds towards expansion of existing woodlands and meadows, or filling gaps in the stream valley/wildlife corridors, the City is able to protect natural resources and improve the habitat quality of our park system.

D. EVALUATION OF NATURAL RESOURCE LAND CONSERVATION PROGRAM

Protection & Regulation of Natural Resources within a highly urbanized area

Baltimore City is virtually built out, with approximately 15% of the land area remaining in parks and open space. The predominant types of environmentally sensitive lands within the city are undisturbed woodland or stream valleys. The majority of woodlands and stream valleys remaining in Baltimore can be found on land that is already owned by the City and protected as parkland or greenways. For example, the most significant tracts of forest in Baltimore are already protected within existing parks such as Gwynns Falls/Leakin Park, Cylburn Arboretum (both Green Infrastructure Hubs) and Druid Hill Park. However, there still remain some concentrations of woodlands that are privately owned. Private institutions such as private schools, universities and hospitals control these areas.

The extensive shoreline of the Middle Branch and Patapsco Rivers has been developed and re-developed for 200 years and offers only limited areas of habitat. Although the majority of shoreline is privately held, the entire shoreline falls within the Chesapeake Bay Critical Area. Baltimore's Comprehensive Master Plan will recommend that the natural resource protection of these private and public lands continue to be handled through Baltimore's existing environmental legislation such as the Forest Conservation Program and the Critical Area Program.

In addition to existing natural resource regulatory programs now managed by the Department of Planning, the City's new Comprehensive Master Plan includes several pro-active strategies for protection and restoration of natural resources on private and public land. (Appendix C) These recommendations include adopting a city-wide landscape ordinance (providing guidance for non-Critical Area development of less than 20,000 sq. ft.), improving park stewardship through expanding existing partnership programs, installing trash interceptors in the three major stream valleys to prevent trash from entering the Chesapeake Bay, creating a city-wide sanitation plan, restoring and protecting all flood-plains and stream valleys, completing the stream valley greenway trails system (inclusive of environmental restoration), creating an open-space/park zone in the zoning code, and increasing the number of trees and percentage of tree canopy in the city. The Comprehensive Plan also recommends identifying a dedicated, sustainable funding source to address the capital needs within the current park system.

Strengths of current regulations and programs

Overall, Baltimore's Natural Resource and Land Conservation Program is working well. The Critical Area Program (CAP) has been in effect for a decade. The Planning Department staff has been able to combine the city's standard permit review process with enforcement of the CAP to protect sensitive lands on private property while also creating a strong buffer offset fee program for natural resource improvements in public parks and

Designated Habitat Protection area. In the last 5 years, Baltimore has utilized \$1,500,000 dollars from Offset Fees to fund the following environmental enhancement projects:

\$300,000	<u>School Greening</u> - remove asphalt and plant trees at 5 schools.
\$ 26,000	<u>Key Highway Beautification</u> - remove impervious surfaces and install trees
\$ 60,000	<u>OROSW Vacant Lot Beautification Program</u> – remove trash and impervious surfaces, and plant trees at over 300 vacant lots.
\$ 54,000	<u>Graceland/ O’Donnell Elementary School</u> - removal of 30,420 sq ft of impervious surface in conjunction with installation of a new playground.
\$ 50,000	<u>Street Tree Program</u> – Spring 2005 tree planting by Forestry Division.
\$ pending	<u>Fort Holabird Park</u> – remove excess roadway pavement and install trees
\$ 30,000	<u>Gwynns Falls Trail-Wildflower Project</u> - habitat landscaping on trail.
\$275,000	<u>Riparian Forest and Habitat Enhancement Project</u> – funding for trees, supplies and volunteer coordinator for the Office of Park Conservation forest management program that utilizes volunteers for invasive removal and reforestation.
\$ 30,000	<u>Parks and People Foundation</u> – community greening grants in Watershed 263.
\$ 92,000	<u>Farring Baybrook Park</u> – reforestation, invasive removal & habitat enhancement.
\$ 80,000	<u>War Memorial Plaza</u> - impervious surface removal and plantings.
\$100,000	<u>Maisel Street</u> – Reforestation of a 9 acre floodplain site along the Gwynns Falls following removal of homes damaged by hurricane.
\$300,000	<u>Waterview Wetlands</u> – wetlands restoration in the Middle Branch of the Patapsco River that will be a match for the USACE partnership.

Through the Critical Area program, over 10,000 new trees have been planted in the City’s critical area over the last ten years. According to the Ten Year Annual Review of Forest Conservation Programs completed by the state Department of Natural Resources, Baltimore’s Forest Conservation Program preserved ninety-six acres of forest between 1993 and 2002, retaining 66% of the forests impacted (70 acres of landscaping and forest were planted in this time period).

Baltimore also continues to protect and restore urban floodplains. For example, the Department of Recreation & Parks acquired a used car lot located on a two acre site in the floodplain of the lower Gwynns Falls (1999), permanently removing the cars and junk and replacing them with trees. This was the culmination of floodplain acquisition and building demolition for this area of the Gwynns Falls, begun after Hurricane Agnes in the 1970’s. The adjacent floodplain parcels acquired by a variety of city agencies have been transferred to the Department of Recreation and Parks and preserved as a new 9 acre park known as Maisel Street (2006). Restoration of the area is in progress, using Critical Area Offset Fees, including officially closing and removing several old roads and reforesting the park.

In addition to regulatory programs that preserve land and fund habitat restoration, the city has utilized regulatory programs to improve water resources. Baltimore has entered into a partnership with the USACE to improve water quality in the Middle Branch of the Patapsco River. The project will install a trash interceptor and construct a new, three acre wetland on the north shore of the Middle Branch. The trash interceptor will help capture trash before it enters the estuary’s waters, keeping it from rafting onto wetlands and

smothering them. The new wetlands will increase habitat in the Middle Branch, complementing the Middle Branch park system and improving water quality in the Chesapeake Bay. Smaller trash interceptors recently installed on Harris Creek and the lower Gwynns Falls have been very successful in preventing floating trash from reaching the Inner Harbor and polluting the marshes and shoreline of the Chesapeake Bay.

Weaknesses of current regulations and programs

While Baltimore is having great success with existing programs, there are still improvements that can be made in policies, regulations and programs. For example, Baltimore has no landscape ordinance. The Forest Conservation program and Critical Area Programs have been substituting as a landscape ordinance, requiring that trees be planted at sites even if there is no forest present before development. Unfortunately, this program is not designed to address the need for landscaping on small development sites and its regulations only focus on trees, instead of including all other elements of landscape design or site greening.

Street tree maintenance is also an area that can be strengthened. Baltimore currently has approximately 500,000 street trees. These trees are an important element in Baltimore's natural resource inventory. They improve air quality by increasing supplies of oxygen and moisture while also decreasing carbon monoxide, ozone and particulate matter. This is particularly important given that Baltimore is a non-attainment area for ozone pollution according to the EPA. Unfortunately, the Forestry Division's operating budget is only able to support basic tree maintenance, which prevents the Department of Recreation and Parks from expanding the Forestry staff and equipment to create a program of pro-active urban forestry management.

The Department of Recreation and Parks operating budget for park maintenance and the capital budget for park renovation are also substantially lower than what is needed. As noted in Chapter III, the Department of Recreation and Parks has documented \$138 million dollars in deferred maintenance. Unfortunately funding for the capital budget averages \$6-10 million dollars in improvements each year, including Program Open Space funds.

Summary of needed improvements and steps to reach improvements

In summary, some of the issues directly impacting parks and natural resources include the following: (1) A need for creation of a Landscape Ordinance (2) A need for increased/sustainable funding for the parks system (both for capital improvements and on-going maintenance) (3) A need for expansion/improvement of the street tree program to increase the survival rate of new trees and increase the capacity our street tree planting and maintenance program.

Baltimore's draft Comprehensive Master Plan makes recommendations that directly relate to the first two issues. The Plan recommends that a team of City staff be assigned to explore creative ways to locate additional funding for parks. The Plan also

recommends the adoption of a Landscape Ordinance by the end of 2006, with an accompanying update of the City's Forest Conservation Regulations. The Landscape Ordinance will include adoption of a Landscape Manual that encourages utilization of native species over exotic species in landscape designs to increase the survival rate of plant material, improve the habitat quality of Baltimore and avoid spread of invasive plant materials in the natural landscape

The Department of Recreation and Parks, Forestry Division and Office of Park Conservation have met with the State DNR and the National Forest Service to draft an Urban Tree Canopy program for Baltimore as well as explore new funding sources (including the federal air quality programs) to support expansion of the tree planting and urban forest maintenance programs.

Appendix A: Summary of Goals from Plan Baltimore 1999

These goals will be revised as part of Baltimore's Comprehensive Plan 2006

A. Goals for Strengthening Housing and Neighborhoods

- 1 Manage vacant and underutilized properties strategically to position Baltimore for future growth
Streamline acquisition policies, work with communities & neighborhood planning program
- 2 Attract and retain middle income residents and homebuyers
Expand incentive programs, encourage new market rate housing as infill Development
Improve sanitation code enforcement, expand assistance to elderly homeowners
- 3 De-concentrate poverty by expanding choice for all residents
Promote mixed income housing, revise regulations
- 4 Reduce drug abuse and crime in neighborhoods
Community-based crime prevention strategy, youth crime prevention programs, expanded drug treatment programs
- 5 Improve neighborhood schools
Link neighborhood planning program to school planning
- 6 Build strong communities through partnerships
Increase community, business and faith-based groups in neighborhood promotion activities.

B. Goals for Creating a Vital, Dynamic Economy

- 1 Strengthen Baltimore's position as a global city
Support development at Port of Baltimore, development of technology industries, and development of new entertainment businesses
- 2 Attract more jobs –generating businesses to Baltimore
Redevelop/modernize 30% of existing industrial parks, redevelop existing brown fields, increase mixed use development
- 3 Reinforce downtown as the economic center of the region
Use incentives to retain/expand downtown business center, promote 24 hr use of area by encouraging mixed use – residential and entertainment with current business activities

4 Improve business development services and support the growth of small and medium businesses

Explore new incentive and support programs for business, support minority business, and modify zoning to encourage entrepreneurial activities

5 Create healthy and lively neighborhood commercial areas

Promote commercial redevelopment areas, review tax structure and incentives, improve policing and improve planning between residential and commercial areas.

6 Prepare Baltimore's workforce and link workers with available jobs

Improve basic skills of residents – school and volunteer based training and mentoring, links to workforce and economic development, improved public transportation to suburban jobs.

C. Promoting Quality Urban Design

1 Continually improve the design quality of Baltimore's built environment and urban fabric

Coordinate urban design guidelines, land use planning and development regulation/review. Revise zoning to support urban design

2 Enhance the effectiveness & efficiency of design review & regulation process for new development

Revise City design review process and improve link to community

3 Increase public awareness and appreciation of urban design issues

D. Celebrate Baltimore's Culture and Heritage

1 Preserve, renew the City's significant historic urban fabric to increase Baltimore's quality of life

Develop a city-wide preservation plan

2 Maximize the economic potential of heritage tourism for Baltimore City and its residents and preserve Baltimore's cultural and heritage assets

3 Re-affirm Baltimore's role as the region's center of art, history and culture and provide the necessary resources to sustain the City's cultural treasures

E. Sustaining the Environment

1 Maintain a well managed system of open spaces such as parks, greenways, landscaped property and naturalized areas located throughout the City

Develop a financial plan for sustaining Baltimore's parks

Update the master plan for parks

Improve the management structure for Baltimore's parks to sustain parks cost effectively

Improve and encourage park partnerships.

Improve regulatory protection of parklands

Establish a citywide system of greenways

Establish formal guidelines for landscaping on redevelopment sites

Increase street tree and park plantings

Develop a comprehensive program for street tree care

2 Ensure the health and cleanliness of Baltimore's water resources and promote the effective management of water supply and waste water systems

Develop water quality goals for City streams & Harbor

Integrate Federal, State and local regulations for water quality & the environment

Develop watershed policies to restore stream buffers

Use Critical Area Offset program to improve habitat

Complete comprehensive analysis of storm/ sewer system for management & renovation

Design public infrastructure to reduce impervious area and promote infiltration

Develop goals for stream bank and stream buffers

Increase protections for drinking water reservoirs

Promote regional strategy for drinking water issues

3 Promote responsible disposal of solid waste

Reduce illegal dumping through enforcement & education

Decrease landfill materials by increasing recycling

Promote regional strategy for solid waste planning

Improve system for hazardous waste, promote safe residential hazardous waste disposal

4 Promote Environmental Stewardship Through Education and Partnerships

Expand environmental education in schools and communities

Increase community involvement in protecting the environment

Support increased involvement of volunteer and community groups in promoting awareness of environmental issues and sponsoring

environmental programs and projects

Improve environmental efficiency of municipally owned vehicles, and public buses

F. Baltimore's Transportation Network

1.Reform the Process for Long-Range Transportation Planning in the Baltimore Region

Develop a transportation master plan that supports the city's land use master plan

Support the development of a long-range regional vision for land use , economic development and environmental protection, based on Smart Growth

Principals, to be used as the framework for all transportation planning and spending in the region.

2. Expand Public Transit into a Integrated and Efficient Regional System Linking Residents to Jobs, Schools Cultural and Leisure Activities
 - Increase transit links in the region, especially Baltimore and Washington DC
 - Improve transit service into and around downtown, increase convenience & attractiveness
 - Improve transit service for workers traveling into suburbs
 - Revise city's street classification system, coordinate with neighborhood plans
 - Use road maintenance funds efficiently – target road projects to support neighborhood and economic projects that promote Baltimore
 - Work with new development / re-development partners to fund roadway projects

3. Provide necessary parking for the Central Business District, local commercial areas and residential neighborhoods and support expansion of park and ride lots linked to public transit.
 - Develop new downtown parking strategy and update zoning requirements to Match

4. Enhance Baltimore's Pedestrian – Friendly Character
 - Neighborhood Plans to improve pedestrian issues (lighting, traffic calming, etc)
 - Revise design standards for streetscapes to improve pedestrian amenities

5. Expand bicycle routes and facilities on City Streets, Parks, Greenways and Trails.
 - Create comprehensive bicycle plan for city
 - Include bicycle standards in street design

G. Enhancing our Public Facilities

1. Provide inviting, accessible, multi-purpose and technologically –advanced public facilities to serve the residents of Baltimore
 - Complete a survey of all city-owned buildings to improve efficiency of use of public buildings – explore multi-use options.
 - Complete a survey of all city-owned buildings to evaluate future of all buildings – Re-invest in well functioning public buildings when possible

2. Provide City residents and neighborhood groups a greater voice in public facility planning and decision –making, and reinforce the role of public facilities a neighborhood anchors.

H. Land Use Plan

1. Create a guide for achieving Baltimore's citywide development vision over the next 20 years
 - Complete a citywide land use survey, work with Neighborhood Plans to guide best use for areas of re-development

2. Provide the tools necessary to implement Baltimore's land use vision
 - Revise the City's zoning ordinance

Maryland Electronic Inventory of Recreation Sites (MEIRS)

USERS' GUIDE

January 2003

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Overview

The Maryland Electronic Inventory of Recreational Sites (MEIRS) is a statewide database of recreational sites maintained by the Maryland Department of Planning with assistance from the Maryland Department of Natural Resources. Designated state and county recreation planning staff can access MEIRS through a secure web-based system. These staff can enter, edit and submit recreational site information using the application for inclusion in the database. In the future the public will be able to search the inventory for recreational sites that meet their needs using a modified version of the application described in this user's guide.

About this Users' Guide

This User's Guide contains background information for state and county staff on the purpose of the Maryland Electronic Inventory of Recreation Sites (MEIRS) database and provides information on how to utilize the secure web-based application. In order to access the system and use this user's guide you will need a username and password. If you do not have either, please contact the MDP MEIRS program administrator to set these up.

After a brief discussion that provides an overview of the purposes of the database, this user's guide will explain how to set up your computer for the application, access the database, navigate the system, and enter and edit data.

Purposes of the Database

The principal purpose of MEIRS (Maryland Electronic Inventory of Recreational Sites, or the Inventory) is to meet many of the needs of State and local governments related to distribution and expenditure of Program Open Space (POS) funds, through a shared Statewide database. These needs include the ability to systematically compare demand for and supply of recreational facilities; determine the need for additional land and facilities; establish goals for local land acquisition and facility development based on these needs; and track progress toward those goals. In these regards, the Inventory will help provide a common frame of reference for State and local governments in their respective roles to ensure good return on POS investment in land acquisition and development.

MEIRS is not intended to be an absolute or complete source of information to support each of these needs. Each jurisdiction will have its own supplemental information for many of these purposes.

The objective is to include in the inventory, to the degree feasible, all public and private land with facilities or other attributes supporting outdoor recreation of concern or interest to State and local government. It will be a valuable tool for a variety of planning and informational purposes. Each site record will contain attributes related to location, size, natural assets, improvements and facilities, and recreational activities supported; the information will be continuously updated on line. The MEIRS application is web-based and accessible to designated local and State staff. When fully updated, the inventory will become available to the public so they may take advantage of the information.

This recreational inventory will be used to:

- ?? Measure the supply of recreational land and facilities against demand, estimated from the Statewide survey of recreational needs and other sources of information specific to local jurisdictions.
- ?? Establish jurisdiction-specific needs and goals for land acquisition and development. By using the Inventory in conjunction with the results of the State survey supplemented by local information, shortfalls in land and facilities to support specific recreational activities can be identified, and corresponding specific goals can be established.
- ?? Serve as a means to measure local jurisdictions' progress toward achieving local recreational acreage goals, and as a rational background for reevaluating those goals.
- ?? Improve coordination and interaction among various levels of governments, including State and local governing bodies. The database will provide State and local program managers and policy makers with a source of common, updated recreational information and analytic reports on which to base discussions and planning efforts.
- ?? Provide a basis for geo-referencing of recreational sites and preserved land for interested State and local agencies.
- ?? Serve as an interactive searchable public website to enable all interested individuals to obtain substantive information about recreation sites and activities available for their use. This service may help to educate the public about State and local efforts to preserve land and associated resources and support outdoor recreation, and therefore motivate greater public involvement in these initiatives.

Computer Setup

1) Computer Requirements

The following are prerequisites for using MEIRS:

- ?? You must have Internet access.
- ?? You must use Internet Explorer 5.x or higher.

Although any computer meeting these specifications may be used to access the system, the following will improve and speed your interaction with the application:

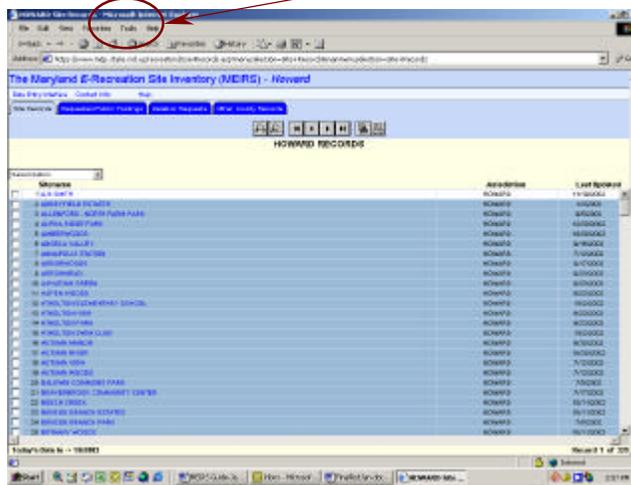
- ?? A fast Internet connection. Preferably DSL, Cable, or T1.
- ?? A computer with 256MB of RAM or higher.

MDP does not provide internet access. If you lack such access, please contact your own department's IT staff.

2) Configuring Internet Explorer

In order to access the web-based MEIRS application you will need to perform some simple steps to configure Internet Explorer to handle the application

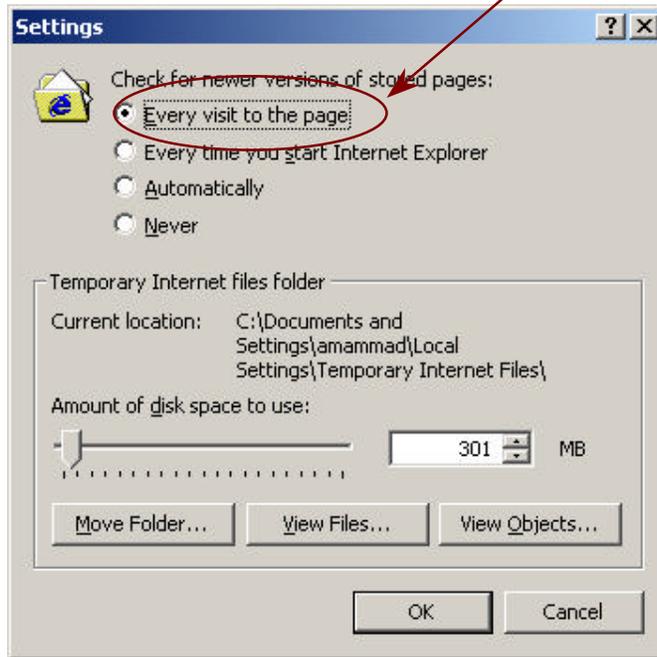
- ?? Start Internet Explorer if you have not already done so.
- ?? From the menu bar click on the Tools->Internet Options.



- ?? On the General tab's Temporary Internet Files section click on the Settings button.



?? From the Settings page check the "Every visit to the page". This will turn off page caching.



Accessing MEIRS

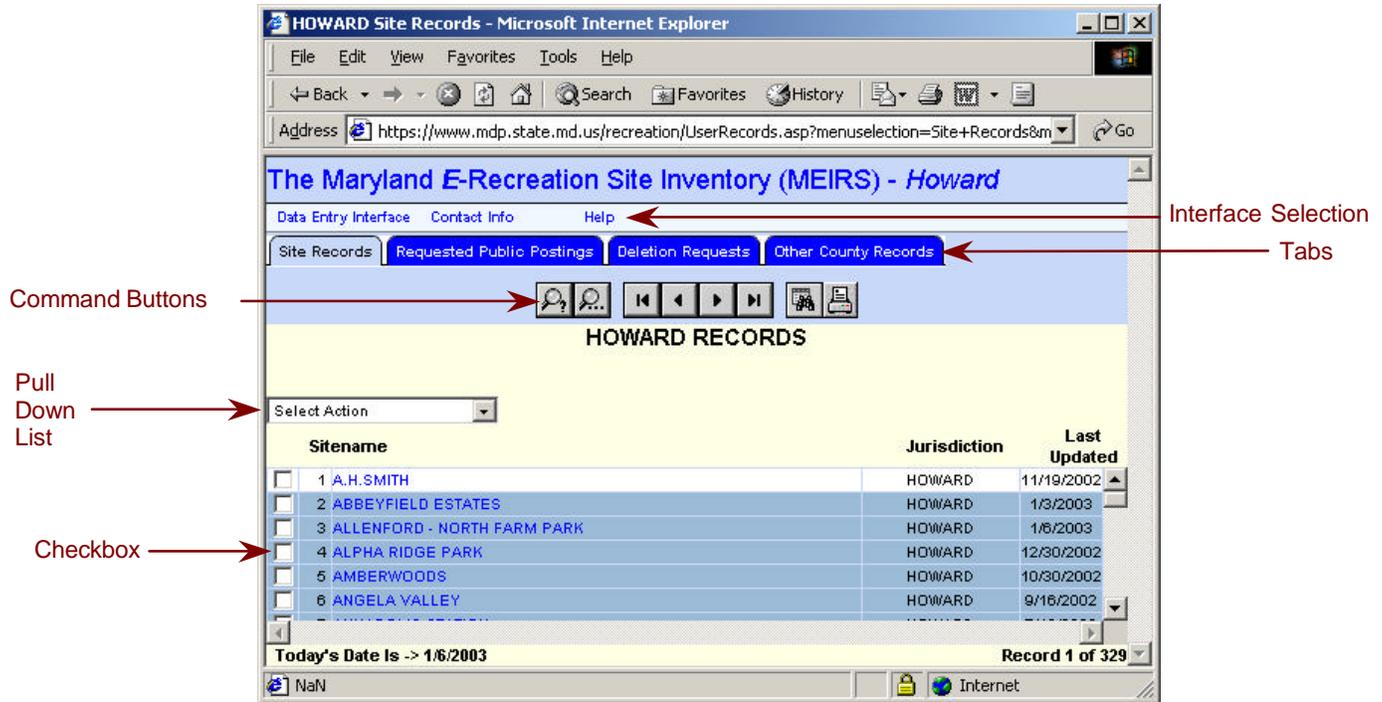
MEIRS is a secure web-based application. To access it you must type the following in the address bar of your web browser <https://www.mdp.state.md.us/recreation>. PLEASE NOTE: you must include the letter "s" after http as the site is protected by a password system. Think s for secure. After typing in the above URL the following screen will appear



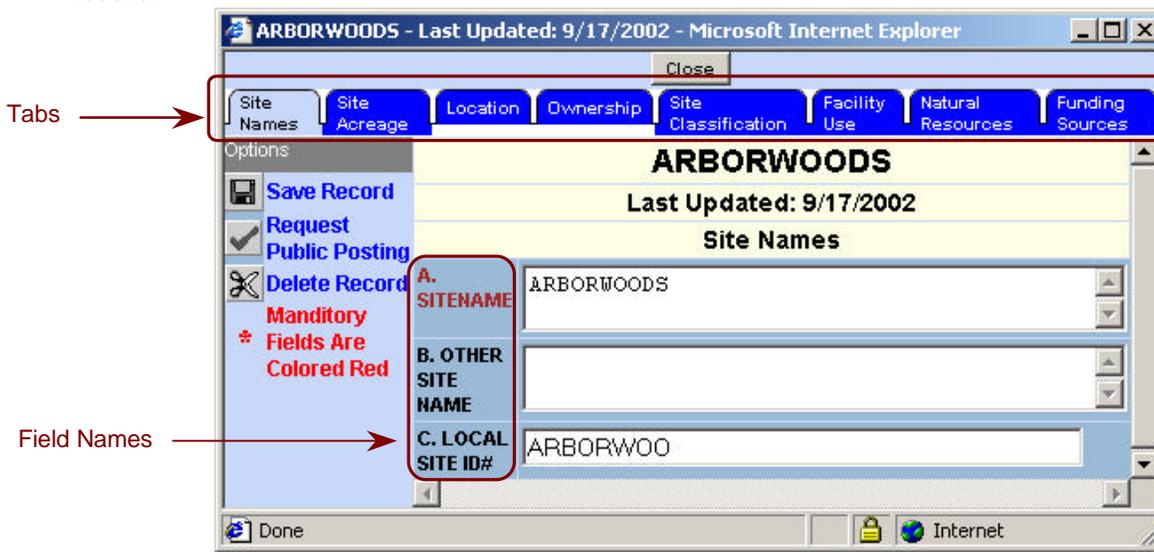
The MDP MEIRS administrator will provide each registered user with a username and a password. Users cannot directly change their passwords. However, users can change their password at any time by sending a request to the MEIRS administrator who will then make the change. Please contact the MEIRS administrator if you forget your password and for all username/password issues.

Navigating the Database

After entering a valid username and password the following screen should appear in the Internet Explorer window (please note the image below includes descriptive text):



This screen is called your local profile and lists all the sites in the inventory for your jurisdiction. When you click a particular site's name in the list a new pop-up window will appear that contains all the information about that site in the inventory. This is called an individual site record.



The site record window consists of a row of 8 tabs. If you click on the title of each tab data associated with that subject for the site is displayed. The screens associated with the tabs have

been designed to resemble survey forms from earlier recreational inventories. As you look through the tabs certain field names are in red. These are mandatory data fields for each site for which information MUST be provided. Click on the X in the upper right hand corner of the window to close the site record. Data entry operations will be covered in the pull down list discussion of the Data Entry Interface.

The local profile screen is part of the data entry interface, which is one of the three interfaces of the MEIRS application. The three interfaces are the

- 1) Data Entry Interface
- 2) Contact Information
- 3) Help interfaces.

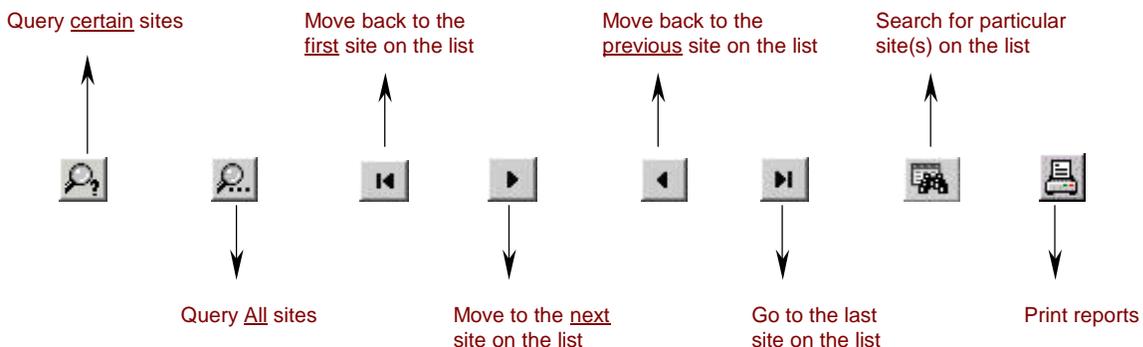
You can access each interface by clicking on the appropriate name in the interface selection row as illustrated from your local profile. The characteristics of each interface will be explained separately.

1) Data Entry Interface

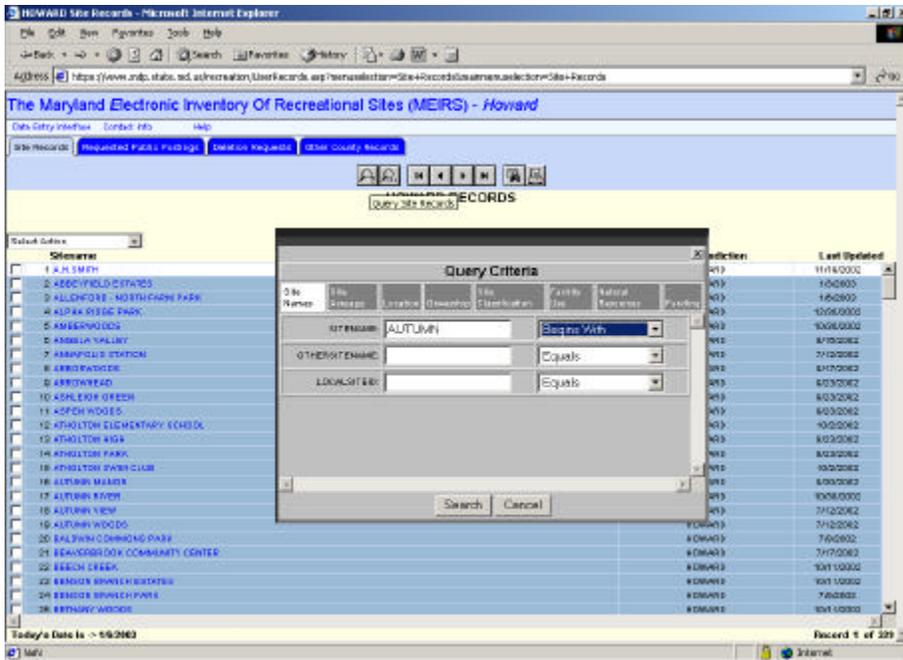
The data entry interface is the first screen users will see upon entering the application. It is the main interface through which all data entry activities are conducted. The interface includes a row of tabs that allow you to list sites from the inventory and to view the status of requests to include or remove a site from public view in addition to a row of command buttons to navigate through the list of records.

Command buttons

The command buttons provide a way for the user to scan through and select information on a particular site from a list in the Data Entry Interface:

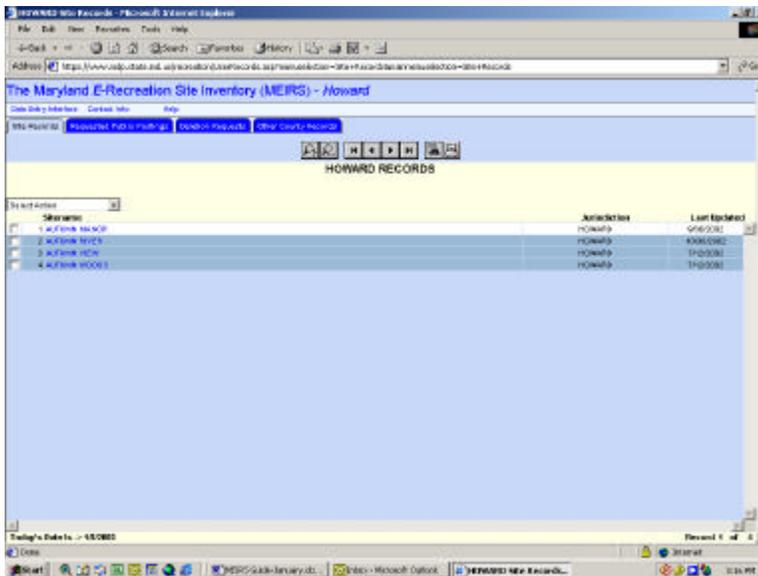


If you do not wish to view all the sites listed, but would rather select a few sites to appear in the list you use the query button. Click on the query button and a pop-up window will appear titled Query Criteria.



At the top of the query criteria window are 8 tabs that correspond to those from an individual site record. To select a list of sites that meet particular requirements click on the appropriate tab and enter the requirement in the field. The fields are case sensitive and most site data will be in all capitals.

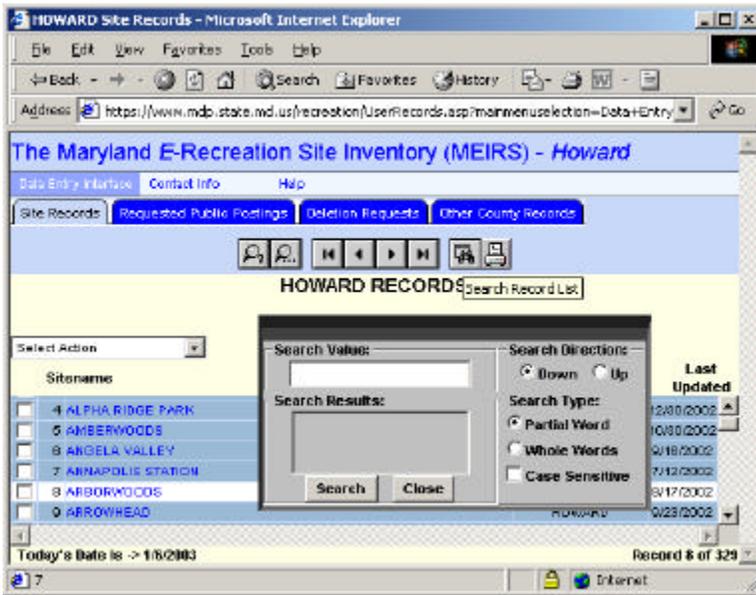
To have the computer select these records click the search button. The list of sites will reappear with only those sites that meet the requirements you specified. In the window below only those sites that begin with the word AUTUMN are included.



If you would like to see the full list of sites, your local profile, click on the Query All Sites button. All sites in your local profile will once again be listed.

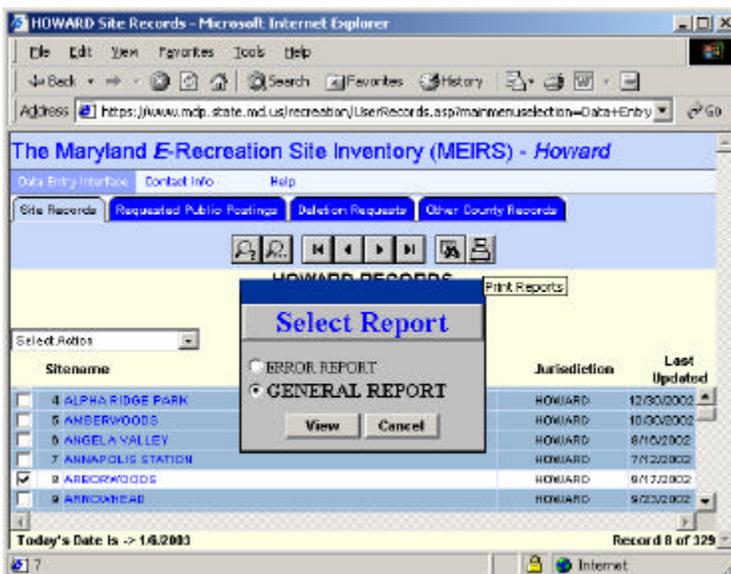
The move buttons allow you to scroll through the site list. When a site is selected the row will not appear blue but white. This highlighting is done to draw your attention to a specific site in the list. These buttons are provided as they are fairly standard, and may be enhanced in the future.

The Search Record List button allows you to search for records from a list. When the search matches a word the rows will be highlighted in white.

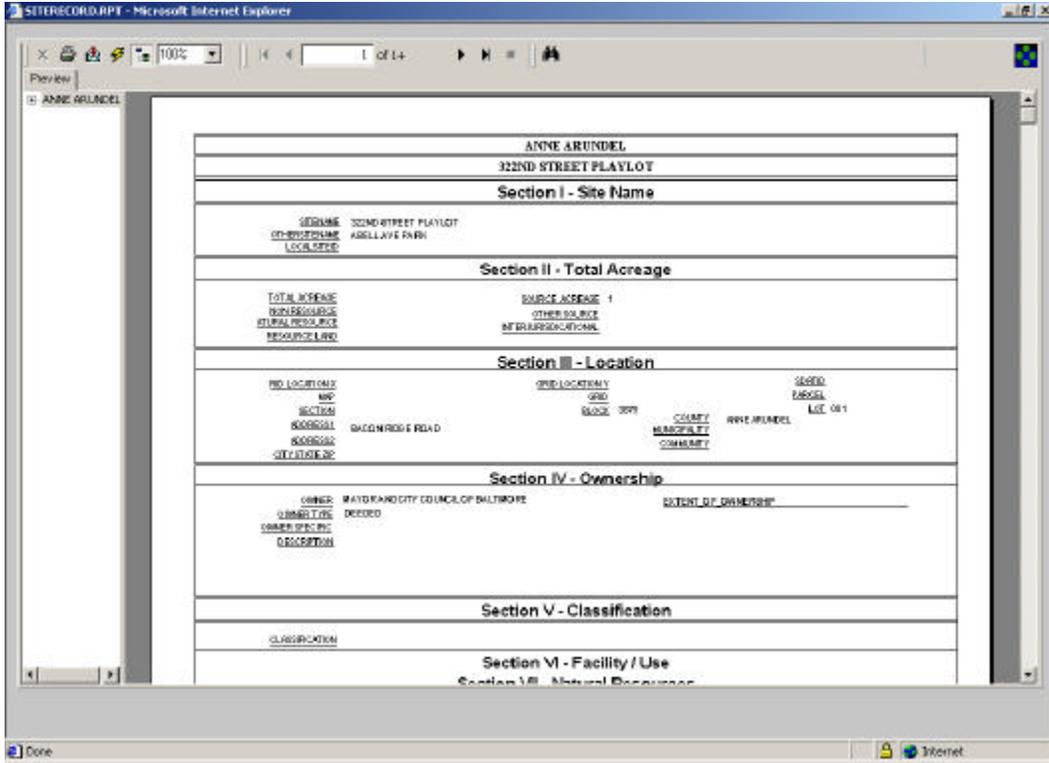


If you would like to print out the data from an individual site record in a report format you need to indicate the appropriate site by clicking the checkbox to the left of the site's name. To print out reports for many sites, click the boxes to the left of the sites you desire. Then hit the print button.

A pop-up menu will appear that asks you to select a report.



The error report checks each site record for missing and incomplete data. This report can be used to check to make sure data is completely entered for a site. The general report will print out all the data from an individual site record. Regardless of which report is selected, click the view button to preview the report and print it.



Notice that instead of having the data from each site record tab appear on a separate page in the general report, all the data will print on one page.

Tabs

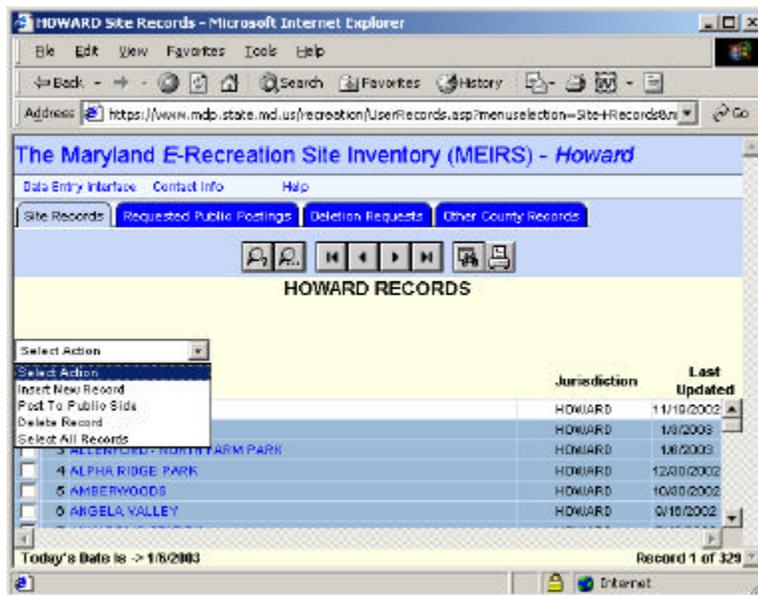
There are four (4) tabs on the screen: Site Records, Post Requests, Deletion Requests and Other County Records. The screens for each tab are lists of sites in the database that are either in or being processed in the inventory.

1. Site Records

The Site Records tab is the screen that first appears after entering the application. Click this tab whenever you want to view your entire local profile that lists all recreational sites in your jurisdiction.

Pull down list functions

A pull down list entitled Select Action is located underneath the command buttons. When you click on the arrow to the right of the box a list four (4) option commands are listed. Pull down and select the appropriate command:



- A) Select “*Insert New Record*” if you want to add a new site to your database. This command will open a new site record window that provides you with a set of fresh data fields to enter all the information associated with this site. The window is exactly like an individual site record that appears when a site’s name is clicked from the list, except all fields will have no information entered.



Entering, editing, and saving data is fairly easy. To enter data, open the tab that relates to the information you want to enter, point your cursor to the data entry window to the right of the field name and start typing. The data you have entered is automatically saved when you move to another tab or close the record, by clicking on the X button in the upper right hand corner of the window. To edit data you may simply type over it or highlight it, delete the data (by hitting the delete button on your keyboard) and start typing the new information.

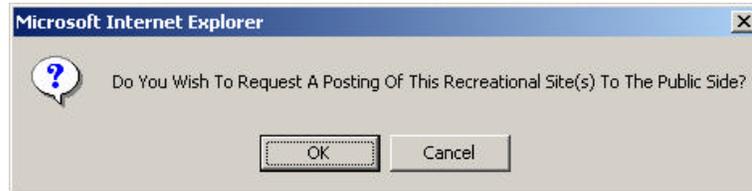
Save/Post/Delete a site record using buttons

The command buttons; “Save Record”, “Request Public Posting”, and “Delete Record” placed at the left of every site record, are provided as an added feature to expedite your interaction with this application. There is a difference between saving a record and approving a record.

When you save a record, by hitting the Save Record button you are just updating the data in your version of the database. To include the record in the version of the database that will be viewed by the public, you must approve the record. If you click on the “Request Public Posting” button a request will be forwarded to the MEIRS administrator to include the record in the MEIRS database. The MEIRS administrator will look over the record one last time to make sure all required fields are present before it is placed on the public list.

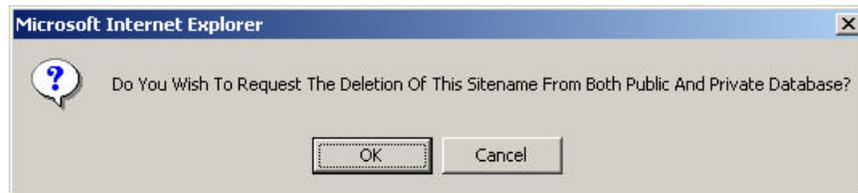
If you click on the “Delete Record” button a request will be forwarded to the MEIRS program administrator to delete the record in the MEIRS database.

- B) If you want to submit a particular site to the MDP Database Administrator (Administrator) to post to the public side of the database, you may also simply click on the checkbox to the left of the site's name on the main Data Entry Interface window. From the drop down list click on the "Post to Public Side" option. A message box will be displayed on your screen asking you:



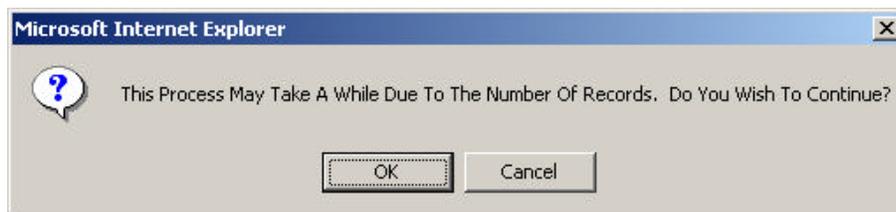
If you wanted to proceed with your request, you click on OK; otherwise you click on Cancel to withdraw your request. Once you have verified your request and clicked on OK, the system automatically makes a copy of the record and stores it in the "Approval Requests" folder for the MEIRS program administrator's review and approval.

- C) If you want a particular site record deleted from the database, you simply click the check box to the left of the site's name and, from the drop down list click on the "Delete Record" option. A message question will be displayed on your screen asking you:



If you wanted to proceed with your request, you click on OK; otherwise you click on Cancel to withdraw your request. Once you have verified your request and clicked on OK, the system automatically makes a copy of the record and stores it in the "Approval Requests" folder for the MEIRS program administrator's review and approval.

- D) To select all records, or your entire local profile, for the system to run queries or print reports, from the pull down menu, click on the last option entitled "Select All". A message box will be displayed on your screen that asks:



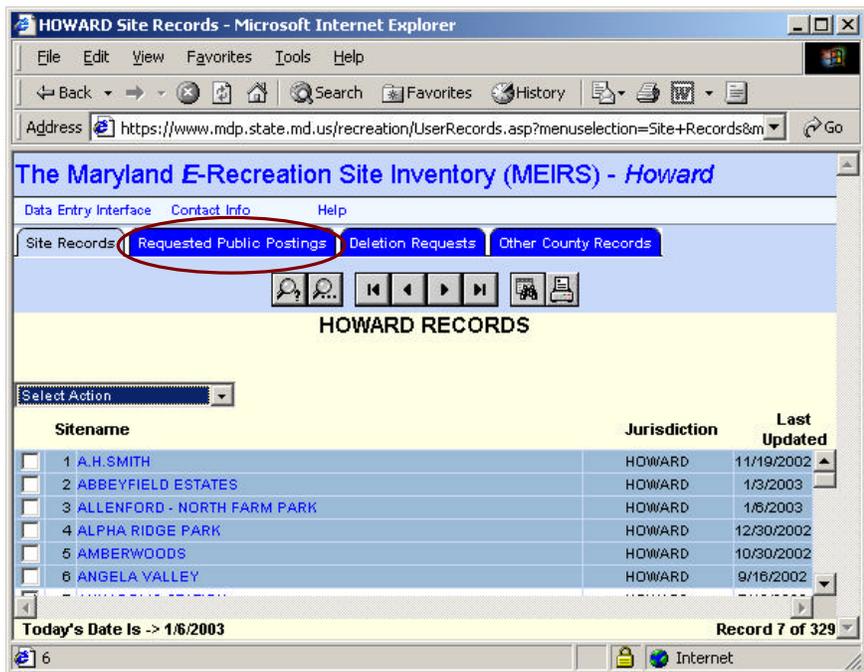
To proceed with your request click OK. The system will scan your entire profile, place a check in the check box beside each record, and shade each with gray.

When the last record is checked and gray-shaded the whole profile is now scanned and ready for your commands. If you hit the print reports button now you will print out a report and all the data currently in the system for your jurisdiction.

To undo this process, and unselect all the sites, just click on “*Select All* “. The system will again scan the entire profile by removing the check marks and the whole profile listing will be restored back to its original blue shade.

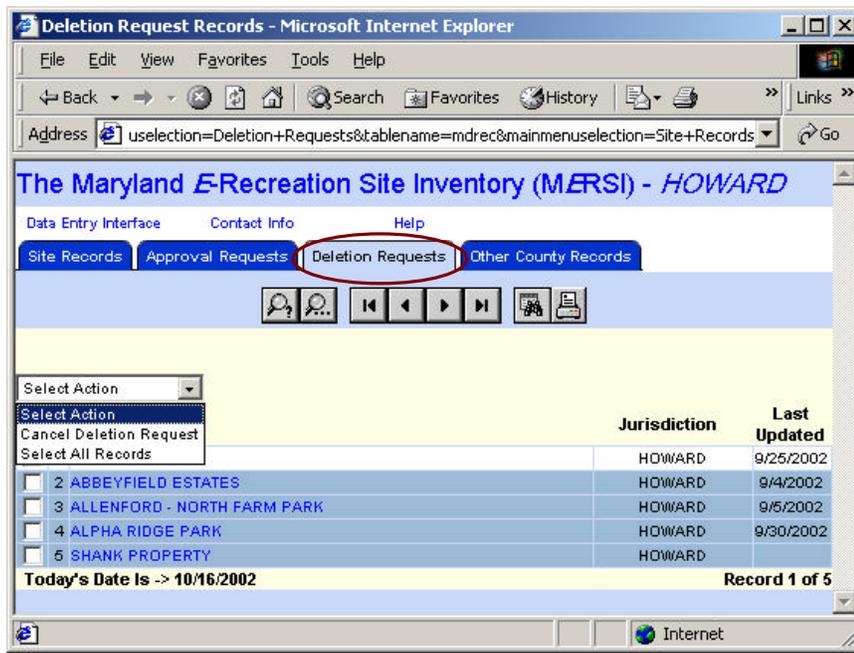
2. Requested Public Postings

Is the tab you click to see if your request to the administrator to post a particular record to the public was processed. Any site listed in this folder means two things. First, your request to the administrator to approve that record was successfully posted. Second, the record is probably in the process of being reviewed by the MEIRS Administrator and thus pending approval to be included in the database. If you mistakenly submitted a wrong site you wanted to cancel your approval request, for some other reason, AND the record is still listed in this folder, you can simply click on the check box to the left of the site’s name and, from the drop down list (located above the site name) click on the “Cancel Requested Public Posting” command option. This will cancel out your request.



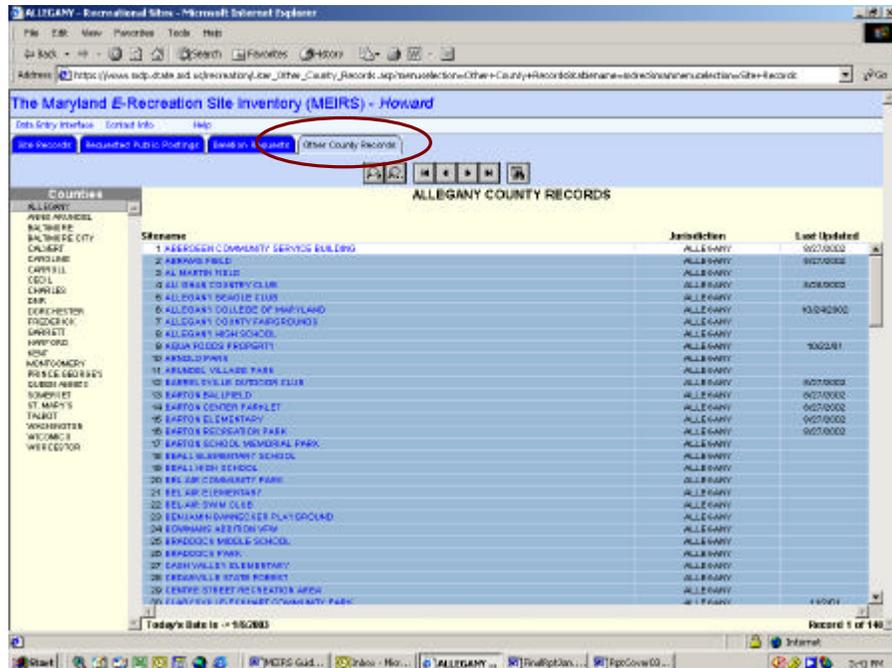
3. Deletion Requests

Is the tab you click to find out if your request to the administrator to delete a particular record was processed. Any site that listed in this folder means two things. First, your request to the administrator to delete that record was successfully posted. Second, the record is probably in the process of being reviewed by the MEIRS Administrator and thus pending approval to be removed from the database. If you mistakenly submitted the wrong site wanted to cancel your deletion request for some other reason AND the record is still listed in this folder, you can simply click on the check box to the right of the site's name and then, from the drop down list (located above the site name) click on the "Cancel Approval Request" command option. This will delete your request.



4. Other County Records

Is a tab that provides visual access to recreational profiles of other jurisdictions in order to enhance communication, coordination and information sharing among staff of various local recreation departments. This information is provided in a read-only format and cannot be edited. As the picture below illustrates, the folder is basically composed of two sections. The section on the left contains a listing of Maryland's 23 counties, Baltimore City and DNR. The section on the right is the profile for the selected jurisdiction.



If you are interested in reviewing the profile of a particular jurisdiction, simply point your cursor on its name in the left hand list and click. The system displays the database profile of that participant and you can then start viewing the data for any site you wish by simply clicking on its name.

2) Contact Info Interface

This interface provides contact information for the user who has been designated by their jurisdiction as the sole person responsible for coordinating with the MEIRS Administrator on all issues related to the maintenance and update of the local profile. This information is very useful as it facilitates efficient communication among all county MEIRS Administrators. All the information in this menu can be modified and updated by the designated local Administrator except for the name of the jurisdiction and the user's password.

System security necessitates that we lock passwords and all password change requests must be submitted to the MEIRS program administrator. If a jurisdiction designates a new local Administrator, a request must be submitted to the MEIRS program administrator to make the necessary changes to the local profile to include the person's name and provide new password. To update the editable data fields in this menu, just highlight the data that is already in that field, type in the new information and click on save. Click on cancel and the old information will be restored.

The screenshot shows a web browser window titled "USER: KALBAN'S PROFILE - Microsoft Internet Explorer". The address bar displays "https://www.mdb.state.md.us/recreation/profile.asp". The page content includes a navigation menu with "Data Entry Interface" and "Contact Info" (circled in red), and a "Help" link. Below the menu is a section titled "KALBAN'S PROFILE" with a "Save" button and a "Cancel" button. The profile information is as follows:

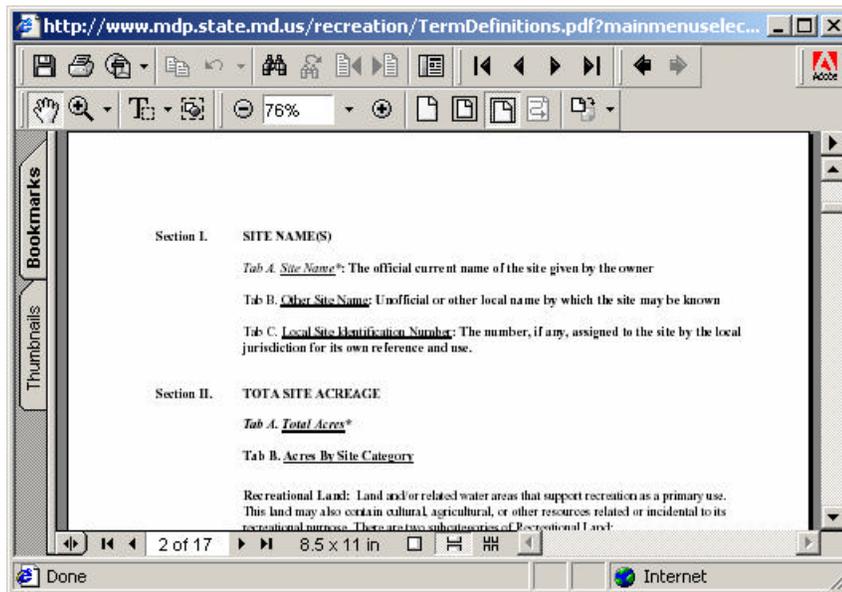
First Name:	Kenneth
Last Name:	KALBAN
User Name:	KALBAN
Title:	Administrator
County:	HOWARD
Email:	
Phone Ext./Fax:	410-313-4889
Address:	Howard County Dept. of Recreation and Parks
City/State/Zip:	Columbia MD 21046-1877

At the bottom of the form are "Save" and "Clear" buttons.

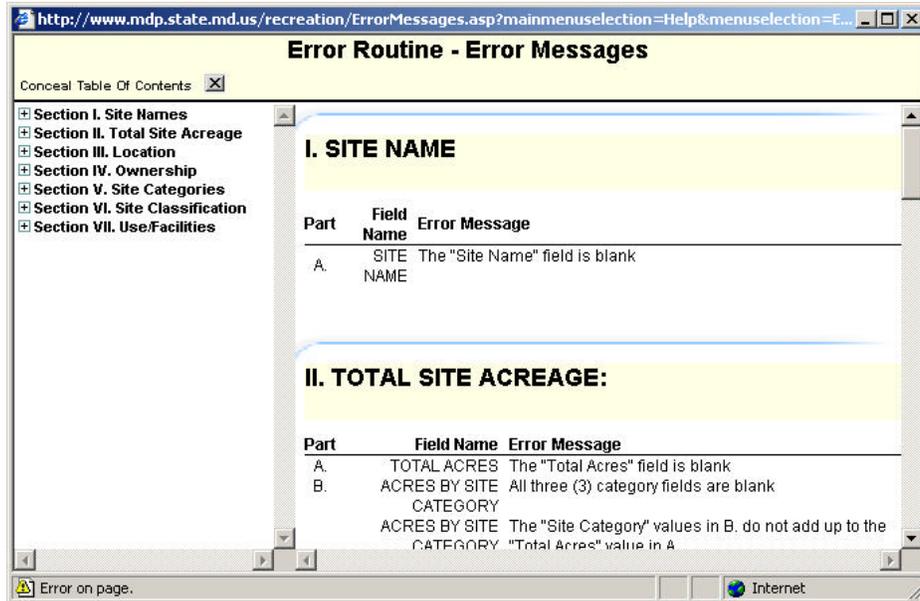
3) Help:

To access the help files click on the word help in the interface selection row and select either the “definitions” or “error messages” text from the pull down list that appears. PDF files for help will appear in separate windows.

- A) A click on “*definitions*” provides you with thorough explanations for the different terms that are being used in conjunction with the various datasets and data fields that make up this application. These definitions are presented and organized following the database structure, section-by-section and field-by-field. The file will also indicate which of the fields are required in the database. If you encounter a particular term that you are not familiar with, locate the section of the database where this term appears, open this file to the same section as that of the database and you will find the definition of that term. This folder also supplies you with detailed instructions on the alternative methods you may use to provide geographical locations of your sites. You will find these instructions on section III of this folder.



- B) A click on “*Error Messages*” will provide you a listing of messages that may potentially appear in an error report printed for one or multiple sites. If a message in an error report is unclear you may use this listing to better understand what information is missing or incomplete.



- C) A click on User’s Guide will allow you to view this User’s Guide electronically.

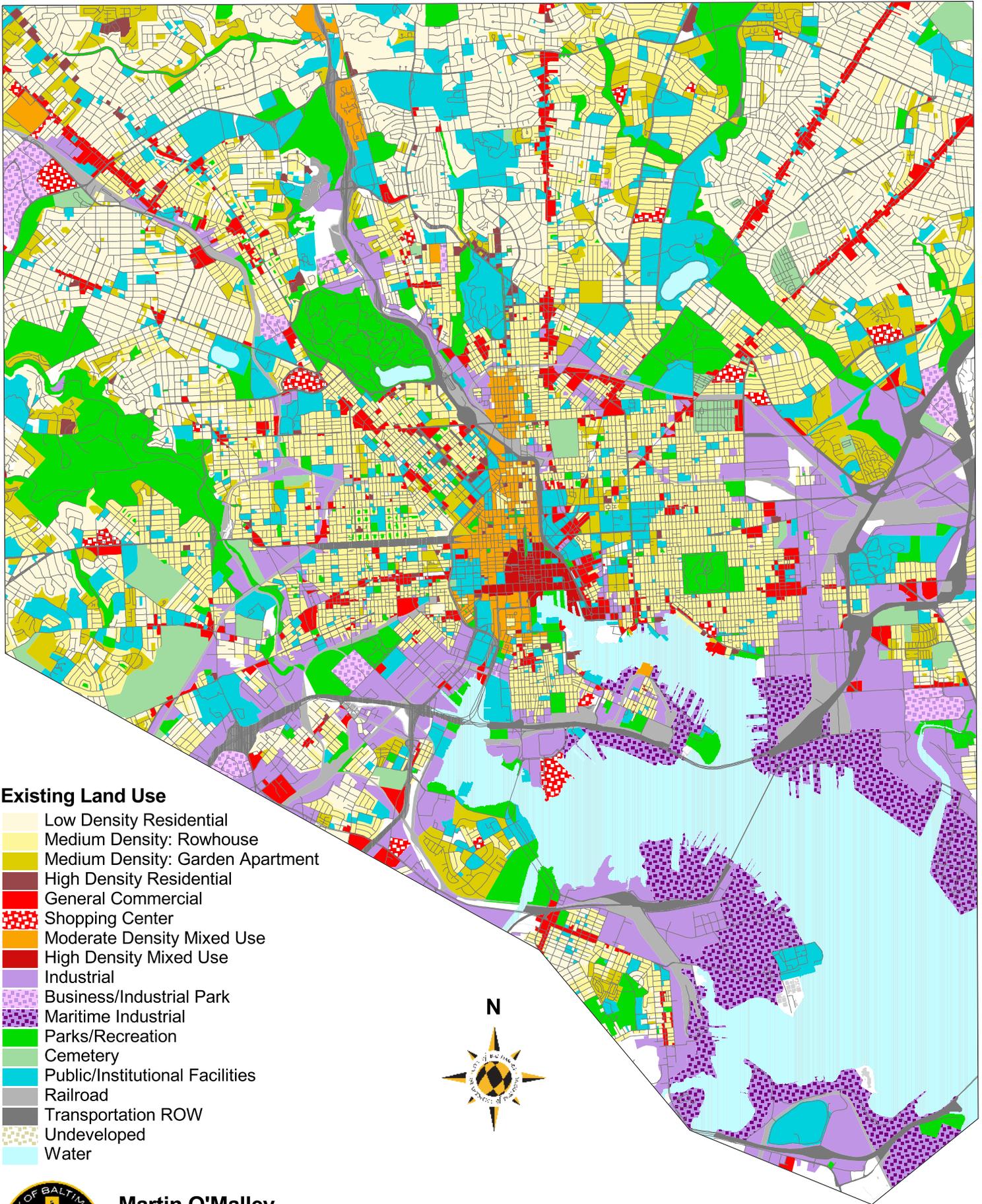


Baltimore City & Surrounding Counties



Martin O'Malley
Mayor

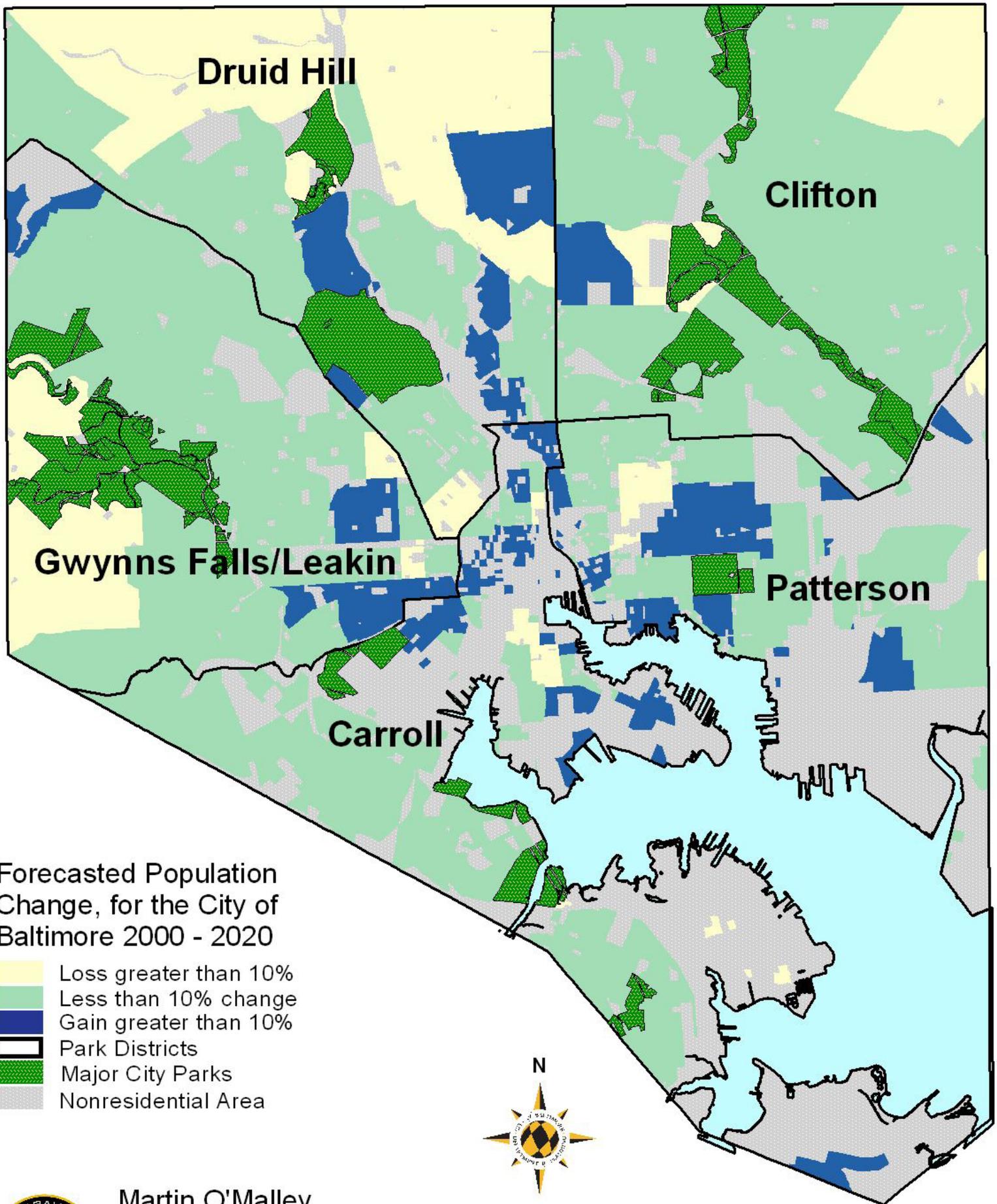
Otis Rolley, III
Director of Planning



Martin O'Malley
Mayor

Otis Rolley, III
Director of Planning

Map 2.0



Forecasted Population Change, for the City of Baltimore 2000 - 2020

- Loss greater than 10%
- Less than 10% change
- Gain greater than 10%
- Park Districts
- Major City Parks
- Nonresidential Area

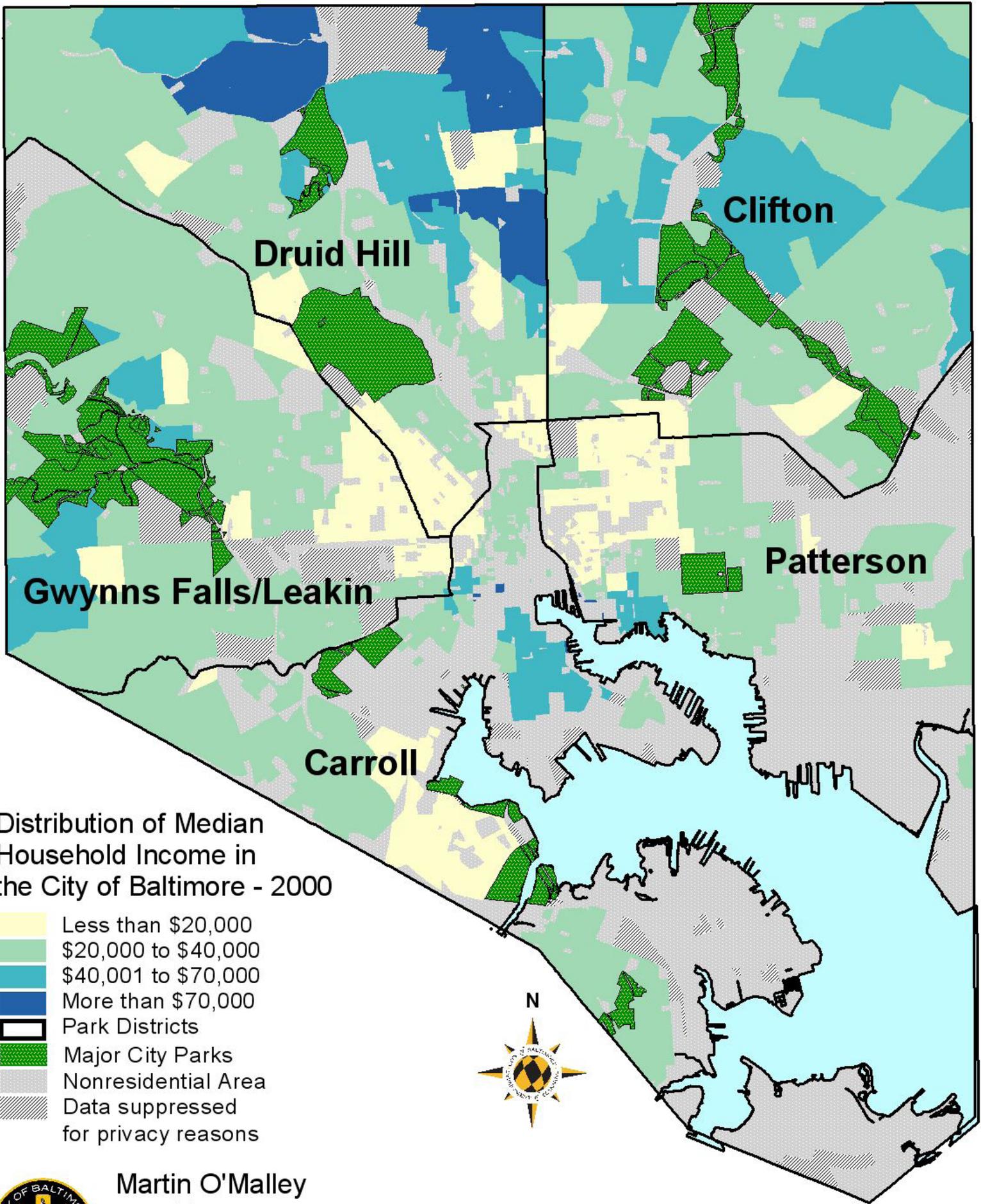


Martin O'Malley
Mayor

Otis Rolley, III
Director of Planning

Map 2.1

Source: Census 2000 and Round 6A Project Forecast for the Baltimore Metropolitan Council

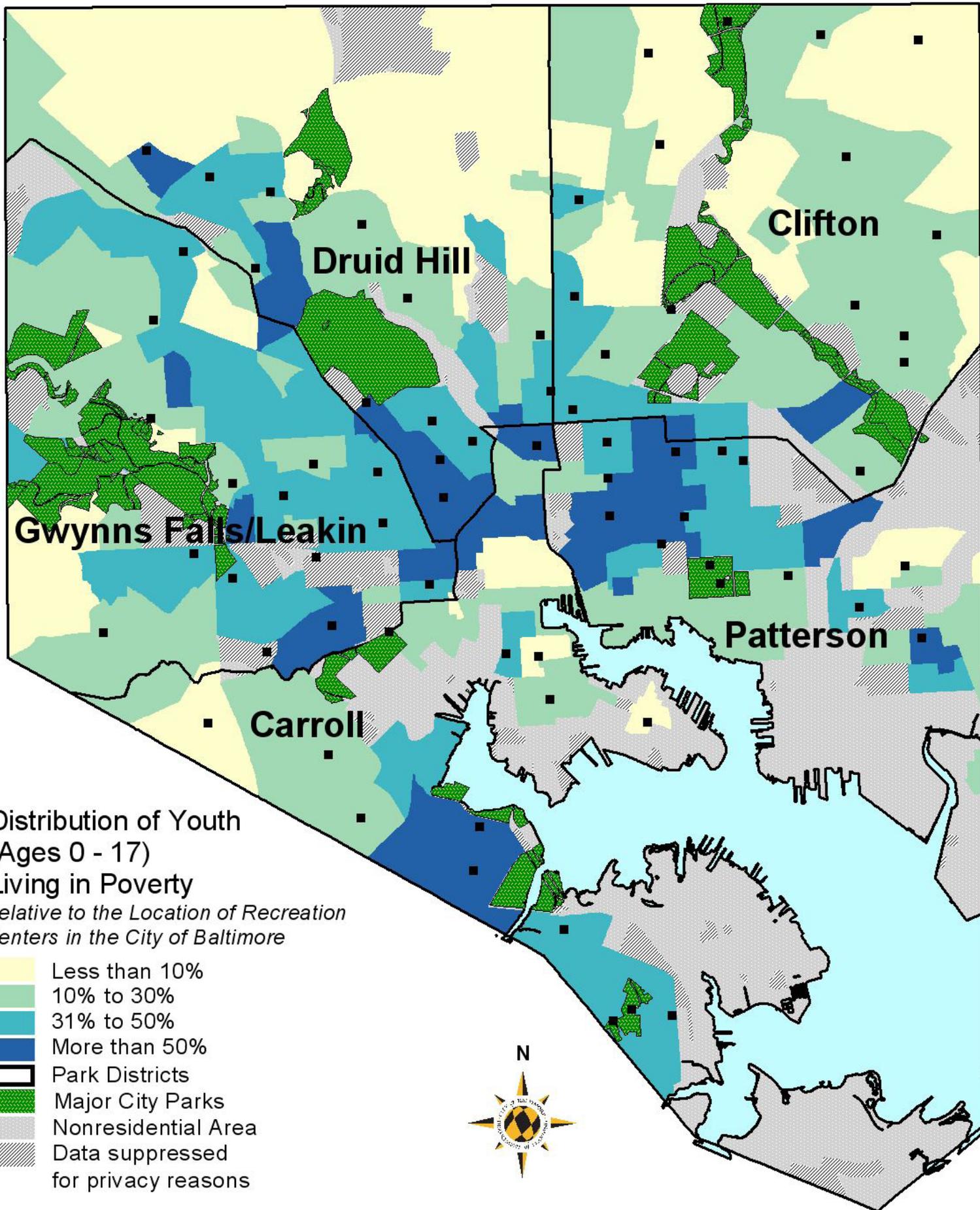


Martin O'Malley
Mayor

Otis Rolley, III
Director of Planning

Map 2.2

Source: Census 2000



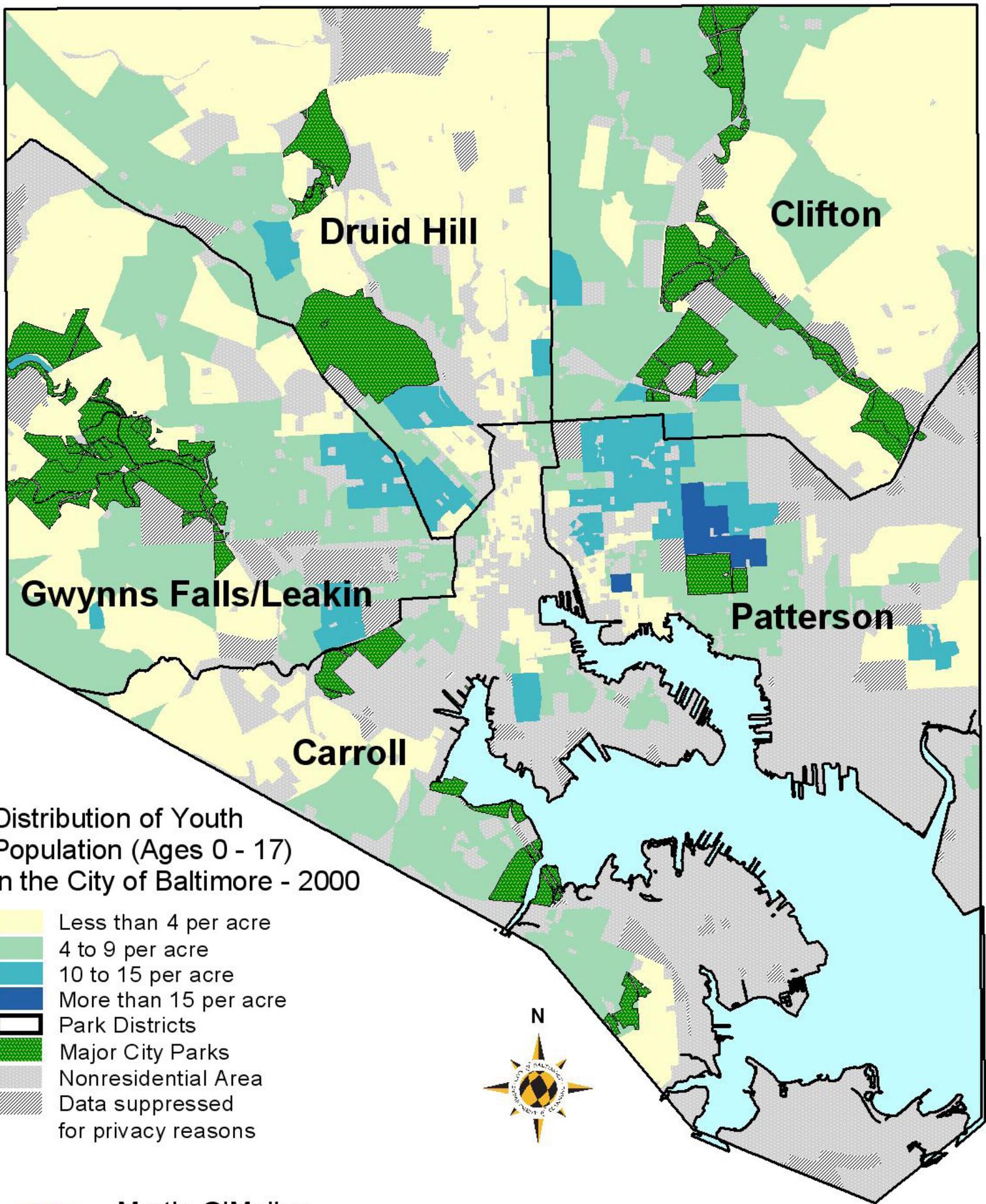
Martin O'Malley
 Mayor

Otis Rolley, III
 Director of Planning

Map 2.3

Source: Census 2000





Distribution of Youth Population (Ages 0 - 17) in the City of Baltimore - 2000

- Less than 4 per acre
- 4 to 9 per acre
- 10 to 15 per acre
- More than 15 per acre
- Park Districts
- Major City Parks
- Nonresidential Area
- Data suppressed for privacy reasons

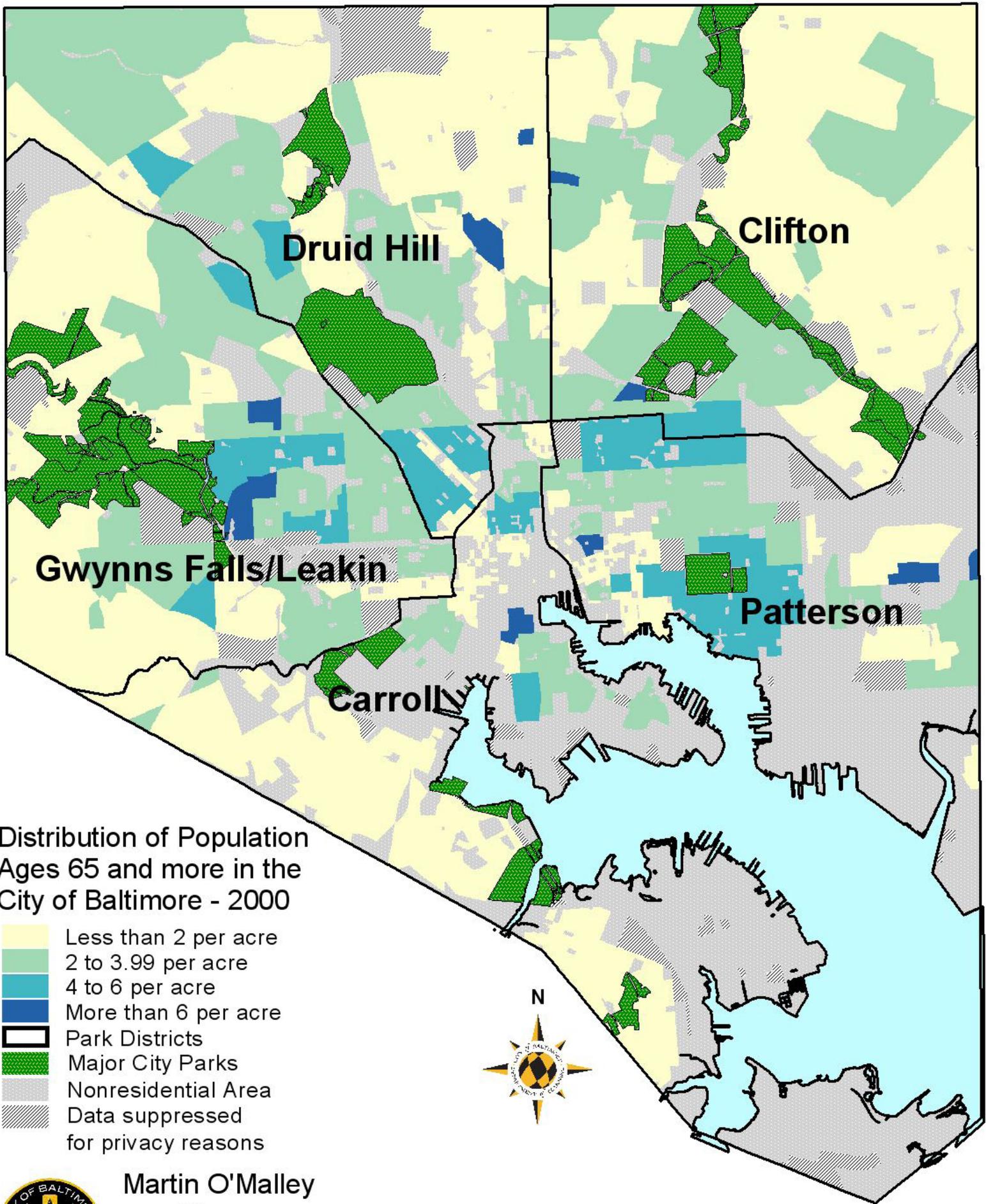


Martin O'Malley
Mayor

Otis Rolley, III
Director of Planning

Map 2.4

Source: Census 2000



Distribution of Population
Ages 65 and more in the
City of Baltimore - 2000

- Less than 2 per acre
- 2 to 3.99 per acre
- 4 to 6 per acre
- More than 6 per acre
- Park Districts
- Major City Parks
- Nonresidential Area
- Data suppressed for privacy reasons

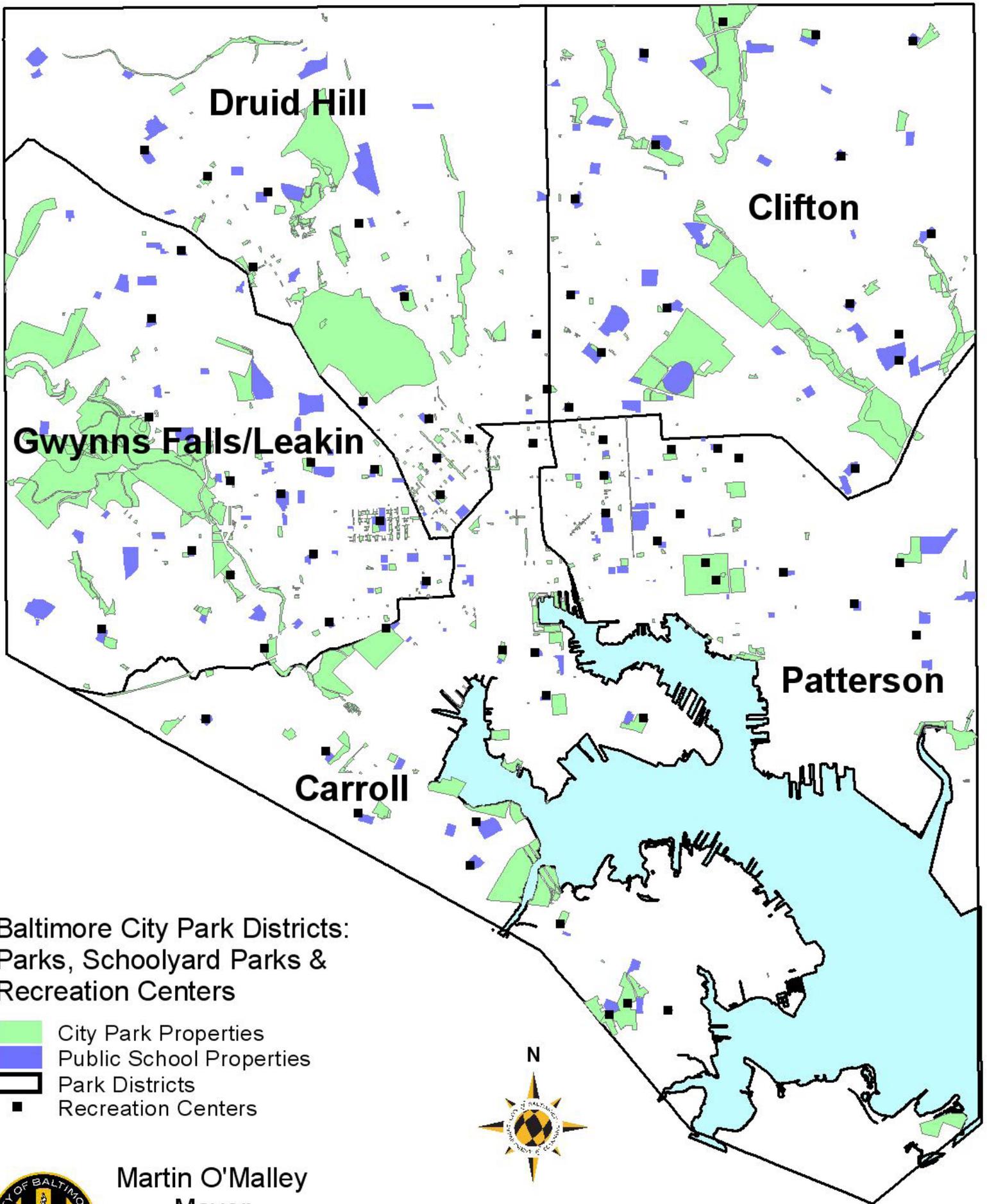


Martin O'Malley
Mayor

Otis Rolley, III
Director of Planning

Map 2.5

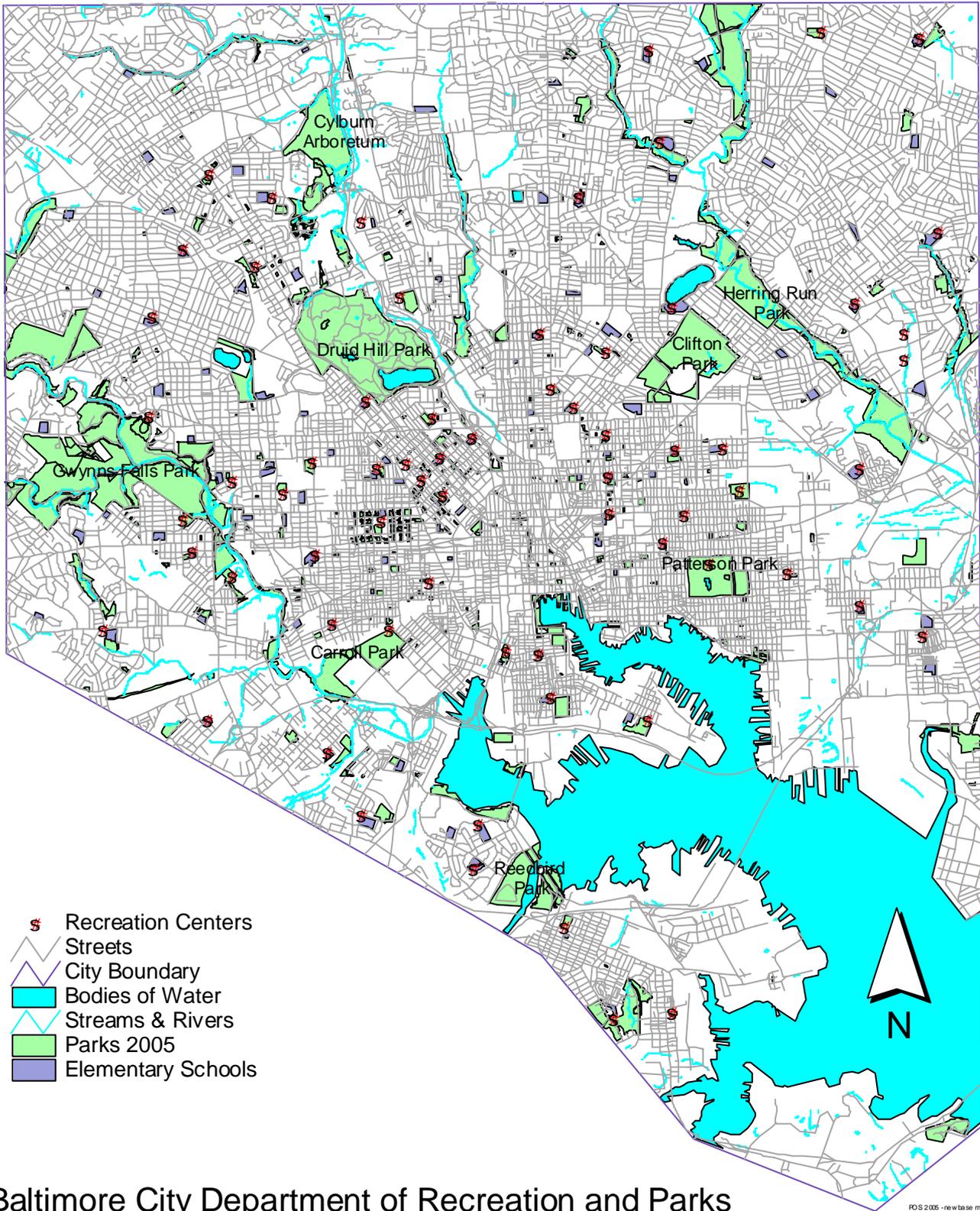
Source: Census 2000



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Baltimore City Parks, Recreation Centers and Elementary Schools



- Recreation Centers
- Streets
- City Boundary
- Bodies of Water
- Streams & Rivers
- Parks 2005
- Elementary Schools

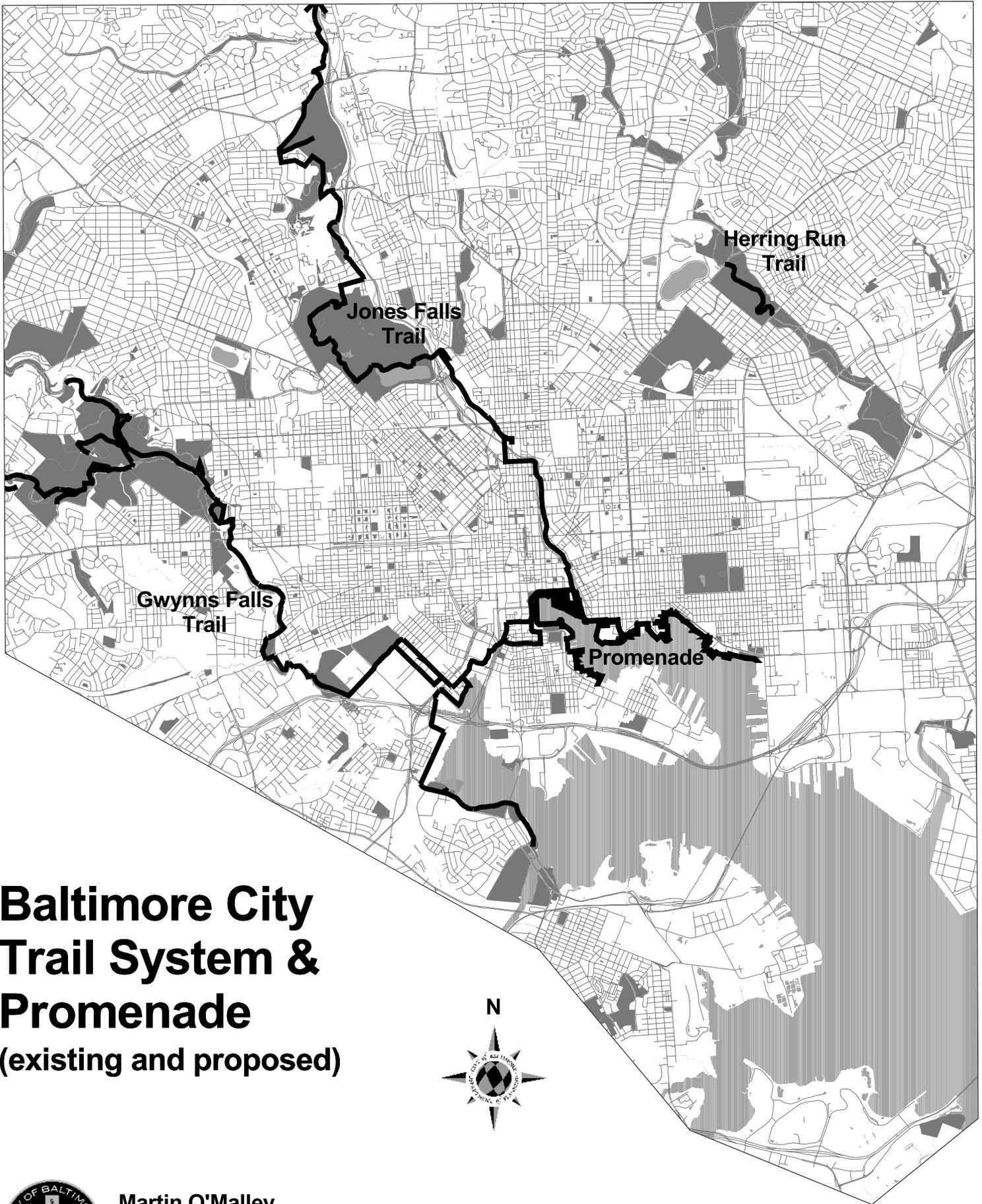
Baltimore City Department of Recreation and Parks

Mayor Martin O'Malley

Draft Jan 2005

Kimberley A. Flowers, Director

ROS 2005 - rebase map 8/11



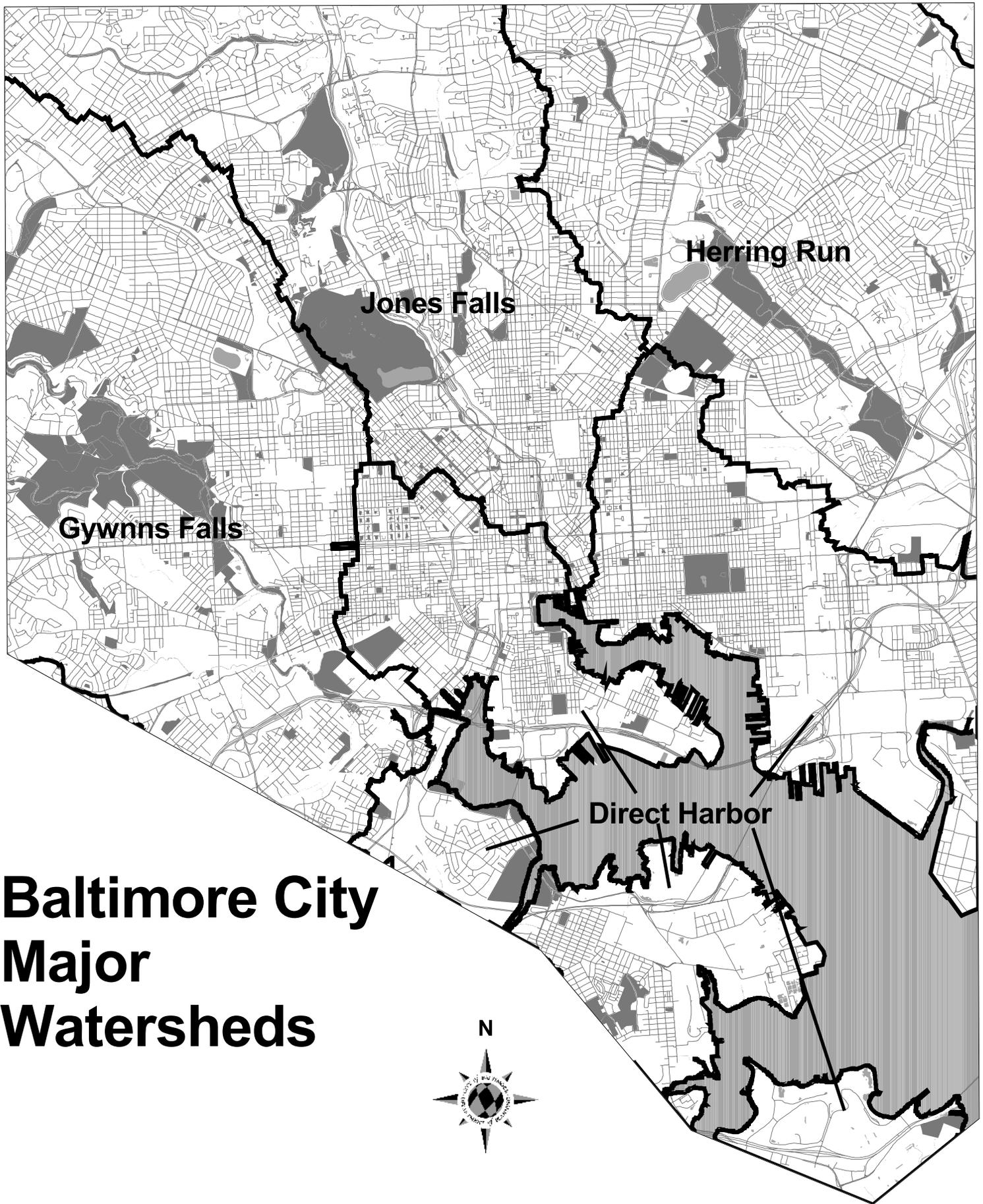
Baltimore City Trail System & Promenade

(existing and proposed)



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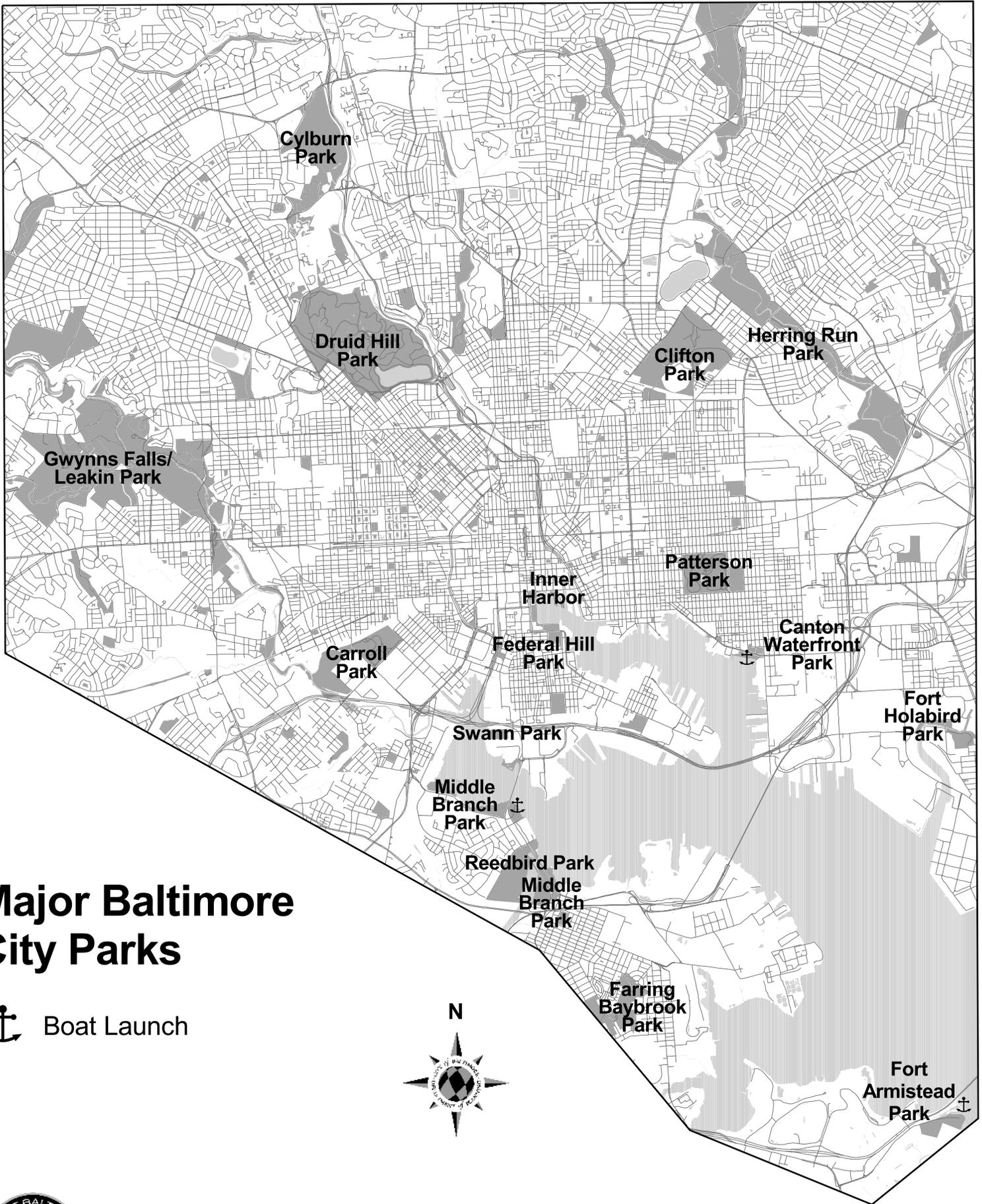
Baltimore City Major Watersheds



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Map 5.1



Major Baltimore City Parks

 Boat Launch



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Map 5.1.1



Baltimore City Forest Cover

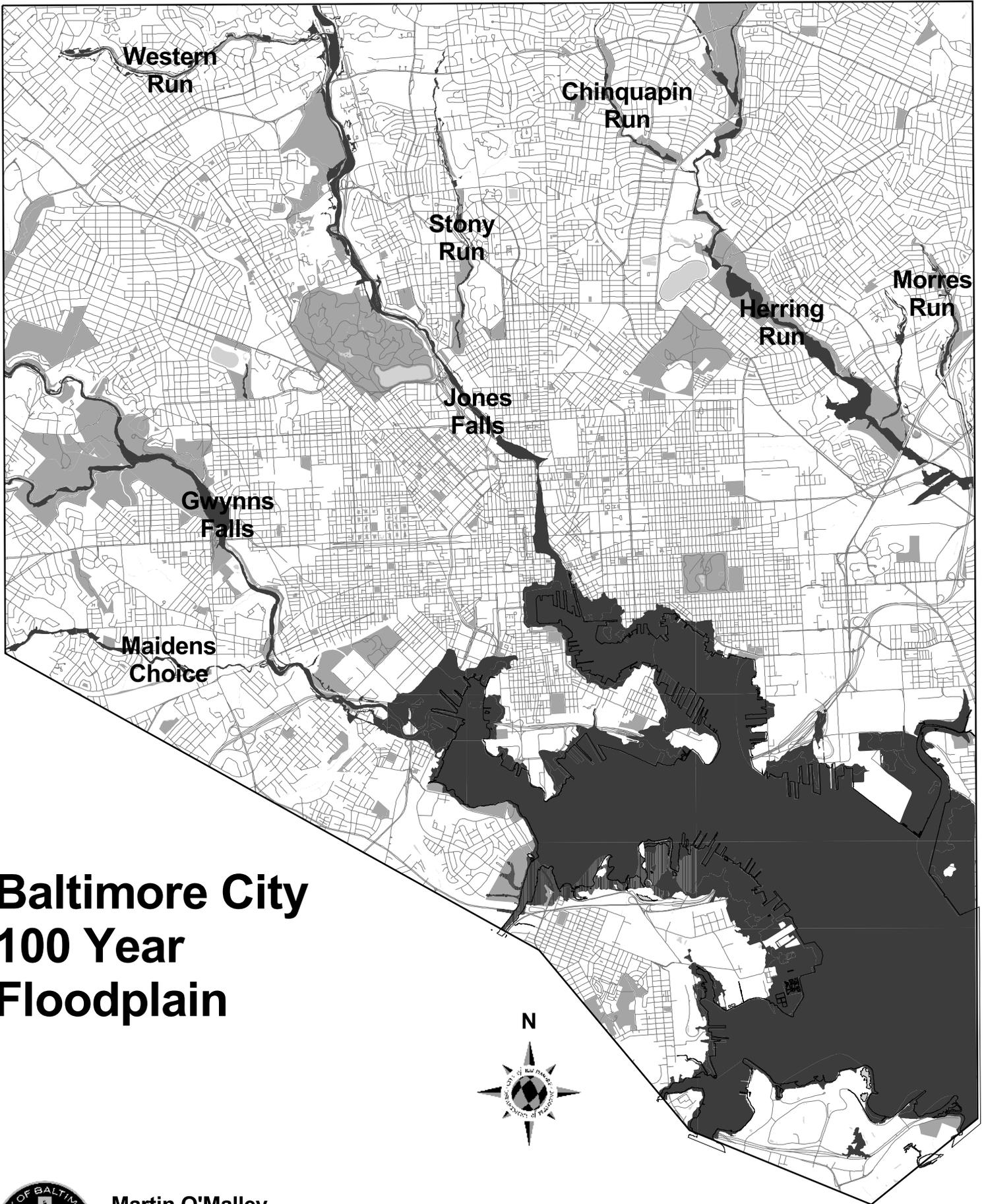
-  Impervious
-  Groundcover
-  Tree Canopy
-  Water



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Map 5.2



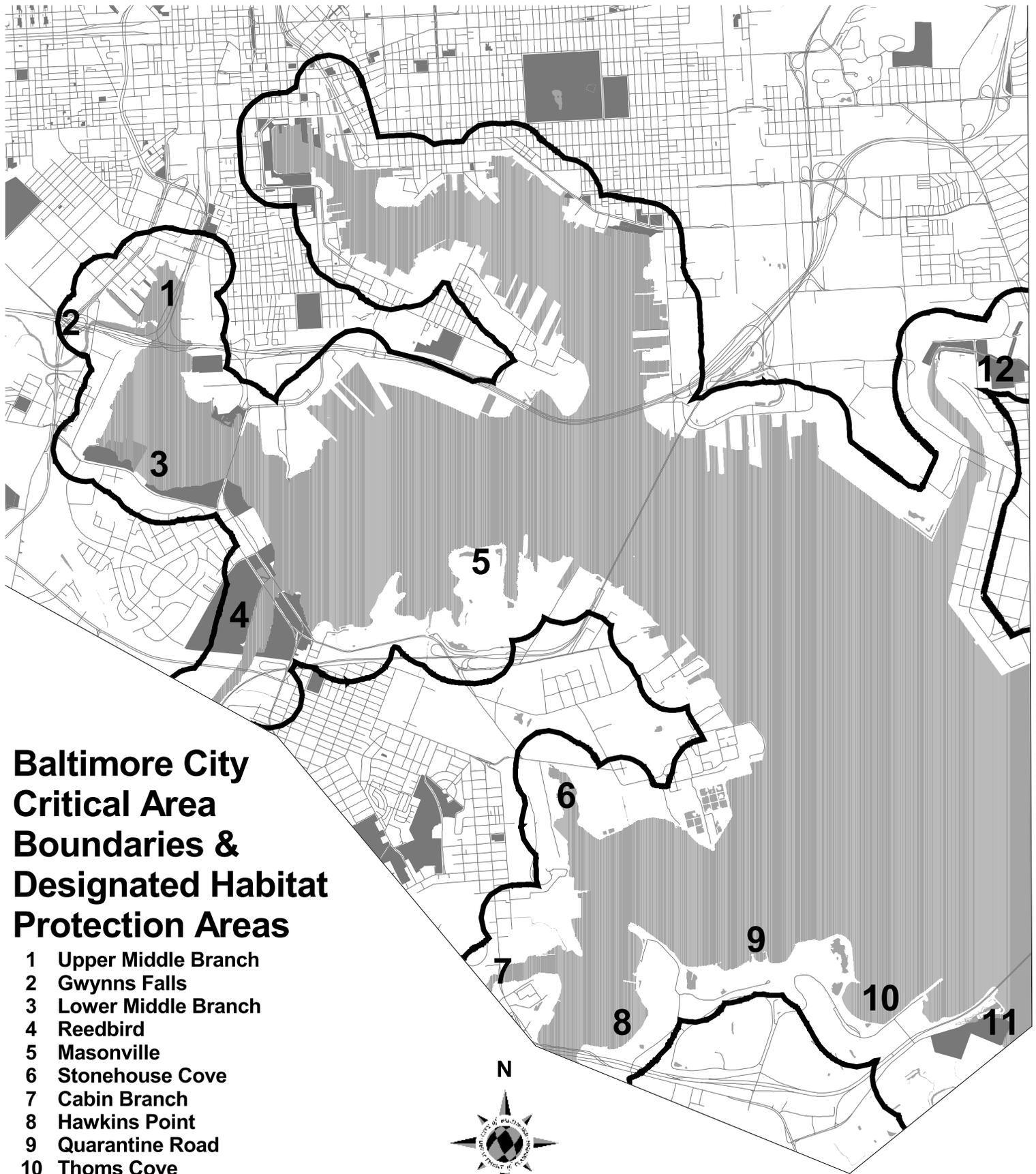
Baltimore City 100 Year Floodplain



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Map 5.3



Baltimore City Critical Area Boundaries & Designated Habitat Protection Areas

- 1 Upper Middle Branch
- 2 Gwynns Falls
- 3 Lower Middle Branch
- 4 Reedbird
- 5 Masonville
- 6 Stonehouse Cove
- 7 Cabin Branch
- 8 Hawkins Point
- 9 Quarantine Road
- 10 Thoms Cove
- 11 Fort Armistead
- 12 Colgate Creek



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Table 3.0: FY2006 Capital Improvement Program

Account	Project Name/ Project Description	Project Total	MVR	City Loan	POS Match	POS Direct	City General	Federal	CPP	State Bond	Other	Previous Funds
474-624	Gateways - Mt Vernon Park	100	100									
474-658	Patterson Park Pool Renovation	750		50	700							1,000
474-667	Park and Playground Improvements	750				750						
474-668	Park Perimeter Improvements	1,775		1,275	500							
474-670	Druid Hill Park: 3 Sister's Pond Design	100		100								
474-690	Street Tree Operations FY05	200	200									
474-691	Western Run Greenway - Study/Design	100	100									
474-692	Clifton & Patterson Park Interior Road Lighting	400	100		300							
474-693	Gwynns Fall Park Trail Restoration & pavilion lighting	100	100									
474-694	Roosevelt Park Master Plan Phase I	750				750						
474-695	Lyndhurst Recreation Center Gymnasium - State Bond Match	110		10						100		
474-696	Baltimore Playlot Program - 9 sites (Cross Country Elem., Elmley, Harwood)	1,184		400	784							
474-697	Court Resurface: Tennis at Carroll Park & Keyes Field (4 courts)	120		120								
474-698	Recreation Facilities: Liberty, Collington, Leithwalk & S. Morse Rec Centers and DePietro Ice Rink	550		175	375							
474-699	Cylburn Master Plan Implementation - Phase I	1,010		410	600							
474-700	Community Parks and Playgrounds - 4 Recreation Center Playgrounds	600							600			
474-701	Park Master Plans : Clifton, Farring Baybrook, Middle Branch	135		135								
474-702	Druid Hill Park ADA & Roadway Improvements	400		100	300							
474-703	Jones Falls Trail Phase IV	200	200									
474-711	Recreation and Parks Facilities - Misc Repairs to existing facilities	250					250					
474-712	Critical Area Storm Water Offset Fund - for pavement removal & reforestation only	607									607	
	Total Capital Program for FY06	10191	800	2775	3559	1500	250	0	600	100	607	1,000

Table 3.2: Summary of Recreation Facilities in the 2005 MEIRS Report

MEIRS TYPES	TOTALS	Large Urban Regional	Community	Neighborhood	School-Rec Park	Mini Park	Special Use	Golf only	Historic-Cultural	Undeveloped
TOTALS	426	11	21	84	166	109	14	3	3	15
ACRES	6878.38	3435.27	601.4	317.55	1230.91	47.77	363.01	631.04	3.66	247.77
ARBORETUM	1						1			
ARCHEOLOGY	1	1								
BEACH	3	3								
BOAT RAMP	5	3	2							
BOWLING ALLEY	1						1			
BOXING CENTER	1						1			
ADMIN.BUILDING	4	4					1			
BATHHOUSE	7	3	3	1						
COMMUNITY GARDEN	15	11	3	1						
COURT-BASKETBALL	182	21	18	51	70	22				
COURT-BOCCE	3		1			2				
COURT-PAVED PLAY AREA	129	0		5	124					
COURT-TENNIS	166	53	23	23	66	1				
COURT-VOLLEYBALL	4	4								
CONCESSION-RESTROOM	1		1							
CONSERVATORY/GREENHOUSE	1	1								
CRICKET PITCH	1		1							
ENVIRONMENTAL ED	2	1					1			
FESTIVAL SITE	15	5	5	2			2		1	
FIELD-BASEBALL DIAMOND	213	52	52	46	63					
FIELD-OVERLAY	112	20	27	26	39					
FIELD-MULTIUSE	69	2	3	6	57		1			
FIELD-LIGHTS	5	5								
FIELD-SOCCER-INDOOR	2						2			
FISHING LAKE	1	1								
FISHING-OCEAN	7	3	1			3				
FISHING-PIER	7	3	1			3				
GOLF-9 HOLE	1	1								
GOLF-18 HOLE	4	1						3		
GOLF-FRISBEE	1	1								
HISTORIC PARKS	18	11		3			1		3	
MAINT. BUILDING	23	17	2				4			
OUTDOOR STADIUM	1	1								
OUTDOOR THEATRE	1	1								
PARKING LOT	3	3								
PASSIVE AREA	69		3	20	1	43	2			
PAVILION	172	18	3	8	2	2				
POOL-INDOOR	3	0		1			2			
POOL-OUTDOOR	19	4	3	7	5					
POOL -WADING	22	4	4	10	3	1				
TOT LOT	224	17	18	53	104	32				
TRAILS-GENERAL	7	4	1	2						
TRAIL-GREENWAY- MILES	24	22					2			
RECREATION CENTER	65	2	4	19	40					
RESTROOM	23	12	4	6		1				
ROWING CENTER	1	1								
RUNNING TRACK	15		1		14					
SKATE-ROLLER	1						1			
SKATE-BOARD	1	1								
SKATE-ICE	2						2			

Table 3.4: Baltimore City Data Reported in State Summary Table 2: Percentage of Households with Members Participating in Park and Recreation Activities
(From "Participation in Local Park Recreation Activities in Maryland")

Activity Preference: by Type	Activity Ranking	Maryland Household Participation	EVENT	Baltimore City Household Participation	EVENT	Suburban Baltimore Household Participation
Field Sports						
1	soccer	17.8	football	14.5	soccer	23.3
2	baseball	16.6	baseball	14.5	baseball	14.8
3	football	13.6	soccer	10.5	lacrosse	13.5
5	softball	13.4	softball	10.5	football	12.5
5	lacrosse	7.1	lacrosse	2.8	softball	12.5
6	field hockey	2.4	field hockey	1.5	field hockey	4
Court Sports						
1	basketball	25.2	basketball	26.1	basketball	22.8
2	tennis	16.7	tennis	10.3	tennis	16.8
3	horseshoes	10.8	horseshoes	8.8	horseshoes	10
4	volleyball	8	volleyball	7.8	volleyball	7.3
5	racquetball	1.4	racquetball	0.8	racquetball	2.5
6	handball	0.2	handball	0	handball	0.3
7	squash	0.2	squash	0	squash	0.3
Skating Sports						
1	ice skating	17.5	ice skating	11	ice skating	15
2	in line skating	13.7	in line skating	7.8	in line skating	14.3
3	skate boarding	8.5	roller skating	3.3	skate boarding	12.8
4	roller skating	4.6	skate boarding	3	roller skating	4.8
5	ice hockey	2	ice hockey	0.8	ice hockey	2.5
Water Sports						
1	swim - pool	51.8	swim - beach/lake	41.4	swim - beach/lake	55
2	swim - beach/lake	50	swim - pool	41.1	swim - pool	53.8
3	power boat	16.6	power boat	5.8	power boat	17.8
4	canoe	6.2	sailing	5.8	canoe	7.3
5	sailing	5.6	kayak	2.8	sailing	6.5
6	kayak	4.9	canoe	2.3	kayak	5
7	water ski	3.6	water ski	0.5	water ski	5
Fishing & Hunting						
1	fishing - boat	18.4	fishing - shore	13	fishing - boat	19.8
2	fishing - shore	17.3	fishing - boat	9.5	fishing - shore	18
3	hunting	9.9	hunting	4.5	hunting	10
4	fishing - pier	8.7	fishing - pier	4.5	fishing - pier	7.8
Fitness						
1	walking	68.5	walking	67.4	walking	65.5
2	jogging	22.2	jogging	17.5	jogging	23.5
3	running	18.5	running	16.3	running	18.5
4	weight training	14.9	weight training	11	weight training	12
5	aerobics	13.2	aerobics	10.5	aerobics	10.8
6	yoga	2.1	yoga	1.8	yoga	2.3
Other Sports						
1	bicycle	21.9	bicycle	15.8	bicycle	21
2	ski	9.1	ski	5.5	target shooting	10
3	target shooting	7.1	mountain bicycle	4.3	ski	9.5
4	mountain bicycle	4.6	target shooting	3.8	mountain bicycle	6.8
5	trail riding	4.1	trail riding	2.5	trail riding	4.8
6	archery	2.2	archery	0.8	archery	2
Outdoors						
1	hiking	33.4	hiking	23.6	hiking	38.3
2	tent camping	13.5	tent camping	6.3	tent camping	14.8
3	nature walk	5.8	bird watching	5.8	bird watching	5.5
4	bird watch	5	nature walk	2.8	nature walk	5
5	RV camping	2.1	RV camping	0.5	RV camping	2.5
Family Activity						
1	festival	60.9	festival	63.9	festival	57
2	playground	39.5	playgrounds	38.3	picnic	37.5
3	picnic	38.7	concerts	37.8	playgrounds	33.8
4	concerts	33.4	picnic	34.6	concert	32.3
Special						
1	golf	20.1	nature/garden	14.3	golf	24
2	dog walk	18.6	dog walk	12.3	dog walk	23
3	nature/garden	18.4	golf	9.3	nature/garden	20

Table 3.5: Baltimore City Department of Recreation and Parks: Supply Report 2005

A	B	D	E	F	G	H
Activity	Facility Types	Number of Facilities	Season Length (days)	Daily Carrying Capacity per Facility (people/day)	Annual Carrying Capacity per Facility	Total Supply, All Facilities for Activity
		MEIRS Data	Dept.	Department Data	E x F	E x F x D
Field Sports	Multi-Use Athletic Fields: Football	35 fields *	210	Football games: 2 games X 2 teams X 25 players = 100	21,000	
	Multi-Use Athletic Fields: Soccer/Lacrosse	34 fields *	210	Soccer/Lacrosse games: 2 games X 2 teams X 15 players = 60	12,600	Football = 1,911,000
	Overlap Athletic Fields: Football	56 fields *	210	Football = 2 games X 2 teams X 25 players = 100	21,000	
	Overlap Athletic Fields: Soccer/Lacrosse	56 fields *	210	Lacrosse/Soccer 2 games X 2 teams X 15 players = 60	12,600	Soccer = 1,134,000
	* Total athletic field count = 69 multiuse fields & 112 overlap fields - for demand study, estimate spring season, 1/2 fields soccer & 1/2 fields lacrosse, fall season, 1/2 fields soccer & 1/2 fields football					
Baseball	Baseball Diamonds	107 fields **	210	2 games X 2 teams X 15 players = 60	12,600	Baseball = 1,348,200
Softball	Softball Diamonds	106 fields **	210	2 games X 2 teams X 15 players = 60	12,600	Softball = 1,335,600
	** Total Ball diamond count is 213 fields - many have skinned infields so can be used in multiple infield dimensions. For purpose of study, assign 107 to baseball and 106 to softball.					
Basketball	Basketball Courts - Outdoor	182 courts	210	3 games x 2 teams X 12 players = 72	15,120	Basketball = 2,751,840
Tennis	Tennis Courts - Outdoor	166 courts	210	(8 games x 4 players) = 32	6,720	Tennis = 1,115,520
Swimming	Outdoor Swimming Pool	5 park pools	90	1500/day	135,000	Pools = 2,520,000
	Outdoor Swimming Pool	14 walk-to pools	90	750/day	67,500	
	Indoor Swimming Pool	3 Indoor Pools	313	1500 / day	469,500	
Playgrounds	Playgrounds	224 locations	210	50 visit / day	10,500	Playgrounds = 2,352,000
Golf	Golf Courses	4.5 courses	270	450 players / day	121,500	Golf = 547,750
Picnics	picnic tables	150 tables	210	8 people/ table	1,680	Picnics = 252,000
Ice Skating	Mt Pleasant Rink	2 sessions/ day	360	300 / day	108,000	Ice Skating = 262,800
	Mimi De Pietro Rink	2 sessions/ day	130	300/ day	39,000	
	Broadway Rink	3 sessions/day	90	200/ day	18,000	
Ice Hockey	Mt Pleasant Rink: Ice Hockey & Broomball Teams	1 session/day	360	10 games / day x 30 players each game = 300 players	108,000	Ice Hockey = 162,000
	Mimi De Pietro Rink: Ice Hockey & Broomball Teams	2 session/ day	130	10 games / day x 30 players each game = 300 players	39,000	
Skateboarding	Skating: Skateboard Park	1 skate park	270	50 people/ hour x 8 hrs = 400 users/ day	108,000	Skateboards = 108,000
Festivals	Small Festival Locations in Parks	9 locations	20	10,000 festival	200,000	Festivals = 25,800,000
	Large Festival Locations in Parks	6 locations	20	200,000 festival	4,000,000	

Table 3.6: Baltimore City Department of Recreation and Parks: Demand Report 2005

A	B	C	D	E	F	G	H	I	J	K
Activity	Individual Participation Rate - State Survey Data	Individual Frequency Rate - State Survey	Current Population	Current Demand	2010 Population	2010 Demand	2015 Population	2015 Demand	2020 Population	2020 Demand
	State table D.4	State Table D.4	Planning	B x C x D	Planning	F x B x C	Planning	H x B x C	Planning	J x B x C
Field Sports			651,154		652,995		652,360		653,995	
Football	0.094	12.33	651,154	754,700	652,995	756,834	652,360	756,098	653,995	757,993
Soccer/Lacrosse	0.06	13.65	651,154	533,295	652,995	534,802	652,360	534,282	653,995	535,621
Baseball	0.087	16.09	651,154	911,504	652,995	914,081	652,360	913,193	653,995	915,481
Softball	0.067	11.19	651,154	488,189	652,995	489,569	652,360	489,093	653,995	490,319
Basketball	0.186	23.58	651,154	2,855,883	652,995	2,855,883	652,360	2,855,883	653,995	2,855,883
Tennis	0.06	16.35	651,154	638,782	652,995	640,588	652,360	639,965	653,995	641,569
Swimming in Pools	0.366	10.15	651,154	2,418,971	652,995	2,425,811	652,360	2,423,452	653,995	2,429,526
Playgrounds	0.348	10.01	651,154	2,268,281	652,995	2,274,695	652,360	2,272,483	653,995	2,278,178
Golf	0.052	12.89	651,154	436,455	652,995	437,689	652,360	437,263	653,995	438,359
picnics	0.299	3.41	651,154	663,910	652,995	665,787	652,360	665,139	653,995	666,806
Ice Rink - Skating	0.069	6.08	651,154	273,172	652,995	273,944	652,360	273,678	653,995	274,363
Ice Rink - Hockey	0.003	38.33	651,154	74,876	652,995	75,087	652,360	75,014	653,995	75,202
Skateboard	0.023	18.33	651,154	274,520	652,995	275,296	652,360	275,028	653,995	275,717
Small & Large Festivals	0.604	2.79	651,154	1,097,298	652,995	1,100,401	652,360	1,099,330	653,995	1,102,086

Table 3.7: Baltimore City Department of Recreation and Parks: Needs Analysis Report 2005

Activity	Current Supply (Field or Facility #)		Annual Carrying Capacity	Current Demand	Current Difference	2010 Demand	2010 Unmet Demand	2015 Demand	2015 Unmet Demand	2020 Demand	2020 Unmet Demand
Field Sports											
Football	1,911,000	91	21,000	754,700 (36)	55 extra fields	756,834 (36)	55 extra fields	756,098 (36)	55 extra fields	757,993 (36)	55 extra fields
Soccer/Lacrosse	1,134,000	90	12,600	533,295 (43)	47 extra fields	534,802 (43)	47 extra fields	534,282 (43)	47 extra fields	535,621 (43)	47 extra fields
Baseball	1,348,200	107	12,600	911,504 (73)	34 extra fields	914,081 (73)	34 extra fields	913,193 (73)	34 extra fields	915,481 (73)	34 extra fields
Softball	1,335,600	106	12,600	488,189 (39)	67 extra fields	489,569 (39)	67 extra fields	489,093 (39)	67 extra fields	490,319 (39)	67 extra fields
Basketball	2,751,840	182	15,120	2,855,883 (189)	7 courts needed	2,855,883 (189)	7 courts needed	2,855,883 (189)	7 courts needed	2,855,883 (189)	7 courts needed
Tennis	1,115,520	166	6,720	638,782 (95)	71 extra courts	640,588 (96)	70 extra courts	639,965 (96)	70 extra courts	641,569 (96)	70 extra courts
Swimming in Pools	2,520,000	22		2,418,971		2,425,811		2,423,452		2,429,526	
Outdoor Pools		5	135,000		Current Supply exceeds demand		Current Supply exceeds 2010 demand		Current Supply exceeds 2015 demand		Current Supply exceeds 2020 demand
Walk to Pools		14	67,500								
Indoor Pools		3	469,500								
Playgrounds	2,352,000	224	10,500	2,268,281 (216)	8 extra playgrounds	2,274,695 (217)	7 extra playgrounds	2,272,483 (217)	7 extra playgrounds	2,278,178 (217)	7 extra playgrounds
Golf	547,750	5	121,500	436,455	Current Supply exceeds demand	437,689	Current Supply exceeds 2010 demand	437,263	Current Supply exceeds 2015 demand	438,359	Current Supply exceeds 2020 demand
picnics	252,000	150	1,680	663,910 (395)	need 245 picnic tables	665,787 (396)	need 246 picnic tables	665,139 (396)	need 246 picnic tables	666,806 (397)	need 247 picnic tables
Ice Rink - Skating	262,800			273,172	Excess demand is 10,372 units, less than 10% of the capacity of another ice rink	273,944	Excess demand is 10,372 units, less than 10% of the capacity of another ice rink	273,678	Excess demand is 10,878 units, which is less than 10% the capacity of a new ice rink	274,363	Excess demand is 11,563 units, which is 10% of the capacity of a new ice rink
Mt Pleasant		1	108,000								
Mimi de Pietro		1	39,000								
Broadway		1	18,000								
Ice Rink - Hockey	162,000			74,876	Current Supply exceeds demand	75,087	Current Supply exceeds 2010 demand	75,014	Current Supply exceeds 2015 demand	75,202	Current Supply exceeds 2020 demand
Mt Pleasant		1	108,000								
Mimi de Pietro		1	39,000								
Skateboard	108,000	1	108,000	274,520	1 skatepark needed	275,296	1 skatepark needed	275,028	1 skatepark needed	275,717	1 skatepark needed
Festivals	25,800,000			1,097,298	Current Supply exceeds demand	1,100,401	Current Supply exceeds 2010 demand	1,099,330	Current Supply exceeds 2015 demand	1,102,086	Current Supply exceeds 2020 demand
Small Sites		9	200,000								
Large Sites		6	4,000,000								

Table 3.8: Acquisition, Development and Renovation Recommendations for Baltimore City

Baltimore City Park Improvement Project	Description of Land Preservation & Recreation Recommendation	Estimated Total Cost	Acres to be acquired	Estimated Short-Range Costs (2006-2010)			Estimated Mid-Range Costs (2011-2015)			Estimated Long-Range Costs (2016-2020)		
				Acquisition	Capital Development	Rehabilitation	Acquisition	Capital Development	Rehabilitation	Acquisition	Capital Development	Rehabilitation
	8 programs in the Baltimore City CIP planning process											
Recreation Center Renovations: Project scope ranges from individual roof or HVAC system replacements to comprehensive interior/exterior renovation of existing centers including ADA upgrades	Recreation Center Renovation	Average yearly investment \$1,600,000				\$8,100,000			\$12,500,000			\$12,500,000
Recreation Center Replacement/Expansion: Project examples include demolition and replacement of old fieldhouses (\$2,000,000) or expansion of existing well used facilities such as the Middle Branch Rowing Club (\$1,500,000)	Recreation Center Replacement & Expansion	Individual projects average \$1,000,000			\$7,900,000			\$10,000,000			\$10,000,000	
Renovation of existing park features and infrastructure including upgrades to community parks and continuing implementation of Master Plans for the city's major historic parks (Druid Hill, Patterson, Carroll, Clifton, Gwynns Falls, and Cylburn Arboretum)	Park Renovation for Regional Parks, Community Parks & Neighborhood Parks	Individual park projects average \$500,000				\$29,700,000			\$30,000,000			\$30,000,000
Street Tree Planting:	Park Renovation	\$300,000/year			\$1,400,000			\$1,500,000			\$1,500,000	
Jones Falls Greenway Design & Construction	Park Renovation	\$10,000,000			\$10,000,000							
Herring Run Greenway Design & Construction	Park Renovation	\$6,000,000						\$6,000,000				
Renovation of existing Swimming Pools, Bath Houses and conversion of wading pools to spray pads	Swimming Pool & Bath House Renovation	Average yearly investment \$750,000				\$4,100,000			\$5,000,000			\$5,000,000
Renovation of school or park playgrounds: estimate \$150,000 per site/20 sites/year	Playground Renovation	Average project \$120,000/site				\$5,400,000			\$5,000,000			\$5,000,000
Tennis & basketball court and athletic field renovation:	Athletic Courts and Fields Renovation	Average project \$30,000/ site				\$1,500,000			\$2,500,000			\$2,500,000
Baseball field renovaton for complex development; estimate 1-3 complex/5years	Athletic Courts and Fields Renovation	Average project \$150,000/site			\$4,100,000			\$5,000,000			\$5,000,000	
Park building renovation: Historic Park Mansions, park comfort stations, etc	Park Building Modernization	Individual projects average \$250,000				\$2,100,000			\$2,000,000			\$2,000,000
Passive Park Renovation: Est 1 site/year	Plaza, Fountain & Median Renovation	Individual projects average \$200,000				\$1,100,000			\$1,000,000			\$1,000,000
Small parcel acquisition opportunities & greenway easements: Land values vary greatly - wooded parcels average \$70,000/acre	Land Acquisition	Average undeveloped parcel \$70,000/ acre	15 acres over 15 years	\$350,000			\$500,000			\$500,000		
Total estimated investments in Open Space (5 year funding cycle):				\$350,000	\$23,400,000	\$52,000,000	\$500,000	\$22,500,000	\$58,000,000	\$500,000	\$16,500,000	\$58,000,000