



Chapter II: Sector Area Character Analysis

Historical Overview

The history of the plan area is closely linked to the growth of the City of Bowie, the development of Bowie State University (BSU), and the establishment of the Patuxent Research Refuge.

The City of Bowie grew out of the Huntington subdivision, a small but important settlement platted in 1870 along the Pope's Creek Branch and Washington Branch rail lines. The subdivision was officially named Huntington when it incorporated in 1874, and renamed Bowie in 1916 in honor of its most prominent resident, Oden Bowie—the former Governor of Maryland and then President of the Baltimore and Potomac Railroad.

The origins of present-day Bowie State University date to 1865, when the Baltimore Association for the Moral and Educational Improvement of Colored People opened the first school in Baltimore, Maryland. The school was reorganized in 1883 and relocated to a 187-acre tract in Prince George's County (its current location) in 1914, at which time it began to be referred to as the Maryland Normal and Industrial School at Bowie. The school introduced a liberal arts program in 1963 and changed its name to Bowie State College. With the expansion and diversification of its educational offerings, the college became a university in 1988.

While the growth of Bowie State University and the City of Bowie has attracted residential and institutional development to the plan

area, the Patuxent Research Refuge has served as a natural growth boundary to the north. The Research Refuge is one of over 540 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service and dedicated to the protection of wildlife and its habitat. Established in 1936, the refuge has expanded from 2,670 acres to its present size of over 12,840 acres, thus limiting development in the northeastern corner of Prince George’s County and the southwestern corner of Anne Arundel County.

The Sector Plan Area Today

The plan area, comprising approximately 2,300 acres, is distinguished by three seemingly divergent sets of features—a regional rail stop, a university, and a picturesque, rural character with abundant open space. **(See facing page for Map II-1: Existing Land Use.)** Notably, the Bowie State MARC Station and BSU have not undercut the area’s rural setting, but have integrated into it. Continuing to balance these features, by facilitating the growth of the university while preserving the rural character of the area, will be critical to implementation of the plan area’s vision.



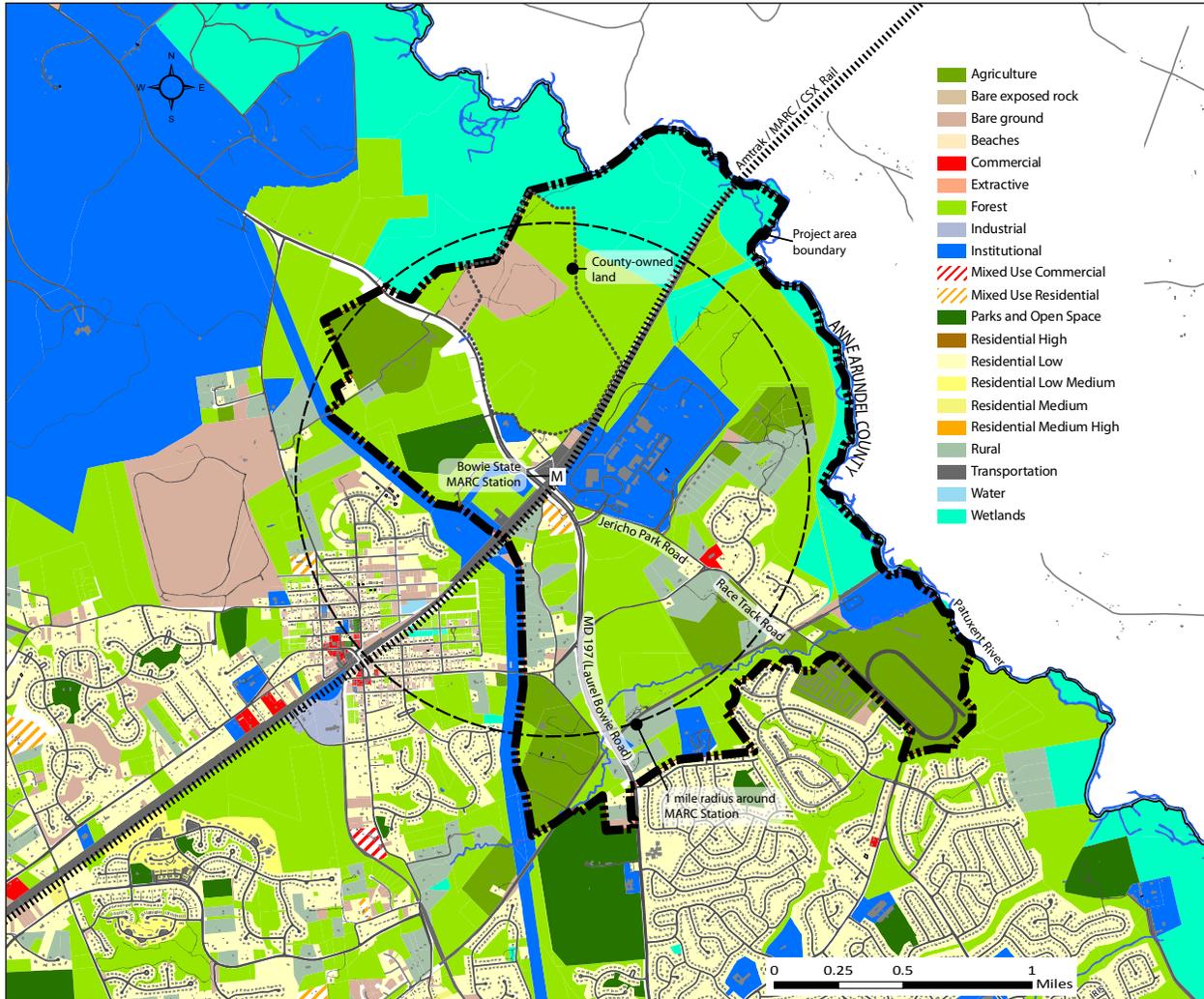
Large-lot single-family homes and new clustered subdivisions define the area’s rural residential character.

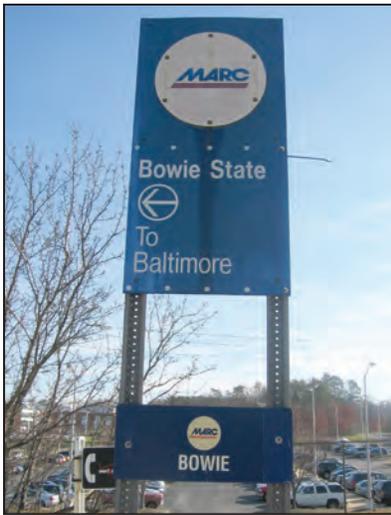
The Patuxent River, abundant forestland, wetlands, and recreational areas, coupled with secluded large-lot single-family homes and new clustered subdivisions, define the plan area’s rural character.

Approximately 75 percent of the area lies within the Rural Tier with predominantly narrow, winding roads, and the plan area has experienced limited new development. There are currently no retail amenities (the closest are located in Old Town Bowie) and commercial activity is limited in the plan area. The existing commercial uses, with the exception of the Bowie Race Track, are generally discrete and of low visibility from the major thoroughfares—MD 197 and Race Track Road.

The relatively modest use of the Bowie State MARC Station stop and the historically commuter-oriented nature of Bowie State University (BSU) have naturally helped to curb development interest and to retain the prevailing character of the plan area. However, both of these facts are expected to change in the near- to mid-term. BSU is actively

Map II-1: Existing Land Use





TOP RIGHT: The historically commuter-oriented nature of Bowie State University has naturally helped limit development in the area.
ABOVE: The Bowie State MARC Station is a critical, but undervalued asset to the area.

planning to expand its programs, facilities, and enrollment and to evolve into a more traditional campus-based university. Meanwhile, the Maryland Transit Authority (MTA) proposes to increase the frequency of MARC rail service during peak hours and to introduce service during weekends, markedly enhancing its appeal as a viable alternative mode of transportation. Both of these changes underscore the need for development to be carefully managed and designed in concert with the area’s environment and rural character.

Demographic and Market Profile

In 2007 the plan area was home to approximately 9,500 residents and 2,900 households. A steady growth in population and households occurred in the Washington D.C. Metropolitan Statistical Area (MSA), Prince George’s County, and the Bowie State MARC Station Sector Plan study area from 2000 to 2007, as shown in **Table II-1**. The median household income remained consistent, keeping pace with inflation and indicating steady earning power over the past seven years.

Table II-1: Population and Household Trends

Year	Washington DC MSA			Prince George’s County			Study Area ¹		
	2000	2007	Annual Growth	2000	2007	Annual Growth	2000	2007	Annual Growth
Claritas									
Population	4,796,183	5,367,465	1.7%	801,515	855,972	1.0%	8,203	9,451	2.2%
Households	1,800,263	2,029,059	1.8%	286,610	306,519	1.0%	2,496	2,869	2.1%

¹The sector plan study area comprises a two-mile radius from the center of the defined sector plan area.

Source: Claritas, RCLCO

Between the years 2000 and 2007 the percentage of the prime working-age population (ages 25 to 44) in the study area was fairly consistent with the rest of the county and the Washington D.C. metropolitan statistical area (MSA), registering only moderate decreases. A slight projected continued decrease in the prime working-age population is anticipated across all three regions in 2012.

Table II–2: Age Distribution by Households

Year	Washington DC MSA			Prince George’s County			Study Area ¹		
	2000	2007	2012	2000	2007	2012	2000	2007	2012
Under 15	21.3%	20.9%	20.4%	22.7%	22.2%	21.5%	23.2%	22.8%	22.0%
15-24	12.7%	13.0%	13.3%	14.5%	14.8%	14.6%	15.3%	18.4%	18.6%
25-34	16.1%	14.0%	12.8%	15.7%	13.6%	12.8%	11.3%	8.6%	10.0%
35-44	17.9%	15.9%	14.0%	17.3%	15.4%	13.6%	20.1%	15.6%	10.8%
45-54	14.5%	15.3%	15.5%	13.7%	14.6%	14.9%	14.1%	15.8%	16.3%
55-64	8.5%	11.2%	12.6%	8.4%	10.5%	11.8%	9.0%	11.3%	12.8%
65-74	4.9%	5.5%	7.0%	4.6%	5.4%	6.8%	4.4%	4.7%	6.4%
75 and over	4.1%	4.2%	4.4%	3.1%	3.5%	4.0%	2.7%	3.0%	3.2%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

¹The sector plan study area comprises a two-mile radius from the center of the defined sector plan area.

Source: Claritas, RCLCO

The median household income of Washington, D.C., Prince George’s County, and the Bowie State MARC Station area increased between the years 2000 and 2007, keeping pace with inflation at roughly three percent per year, indicating a steady earning power as shown in **Table II–3**. In 2007, the household income for the Bowie State MARC Station area was \$102,764, compared to \$66,258 for the county, and \$76,534 for the Washington, D.C., MSA. The relatively high annual household income reflects the high paying white collar jobs of area residents. The disparity between the Bowie State MARC Station Sector Plan region and the county’s median household income is significant and is projected to increase by an additional 13 percentage points by 2012.

Table II–3: Income Distribution by Households

Year	Washington DC MSA			Prince George’s County			Study Area ¹		
	2000	2007	2012	2000	2007	2012	2000	2007	2012
Less than \$15,000	8.3%	6.7%	5.9%	8.0%	6.7%	6.1%	2.1%	1.4%	1.2%
\$15,000–\$24,999	6.9%	5.2%	4.5%	8.1%	6.0%	5.2%	4.1%	2.6%	2.1%
\$25,000–\$34,999	9.0%	6.7%	5.6%	11.2%	8.4%	7.0%	3.6%	2.3%	2.5%
\$35,000–\$49,999	14.0%	11.9%	10.3%	16.9%	14.8%	13.2%	11.0%	7.6%	4.9%
\$50,000–\$74,999	21.1%	18.7%	17.3%	23.5%	21.7%	20.5%	21.8%	15.7%	14.2%
\$75,000–\$99,999	15.1%	15.4%	14.9%	15.3%	16.2%	15.9%	23.2%	18.6%	16.5%
\$100,000–\$124,999	9.2%	11.8%	12.2%	7.6%	10.9%	12.2%	15.9%	18.4%	16.5%
\$125,000–\$149,999	6.1%	8.0%	9.2%	5.1%	7.3%	8.1%	9.3%	13.3%	14.4%
\$150,000–\$199,999	5.0%	7.6%	9.3%	2.4%	4.5%	6.4%	6.4%	12.8%	15.4%
\$200,000 and over	5.2%	8.1%	11.0%	1.8%	3.5%	5.4%	2.5%	7.5%	12.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Median HH Income	\$63,992	\$76,534	\$85,926	\$56,134	\$66,258	\$72,607	\$82,927	\$102,764	\$113,940

¹ The sector plan study area comprises a two-mile radius from the center of the defined sector plan area.

Source: Claritas, RCLCO

The greatest demographic shift in the Bowie State MARC Station Sector Plan area will be the growth of the BSU faculty and student population. The changes at BSU over the next 20 to 25 years will create strong demand for new housing on campus and adjacent to campus while driving future demand for new retail offerings.

Area Characteristics

This section provides a market assessment of the future development opportunities within the Bowie State MARC Station plan area, with a particular focus on the 250-acre community center site, 219 acres of which is county-owned property proposed to be conditionally transferred to Bowie State University upon the adoption of this sector plan. To determine the area's development potential, the assessment analyzed the area's characteristics, regional context, economic and demographic trends, and demand and supply conditions for each type of prospective land use.

The assessment concluded that three market forces will drive the demand potential in the Bowie State MARC Station plan area—and at the community center in particular:

- Local-serving retail and commercial demand from within a one- and three-mile radius.
- The potential to leverage the MARC Station as a mass transit opportunity to bring people to the area.
- The current and future demand driven by Bowie State University.

The market analysis found support for a diverse community center with a mix of residential uses (including higher-density multifamily housing in the center's core), a small but vibrant university-oriented retail cluster, some supportive local-serving office, and various other university-driven academic, office, and recreational uses.

Market Assessment

During the past two decades, the Bowie State MARC Station plan area has served primarily as a bedroom community to the Washington metropolitan area, offering limited services and employment. Located primarily in the Rural Tier, the plan area is surrounded primarily by low-density residential neighborhoods and open space.

Development within the Washington metropolitan area has historically extended northwest out of Washington, D.C., into suburban Maryland and more recently into Virginia along the Rosslyn-Ballston Metro corridor. This path of development follows convenient Metro access, high-property values, and proven demand for higher density residential and commercial development. The Bowie State MARC Station plan area is not within this natural path of development in the region due to its rural character, environmental features, and distance from major commercial centers. Significant competition from existing and emerging, large-scale development centers, such as Greenbelt, Konterra, New Carrollton, and Odenton Town Center, have solidified its rural character. Furthermore, while the shifting of jobs and, to a lesser degree, of households prompted by the Base Realignment and Closure Act (BRAC)¹ will impact the region, it is not anticipated the plan area will naturally attract a significant share of this growth.

¹ The congressionally authorized process the Department of Defense used to reorganize its base structure to more efficiently and effectively support our forces, increase operational readiness, and facilitate new ways of doing business.

BSU's proposed expansion in enrollment up to a total of 12,000 students offers an unparalleled opportunity to transform the university from a commuter school to a campus-based university with a significant full-time, on-campus student population.

Two key assets distinguish the plan area and have the potential to attract growth—Bowie State University (BSU) and the MARC Station. The oldest historically black college/university in Maryland, BSU has a diverse student and faculty mix. BSU had a total enrollment of just over 5,200 students in the 2006-2007 academic years, with 25 percent of students living on campus, compared to approximately 33 and 30 percent at Morgan State University and the University of Maryland respectively. This modest proportion of campus residents, coupled with a proposed expansion in enrollment up to a total of 12,000 students, of whom the university would like to house at least 35 percent by 2030, offers an unparalleled opportunity to transform BSU from a commuter school to a campus-based university with a significant full-time, on-campus student population. The introduction of new degree programs and the diversification of student recruitment to areas outside the local region will also play a critical role in BSU's growth.

A projected increase in levels of service and ridership will make MARC stations stronger drivers of demand for higher density, mixed-use development in the mid- (6–10 years) to long-term (11–plus years).

The area's second, underutilized asset is the Bowie State MARC Station—a potential site for transit-oriented development (TOD). TODs create opportunities for higher-density, mixed-use development around transit nodes and are attractive investment prospects for developers. While commuter rail (MARC and Virginia Railway Express) stations have not experienced similar interest from developers as have Metrorail stations (due to markedly lower ridership levels and limited, commuter-oriented service), a projected increase in levels of service and ridership will make MARC stations stronger drivers of demand for higher density, mixed-use development in the mid- (6–10 years) to long-term (11–plus years).

Residential Market

The current and future residential growth in Prince George's County, particularly in multifamily housing, is focused in existing and emerging General Plan designated centers typically near major transportation networks such as highways and Metro stations. The sector plan area is expected to capture only a limited share of residential growth in the near and mid-term. Given the prevailing single-family detached character of Bowie, the shift to a higher density development will be gradual and will require a significant evolution in the market. While BRAC and TOD offer potential future growth for the greater Washington metropolitan area the ability of the study area to capture any of this growth will be modest.

The market analysis concluded that the area's residential opportunities will be primarily driven by future planned growth of BSU's campus and student body, as well as the ability to leverage the MARC Station in the near and mid-term. The ease of commuting into the District of Columbia and points north will also generate market opportunities to sell or rent to consumers seeking a convenient commute and the amenities offered in close proximity to a college campus.

Development opportunities consist of lower-density and surface-parked multifamily residential development (e.g., university-owned student

housing and student-oriented apartments) in the near-term. There is also longer-term potential for higher-density, mid-rise, structure-parked multifamily product (e.g. apartments, condominiums). Housing that targets students specifically, for example private development that offers dorm-style units and living environment, will be a strong opportunity as BSU continues to grow and evolve by providing easily accessible, low-cost housing near the campus.

In addition to the ability to attract higher-density housing opportunities, there is also an opportunity to deliver urban-style single-family detached and attached housing on smaller lots in a transit-oriented setting. Offering a mix of housing types to serve a variety of markets—including faculty, staff, and other households who would value proximity to a college environment—will be a critical component to sustaining a vibrant college-town environment and fulfilling the vision for the plan area.

Retail Market

Future development at the community center envisaged by this plan has the potential to spawn spin-off demand for Old Town Bowie as a complementary node of activity. The principal prerequisites are enhanced physical connectivity between the two areas and sufficient density at the community center.

The current and future retail growth in the county is focused in the existing and emerging centers. These centers include Greenbelt, New Carrollton, Laurel, and Konterra, where easy roadway and transit access and high visibility, along with significant traffic counts, make these areas highly desirable to retailers. Locally, the MD 301 corridor, especially around the MD 450 and MD 50 intersections a few miles south of the sector area, has a significant amount of community and neighborhood-serving retail. Yet, very little retail exists within a three-mile radius of the Bowie State MARC Station.

Retail trade areas around the Bowie State MARC Station area (one and three-mile radii) will generate significant retail demand, although with modest household growth in these areas the depth of demand will not change significantly by 2015. Much of this demand will undoubtedly travel to the existing large retail cores just outside the three-mile radius, especially since many of the households within the radius are located at its southern edge and thus just one to two miles away from these retail offerings. Development at Bowie State MARC Station will provide an opportunity to serve a modest share of this demand by establishing a neighborhood-serving community center focused on staple and convenience goods and services.

The 2006 Bowie and Vicinity Master Plan recognizes that there is a significant opportunity to revitalize Old Town Bowie as mixed-use village supporting a niche retail market. This plan's community center is intended to complement rather than compete with the larger Bowie Town Center core and the niche retail cluster of Old Town Bowie. While Old Town Bowie has struggled as a commercial area, particularly with the retail development on MD 197, future development at the community center has the potential to spawn spin-off demand for Old Town Bowie as a complementary node of activity. The principal prerequisites for this to occur are enhanced physical connectivity between the two areas and sufficient density at the community center.

Support for retail space at the community center will be driven by the presence of BSU, including full-time students living on campus and just off campus, as well as faculty, staff, and visitors. The types of desired stores should include convenience goods, boutique and specialty goods, health and personal care products, limited-service and full-service restaurants, and a small grocery store. Over time, it is anticipated that the university-oriented niche retail development, leveraged by the demand from the broader market, would foster a small-scale destination for students and faculty and attract additional mixed-use development.

Office Market

Compared to other markets in the Washington metropolitan area, the office market in Prince George’s County is characterized by its affordable nature, older buildings, suburban environment, and its appeal to primarily small- to mid-size firms. With existing and

While the presence of the MARC Station in the plan area could foster a compelling market location, especially if land prices and/or rents are very competitive, establishing a new office center is challenging and would likely require a non-market catalyst such as a large governmental user.

emerging office centers projected to continue growing and capturing the largest share of future county office space development, there will be limited opportunities for new locations to emerge. Currently, there are four large planned projects in Prince George’s County that include nearly 5 million square feet in College Park, 1.3 million square feet in New Carrollton, and 1.4 million square feet in both Landover and Largo. With the development of the Intercounty Connector (ICC) and the emergence of the Konterra development (with another 4 million square feet planned), the demand for new office development in Prince George’s County is extremely limited.

The existing office market in Bowie, including the Bowie Corporate Center and the Maryland Science and Technology Center/Melford, consists of 378,000 square feet—220,000 square feet of Class A, 157,000 square feet of Class B, and 11,200 square feet of Class C office space²—and is located adjacent to MD 50, near its junction with MD 301. It is anticipated that most local office development will continue to co-locate in this area given its proximity to major roadways. While the presence of the MARC Station in the plan area could foster a compelling market location, especially if land prices and/or rents are very competitive, establishing a new office center is challenging and would likely require a non-market catalyst such as a large governmental user. Office demand could also be stimulated by three other drivers: growth and expansion of the BSU campus; potential private sector spin-offs generated by future university-related applied research; and local-serving office users, such as medical offices, brokers, realtors, and small professional service firms that rely on visibility and traffic. As a result of the needed visibility, the local-serving office potential, relative to larger offices cores, is limited—typically 20,000 to 50,000 square feet of space.

Hospitality Sector

The hospitality sector in Prince George’s County is well supplied with a range of hotels. The existing supply consists of economy through upper upscale hotels located in prime locations—adjacent to major highways and roadways and near existing retail and office cores in the county. Near the Bowie State MARC Station study area, existing hotels are concentrated adjacent to Bowie Town Center, MD 301, and MD 50, the broader area’s key transportation, retail and office cores.

² Class of property refers to a subject rating of buildings, primarily by desirability among tenants and investors. The typical criteria that factor into a property’s class are age, location, the attractiveness of the building, and maintenance. Class A properties typically refer to newer properties in strong locations, whereas Class C properties refer to buildings that are older, less well-maintained, and may soon be functionally obsolete for tenants.

Market analysis conducted for this sector plan concludes that, given the plan area's remote location, distance from major thoroughfares, lack of proximity to retail and employment cores, and BSU's current enrollment, the near-term opportunity for the area is very limited. Traditionally, universities that have been able to support on-campus hotels have had in excess of a 20,000+ student enrollment, with a large alumni base returning to campus regularly, significant research activities, spin-off businesses adjacent to campus, a large number of visiting national and international guest lecturers, and sizeable on-campus athletic and cultural offerings. Bowie State University is primarily a commuter school and generates very limited demand for overnight visitors requiring hotel rooms. With BSU's desire to expand its campus and change the university's orientation away from a commuter school, future potential hotel demand could develop in the medium- to long-term. In the interim, BSU could explore the possibility of providing short-term rentals to visiting faculty or families in university owned and managed units in the community center.

Infrastructure Elements

Transportation

As a suburb of the Washington metropolitan area, the plan area has direct access to the region's transportation network: arterials, collectors, and local roads, as well as the Washington Metropolitan Area Transit Authority Metrobus and the Maryland Area Regional Commuter (MARC) rail.

Transit

The Washington Metropolitan Area Transit Authority (WMATA) provides Metrobus service to parts of the plan area. Several routes run along MD 197 including the B21/B22 (Bowie State University Line) which begins at the New Carrollton Metrorail Station and services the Bowie Town Center along Northview Drive. The B27 route (Bowie-New Carrollton Line) also provides service to BSU; it runs along Lanham Severn Road through Old Town Bowie at the 9th Street/Chapel Avenue intersection, operating weekdays during morning and evening peak periods. Extended service hours are offered during the evening peak. The C29 route, Central Avenue Line, provides limited service to BSU on Saturdays only. Currently, Sunday service is not provided to the plan area, and bus shelters are typically not provided at bus stops.

The Prince George's County Department of Public Works and Transportation (DPW&T) 2008 Draft Five-Year Transit Services Operations Plan (TSOP) outlines an opportunity to improve bus service and operations to the sector plan area. In year four of the TSOP an extension of TheBus MD 15, county bus service, is proposed to provide service between the Bowie State MARC Station and the Greenbelt Metrorail Station with 30-minute headways. Improved weekend service is also anticipated. Additional services and demand will be reviewed each year as part of the TSOP.

MARC

The Maryland Transit Authority (MTA) provides commuter rail service to the Bowie State MARC Station. This station is on the Penn Line, which provides 12 stops at stations between Washington, D.C., Baltimore, and further north to Perryville, Maryland. Forty-seven weekday trains provide 25-minute headways between Washington, D.C., and Baltimore and 45-minute headways to Perryville during peak travel. There are 19,000 daily passenger trips on the Penn Line, with 620 daily boardings at the Bowie State MARC

Station. There are 693 parking spaces at this MARC Station, located on either side of the rail tracks. Parking at the station is near capacity during peak periods. The Maryland Transit Administration Office of Planning forecast parking demand of 700–1,000 total parking spaces by 2030.

A pedestrian tunnel under the tracks provides access from the parking locations to the opposite-direction platform. The pedestrian tunnel is in poor condition and offers an undesirable pedestrian experience, primarily due to inadequate lighting, poor maintenance, and the lack of security.

Proposed improvements throughout the MARC transit system will enhance MARC service and provide additional capacity. The 2007 MARC Growth and Investment Plan reports a six percent growth in daily ridership per year during the past decade, and ridership now exceeds peak-period system capacity. The plan proposes rail service improvements and capacity improvements to support expected growth system-wide. Ridership and service objectives include increasing passenger capacity, increasing peak and off-peak service, providing express/late evening service and implementing weekend service. Additional construction of rail lines between Baltimore and Washington is also planned along the Penn Line. These improvements will enhance MARC service and provide additional capacity.

Roadways

The Bowie State MARC Station area is serviced by the following roadways (see **Map II-2: Existing Roads, page 24**):

- **MD 197 (Laurel-Bowie Road)** is classified as an arterial carrying the largest volume of traffic through the plan area. The 2007 annual average daily traffic (AADT) volume traveling through the sector plan area was 20,320 vehicles. The roadway is a major travel route between Bowie and Laurel, Maryland. Several east-west roadways cross MD 197; intersections in the plan area are at a minimum distance of approximately 1,400 feet from one another. Vehicles traveling from minor approaches (at unsignalized intersections)

Arterials are divided highways with intersections at grade, with geometric designs and traffic controls intended to expedite the movement of through traffic. Direct access to abutting properties may be permitted but is carefully controlled by county regulations and by the statutory authority of the agencies that operate these roadways. Rights-of-way are generally a minimum of 120 feet where underground drainage is provided.

Collectors are multilane or two-lane roadways designed to carry medium-speed traffic between arterial and internal local streets, to provide access to major traffic generators, and to connect residential neighborhoods to major highway systems. Access to abutting properties is usually permitted. Rights-of-way are generally a minimum of 80 feet where underground drainage is provided.

onto MD 197 may experience slight delays due to minimal gaps in traffic flow along the major approach. The speed limit is 45 mph; however, vehicular traffic frequently travels at excessive speeds along the arterial. Additional traffic signals along MD 197 would improve access from collector and local roads and help to control speeding vehicles. The Maryland State Highway Administration (SHA) 2030 long range plans include widening MD 197 from Jericho Park Road to the Baltimore Washington Parkway. This section would become a four-lane divided highway with a 150-foot right-of-way. Currently this section of MD 197 is a two-lane, 22-foot roadway with six-foot shoulders and a 60-foot right-of-way. Note: Planned roadway widening is based on land use planning with Prince George's County and 2030 traffic forecasting. Widening of MD 197 is not currently funded.

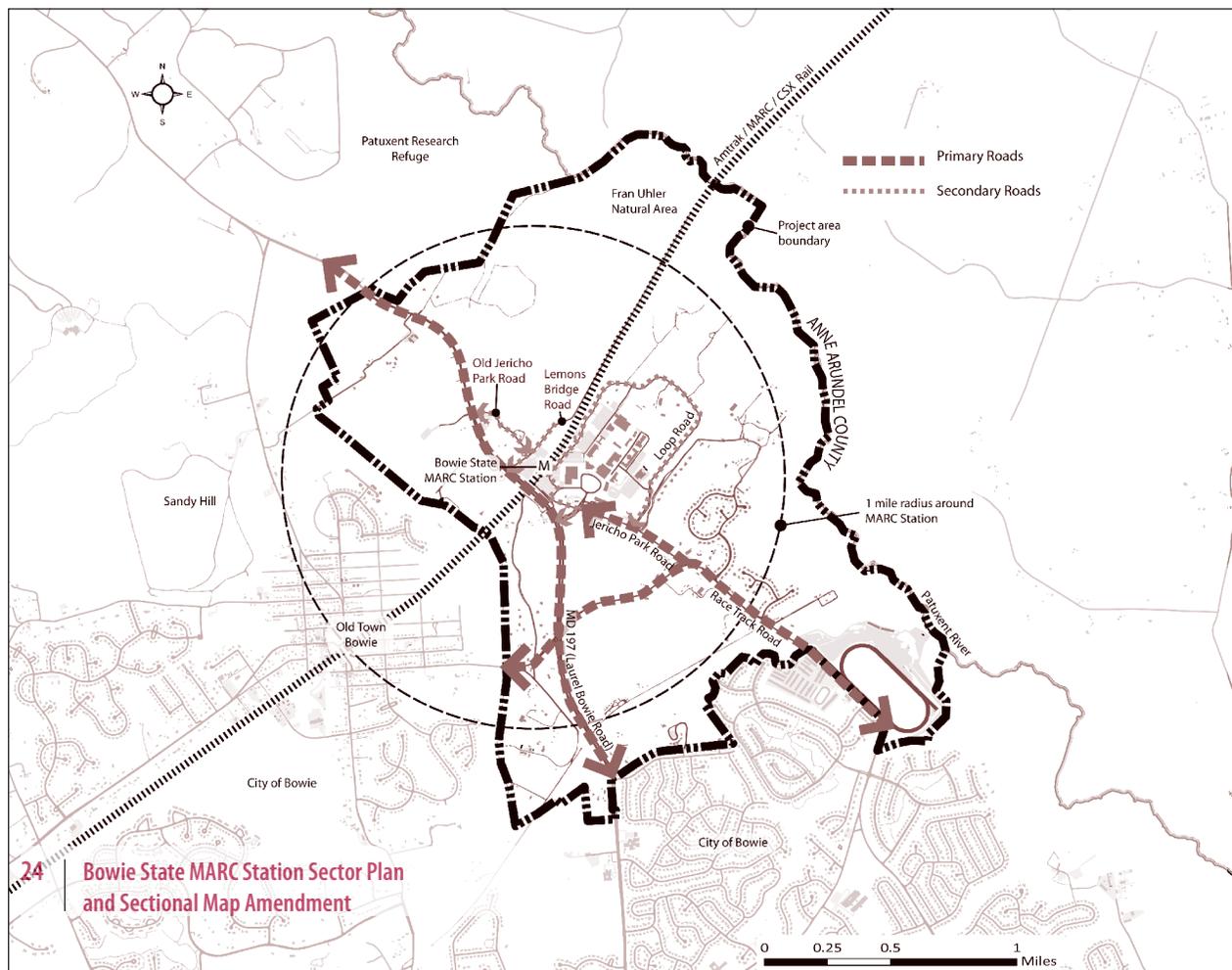
- **Race Track Road** is a collector carrying approximately 8,800 vehicles per day. It is a prime commuter route for area residents accessing Crain Highway (MD 3) via MD 450.

Local Roads are two-lane roadways that provide access to, from, and through developed areas. On these roadways, the street space is valuable for bicycle and pedestrian movement and parking as well as for vehicular movement. Rights-of-way for industrial and commercial roadways are generally 70 feet. Primary and secondary residential roadways utilizing curbs and gutters are 60 and 50 feet respectively, while 60 feet is generally the minimum for a residential roadway utilizing open drainage.

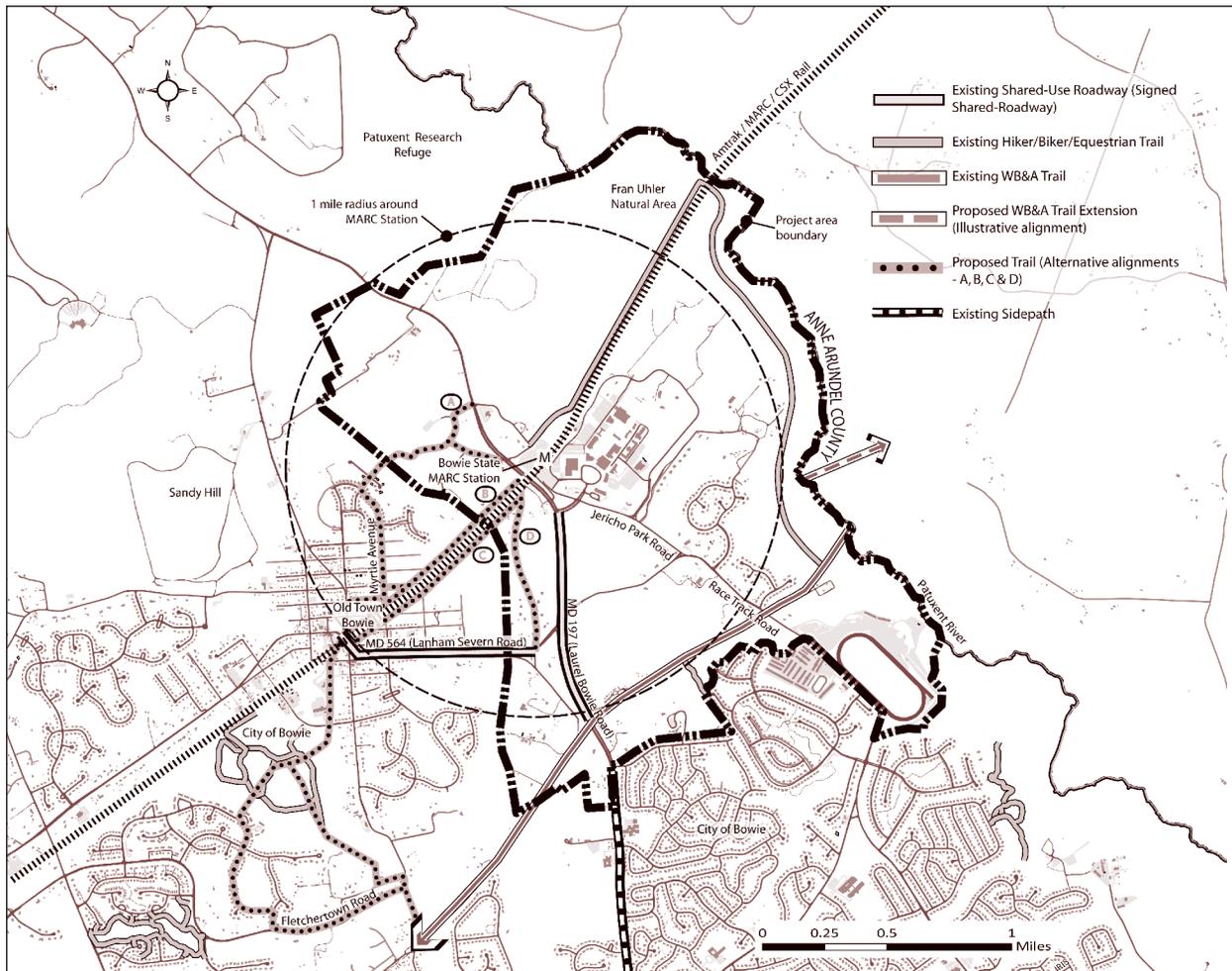
Race Track Road transitions to 11th Street (MD 564) west of MD 197 and provides direct access to Old Town Bowie. The Race Track Road/MD 197 intersection is a main connection to Old Town Bowie, accommodating double left turning lanes for vehicles traveling northbound onto Race Track Road. Some residents have expressed concerns regarding vehicles speeding along Race Track Road as they approach this intersection, confusing pavement marking, and the lack of signage on eastbound travel lanes from 11th Street. Residents have noted that turn movements and corresponding lane assignments are not clearly marked.

- **Jericho Park Road** is a north-south local street. The street provides secondary access to Bowie State University via Loop Road. Jericho Park Road and Race Track Road form a T-intersection, with Race Track Road serving as the major approach and Jericho Park Road as the minor approach controlled by stop signs. Residents have identified this intersection as dangerous and have suggested that the safety of the intersection is hampered by the location of MARC parking on the south side of the Bowie State MARC Station. The large volume of vehicles leaving the MARC Station's southern parking lot on evening peak periods and heading towards Race Track Road is cited as the main factor in safety concerns about the intersection.
- **Lemon's Bridge Road, Old Jericho Park Road and Old-Laurel Bowie Road** are key unsignalized intersections along MD 197. Field observations and critical lane volume analyses indicate all major approaches at area intersections operate at or above the acceptable level of service.

Map II-2: Existing Roads



Map II-3: Existing Trails



Trails and Bikeways

The plan area is distinguished by several prominent trail networks that run along local trails and area roads. Concentrated in the southern section of the project area, these networks comprise the Washington, Baltimore and Annapolis Trail (WB&A), which serves as a segment of the East Coast Greenway and the American Discovery.

The WB&A Trail runs along the site of the former Washington, Baltimore and Annapolis Railroad. The 5.6-mile, 10-foot wide bituminous trail extends from MD 450 in Glenn Dale to the Patuxent River and includes five bridge crossings, two tunnel crossings, and two at-grade intersections. Extension of the trail across the Patuxent River is planned to fill the existing gap and connect with the WB&A Trail in Anne Arundel County to provide a direct scenic link between the neighboring counties.

The East Coast Greenway is the nation's first long-distance urban trail system. By connecting existing and planned trails, the Greenway is forging a continuous 3,000-mile

route linking east-coast cities from Maine to Florida. The American Discovery Trail is the nation's first coast-to-coast, non-motorized trail. Its 6,800 miles stretch from Delaware to California; connect five national scenic, 12 national historic, and 29 national recreational trails; lead to 14 national parks and 16 national forests; and provide access to 10,000 sites of historic, cultural, and natural significance.

Network Linkages

Trail linkages are important to enable long-distance biking and to make the area accessible to transit, schools, and recreation. A proposed new trail with important implications for the sector plan area would connect the WB&A with Old Town Bowie, the community center, Bowie State University, and the MARC Station. (See **Map II-3: Existing Trails, on previous page.**) The proposed connection would enhance the accessibility of these sites to local residents, commuters, and students and potentially bolster the economic viability of Old Town Bowie and the community center. Closing the gaps in the trail and on-road bikeway network would reduce the number of vehicles needed to maintain a good quality of life.

Sidewalks

Sidewalks are needed in the plan area. Today, most are located only within the newer residential subdivisions and BSU campus. Pedestrian circulation is hampered by the design and connectivity of local public streets and by speeding vehicles. As a result, the area presents an uninviting and unsafe environment for pedestrian travel, leaving vehicular travel as the preferred transportation mode for short inter-neighborhood trips.

Public Facilities

Schools

The plan area is served by three schools—one elementary, one middle, and one high school—located outside plan area boundaries and operated by Prince George's County Public Schools (PGCPS). **Table II-4** provides information on their names, addresses, building size and acreage.

Table II-4: Prince George's County Public School Facilities that Serve the Bowie State MARC Station Sector Plan Area

Name	Address	Building Size (square feet)	Acreage
Rockledge Elementary School	7701 Laurel Bowie Road, Bowie	56,252	10.0
Samuel Ogle Middle School	4111 Chelmont Lane, Bowie	133,631	9.4
Bowie High School	15200 Annapolis Road, Bowie	283,091	29.5
Belair Annex of Bowie High School	3021 Belaire Drive, Bowie	102,351	16.0

Source: PGCPS 2008 Educational Facilities Master Plan, Form 101.1

Current and Projected Enrollment

The population projections used for determining future school needs were taken from the development program recommendations for the community center in the Vision Chapter of this plan. These projections forecast an increase of 1,139 dwelling units in the community center at buildout. The current pupil yield rates are based on the following factors: (0.24) for elementary school, (.06) for middle school and (.12) for high school. Based on current pupil yield factors, these dwelling units are projected to yield 273 additional elementary school students, 68 additional middle school students, and 137 additional high school students.

All of the schools serving the Bowie State MARC Station Sector Plan area had 2007–08 enrollments exceeding their state-rated capacities. The schools serving the plan area had a deficit of 74 elementary school seats, 47 middle school seats, and 199 high school seats during the 2007–2008 school year (Table II–5). There are two primary reasons for not recommending new construction to address overcrowding of schools serving the project area. First, a forecast loss of 361 students by 2013, mostly at Samuel Ogle Middle School and Bowie High School, is expected to partially offset the existing deficit (Table II–6). The second reason relates to existing school boundaries. When the Maryland Public School Construction Program evaluates systemic capacity to determine the suitability of proposed new schools for state funding, it gives preference to redrawing the boundaries of overcrowded or underutilized schools over encouraging new construction.

Table II–5: Bowie State MARC Station 2007–2008 School Enrollment and Capacity

Elementary Schools				
Name	2007-08 Enrollment	2007 State-Rated Capacity	Percent of Capacity	2007 Available Seats
Rockledge Elementary	503	429	117.2%	-74
Countywide Total	62,923	69,438	90.6%	6,515
Middle Schools				
Name	2007-08 Enrollment	2007 State-Rated Capacity	Percent of Capacity	2007 Available Seats
Samuel Ogle Middle School	897	850	105.5%	-47
Countywide Total	23,896	26,553	90.0%	2,657
High Schools				
Name	2007-08 Enrollment	2007 State-Rated Capacity	Percent of Capacity	2007 Available Seats
Bowie High School*	2,933	2,734	107.3%	-199
Countywide Total	41,074	40,349	101.8%	-725

Source: PGCPs

* Bowie High School enrollment numbers include 9th grade students housed in the Belair Annex.

Table II–6: Bowie State MARC Station 2013 Projected School Enrollment and Capacity

Elementary Schools					
Name	2013 Projected Enrollment	2013 State-Rated Capacity	Percent of Capacity	2013 Available Seats	2007–2013 Enrollment Change
Rockledge Elementary School	530	429	123.54%	-101	27
Countywide Total	73,882	69,438	106.4%	-4,444	10,959

Middle Schools					
NAME	2013 Projected Enrollment	2013 State-Rated Capacity	Percent of Capacity	2013 Available Seats	2007–2013 Enrollment Change
Samuel Ogle Middle School	759	850	89.3%	91	-138
Countywide Total	17,360	26,553	65.4%	9,193	-6,536

High Schools					
Name	2013 Projected Enrollment	2013 State-Rated Capacity	Percent of Capacity	2013 Available Seats	2007–2013 Enrollment Change
Bowie High School*	2,683	2,734	98.1%	51	-250
Countywide Total	35,463	40,349	87.9%	4,886	-5,611

Source: PGCPSS

* Bowie High School enrollment numbers include 9th grade students housed in the Belair Annex.

School Facility Conditions

In 2008, PGCPSS commissioned a detailed analysis (Parsons 3DI Study) of school facilities to identify school-required improvements based upon the age of the schools and the cost of renovation versus replacement. The studies assessed the schools based upon a facilities condition index (FCI) which divides the current cost of repairs by the replacement value. Schools whose FCI is 0-40 percent are considered to be in good condition. Schools with an FCI between 40-75 percent are considered to be in fair condition. Schools with an FCI greater than 75 percent are considered to be in poor condition.

The 2008 study did not measure facilities constructed after 1993. The three schools that serve the plan area, plus the Bowie High School Belair Annex, all rated fair.

Table II–7: School Facility Conditions: 2008 Parsons 3DI Study

Elementary Schools		
Name	2008 3DI FCI	2008 3DI Rating
Rockledge Elementary School	57.11%	Fair

Middle Schools		
Name	2008 3DI FCI	2008 3DI Rating
Samuel Ogle Middle School	61.15%	Fair

High Schools		
Name	2008 3DI FCI	2008 3DI Rating
Belair Annex	68.77%	Fair
Bowie High School	49.83%	Fair

Source: Parsons 3DI, 2008

FCI = Facility Condition Index

NR = Not Reviewed

Recent Capital Improvements

In response to demonstrated needs and the results of a 2001 3DI study, several schools received some recommended capital improvements between 2003–2008. These improvements are listed in **Table II–8**.

PGCPS requested funding for the following capital improvements in its 2008–2013 and draft 2010–2015 capital improvement programs.

Table II–8: Capital Improvements, 2003–2008

Elementary Schools	
Name	Capital Improvements 2003–2008
Rockledge Elementary School	None
Middle Schools	
Name	Capital Improvements 2003–2008
Samuel Ogle Middle School	2007 Boilers
High Schools	
Name	Capital Improvements 2003–2008
Bowie High School	2006 Science Classroom, 2007 Structural Repairs

Source: Maryland Public School Construction Program Existing Facilities Database

Table II–9: Identified Capital Needs, 2009–2015

Elementary Schools	
Name	Identified Capital Needs, 2009–2015
Rockledge Elementary School	None
Middle Schools	
Name	Identified Capital Needs, 2009–2015
Samuel Ogle Middle School	Asbestos hot ceiling tile abatement, boilers/HVAC replacement, unit ventilator replacement, ADA compliance, kitchen, and food service.
Other	Needs assessment study for a transitional school in Council District 4.
High Schools	
Name	Identified Capital Needs, 2009–2015
Belair Annex	ADA compliance, food service equipment and systems.
Bowie High School	Science classroom renovation, general repairs, food service equipment, central air conditioning, ADA compliance.
Other	New 1,800-seat Bowie area high school

Source: Prince George’s County Office of Management and Budget, PGCPS.

Status of Public School Facility Recommendations in 2006 Bowie and Vicinity Master Plan

The 2006 *Approved Master Plan for Bowie and Vicinity and Sectional Map Amendment for Planning Areas 71A, 71B, 74A, and 74B*, recommends a new middle or high school in the 3400 block of Mitchellville Road, and the proposed 2010–2015 PGCCPS Capital Improvement Program includes funding for planning a new high school at this location. While the proposed location is not in the vicinity of the plan area, a new middle or high school could reduce enrollment at Samuel Ogle Middle and Bowie High Schools.

Libraries

There are no branches of the Prince George’s County Memorial Library System (PGCMLS) within the sector plan boundary. The residents of the plan area are served by the Bowie Branch Library located on Annapolis Road in Bowie. The 2006 Bowie and Vicinity Master Plan recommends a regional library in south Bowie in the vicinity of Central Avenue and Hall Road. This project consists of a 25,000 to 50,000-square-foot facility, budgeted at \$13,564,000 and scheduled for completion in March 2010.

Public Safety

Police

The Bowie State MARC Station Sector Plan area lies within the Prince George’s Police Department’s (PGPD) District II. Its headquarters are located at 601 SW Crain Highway in Upper Marlboro. The 2008 *Approved Public Safety Facilities Master Plan* recommends construction of a new PGPD District Station adjacent to the Glenn Dale Fire/EMS Station, Company 18, at 11900 Glenn Dale Boulevard, as a long-term priority to be implemented after 2021. Funding for planning of this station is in the current county CIP for 2013. This new station would provide service to the plan area. The BSU Department of Public Safety, located on the northern portion of the campus in the Theodore McKeldin Gymnasium building, provides police service to the university. Operating 24-hours a day, campus police enforce both the laws of the State of Maryland and the university regulations. Campus police provide uniformed vehicle and foot patrols for the entire campus.

Fire and Emergency Medical Services (EMS)

Fire and EMS are provided by the Prince George’s County Fire/EMS Department (PGFD). This department is one of the two largest combination fire/EMS departments in the U.S., with both career and volunteer elements. There are no fire/EMS stations within the sector plan boundary. The 2008 *Approved Public Safety Facilities Master Plan* places the plan area in the seven-minute response time radius for the Bowie Fire/EMS Station, Company 19, at 13008 9th Street in Bowie. The nearest advanced life support paramedic service is located at the second-closest fire/EMS station, Glenn Dale Company 18, located at 11900 Glenn Dale Boulevard in Glenn Dale. These stations responded to 2,240 EMS calls for service in 2007 and 1,041 fire calls. The Public Safety Facilities Master Plan makes no recommendations for these facilities.

Table II–10: Fire/EMS Stations Serving the Bowie State MARC Station Sector Plan Area

CO.	Name	Address	City	Apparatus	2008 PSFMP Recommendation
18	Glenn Dale	11900 Glenn Dale Boulevard	Glenn Dale	2 Engines 1 Ambulance 1 Medic 1 Rescue Engine 1 Rescue Squad	None
19	Bowie	13008 9th Street	Bowie	2 Engines 1 Ambulance 1 Truck	None

Source: M-NCPPC

Parks and Recreation

M-NCPPC provides comprehensive park facilities and recreational programs to residents of Prince George's County. Its Department of Parks and Recreation is tasked with acquiring property and planning, developing, operating, and maintaining the facilities. The City of Bowie operates its own parks and recreation system. Together, the City of Bowie and M-NCPPC provide a variety of recreational opportunities for the residents in the sector plan area.

The plan area currently includes five M-NCPPC-owned parks totaling approximately 1,103 acres (portions of the Patuxent River Park lie outside the plan boundaries) and one 64-acre park owned by the City of Bowie.

Map II-4: Existing Public Facilities and Parks

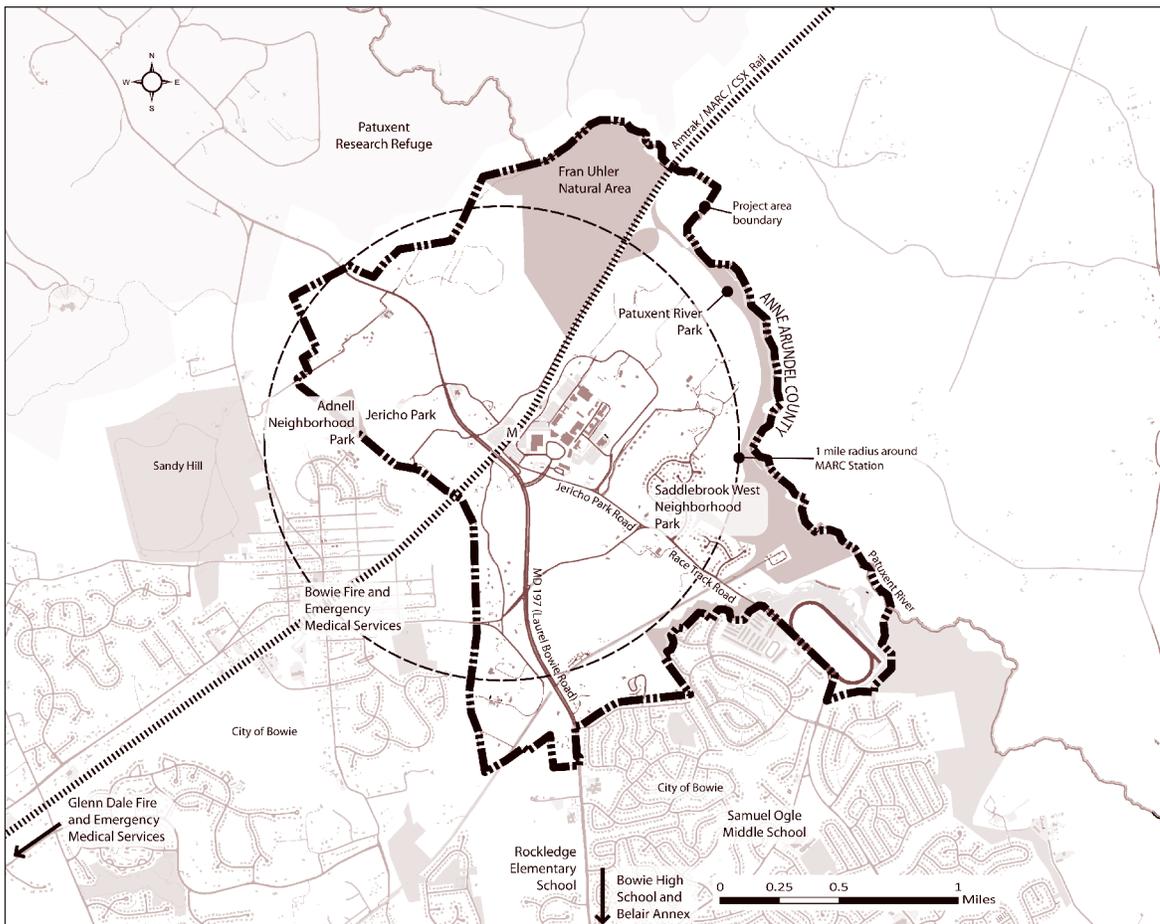


Table II–11: Existing Parks

Name	Type	Ownership	Size	Purpose
Adnell Neighborhood Park	Local Park	M-NCPPC	12.2 acres	Undeveloped recreational area adjacent to Jericho Park.
Saddlebrook West Neighborhood Park	Local Park	M-NCPPC	18.9 acres	Recreational area that serves residents in the immediate area, with a trail connection to the WB&A Trail.
Fran Uhler Natural Area	Special (Regional) Park	M-NCPPC	28.2 acres	Recreational area, including woodland trails and a boardwalk loop trail.
Patuxent River Park	Regional Park	M-NCPPC	1,327 acres (portions lie outside the plan boundary)	Recreational areas with facilities, historic sites and/or landmarks, conservation areas, and unique natural features.
WB&A Trail	Special (Regional) Park	M-NCPPC	105.1 acres	Recreational trail and transportation connection.
Jericho Park	Local Park	City of Bowie	55.4 acres	Active recreational area with an adult softball field, two youth baseball fields, and a tournament baseball field.

Source: M-NCPPC

As part of the 2006 Bowie and Vicinity Master Plan, an analysis was conducted to determine the existence of parkland deficits within the master plan’s boundaries. Four master-plan proposed park acquisitions are consistent with the sector plan boundaries. (See Table II–12).

Table II–12: Parks Recommended by Bowie and Vicinity Master Plan

Name	Size	Rationale
Thompkins Community Park	70 acres	Replaces 47.69 acres not acquired by Lemon’s Bridge Regional Park
Pecan Ridge Community Park	50 acres	Proposed to account for high parkland need in immediate area
Patuxent River Park	50 acres	Connects parkland on either side of the Bowie Race Track Training Facility
Horsepen Branch Neighborhood and Stream Valley Park	10 acres	Replaces 9.32-acre deficit

Source: M-NCPPC

Additional proposed park acquisitions within the sector area are listed in Table II-13.

Table II–13: Additional Proposed Park Acquisitions

Name	Size	Rationale
Addition to Horsepen Branch Neighborhood and Stream Valley Park	Approximately 65 acres	Acquire additional land along the Horsepen Branch and the WB&A Trail.
Addition to Thompkins Community Park	Approximately 20 acres	Add parkland adjacent to the City of Bowie’s Jericho Park.
Addition to Adnell Neighborhood Park	Approximately 7 acres	Add more parkland to existing Adnell Neighborhood Park.

Source: M-NCPPC

The proposed land acquisitions listed in **Table II–12** and **Table II–13** will be added to the park inventory when properties are conveyed to or purchased by M-NCPPC. Land acquisitions and recreation facilities are funded through the Capital Improvement Program or state funding mechanisms such as Program Open Space. Land can also be donated by developers via the mandatory dedication provisions in Subtitle 24.134–135 of the Subdivision Ordinance.

The master plan recommends the acquisition of parkland along the Patuxent River to provide both a conservation buffer and trails system for hikers and equestrians. It also advocates the acquisition of parkland and facility planning along the Patuxent River to be coordinated with the *Approved Countywide Green Infrastructure Plan* and with the trails element of the *Countywide Master Plan of Transportation*.

Historic Preservation

The 1992 *Approved Historic Sites and Districts Master Plan* is currently being amended to introduce specific proposals regarding historic properties in the county.

The sector plan contains one designated historic site—D.S.S. Goodloe House—and one historic resource—the Concrete Railroad Bridge (**Table II–14**). A historic site is defined as a historic resource that has been evaluated using the criteria of the Historic Preservation Ordinance of Prince George’s County and found to meet criteria of architectural and historical significance. These sites are protected by the County’s Historic Preservation Ordinance. The D.S.S. Goodloe House is also listed in the National Register of Historic Places.

The National Register of Historic Places is the federal government’s list of cultural resources that are significant at the national, state, or local level. Listing in the National Register is achieved through a federally legislated nomination process. Listing provides recognition and affords some protection if federal or state funding or licensing would affect the property.

Properties designated as historic resources are provided limited protection by the Historic Preservation Ordinance until they are classified as a historic site or a historic district. Historic



resources may be classified as historic sites status if they meet certain historic and architectural criteria. Detailed explanations of the historic sites and historic district criteria may be found in the *Historic Sites and Districts Plan* and the Prince George’s County Historic Preservation Ordinance (Subtitle 29 of the Prince George’s County Code).

The D.S.S. Goodloe House, circa 1916, was designed by African-American architect John A. Moore for Don S.S. Goodloe, the first principal of the Maryland Normal and Industrial School (now Bowie

D.S.S. Goodloe House.

State University). The imposing brick house on Laurel-Bowie Road, owned by Bowie State University, is currently used to host meetings and events.

The Concrete Railroad Bridge, constructed in 1908, is a large concrete bridge that spans the Horsepen Branch of the Patuxent River south of Laurel-Bowie Road. It is a rare surviving vestige of the Washington, Baltimore and Annapolis Electric Railway.

Table II–14: Historic Preservation List

Historic Name	Inventory of Historic Resources Number	Classification
DSS Goodloe House	71A-030	Historic Site, National Register
Concrete Railroad Bridge	71A-006	Historic Resource

Source: M-NCPPC

Environmental Infrastructure and Sustainability

The 2005 *Approved Countrywide Green Infrastructure Plan* provides a comprehensive policy guide for conserving significant environmental ecosystems in Prince George’s County. With this network as a guide, specific recommendations for preserving and strengthening the local green infrastructure systems have been developed for the sector plan.

The green infrastructure network is divided into three environmental assessment categories: regulated areas, evaluation areas, and network gaps. Regulated areas contain environmentally sensitive features, such as streams, wetlands, 100-year floodplains, severe slopes and their associated buffers that are regulated (i.e., protected) during the land development process. The regulated areas contain wetlands and drainage ways which lead to the Patuxent River. Evaluation areas contain environmentally sensitive features such as interior forests, colonial waterbird nesting sites, and unique habitats, which are not regulated (not protected) during the land development process. Network gaps are those areas that are critical to the connectivity of the regulated and evaluation areas and should be evaluated for restoration opportunities to enhance the ecological functioning of the network. The network gaps are not found directly in the future community center, but are located in the larger sector plan area. The green infrastructure network provides an important framework for defining ways to preserve and enhance the environmental quality in the plan area. (See **Map II-5: Green Infrastructure, facing page.**)

The primary green infrastructure corridor identified in the plan area is the Patuxent River Corridor, the main stem of the Patuxent River basin that flows north to south and eventually into the Chesapeake Bay.

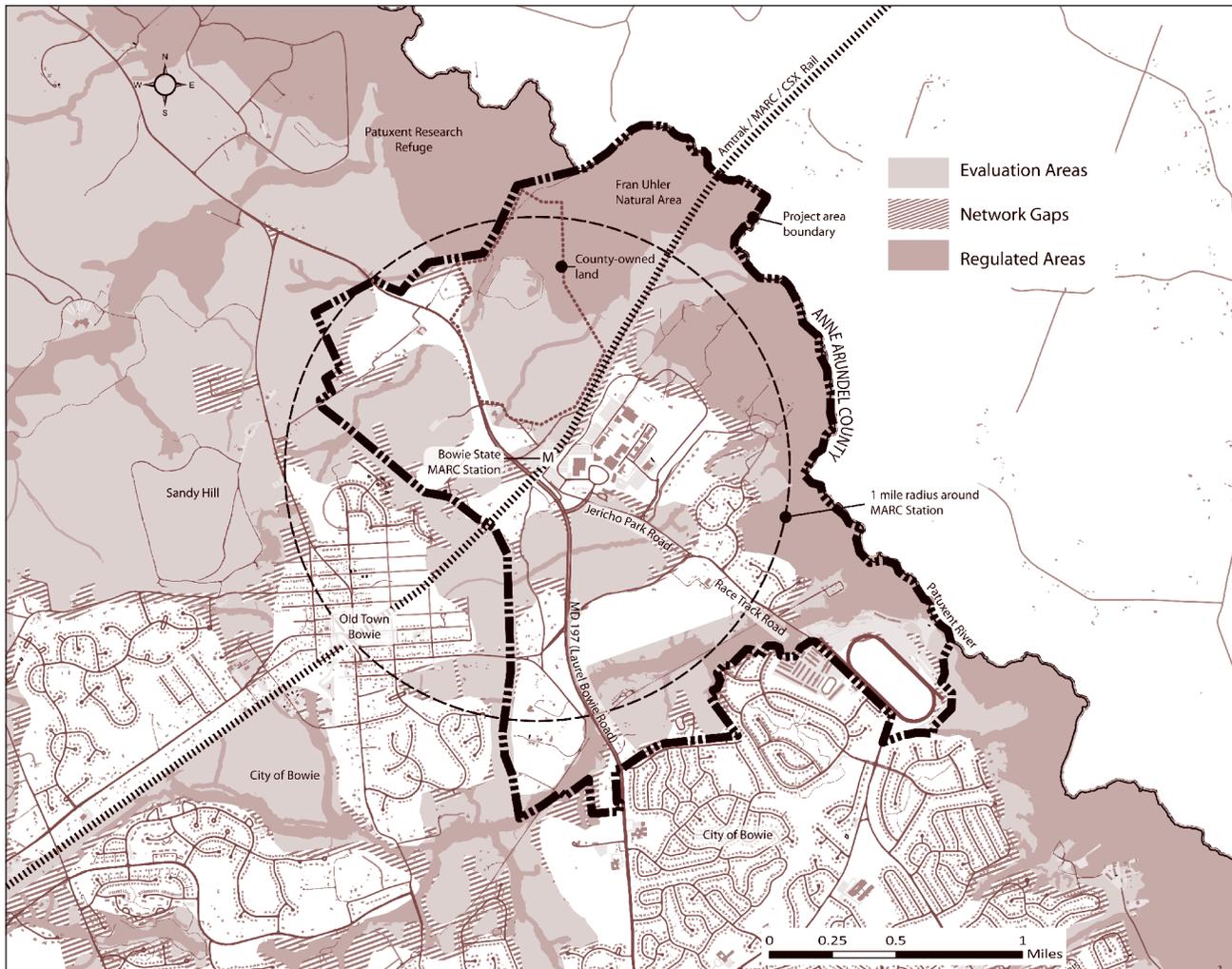
Secondary corridors are areas where connectivity is critical to the long-term viability of the primary corridors. The only secondary corridor within the plan area is the Horsepen Branch corridor, which represents the best opportunity for preserving or reestablishing connectivity.

In addition to their role within the green infrastructure network, stream corridor assessments (SCAs) are designated to have countywide significance. SCAs contain special habitat or natural resources which are important to protect. Any development near an SCA should ensure that the ecological functioning of the SCA is protected. The Bowie State MARC Station lies near the following SCAs: Beltsville Agricultural Research Center, Patuxent Research Refuge, Greenbelt National Park, and Belt Woods. The only SCA which

could be directly affected by the development of the proposed community center is the Patuxent Research Refuge.

Water quality from development could potentially negatively affect the river, underscoring the need for proposed development to adopt measures to protect the Patuxent Research Refuge, natural drainage corridors, and wetlands.

Map II-5: Green Infrastructure



Water Quality

To understand the impact of future land use changes on water sources, it is important to view the plan area within a watershed context. The sector plan area falls primarily within the Upper Patuxent River watershed, which drains to the Potomac River and eventually to the Chesapeake Bay. A smaller area at the southern portion of the planning area falls within the Horsepen Branch watershed, which also drains to the Patuxent River and eventually to the Chesapeake Bay. As reported in the *Approved Countywide Green Infrastructure Plan*, the habitat of the Upper Patuxent River watershed is rated “poor” and the water quality rating for invertebrates is also rated “poor” based on water quality sampling data. The habitat

of the Horsepen Branch watershed is rated “very poor” and the water quality rating for invertebrates is rated “poor” based on the same sampling data.

According to data provided by the Maryland Department of Natural Resources Fisheries Service, water quality and overall watershed health in the Upper Patuxent River watershed is in good condition. In 1996, the Upper Patuxent watershed was listed for high levels of nutrients and sediments, but these limitations were given a low priority ranking for total maximum daily load (TMDL) for bacteria in parts of the watershed. No new limitations were added to the 1998 303(d) or 2002 303(d) lists, which show no water quality impairment and no impairments to the aquatic community.

In the study area, the percentage of impervious surfaces is currently approximately seven percent, with a minor increase expected with the construction of the community center. The quality of the runoff without treatment is considered adequate.

Sustainability

Environmental sustainability involves practices that significantly reduce or eliminate the negative impact of buildings and development on residents and the environment while creating vibrant, healthy, comfortable, durable, cost-effective places to live, work, and play. Developing a sector plan includes the assessment of existing natural features in order to ensure the effective protection, preservation, and enhancement of the area’s environmental qualities. These existing natural features offer valuable opportunities to enhance the environmental sustainability of future development within and beyond the plan area. **(See Map II-6: Existing Environmental Features, facing page.)** The community center is bordered to the northeast by the Fran Uhler Natural Area and to the northwest by the Patuxent Research Refuge. The 219-acres of county-owned property and the focus area of the community center are predominately woodlands and meadows, with several wetland areas. The property drains north to the wetlands, which, in turn, drain directly into the Patuxent River along the eastern boundary of the Fran Uhler Natural Area. The community center’s proximity to the river underscores the need for preservation of ample natural buffers and tree cover to ensure that the wetlands continue to filter nutrients, help protect and improve the area’s water quality, and provide habitat for wildlife. The issue of air pollution is a critical one because it can cause respiratory, cardiovascular, and other health problems. Presently, the area of focus for the sector plan is relatively undeveloped and the air quality is good. To preserve this, the development will promote walking, plantings, and alternative transportation, such as biking.

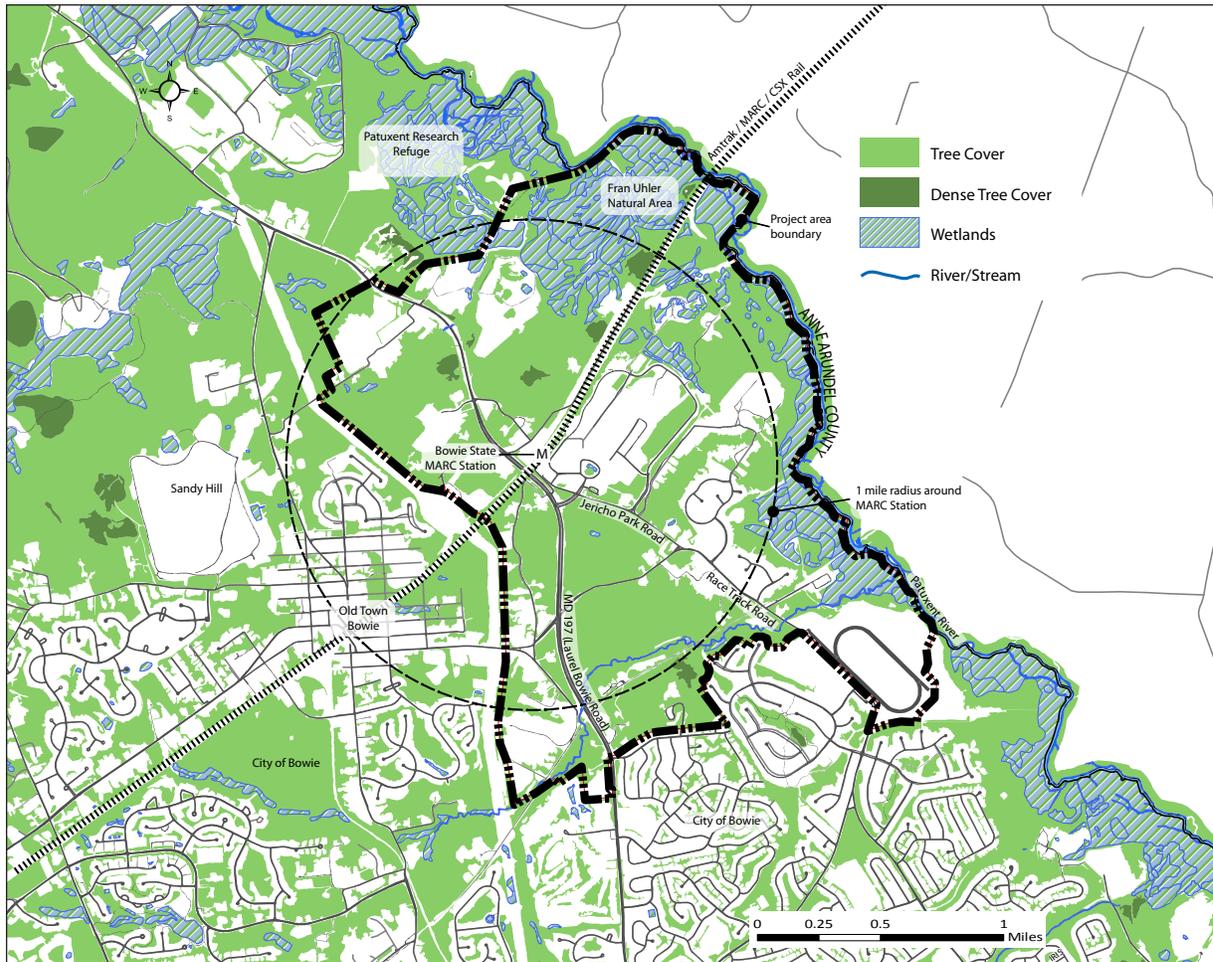
Light Pollution

Light pollution is defined as light that causes a glow in the night sky from artificial sources such as street lights, lights from commercial uses, and lights from residential sources. Light pollution also includes “light spill-over” when one property is more brightly lit than an adjacent one. The widely accepted Crime Prevention through Environmental Design (CPTED) guidelines were written to address how built environments can be designed to help reduce crime. The basic principle CPTED sets out is that light levels should be kept as constant as possible from one property to the next in order to reduce the amount of time that the human eye needs to adjust to the different light levels. This lighting scheme has the ability to reduce crime by providing an even level of light across various properties. Reducing light pollution also serves to reduce overall energy costs by directing the correct light levels in the right places, reducing the need for higher wattage fixtures. As new and redevelopment proposals are evaluated, light levels should be considered and overall lighting should be minimized and properly directed.

Air Pollution

The Washington metropolitan area is considered a “nonattainment area” for air quality by the Environmental Protection Agency, mainly due to high levels of ozone. The negative effects of air pollution are becoming increasingly recognized and efforts to mitigate its effect are being undertaken nationwide. Air quality issues result mainly from nitrogen oxide gases (NO_x) and volatile organic compounds (VOCs) that are mostly by-products of burning gasoline and coal. These gases combine when heated up by hot summer days and increasingly warming urban areas to create ozone, which can be detrimental to the health of humans, animals, and plants alike. One of the sources of ozone is the mixing of vehicle exhaust in the atmosphere and the heating effect of the earth. If the overall number of vehicle trips can be reduced, the amount of ozone formed can be reduced, thereby helping to improve the air quality in the region. Several small steps can be taken to improve air quality in the sector plan area. These include reducing the overall number of vehicle miles traveled, providing a network of linkages for alternative forms of transportation, and providing more opportunities for ride sharing. With the implementation of sustainable building techniques, localized air quality can be improved and a contribution can be made to improving regional air quality.

Map II-6: Existing Environmental Features





An illustrative birds-eye rendering of the proposed Bowie State MARC Station Community Center.