

**Joint Base Andrews
Naval Air Facility Washington
Joint Land Use Study
December 2009**



The Maryland-National Capital Park and Planning Commission

www.mncppc.org



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**The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department
14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772**

www.mncppc.org/pgco



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Chapter 1: Study Purpose and Process

1.1 INTRODUCTION

Strategically located near Washington, D.C., Joint Base Andrews Naval Air Facility Washington has supported military air operations since World War II. The air base was originally located on a natural plateau surrounded by rural land populated with small farms. After World War II, rapid suburbanization of the Washington, D.C., metropolitan area brought new development to the vicinity of the base, with numerous residential neighborhoods, commercial properties, and public facilities springing into existence during the 1950s and 1960s. Development persisted around the base in the late twentieth century, intensified by the construction of the nearby Capital Beltway and the Green Line branch of Washington’s Metro system. New homes and businesses were added to the area as base air operations grew more complex, driven in part by Andrews’ proximity to the nation’s capital. As suburban growth surrounded the air installation, incompatibilities began to emerge. Homes and businesses were located in active flight paths, subjecting residents, owners, workers, and shoppers to noise impacts and potential safety hazards.

In the early twenty-first century, conflicts between the air base’s mission and operations and Prince George’s County development patterns created the need for coordinated planning that will address base impacts on the community and community impacts on the base. The Joint Base Andrews Naval Air Facility Washington Land Use Study (JLUS) represents an opportunity for the military community to work with county government and citizens to address issues of encroachment in the base vicinity.¹ Through this joint planning process, policies and recommendations for future development will balance the physical safety and economic welfare of area communities with the operations needs of Joint Base Andrews.

¹ Incompatible uses are broadly termed “encroachment.” This includes land uses which adversely affect the public health, safety, and welfare, and those that produce negative externalities, including noise, smoke, dust, excessive light, electromagnetic interference, and vibration. Encroachment may impair the military mission or negatively impact civilian residential, commercial, or employment areas.

1.2 STUDY BACKGROUND

Recognizing increased development pressures on many of its military installations in the late twentieth century, the United States Department of Defense created programs to address incompatibilities between military bases and nearby communities. These include the Air Installation Compatible Use Zones (AICUZ) program and the Joint Land Use Study (JLUS) program, both of which encourage local governments to adopt land use and development policies that minimize conflicts between base area communities and military operations.

Air Installation Compatible Use Zones

Established in 1973, the AICUZ program “promotes compatible land development in areas subject to aircraft noise and accident potential.”² Under the program, the Department of Defense performs studies for all military air installations, focusing on areas near air base runways and accident potential zones. An AICUZ study examines noise levels, existing community land uses, and building heights near air bases, and makes recommendations that will minimize base impacts on civilian areas and promote compatible public and private land uses in the vicinity of an air base. Each AICUZ study is periodically updated to account for changes in military technology and aircraft operations that may have new impacts on nearby communities.

Five AICUZ studies have been prepared for Joint Base Andrews since the program’s inception: studies in 1974, 1989, 1994, 1998 and 2007. Each study builds upon the previous study, providing updated technical information and recommendations when appropriate. New AICUZ data reflect changes to air base operations such as the use of different aircraft types, numbers of flights, and modifications to flight tracks. Furthermore, technical improvements to the noise model used in determining the extent of noise exposure areas may also impact AICUZ data. AICUZ studies provide key technical information to local officials when they prepare land use and development plans for areas surrounding military installations.

The Joint Land Use Study (JLUS) Program

In 1985, the Department of Defense initiated the Joint Land Use Study Program (JLUS) to encourage cooperative planning between military installations and local governments. Joint planning initiatives should address incompatibilities that have arisen over time between military installations and surrounding communities, generally due to sustained growth. The JLUS program is a regionally coordinated effort between the Department of Defense’s Office of Economic Adjustment (OEA); state, county, and municipal officials; and local citizens and business leaders focused on addressing encroachment concerns in relation to military bases. This joint planning effort is conducted on numerous bases across the nation annually, helping to resolve existing incompatibility problems and avoid future conflicts. The main objectives of the JLUS program are to:

- ❖ Encourage cooperative land use planning between military installations and the surrounding community.
- ❖ Seek ways to reduce the operational impacts of the military bases on adjacent land.³

The JLUS program has a broader focus than the AICUZ program and typically relies on data generated for an AICUZ report as a basis for many of its recommendations. Whereas the Department of Defense develops AICUZ studies internally and provides them to local jurisdictions, a JLUS is a joint planning effort that builds upon AICUZ data to create local policy plans addressing unique situations for areas in the vicinity of air installations.

² *Air Installation Compatible Use Zone Study: Joint Base Andrews, Maryland* (December 2007), p. 1-1.

³ Office of Economic Adjustment (OEA). *Joint Land Use Study Program Guidance Manual* (November 2006), p. 2.

1.3 STUDY PURPOSE AND GOALS

Initiated in 2008, the Joint Base Andrews Naval Air Facility Washington Land Use Study (JLUS) represents a partnership between the base, Prince George’s County, and the local community that facilitates a cooperative approach to development policy for the Joint Base Andrews vicinity. The JLUS identifies encroachment issues that impact both the base and the communities around the base and recommends strategies to address these impacts. Strategies will balance the needs of the base with the long-term development plans and economic viability of the surrounding communities.

Goals of the JLUS include:

- ❖ Ensuring local land use controls promote development that is compatible with the base mission and air operations.
- ❖ Addressing encroachment issues, including noise, traffic, pollution, and impacts on environmental and cultural resources.
- ❖ Identifying opportunities for economic and community revitalization around the base.
- ❖ Identifying needed traffic and transportation improvements.
- ❖ Increasing communication and strengthening relationships between the base, the county, and surrounding communities.

1.4 STUDY AREA

Joint Base Andrews is located in central Prince George’s County, Maryland, approximately five miles southeast of the District of Columbia/Prince George’s County boundary and about ten miles southeast of Capitol Hill. The base covers 4,346 acres or about 6.8 square miles of land area and lies near the junction of three key regional transportation routes: the Capital Beltway (I-95/495), Pennsylvania Avenue (MD 4), and Suitland Parkway (**See Map 1–1**). The Suitland Parkway right-of-way, managed by the National Park Service, forms part of the base’s northern boundary, and the Capital Beltway runs along a stretch of the base’s northwestern border. Other key roads in the base’s vicinity include Branch Avenue (MD 5), Woodyard Road—Piscataway Road (MD 223), Suitland Road, Marlboro Pike, and Allentown Road.

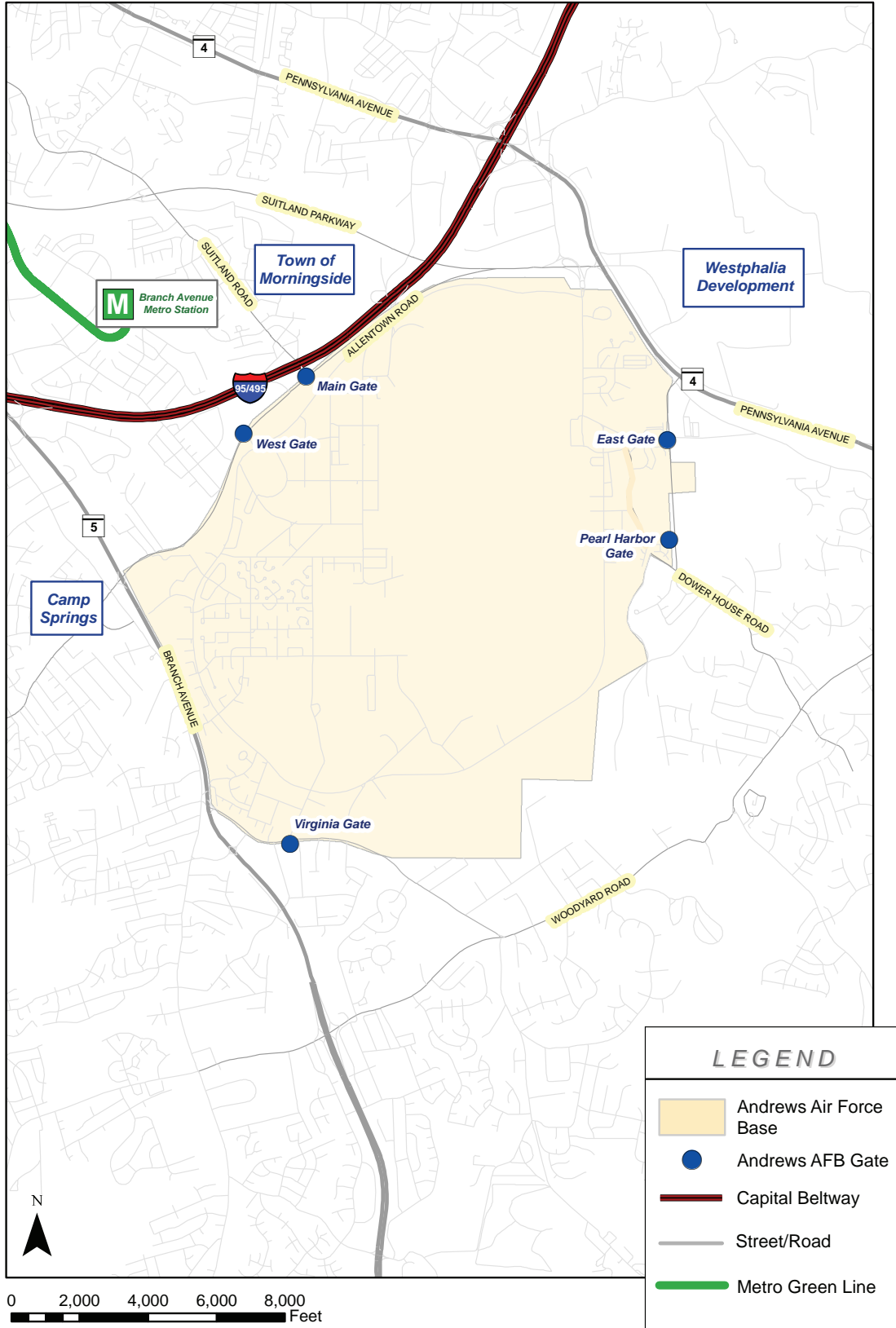
The Joint Base Andrews JLUS study area extends approximately one mile around the base. This area generally includes land surrounding the base on which the potential for encroachment impacts is the greatest. Possible encroachments include land uses that concentrate large numbers of people within flight paths, high noise levels, and building and vegetation heights that could interfere with air operations.⁴ According to the 2007 AICUZ study for Joint Base Andrews, these encroachment issues are found to the north, east, and south of the base, but not to the west.

Some encroachment issues extend beyond this one-mile area. In these cases a broader study area was adopted in order to conduct a more comprehensive examination of specific encroachment impacts, such as aircraft noise levels; building, structure, and vegetation heights; transportation systems; and damage to environmental resources.

Additional information about the base and its surroundings can be found in **Chapters 2 and 3**.

⁴ Although the study area boundary generally was drawn to encompass a one-mile radius around the base, portions of the boundary are somewhat irregular, as it follows small local statistical areas called traffic analysis zones (TAZs).

Map 1.1 Joint Base Andrews JLUS Area



Source: M-NCPPC and Joint Base Andrews (2007, 2008)

1.5 JLUS POLICY AND TECHNICAL COMMITTEES

As a JLUS represents a partnership between the military and the local community, obtaining input from a variety of stakeholders is critical to a successful study. The Prince George's County Planning Department convened two advisory bodies, the Technical Committee and the Policy Committee, to assist in JLUS preparation. These two groups met regularly between October 2008 and August 2009, reviewing materials prepared by the Planning Department and providing feedback on proposed policies and strategies.

The Technical Committee consisted of technical and professional staff from M-NCPPC, Prince George's County government agencies, and Joint Base Andrews. This committee was responsible for data collection, identifying and studying technical issues, and developing recommendations for consideration by the Policy Committee. The Technical Committee met eight times between October 2008 and May 2009.

The Policy Committee consisted of federal, state, and local elected and appointed officials; the Joint Base Andrews Commander and base planning staff; Air Force District of Washington (AFDW) staff; Department of Defense–Office of Economic Adjustment staff; and representatives of the local residential and business communities. This committee oversaw the JLUS process, reviewed draft reports, evaluated proposed policies, and recommended the final JLUS to those local, state, and military officials responsible for its implementation. The Policy Committee met eleven times between October 2008 and September 2009, reviewing the preliminary recommendations in June 2009 and approving the final draft document in September 2009.

The **Acknowledgments (page 150)** list the Technical Committee and Policy Committee members.

1.6 PUBLIC PARTICIPATION

Area residents, business owners, and property owners also comprise an important component of the JLUS constituency. While preparing the Joint Base Andrews JLUS, M-NCPPC staff and members of the Technical and Policy Committees held public meetings to inform the community about the JLUS program and solicit feedback from citizens on encroachment issues, the need for economic revitalization around the base, transportation issues, and JLUS recommendations. An initial round of meetings was held early in the planning process to confirm issues, and the JLUS team returned to the community in June 2009 to present preliminary recommendations. **Table 1–1** lists public meetings held as part of the JLUS process.

One of several public meetings held to inform the community about the JLUS program.



Table 1–1. JLUS Public Meetings

Date	Location	Topic
January 31, 2009	Town of Morningside Town Hall	Project overview and issues identification
June 23, 2009	Camp Springs Community Church	Project update and preliminary recommendations
June 30, 2009	St. Philip the Apostle Church	Project update and preliminary recommendations

In addition to the formal public meetings listed above, M-NCPPC staff delivered presentations to local business groups and community organizations active in the vicinity of the base. **Table 1–2** lists all presentations requested by individual organizations.

Table 1–2. Additional JLUS Meetings

Date	Organization	Location	Topic
October 21, 2008	Town of Morningside	Town of Morningside Town Hall (Morningside, MD)	Project overview and issues identification
January 7, 2009	Greater Prince George’s Business Roundtable (GPGBR)	Colony South Hotel (Clinton, MD)	Project overview and issues identification
January 8, 2009	Andrews Business and Community Alliance (ABCA)	Mama Stella’s Restaurant (Clinton, MD)	Project overview and issues identification
March 19, 2009	Camp Springs Civic Association	St. Philip’s the Apostle Church (Camp Springs, MD)	Project update and preliminary recommendations
July 17, 2009	Andrews Business and Community Alliance (ABCA)	Mama Stella’s Restaurant (Clinton, MD)	Project update and preliminary recommendations

M-NCPPC Planner Coordinator Chris Izzo addresses a public meeting.





Chapter 2: Joint Base Andrews and the Community

Joint Base Andrews is the home base of Air Force One, the U.S. President's official airplane.

2.1 BASE MISSION

Joint Base Andrews Naval Air Facility Washington is the secure aerial gateway for the President of the United States, Vice President, Executive Cabinet members, members of Congress, military leaders, foreign heads of state, and other dignitaries. The base also supports Air Force and other military personnel engaged in critical national defense initiatives.

The Air Force District of Washington (AFDW), the entity responsible for coordinating Air Force operations in the National Capital Region (NCR), is headquartered at Joint Base Andrews (JBA). AFDW is responsible for overseeing Joint Base Andrews, Bolling AFB, and Air Force operations in the Pentagon.

The 316th Wing is Joint Base Andrews' "host wing" and is responsible for operating the base. The 316th Wing maintains emergency reaction aircraft and other NCR contingency response capabilities critical to national security and the organizing, training, equipping, and deploying of combat-ready forces for Air and Space Expeditionary Forces. The wing also provides installation security, services, and airfield management services to support the President, Vice President, other senior U.S. leaders, and more than 50 tenant organizations and federal agencies.

The 89th Airlift Wing is responsible for air transport, logistics, and communications support for the President, Vice President, and other senior U.S. leaders. The 89th Wing operates Air Force One.

2.2 BASE HISTORY

Prior to its role as an air base, the Andrews site was mainly used for agriculture. In 1937 this site was considered for a new civilian airport serving Washington D.C., but a location along the Potomac River in Virginia was selected instead for what later became National Airport. Following the nation's entry into World War II in December 1941, the U.S. Army identified the site near Camp Springs, Maryland, as an ideal place for a new military airfield.

In August 1942 President Franklin D. Roosevelt directed the Secretary of War to acquire land in the vicinity of Camp Springs for the establishment of an army airfield. This facility, named Camp Springs Army Air Field, was developed by the Army Corps of Engineers between the fall of 1942 and the summer of 1943 with four runways, fourteen miles of taxiways, and supporting buildings and infrastructure. The airfield officially opened on May 2, 1943. The airfield's facilities were expanded between the fall of 1943 and the spring of 1945 with new housing and operating installations. During World War II the airfield was mainly used for training fighter pilots.

In March 1945 the Army renamed the installation Andrews Army Air Field in honor of Lieutenant General Frank Maxwell Andrews (1884–1943), a pioneering Army aviator and commander of European operations for all Army Air Forces at the time of his death in an air accident in May 1943. In 1947, following formation of the United States Air Force as a separate military branch independent of the Army, Andrews Army Air Field became Andrews Air Force Base, and in 2009 Joint Base Andrews Naval Air Facility Washington.

The physical development of the base during the Cold War era reflected continual changes in military aviation technologies as well as ongoing shifts in the missions and requirements of Air Force units stationed there. New hangars, workshops, living quarters, administrative buildings, and command centers were built to handle specific operational requirements. During the Korean War the base was again used to train pilots, and the base has played a key role in national security operations from the 1950s to the present.

The base has served as the “international gateway” to the United States for visiting dignitaries since 1959, following extensive upgrades to the runways. Heads of state from around the world routinely fly into Andrews for conferences in the Washington, D.C., area, such as the G-20 Leaders Summit on Financial Markets and the World Economy in November 2008.

In addition to its roles in national defense and hosting distinguished visitors, Joint Base Andrews has become well-known throughout the world as the home base of Air Force One, the U.S. President's official airplane. In November 1946 President Truman was the first president to fly an official plane out of the facility. In March 1962 President Kennedy's official airplane was transferred to Andrews from National Airport, and since that time Andrews has housed all presidential aircraft.

2.3 BASE FACILITIES

JBA is largely a self-contained community. The base's facilities include two runways and associated taxiways and parking aprons, hangars, and workshops, warehouses, command centers and administrative buildings, fuel storage areas, utility infrastructure, a community center, various types of housing, a medical center, open space areas including three golf courses, and recreational facilities such as a clubhouse.

Oriented roughly on a north/south axis, the base's two parallel runways are designated respectively as Runways 01Left/19Right (01L/19R) and 01R/19L. Runway 01L/19R is 9,300 feet long and 200 feet wide,

and Runway 01R/19L is 9,755 feet long and 150 feet wide. The overruns at the ends of each runway are approximately 1,000 feet long. The airfield elevation is 280 feet above mean sea level (MSL). Runway 01L is used for 35 percent of the flights at the base and Runway 19R for 19 percent of the flights. Runway 01R is used for 28 percent of the flights and Runway 19L for 18 percent.

2.4 BASE UNITS

Flying operations on the base are carried out by units from the Department of Defense (Air Force, Air National Guard, Army, Navy, Marine Corps, and Defense Intelligence Agency), Department of Energy, and the Maryland State Police.

In addition to the 316th Wing, Joint Base Andrews is home to more than 50 tenant units. Key units include:

- ❖ Headquarters, AFDW.
- ❖ 89th Airlift Wing, which provides air transportation and logistical support for the President of the United States and top government officials.
- ❖ 79th Medical Wing, which coordinates Air Force medical care throughout the national capital region (including facilities at Andrews and Bolling AFB). The 79th Medical Wing is headquartered at the Malcolm Grow U.S. Air Force Medical Center at JBA.
- ❖ 113th Fighter Wing (Washington, DC Air National Guard).
- ❖ 459th Air Refueling Wing (U.S. Air Force Reserve).
- ❖ Naval Air Facility (U.S. Navy Reserve).



An Andrews “bird” hovers over the Jefferson Memorial in Washington, D.C.

2.5 BASE OPERATIONS

Over 141,000 annual aircraft operations occurred at JBA between May 2006 and April 2007.¹ The 20 Air Force, Air National Guard, Army, Navy, Marine Corps, Defense Intelligence Agency, Department of

¹ Most of the information in this section is derived from the 2007 Andrews AFB AICUZ Study. An “aircraft operation” is defined as one takeoff/departure, one approach/landing, or half of a closed pattern. A “closed pattern” consists of two portions: a takeoff/departure and an approach/landing (i.e., two operations). A “sortie” is a single military aircraft flight from the initial takeoff through the termination landing. The minimum number of aircraft operations for one sortie is two operations, one takeoff (departure), and one landing (approach). A closed pattern includes successive takeoffs and landings or low approaches where the aircraft does not exit the tower- or radar-controlled traffic pattern. Closed patterns allow pilots to accomplish numerous landings in a short period of time to meet training and certification requirements.

Energy, and Maryland State Police flying units based at Joint Base Andrews operate 16 different aircraft types, including executive transport, cargo, fighter, and helicopter. In addition to the JBA-based aircraft, 54 types of transient military and civil aircraft also conduct operations at the base.

In 2007 these aircraft accounted for approximately 314 average busy-day aircraft operations (**Table 2–1**). Approximately eight percent of the operations occurred at night (i.e., between the hours of 10:00 p.m. and 7:00 a.m.).

Table 2–1. Average Busy-Day Aircraft Operations for 2007

Aircraft Type	Arrival/ Departure Operations	Closed Pattern Operations	Total Operations
Joint Base Andrews Aircraft (16 types)	123	144	267
Transient Aircraft (54 types)	47	0	47
Total	170	144	314

Source: 2007 Andrews AFB AICUZ Study

Runway and Flight Track Utilization

Aircraft operating at Joint Base Andrews use the following flight patterns:

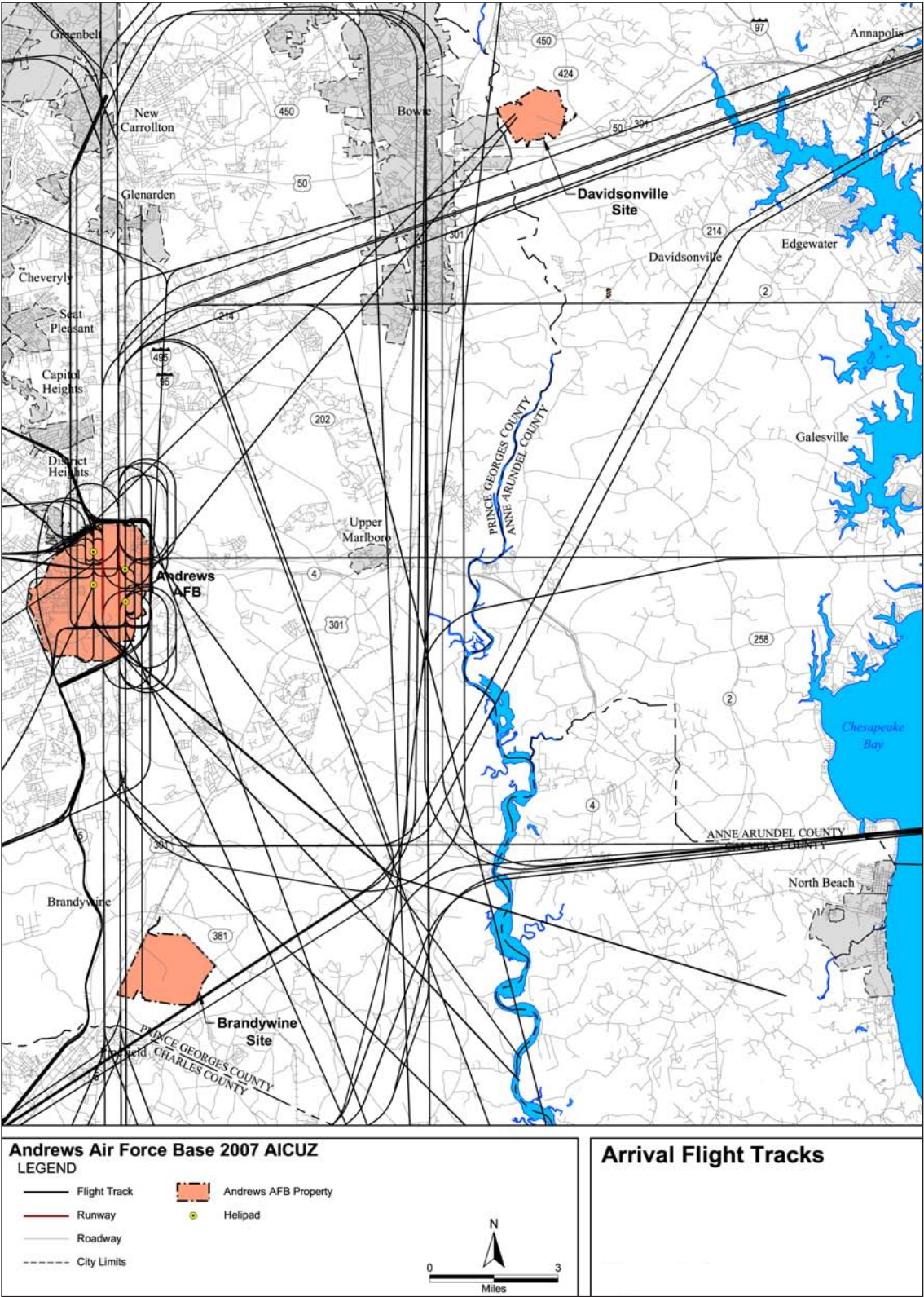
- ❖ Straight-out departure
- ❖ Straight-in arrival
- ❖ Overhead closed patterns both east and west of the airfield
- ❖ Radar closed patterns to the east of the airfield
- ❖ Re-entry patterns

Flight patterns specific to JBA result from several considerations, including:

- ❖ Takeoff patterns routed to avoid noise-sensitive areas as much as possible.
- ❖ Arrivals and departures routed to avoid restricted airspace.
- ❖ Criteria governing the speed, rate of climb, and turning radius for each type of aircraft.
- ❖ Efforts to control and schedule missions to keep noise levels low, especially at night.
- ❖ Coordination with the Federal Aviation Authority (FAA) to minimize conflict with civil aircraft operations.

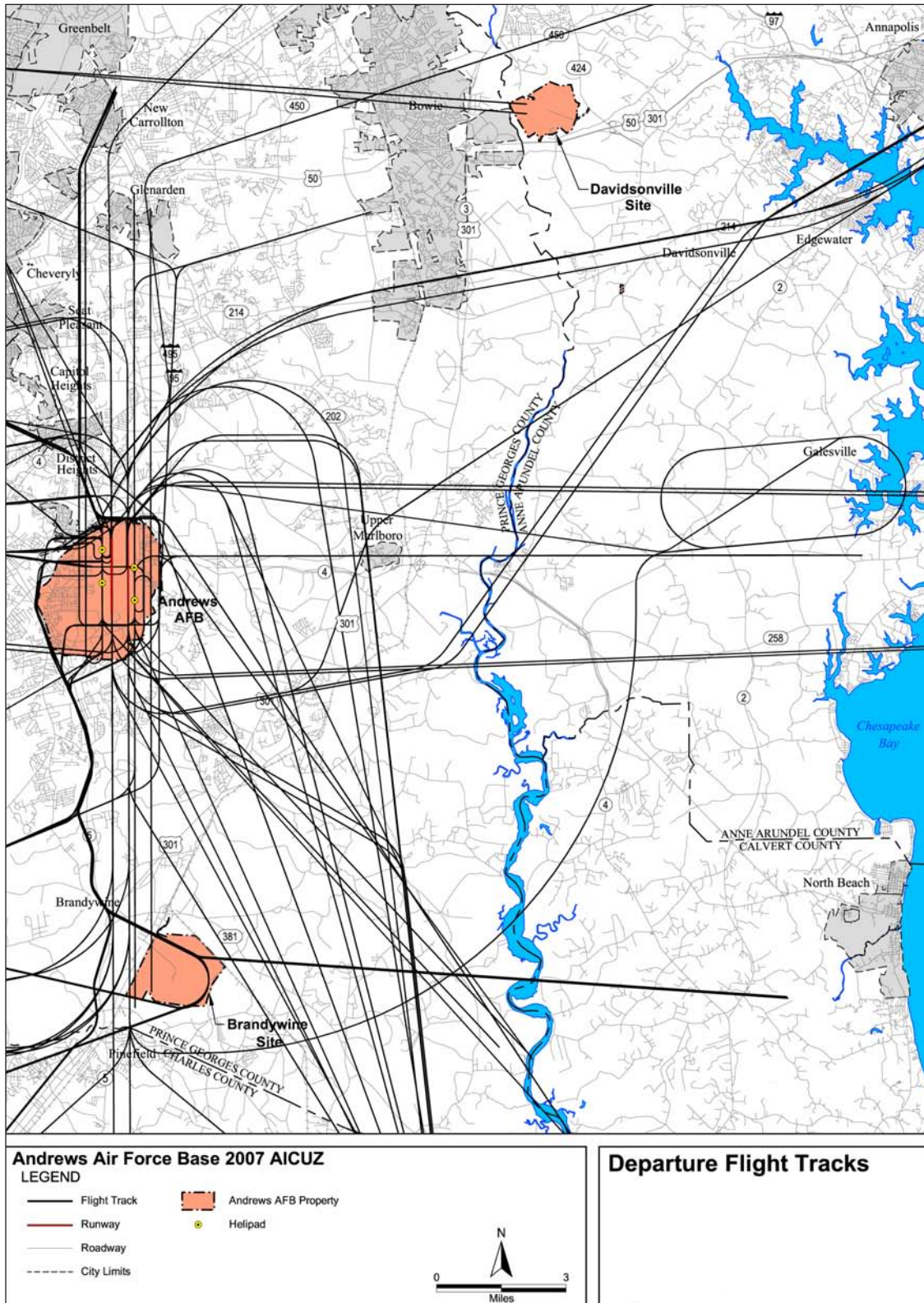
Maps 2–1, 2–2, and 2–3—excerpted from the 2007 Andrews AFB AICUZ Study—show the representative flight tracks at Joint Base Andrews. The flight track locations represent the various types of arrivals, departures, and closed patterns accomplished at Joint Base Andrews. As shown on the maps, a majority of the operations occur to the east of the base. The location for each track is representative for the specific track and may vary due to air traffic control, weather, and other reasons (e.g., one pilot may fly the track on one side of the depicted track, while another pilot may fly the track slightly to the other side). To reduce the effect of aircraft noise, Joint Base Andrews limits transient aircraft to one approach to a full stop landing. The base also controls and schedules missions to keep noise levels low, especially at night.

Map 2-1. Arrival Flight Tracks



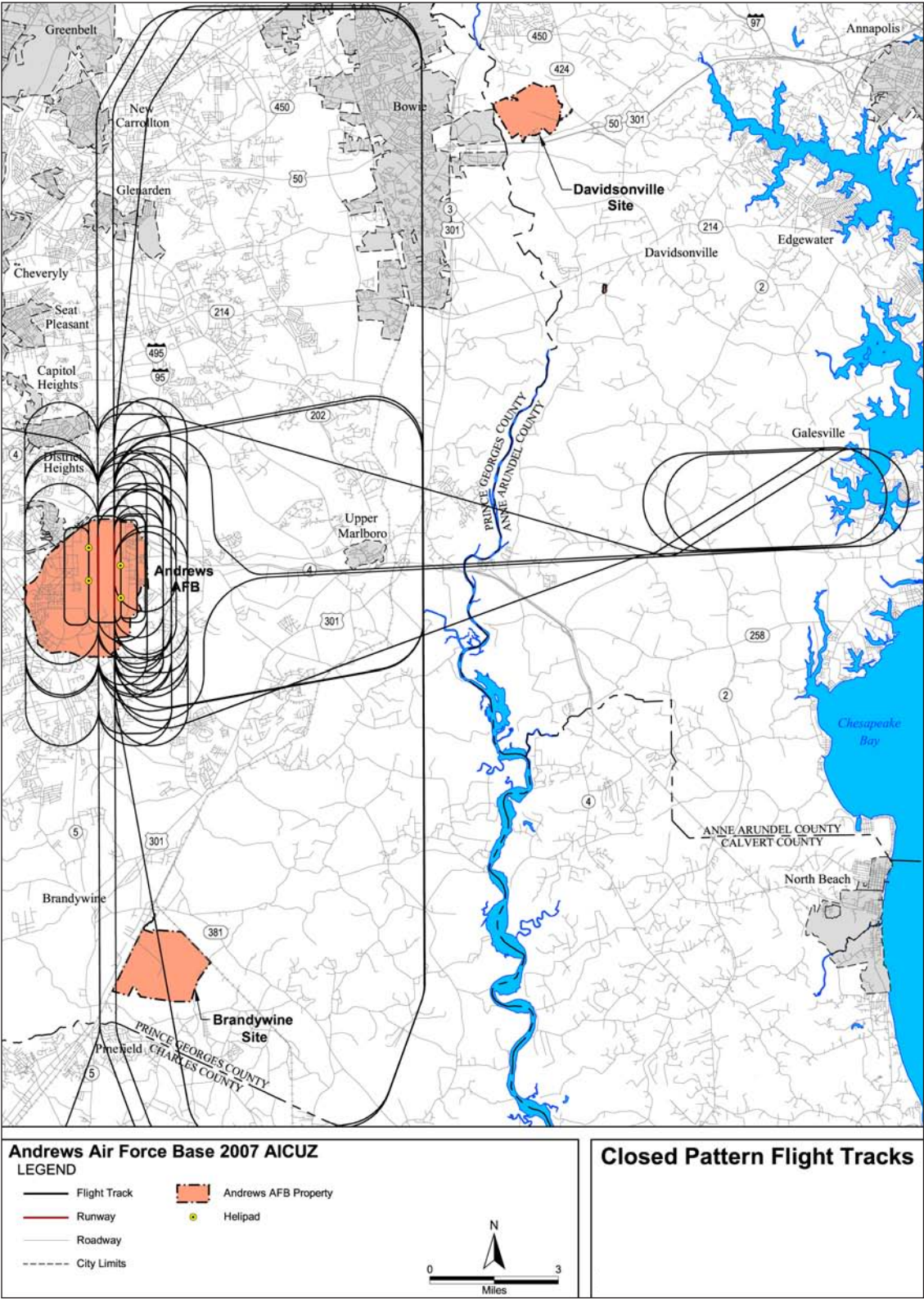
Source: 2007 Andrews AFB AICUZ Study, page 3-5.

Map 2–2. Departure Flight Tracks



Source: 2007 Andrews AFB AICUZ Study, page 3-6.

Map 2-3. Closed Pattern Flight Tracks



Source: 2007 Andrews AFB AICUZ Study, page 3-7.

Future Operations

As a result of the Base Realignment and Closure Act of 2005 (BRAC) and National Capital Region (NCR) initiatives, several new operational actions will occur at Joint Base Andrews over the next few years:²

- ❖ An additional 2,400 +/- personnel are expected to be assigned to Joint Base Andrews by 2011.
- ❖ A portion of this increase related to BRAC (804 positions) is expected by 2011, while the balance will be realized by 2018.
- ❖ The Air Force Office of Special Investigations (AFOSI) will move from Joint Base Andrews to the Marine Corps Base at Quantico, VA.
- ❖ NCR U.S. Air Force leased locations will relocate to Joint Base Andrews.
- ❖ NCR Air National Guard leased locations will relocate to Joint Base Andrews.
- ❖ Inpatient care at Malcolm Grow Medical Center (on Joint Base Andrews) will be discontinued and the hospital will be converted to a clinic with an ambulatory surgery center.

None of the actions identified above are anticipated to result in significant changes to existing aircraft operations at Joint Base Andrews. No other significant operational or mission changes are anticipated during the foreseeable future.

2.6 FUTURE BASE DEVELOPMENT PLANS

In 2008, the 316th Wing developed a 25-Year Strategic Plan that envisions the long-term redevelopment of nearly 600 acres of base land uses and facilities. These proposed redevelopments are primarily targeted to the east and west flight lines, and a north-south “corridor” within the western portion of the base. The key areas addressed by the strategic plan are shown in **Map 2–4** and summarized below:

Town Center

Perhaps the most significant land use change at Joint Base Andrews under the 25-Year Strategic Plan is the proposed development of a new on-base “town center” in a portion of the existing military family housing area. The town center is envisioned as a pedestrian-oriented central hub for community activities. The proposed anchors for the town center include a new fitness center and education center/library at the northern end, and a new base exchange and commissary at the southern end. Various customer service-oriented functions and retail establishments are planned between these anchors.

Eastern Portion of the Base

The eastern side of the base primarily serves Air National Guard and Air Force Reserve (AFRES) and Naval Reserve functions. The strategic plan envisions reconfiguring the AFRES flight line, service, and administrative facilities; reconfiguring the East Administrative area to consolidate tenants and provide additional services; reconfiguring the East Perimeter Road due to the planned changes in the AFRES flight line; and reconstructing the Pearl Harbor Gate.

² See **Chapters 3 and 4** for more information about the BRAC program.

Map 2-4. Components of the 316th Wing's 25-Year Strategic Plan



Source: Joint Base Andrews

North-South Central Corridor

To improve on-base traffic flow, manage security needs, and provide a sense of place and direction, a new north-south corridor is planned to create a central spine through the base. This new corridor will provide a thoroughfare (envisioned as a landscaped “boulevard”) between the Main Gate and the Virginia Avenue Gate that will improve access to many of the base’s key facilities.

Housing Privatization

In 2007, Joint Base Andrews contracted to privatize the base’s family housing functions, primarily to modernize the 1960s and 1970s-period housing stock. Under the contract, the Air Force has leased approximately 420 acres of land at Andrews to a realty company for 50 years. The contract calls for the demolition of 590 housing units, the construction of 200 new housing units, and the renovation of 187 units. At the completion of this process, the company will be responsible for the operation and maintenance of 887 housing units.

Western Industrial Area

The area where the base exchange and commissary are currently located is envisioned as the site of a new northern industrial land use area. The base’s Logistics and Transportation Maintenance, Base Supply, and Base Civil Engineer functions will relocate to this area.

Reconfigurations of Existing Functions

Several existing functions are planned for reconfiguration within their existing locations. These include the West Administrative complex, the Operations Quadrant, and the West Flight Line. A readiness complex, intended to host classified meetings and conferences, is also planned near the West Administrative complex.

2.7 COMMUNITY LAND USE

Standard suburban residential, commercial, and industrial development generally surrounds the base. Area existing land uses are diverse, reflecting the base’s proximity to Washington, D.C., and its location in what has been a continually-growing suburban area since the establishment of the base in the 1940s. Existing development is generally denser to the north and west of the base towards Washington, D.C., with lower density suburban development to the south and the lowest densities to the east, where some land is classified as rural. Most land around the base is used for residential purposes; however, large acreages are also devoted to parks, institutional uses such as schools and churches, and commercial uses.

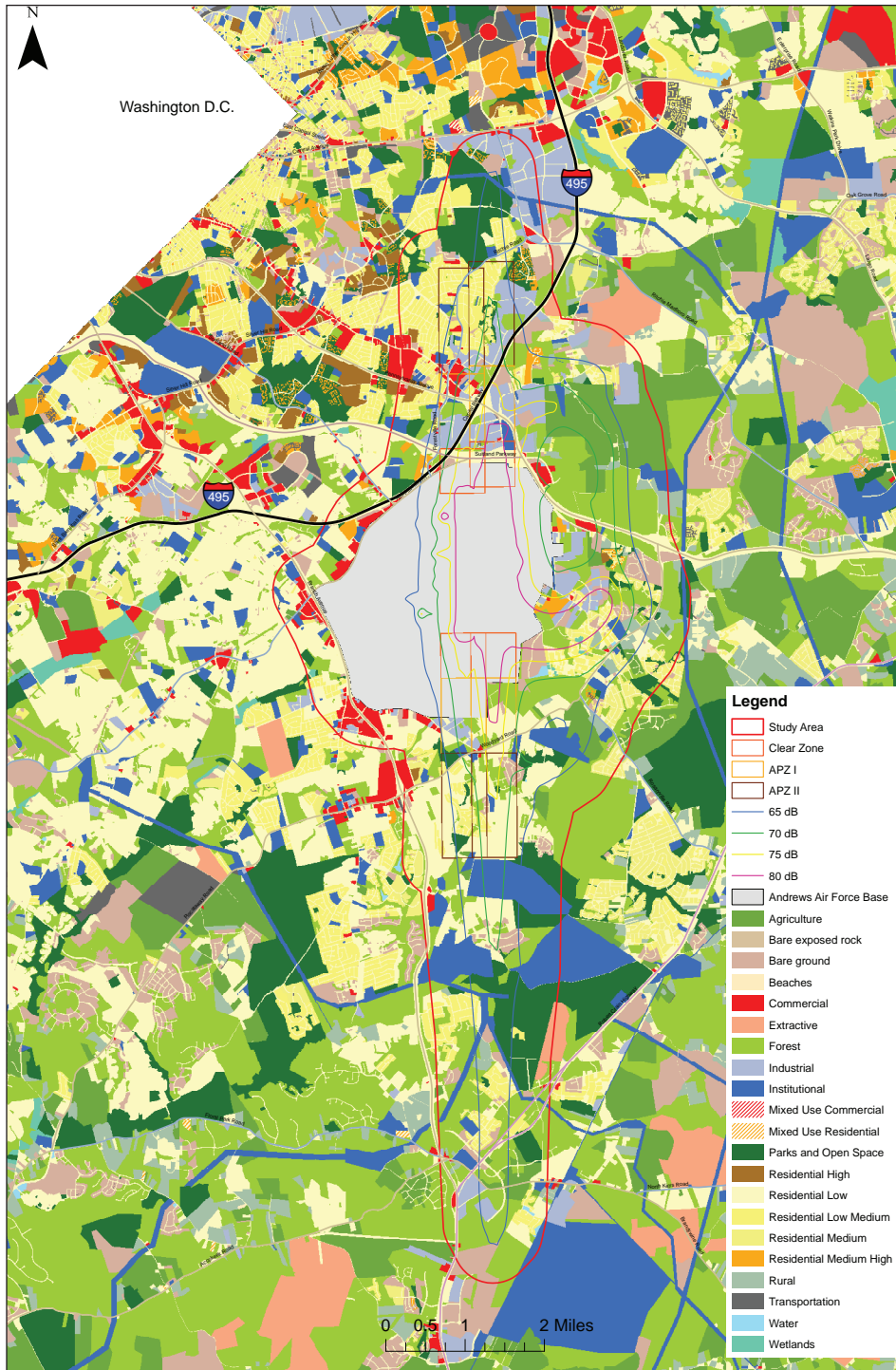
The town of Morningside, one of Prince George’s County’s incorporated municipalities, lies to the northwest of the base. Land uses in Morningside are mostly residential, with some commercial properties lining its main thoroughfare, Suitland Road.

The only undeveloped area around the base is to the northeast, in the area bounded on the south and west by Pennsylvania Avenue (MD 4) and on the north and east by Ritchie Marlboro Road. However, much of this area is slated for a large-scale development project that aims to build on the base’s presence. Known as Westphalia, this area is a master-planned community expected to be built out over a period of thirty years. Westphalia will eventually include 14,000 to 15,300 residential units, up to 710,000 square feet of retail

space, about four and a half million square feet of employment uses, and extensive open spaces, consisting of 1,850 acres, or about 30 percent of the 6,000-acre project area.

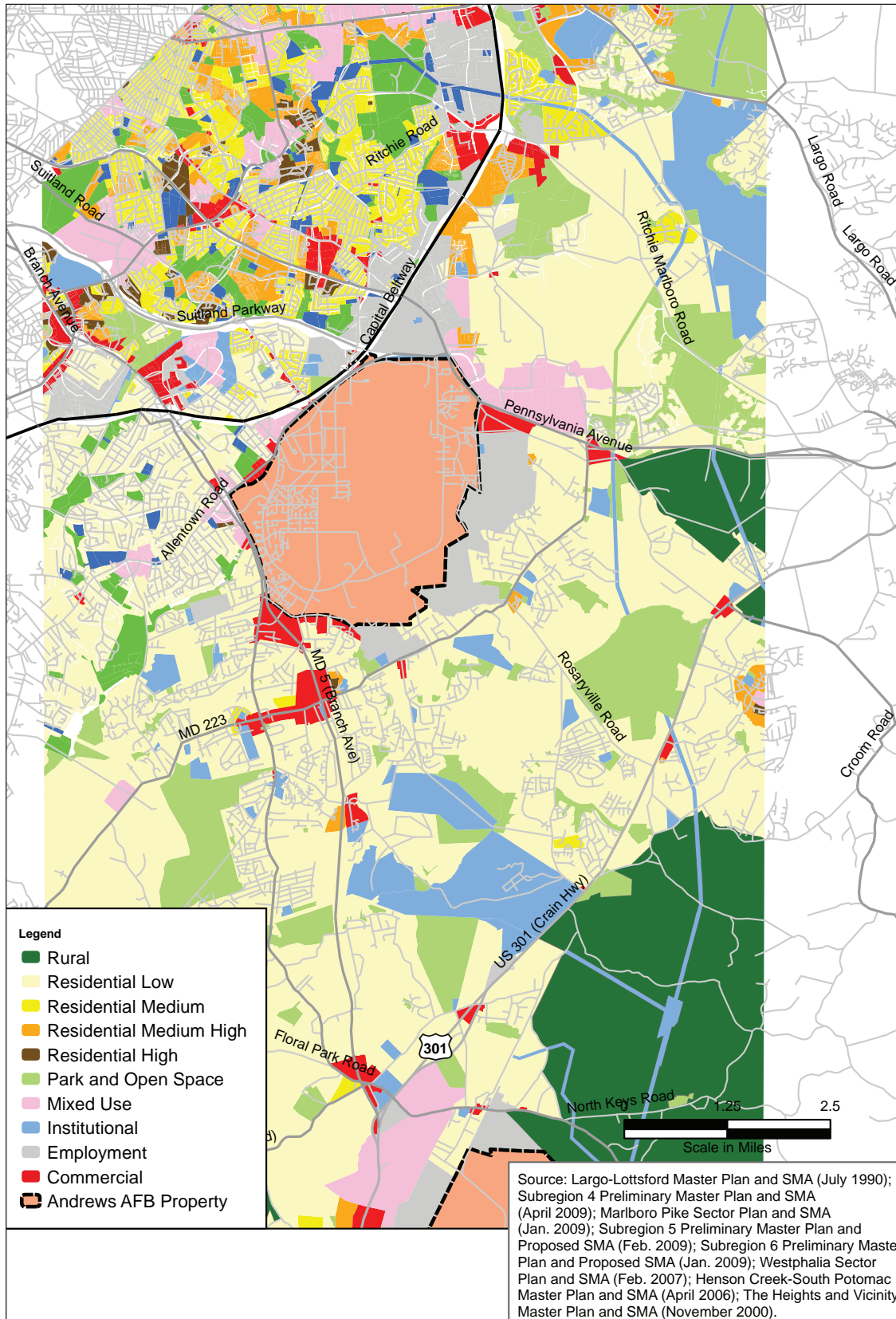
Map 2–5 and Map 2–6 show existing and future land uses in the vicinity of JBA. These maps have been updated compared to the existing and future land use maps in the 2007 Andrews AFB AICUZ study.

Map 2–5. Existing Land Use, Joint Base Andrews Vicinity (2008)



Source:
M-NCPPC

Map 2-6. Proposed Future Land Use, Joint Base Andrews Vicinity



2.8 BASE EMPLOYMENT AND ECONOMIC IMPACT

In 2008 the base hosted almost 17,000 active duty military and civilian employees and military dependents (See Table 2–2).

The total economic impact of JBA on the Greater Washington metropolitan area in FY08 was approximately \$1.1 billion (Table 2–3). The base alone had a gross payroll close to \$658 million, and spent another \$217 million on goods and services. In FY08, more than 10,000 personnel were on the base’s payroll, including 7,500 military and 2,500 civilian employees, making the base the county’s largest employer. About 94 percent of military personnel live off base, creating an economic multiplier effect for the off-base economy. Indirect job creation related to the base in FY08 is estimated at \$256 million.

As noted above, as a result of BRAC and Department of Defense reassignments, an additional 2,400+/- personnel are expected to be assigned to JBA by 2011. Prince George’s County estimates that these positions could generate significant “spin-off” jobs and economic development in the form of 13,985 jobs and demand for 10,476 housing units in the county by 2020.³ A planned growth center to the north of the base, Westphalia, is intended to absorb much of this growth, although other parts of the county will be affected.

In addition to its economic impact, Joint Base Andrews also provides community services to personnel, as well as retirees and off-base dependents. A commissary, base exchange (BX), and gas station provide basic necessities such as groceries and convenience items. Recreation opportunities on base include golf courses, ball fields, basketball courts, picnic areas, a bowling alley and other amenities. The base has a library, a church, a hospital (Malcolm Grow Medical Center), fast food restaurants, and some small stores that offer clothing, furniture, and appliances to military personnel, retirees, and dependents.

Table 2–2. Population Living and Working at JBA, 2008

Classification	Total
Military	7,547
<i>Active Duty Military</i>	5,723
<i>Reserve and Guard</i>	1,818
<i>Trainees and Cadets</i>	6
Civilian	9,150
<i>Appropriated Fund Civilian Employees</i>	926
<i>Other Civilian Employees</i>	1,655
<i>Military Dependents</i>	6,569
TOTAL	16,697

Source: Joint Base Andrews Fiscal Year 2008 Economic Impact Analysis.

**Table 2–3. Annual Economic Impact Estimate
Joint Base Andrews, FY08**

	Dollar Value
Annual Payroll	\$658,000,000
Annual Expenditures	\$217,000,000
<i>Construction</i>	\$22,000,000
<i>Services</i>	\$150,000,000
<i>Materials, Equipment, and Supplies Procurement</i>	\$44,000,000
Estimated Annual Dollar Value of Jobs Created ¹	\$256,000,000
Total Annual Economic Impact	\$1,130,000,000

¹ Projected 4,987 jobs multiplied by a projected average annual pay of \$51,241.

Source: Joint Base Andrews Fiscal Year 2008 Economic Impact Analysis.

³ *Prince George’s County BRAC Action Plan*, September, 2007.

2.9 COMMUNITY DEMOGRAPHIC PROFILE

In 2008 the population in the JLUS study area was approximately 76,200 people, or nine percent of the total population of Prince George’s County. This area contained approximately 29,400 dwelling units, of which approximately 9,400 (31 percent) were in Subregion 4 and 6,600 (22 percent) were in Subregion 5 (Table 2–4).⁴

Table 2–4. Community Demographic Profile, 2000–2030

	2000	2008 ¹	2030	Change, 2008–2030	
				Number	Percent
Population					
<i>JLUS study area</i>	72,785	76,224	101,235	25,011	33%
<i>Prince George’s County</i>	808,060	852,884	992,868	139,984	16%
Dwelling Units					
<i>JLUS study area</i>	27,259	29,430	40,014	10,584	36%
<i>Prince George’s County</i>	306,190	328,928	392,490	63,562	19%
Employment²					
<i>JLUS study area</i>	42,327	44,946	75,738	30,792	69%
<i>Prince George’s County</i>	338,296	347,886	518,386	170,500	49%

¹Population figures for 2008 and 2030 are derived from dwelling units.

²Employment data are from 2005 Metropolitan Washington Council of Governments Round 7.1 projections.

Source: M-NCPPC

The population in the JLUS study area is projected to increase by 33 percent to approximately 101,200 by 2030; similarly, the number of dwelling units is projected to increase by approximately 10,600 units (36 percent) during the same time period. While growth is projected in all planning areas around the base, the largest dwelling unit growth share (6,029, or 57 percent) will be in Westphalia (See Table 2–5).

Table 2–5. Base Area Dwelling Unit Change, 2000–2030

Subregion	2000	2008	2030	Change 2008–2030	
				Number	Percent
Subregion 4 (Suitland, District Heights)	9,026	9,376	11,094	1,718	18%
Subregion 5 (Clinton)	5,397	6,647	7,385	738	11%
Subregion 6 (Westphalia)	2,055	2,336	8,365	6,029	258%
Subregion 6 (Melwood)	4,723	4,389	5,610	1,221	28%
Subregion 7 (The Heights)	2,096	2,614	3,004	390	15%
Subregion 7 (Henson Creek)	3,962	4,068	4,556	488	12%
Total JLUS study area	27,259	29,430	40,014	10,584	36%
Prince George’s County	306,190	328,928	392,490	63,562	19%

Source: M-NCPPC. Detailed data by ERM.

⁴ For land use planning purposes, Prince George’s County is organized into seven “subregions.” A “subregion” is a technical term that refers to a region within the county that can be analyzed and planned for as a coherent unit.

Over 42,000 jobs existed in the JLUS study area in 2005 (**See Table 2–6**). These jobs constituted approximately 13 percent of the total employment in Prince George’s County. Of these jobs, approximately 36 percent (15,326 jobs) were in the Melwood area, which includes Joint Base Andrews. The base itself had approximately 10,000 jobs in 2005.

Table 2–6. Base Area Employment, 2000–2030

Subregion	2000	2005	2030	Change 2005–2030	
				Number	Percent
Subregion 4 (Suitland, District Heights)	8,558	8,744	10,954	2,210	25%
Subregion 5 (Clinton)	8,428	9,171	12,207	3,036	33%
Subregion 6 (Westphalia)	2,959	3,107	22,237	19,130	616%
Subregion 6 (Melwood)	15,210	15,326	19,567	4,241	28%
Subregion 7 (The Heights)	3,316	4,589	5,809	1,220	27%
Subregion 7 (Henson Creek)	3,856	4,009	4,964	955	24%
Total JLUS study area	42,327	44,946	75,738	30,792	69%
Prince George’s County	338,296	347,886	518,386	170,500	49%

Source: M-NCPPC.

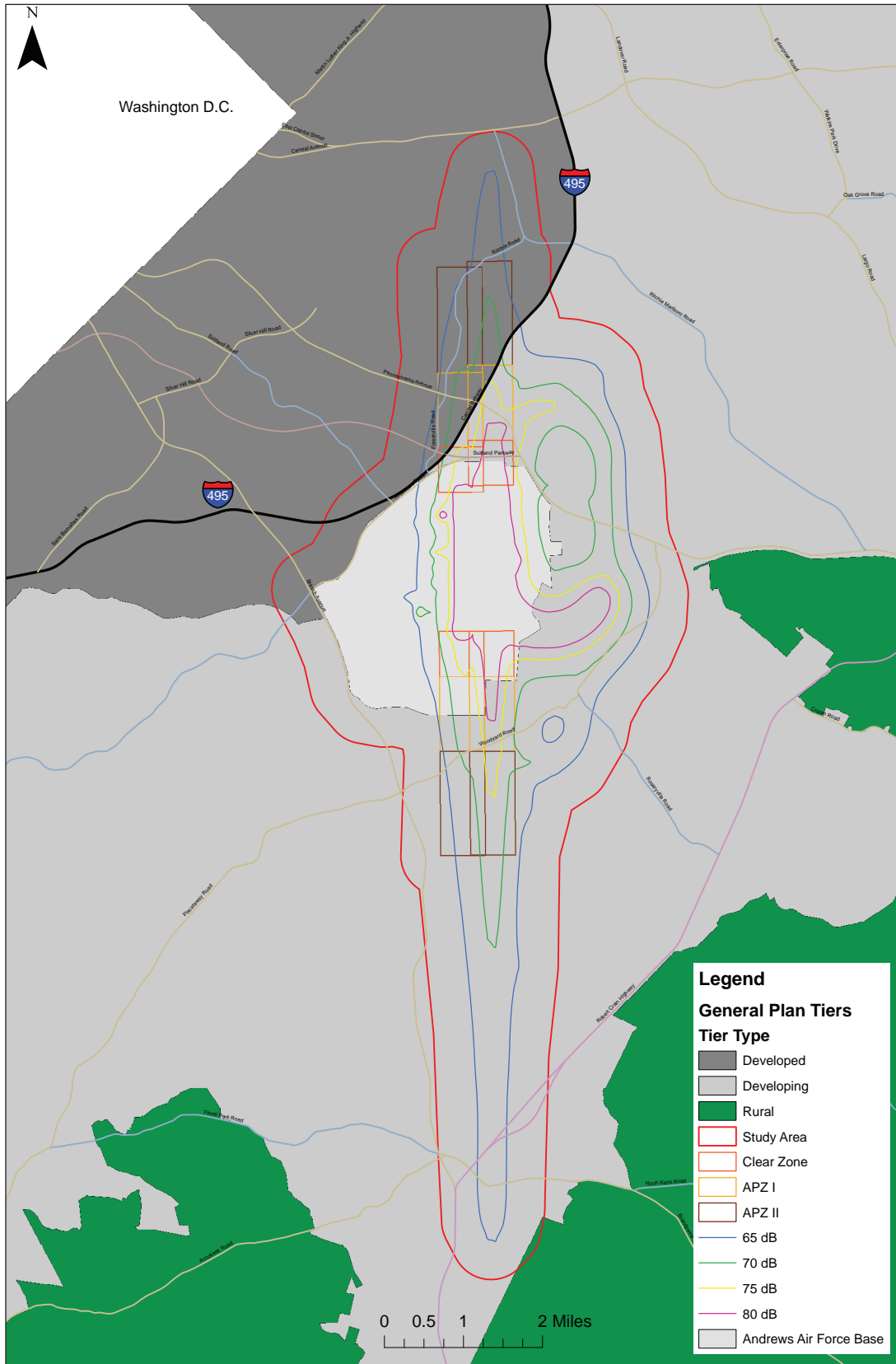
Projections show that by 2030, employment in the Joint Base Andrews vicinity will increase by approximately 30,800 jobs, which equals 18 percent of total projected employment growth in Prince George’s County. Of this increase approximately 62 percent of jobs (19,130 jobs) will be in Westphalia.

2.10 PRINCE GEORGE’S COUNTY PLANNING POLICIES

The 2002 *Prince George’s County Approved General Plan* sets the overall land use and development planning framework for the county. The General Plan establishes three policy areas or “tiers” for the county, the Developed, Developing, and Rural Tiers, which, in combination, designate strategic areas of desired economic development, residential development, and preservation. Joint Base Andrews itself and most of the area north and south of the base lie in the Developing Tier. The area inside the Capital Beltway falls within the Developed Tier (**See Map 2–7**).

While the General Plan sets a comprehensive policy framework for the county, detailed planning is done at the subregion and sector plan levels. As noted earlier, Prince George’s County is organized into seven “subregions” for land use planning purposes. Joint Base Andrews is located within Subregion 6, but the JLUS study area includes portions of Subregions 4, 5, 6, and 7 (**Map 2–8**). In developing recommendations for the JLUS, the planning team and advisory committees have taken into consideration detailed policies and recommendations contained in all current and proposed subregion and sector plans that affect the study area (**See Table 2–7**). JLUS recommendations have been crafted to complement and help facilitate implementation of these subregion and sector plan recommendations.

Map 2-7. 2002 General Plan Policy Tiers in the Joint Base Andrews Vicinity



Source:
M-NCPPC

Map 2–8. 2009 Subregion and Sector Plan Areas in the Joint Base Andrews Vicinity

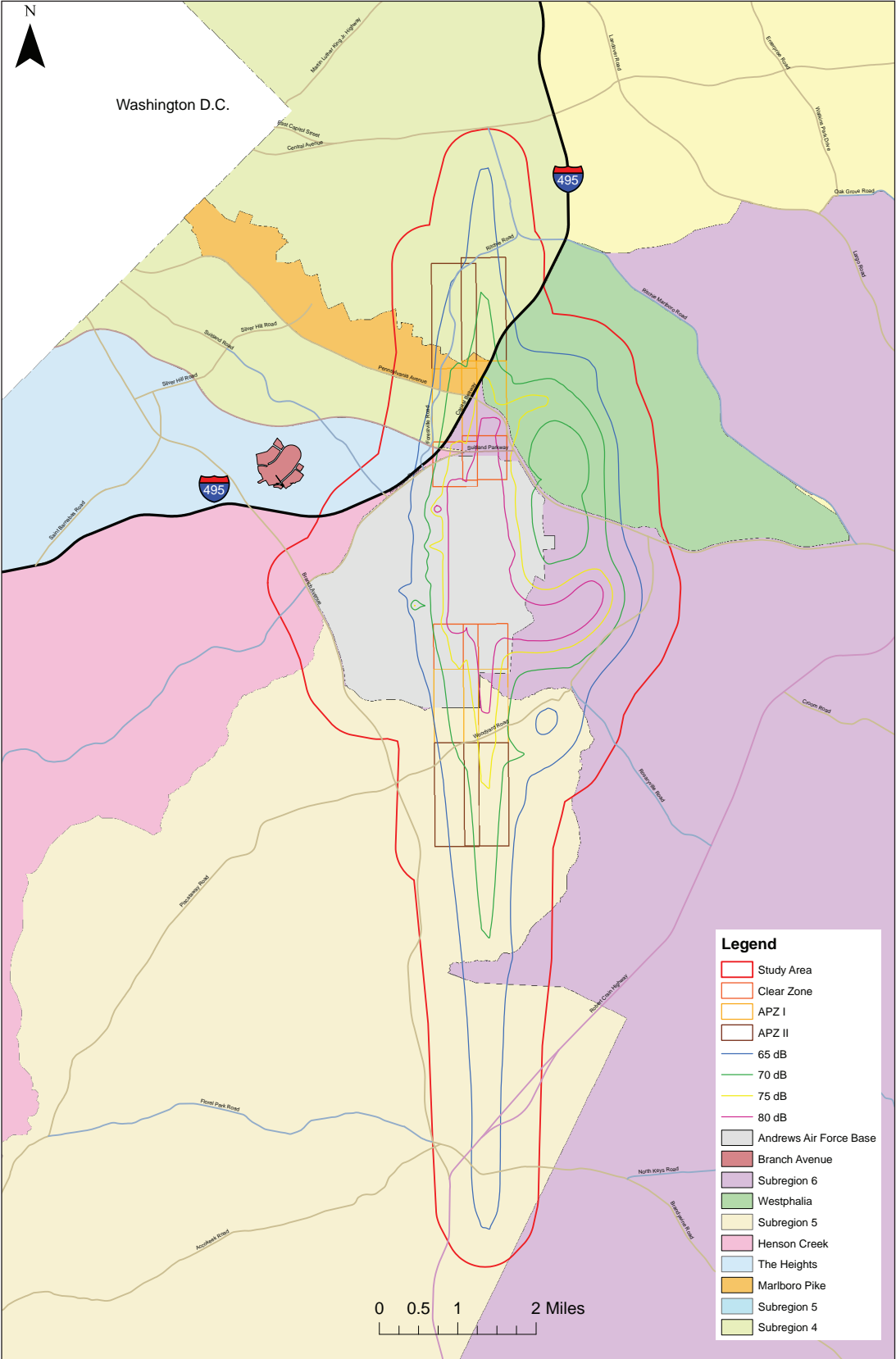


Table 2–7. Planning Areas around Joint Base Andrews

Planning Area	Relevant Plan(s) and Date
Subregion 4	Adopted Master Plan and Endorsed SMA, December 2009
Subregion 5	Approved Master Plan and SMA, September 2009
Subregion 6	Approved Master Plan and SMA, 1993 Approved Master Plan and SMA, September 2009
Subregion 7	Adopted and Approved Master Plan, 1981
Westphalia	Approved Sector Plan and SMA, February 2007
Henson Creek and South Potomac	Approved Master Plan and SMA for the Henson Creek–South Potomac Planning Area, April 2006
Marlboro Pike	Approved Sector Plan and SMA, November 2009

Future land use around Joint Base Andrews is addressed in several county subregion and sector plans in various stages of preparation and approval (See Table 2–7). Map 2–6 shows the most recent versions of each plan’s proposed future land use map. Generally, all county plans contain the following policies for the Joint Base Andrews vicinity:

- ❖ Promote an increase in compatible employment uses around the base, especially in accident potential zones and areas subject to aircraft noise.
- ❖ Reinforce, redevelop, and revitalize existing business/commercial corridors and centers.
- ❖ Increase designation of mixed-use areas, especially to the north and west of the base.
- ❖ Encourage compatible infill development on previously undeveloped or underdeveloped land around the base, especially to the south and east in Subregion 5 and Subregion 6.

Each planning report also identifies a series of specific recommendations for areas within the base vicinity. The following sections briefly describe and explain key planning recommendations from the planning reports listed in Table 2–7.

Adopted Subregion 4 Master Plan

The *Adopted Subregion 4 Master Plan and Endorsed Sectional Map Amendment* identifies the area around the Forestville Shopping Center and Marlo Furniture Store site as “Opportunity Site 10” and recommends redeveloping this site as a business park. Designated the “Forestville Business Park,” this new development would be built in accordance with AICUZ guidelines and create an attractive and distinctive gateway to Marlboro Pike. The land uses in this business park would be some combination of light industry, employment, research and development, and office uses. This business park development would seek to revitalize the surrounding community and take advantage of the base’s presence.⁵

Subregion 5 Master Plan

The 2009 *Approved Subregion 5 Master Plan and Sectional Map Amendment* includes land use recommendations for areas to the south of the base. Much of this area is currently developed with low density residential uses. Some commercial and industrial uses are also present. The plan acknowledges the difficulty of making this existing development compatible with the AICUZ guidelines; however, the plan recommends a long-term policy of gradually making land uses and development in the area compatible

⁵ Please see *Adopted Subregion 4 Master Plan and Endorsed Sectional Map Amendment*, December 2009, pages 320–323.

with the AICUZ guidelines as the opportunity arises. Specific recommendations include ensuring collaboration between county and JBA staff on review of development proposals in safety zones and areas subject to aircraft noise as well as the use of noise reduction measures for new development within the 65 dB and greater noise contours.⁶

Subregion 6 Master Plan

The *Approved Subregion 6 Master Plan and Sectional Map Amendment* includes land use recommendations for areas to the north and east of the base. A broad range of land uses exists in these areas, including residential, commercial, and industrial uses, along with extensive tracts of undeveloped land. Like the Subregion 5 plan, this plan recommends land uses and development that are compatible with base operations. Specific recommendations include formalizing the base's participation in the county's development review process, requiring development within the 65 dB and greater noise contours to be protected from aircraft noise with appropriate noise reduction measures, expanding the industrial areas near the base, and rezoning those areas to a more appropriate category of industrial/employment zoning as a means of reducing encroachment issues.⁷

Subregion VII Master Plan

The *Adopted and Approved Master Plan for Subregion VII, Henson Creek (Planning Areas 76A and 76B) and South Potomac (Planning Area 80)* dates from 1981 and has not been updated since that time. This subregion includes three Planning Areas: 76A, 76B, and 80. The *Approved Master Plan and Sectional Map Amendment for the Heights and Vicinity (Planning Area 76A)* (November 2000) replaced the old Subregion VII Plan for Planning Area 76A and the *Approved Master Plan and Sectional Map Amendment for the Henson Creek-South Potomac Planning Area* (April 2006) replaced it for Planning Areas 76B and 80. The Subregion VII Master Plan did not include much information regarding Joint Base Andrews; it acknowledged the potential of noise impacts on developments near the base and hinted that the Air Force would seek to acquire land in certain areas considered to have high accident potential.⁸

Westphalia Sector Plan

The *Approved Westphalia Sector Plan and Sectional Map Amendment* area is located to the northeast of Joint Base Andrews, in the area bounded by the Capital Beltway (I-95/495) to the west, Pennsylvania Avenue (MD 4) to the south, and Ritchie Marlboro Road to the north and east. This area is largely undeveloped, although several residential subdivisions already occupy a portion of the area. The sector plan calls for coordinated development of a high-density "town center" surrounded by lower-density

⁶ Please see the *Approved Subregion 5 Master Plan and Sectional Map Amendment*, September 2009, pages 34–38. Also see Chapter 3 for additional detail about noise encroachment issues.

⁷ Please see the *Approved Subregion 6 Master Plan and Sectional Map Amendment*, September 2009, pages 58–62. Also see Chapter 3 for detail about area encroachment issues.

⁸ Please see the *Adopted and Approved Master Plan for Subregion VII, Henson Creek (Planning Areas 76A and 76B) and South Potomac (Planning Area 80)*, October 1981, pages 39–40.

residential areas, several village clusters, and extensive parkland and open space. The plan recommends minimizing the effects of noise from the base and roads classified as arterials or higher. Additional recommendations include locating residential uses outside of high noise level areas, locating industrial uses within noise zones, and considering noise impacts in the evaluation of area development proposals.⁹

Henson Creek-South Potomac Planning Area

The *Approved Master Plan and Sectional Map Amendment for the Henson Creek-South Potomac Planning Area* (April 2006) includes land use recommendations for the stretch of Allentown Road located just outside the Main Gate of Joint Base Andrews. The plan recommends redeveloping underutilized shopping centers along this road with a mix of commercial, retail, and residential uses aimed at creating a distinctive gateway to the base. The plan proposes a new street and sidewalk network to improve links between the community and the base and reduce traffic congestion. Any redevelopment in this area would seek to capitalize on the base's presence and use it as a source of economic development for the community.¹⁰

Marlboro Pike Sector Plan

The *Approved Marlboro Pike Sector Plan and Sectional Map Amendment* identifies the area just north of the base around the intersection of Marlboro Pike with Forestville Road as “Priority Area 7.” This area currently includes the underutilized Forestville Plaza shopping center as well as several nondescript retail buildings. The sector plan recommends this area for use as a “flex space campus” that would have up to three floors of professional office space. The plan notes that while retail and high density housing would not be appropriate for this area due to its location near the base, it does recommend a number of lower-density uses for this area, including warehousing, wholesalers, and manufacturing. These recommendations overlap and complement recommendations for the same area in the Adopted Subregion 4 Master Plan.¹¹

⁹ Please see the *Approved Westphalia Sector Plan and Sectional Map Amendment*, February 2007, page 22.

¹⁰ Please see the *Approved Master Plan and Sectional Map Amendment for the Henson Creek-South Potomac Planning Area*, April 2006, pages 36–37.

¹¹ Please see the *Approved Marlboro Pike Sector Plan and Sectional Map Amendment*, November 2009, pages 32–36.