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BRAC Preparedness Strategy...

Brunswick Naval Air Station

Prepared for the
Town of Brunswick, ME

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2005

June 2005



**BRAC PREPAREDNESS STRATEGY
BRUNSWICK, MAINE**

May 12, 2005

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PROLOGUE

On May 13, 2005, the Department of Defense released its list of recommendations under the 2005 Base Realignment and Closure process. Brunswick naval Air Station was recommended for realignment, resulting in a manpower reduction of 2,317 military and 61 civilian positions. Further information provided by DoD indicated that all of the active P-3 squadrons would be moved to Jacksonville Naval Air Station. BNAS would remain open, retaining a DoD airfield in the northeast, and would continue to support other Navy operations in the region. More detailed descriptions of what will remain at BNAS have not yet been provided.

The bulk of this report was concluded prior to the announcement. The realignment recommendation, if upheld by the BRAC Commission, the President and Congress, will result in a variety of social and economic impacts to the Town of Brunswick and the Mid-Coast Maine region. These impacts include (but are not limited to):

- Loss of population and employment, including more than 1,500 indirect jobs.
- Loss of retail sales.
- Increase in vacancy rates among rental and owner-occupied housing.
- Loss of revenues and services for local schools, town government and utility providers.

In some cases, these impacts may be serious. For example, the sudden withdrawal of military personnel could result in 25% to 35% of the local apartment units becoming vacant, resulting in a dramatic decrease in rents and resultant loss of income to many small investors, and a subsequent reduction in the town's tax base and property tax revenues.

Although the fiscal and economic impacts of the realignment action were beyond the scope of this report, the information contained herein can be utilized to estimate the consequence of the decision.

I. INTRODUCTION

A. Purpose of This Report

In January 2005, the Town of Brunswick received a grant from the United States Department of Defense (DoD), Office Economic Adjustment (OEA) for pre-planning activities. The scope of the grant called for the collection and analysis of land use and other related data relative to the *possible* redevelopment of Brunswick Naval Air Station (BNAS), if the installation is included on the list of recommended military bases to be closed under the Base Realignment and Closure Act. The OEA funding for this study was not contingent upon nor in any way related to whether or not BNAS makes the closure list, but rather represents an attempt by DoD to enhance and accelerate the property transfer process in order to save the federal government money and to return land to productive civilian uses more quickly.

This data collection and analysis effort is best described as a platform or foundation for future reuse planning efforts, should they be required. It is not a plan for the redevelopment of BNAS, since it does not include the development of specific alternatives for all or portions of the installation. Rather, it provides a starting point for the development of a Master Plan for the reuse, if and when it is required. A master planning process will include extensive public input and review, along with the analysis of alternative uses for the more than 3,000 acres that make up BNAS.

B. Report Organization

This report is organized into several chapters, each of which deals with specific redevelopment issues that the town will face if BNAS is included on the 2005 base closure list. The contents of each of the following chapters include:

Chapter II: Organization & Governance

This chapter provides an explanation of the base closure process, a description of how federal property can be transferred and describes the possible make up of a public governance body to oversee the redevelopment process. Appendix A presents several case studies of how other communities have dealt with base closures and subsequent reuse which illustrate what has and has not worked in other locations. This chapter also describes a legal framework for the redevelopment effort, looking at the chain of title for the property now owned by the federal government and the organizational options currently available under Maine law.

Chapter III: Facilities Assessment

This chapter provides a detailed description and inventory of the major physical elements present at BNAS including buildings and other structures, infrastructure components such as roads and utilities, natural features as well as environmental contamination and environmentally sensitive areas.

Chapter IV: Market & Economic Conditions

This chapter summarizes the current economic environment in the state and region along with an analysis of the real estate markets for key sectors such as housing, office, commercial and industrial uses. This information serves as the basis for forecasting future demand for the property. A more detailed market, economic and housing analysis is presented in Appendix B, in order to provide a context for the potential impacts to the community and the local housing market if the Base is closed and 4,000 or more military employees leave the area.

Chapter V: Opportunities and Constraints

This chapter describes potential uses for the facility if it is no longer needed by the Navy, as well as potential issues regarding the redevelopment of the property. It also includes a discussion of the impacts on the town and region if the Base expands instead of closes. The BRAC process also includes the realignment of bases to absorb additional mission capacity, and in that event, the town needs to be prepared to plan for the growth that will occur.

Chapter VI: Reuse Planning

This chapter concludes with a description of the closure process and provides a proposed timeline and an action plan or strategy for the town to follow to effectively and efficiently plan the redevelopment of BNAS, if needed.

Addenda

In addition to this narrative report, several documents, maps and computer files that contain relevant information about Brunswick and BNAS are included as a separate addenda "document". This information is indexed at the end of this report.

C. Description of the Base

Brunswick Naval Air Station (BNAS) is a military facility that supports the warfighting capabilities of a number of tenant organizations. These include Patrol & Reconnaissance Wing Five (CPRW-5), a group of P-3 aircraft squadrons used for anti-submarine warfare and other functions and related aircraft maintenance groups, a C-130 military airlift squadron, several Navy reserve units, a medical/dental clinic, special training groups along with a construction battalion. The Base also supports the Superintendent of Shipbuilding, which oversees government activity at Bath Iron Works. Resident military and civilian employees at BNAS are also supported by a full array of residential, recreational and other programs and facilities. As the only remaining active duty Department of Defense airfield in the northeastern United States, the Base provides airport services to a wide variety of military activities on a 24/7, year-round basis with two 8,000 foot runways and a full complement of airside support infrastructure.

As of October 2004, BNAS employed 4,428 military personnel and 722 civilians. The military totals include active duty and reserve personnel, and 420 officers and enlisted personnel who work for SUPSHIP (Superintendent of Shipbuilding) in Bath or who are crewmembers on ships that are not yet commissioned, but who are supported by BNAS. Civilian personnel include direct Navy employees, MWR (Morale, Welfare & Recreation) personnel as well as 20 civilian SUPSHIP employees. The number of employees at the Base

varies year-to-year depending on military funding and activity levels. Included in the total employment levels are approximately 1,300 to 1,500 reservists from throughout New England who regularly visit the Base for training purposes.

Physically, the Base occupies approximately 3,300 acres in Brunswick¹, along with several outlying parcels. These include the 70-acre McKean Street family housing site located approximately one mile southwest of the Brunswick town center, an undeveloped 66-acre site in East Brunswick (former remote antennae site) and an 80-acre Topsham Annex located across the river in the Town of Topsham that includes 177 family housing units and a commissary branch. BNAS also manages other sites in Maine including a 6,000+-acre tract in Rangeley used for survival training, and a few smaller sites in other communities along the Maine coast. The physical assets of the installation located in the Town of Brunswick are described in more detail in Chapter III. Figure I-1 on the following page illustrates the location of the principal properties owned by the Navy in Brunswick.

D. Town of Brunswick

First settled in 1620 along the banks of the Pejepscot (now Androscoggin) River, Brunswick has grown to become one of the biggest small towns in Maine. Incorporated in 1739 and with a current population of just under 22,000, the town serves as a regional center for the mid-coast area, providing a wide array of employment, retail sales, medical services, historical and cultural amenities and educational activities. The Town of Brunswick offers a full range of government services to its residents and enjoys a very participatory public involvement with numerous volunteer committees in addition to elected officials and the professional staff.

The town is situated on the coast of Maine approximately 30 miles northeast of the City of Portland and 25 miles south of the capitol city of Augusta. It is located on U.S. Route 1 at the intersection with Interstate 95. As such, the town serves as the 'gateway' to the Coast of Maine, a very strong and historic tourist destination. The town, home to Bowdoin College and Brunswick Naval Air Station, supports two regional hospitals (Mid-Coast and Parkview) and serves as host to several manufacturing and office operations of Bath Iron Works, Maine's largest employer, which is headquartered nearby in the City of Bath.

Brunswick is governed by a nine member elected Town Council, with seven members elected from various wards and two at-large. A Town Manager oversees day-to-day administration of the Town and its several departments including Public Safety (Police and full-time plus volunteer Fire departments), Human Services, Planning and Development, Assessing, Finance, Town Clerk and Schools. The town is financially stable, with a total current expenditure budget of approximately \$4.8 million and a tax rate of \$22.07 mils. As with most Maine communities, however, rising costs are straining budgets and affecting service levels.

¹ The Navy property records indicate that the size of the contiguous Base is 3,151 acres (3,116.5 owned in fee plus 34.5 acres of easement). The Town's GIS mapping calculates a total of 3,132 acres. Copies of survey maps and other data are provided in the Addendum to this report.

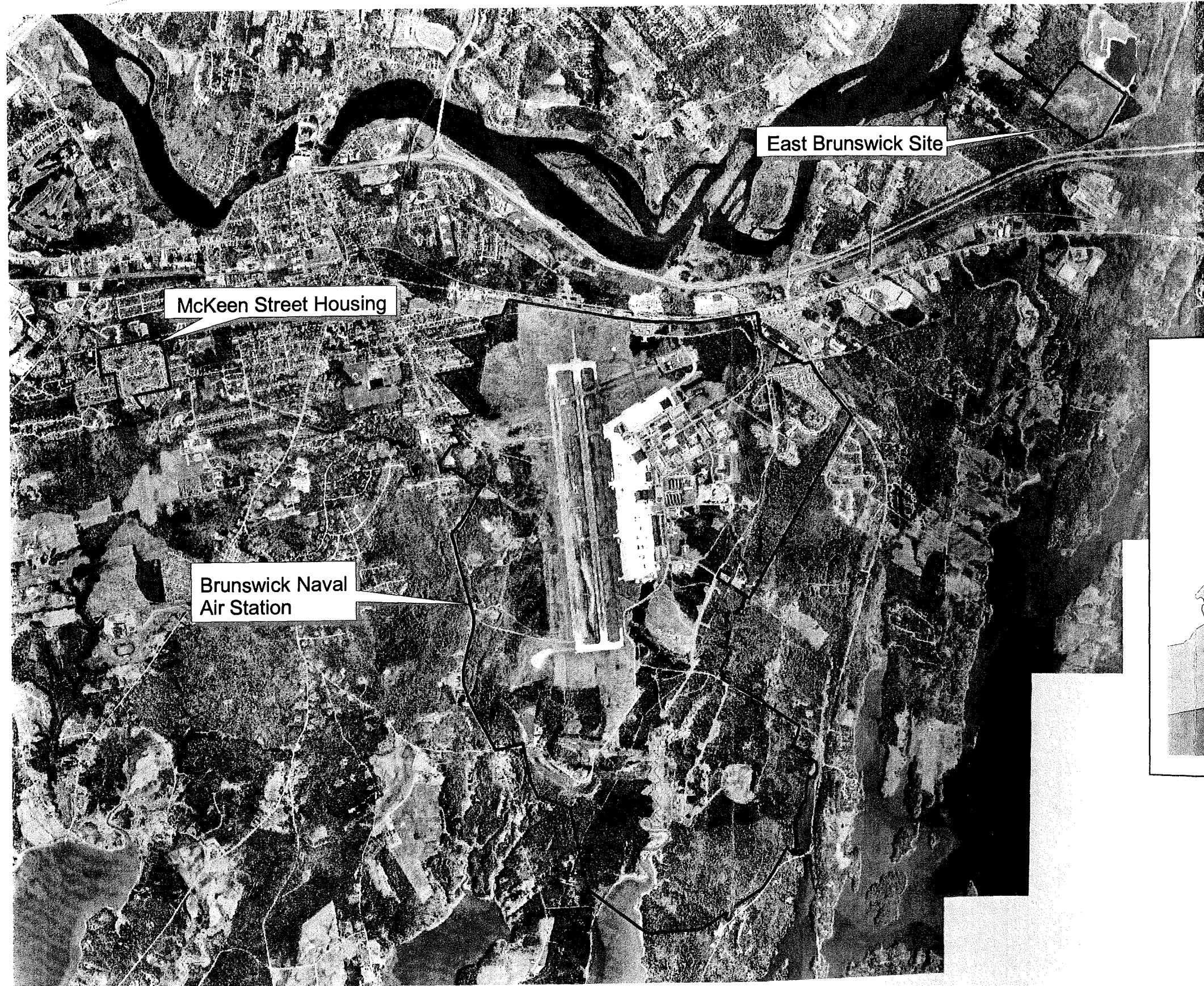
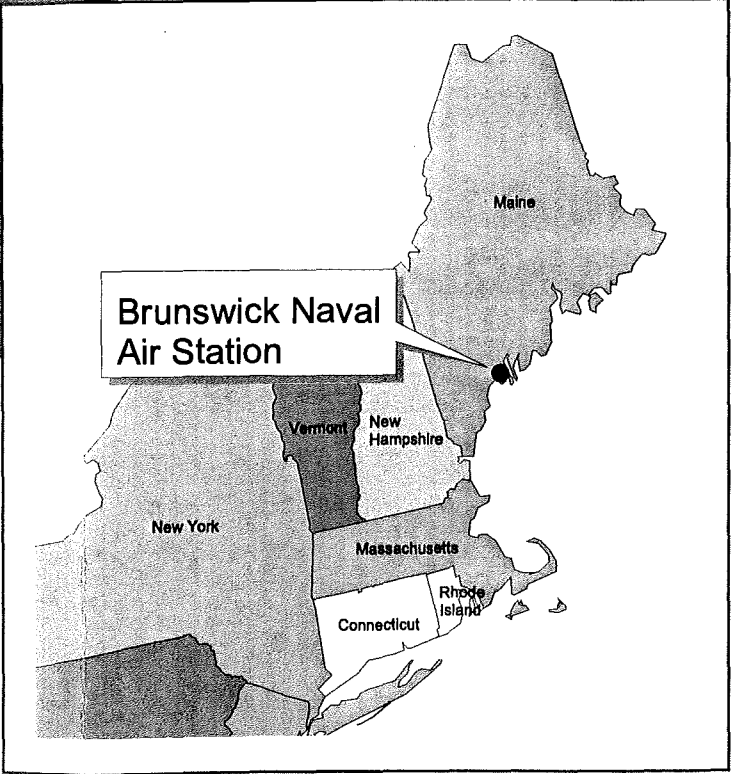


Figure I-1
BNAS Parcels
and Locus



3000 0 3000 6000 Feet

**BRAC Preparedness Strategy
Brunswick Naval Air Station**
Town of Brunswick, Maine

Prepared by RKG Associates, Inc. and OEST Associates, Inc. - April 2005
Sources: Town of Brunswick GIS Services;
and RKG Associates, Inc.

II. ORGANIZATION & GOVERNANCE

This chapter of the BRAC Preparedness Strategy for the Town of Brunswick focuses on the type of organization(s) needed to effectively plan, administer and implement a successful redevelopment program for the Brunswick Naval Air Station property, should it be included in the 2005 round of the Base Realignment and Closure Act². This chapter addresses the following key elements:

- A description of the different conveyance mechanisms through which government-owned and operated property can be transferred to other public or private entities.
- Case studies of redevelopment organizations, which illustrate various alternative redevelopment approaches and management structures, and a discussion of their applicability to Brunswick's situation.
- An analysis of the key issues facing the Town of Brunswick from an administrative and fiscal perspective if faced with the closure of BNAS as well as with the possibility of a substantial increase in mission activity as a result of a realignment.
- A review of the legal and regulatory issues brought on by redeveloping such a large and complex property, including a separate legal opinion regarding the status of the land ownership in the event of closure.

The purpose of this report is to familiarize the Brunswick Town Council and town staff with the complex process of redeveloping former military property and to collect and analyze to the extent possible, information about BNAS, the community and the region in order to provide a sound platform for future land use planning, if required. Future chapters will address the opportunities and constraints for reuse of the property based on analysis of the physical and environmental features that exist as well as current and forecast market and economic conditions.

Property Transfer Mechanisms

This section reviews alternative means by which the U.S. Government can dispose of surplus property, including military facilities that are included in the 2005 BRAC process. The processes described apply to real property as well as related personal property or equipment. Much of the information here is based on the February 2004 publication; *The Community Base Reuse Planning Process – A Layman's Guide*, edited by John E. Lynch and published by the National Association of Installation Developers, an Association of Defense Communities (NAID/ADC), and the December 1998 DoD Base Reuse Implementation Manual.

The primary regulatory mechanism governing the disposal of government property is the 1949 Federal Property and Administrative Services Act, as amended. The 1990 Defense Base Closure & Realignment Act, as amended, provided a revised mechanism for the transfer

² Enacted as Title XXIX of the National Defense Authorization Act for Fiscal Year 1991 (Public Law 101-510, 10 USC 2687).

of military property that was determined to be no longer needed by the Department of Defense (DoD). Within each of these regulations are a myriad of specialized features and nuances that may affect how property can be moved from the federal inventory to different ownership or uses.

1. The BRAC Process

The Defense Base Closure and Realignment Act (BRAC) process began with the first round of base closures in 1988 and proceeded through three additional rounds in 1991, 1993 and 1995. The purpose of the law was to reduce the physical infrastructure supported by the Department of Defense in order to better serve its war-fighting capabilities. Much of the property owned and operated by DoD was originally built in response to the threats presented in World War II or the Cold War that followed. Both the size and mission of the military has changed since then and DoD has determined that as much as 25% of its physical facilities are no longer needed. A total of 518,500 acres were included in these first BRAC rounds, and involved over 60 communities surrounding major military facilities.

The BRAC regulations include a variety of transfer mechanisms that guide the transfer of government property to other users, which may include other federal government agencies, state organizations, local communities and private sector interests. Although these methods have been modified slightly over the past few years, they provide for strong local public input into the process so that local interests, including economic development goals, are accounted for.

The current 2005 round of BRAC is set to be the largest of all in terms of the number of military properties that will be included. The Secretary of Defense has indicated that up to 25% of the remaining stateside facilities will be closed and others realigned to absorb new or transferred mission capabilities. This means that while many bases will be closed, others could be significantly expanded.

DoD has refined the criteria that it is using to make its 2005 BRAC decisions. The primary focus now is on Military Value, Return on Investment and Impacts. The selection criteria ensures that military value is the primary consideration in the making of recommendations for the closure or realignment of military installations in 2005. The individual elements within each of the value criteria include the following:

Military Value

- Preservation of training areas suitable for maneuver by ground, naval, or air forces to guarantee future availability of such areas to ensure the readiness of the Armed Forces.
- Preservation of military installations in the United States as staging areas for the use of the Armed Forces in homeland defense missions.
- Preservation of military installations throughout a diversity of climate and terrain in the United States for training purposes.
- The impact on joint warfighting, training, and readiness.

- Contingency, mobilization, and future total force requirements at both existing and potential receiving locations to support operations and training.

Return on Investment

- The extent and timing of potential costs and savings, including the number of years - beginning with the date of completion of the closure or realignment - for the savings to exceed the costs.
- The effect of the proposed closure or realignment on the costs of any other DoD activity or any other federal agency that may be required to assume responsibility for activities at the military installations.

Impacts

- The economic impact on existing communities in the vicinity of military installations.
- The ability of both existing and potential receiving communities' infrastructure to support forces, missions, and personnel.
- The impact of costs related to potential environmental restoration, waste management, and environmental compliance activities.

Although investment returns and community impacts are included, DoD officials have continued to stress that Military Value is the driving force behind the upcoming closure and realignment process.

2. Local Redevelopment

When DoD declares a property to be excess under BRAC, it begins an intensive process of working with the local community (or in many cases multiple communities or other government organizations) to begin planning for the transfer of the property³. Typically, there may be many groups asserting claims to the property, ranging from other military departments or federal agencies that desire some of the assets for furtherance of their objectives to local homeless providers to former owners whose land was acquired by the government many years ago to build the facility.

To begin the process of sorting through the various interests, DoD, acting through its Office of Economic Adjustment (OEA), has historically worked with the affected communities to create a Local Redevelopment Authority (LRA) and designates it as the sole contact point for the transfer process⁴. The LRA should represent various community factions with an interest in the facility and is charged with creating a realistic plan for the constructive reuse of the property. OEA does not dictate the structure or role

³ Section 2905(b)(2)(D) of the BRAC law reads: "Before an action may be taken with respect to the disposal of any surplus real property or facility located at any military installation to be closed or realigned under this part, the Secretary of Defense shall consult with the Governor of the State and the heads of local governments concerned for the purpose of considering any plan for the use of such property by the local community concerned."

⁴ An LRA is defined as "any authority or instrumentality established by state or local government and recognized by the Secretary of Defense, through the Office of Economic Adjustment, as the entity responsible for developing the redevelopment plan with respect to the installation or for directing implementation of the plan." (*DoD Base Reuse Implementation Manual, p. x*)

of the LRA, but must certify that it meets the requirements set forth in the enabling legislation. During earlier BRAC rounds, OEA urged states and communities to create LRA's with the power to own and hold property, borrow monies and other development-specific authorities. However, the experience of the many existing LRA's over the years has shown that there are many variations of organizational structure and authority that can work effectively. One of the key "lessons learned" from this experience is that there are two distinct roles that an LRA plays in the process:

- A "Planning LRA" responsible for developing a realistic master plan for the entire reuse program, and an
- "Implementation LRA" to actual effect the transfer of property and manage its long-term development.

The make-up and governance of the organization responsible for each of these distinct roles is likely to be substantially different.

The primary objective of a redevelopment agency⁵ involved in the reuse of military property is obtaining title to land, buildings and other assets (including so-called "personal property" which includes equipment and other non-realty assets) so that they may be put to productive new uses. In reality, most military property that is transferred comes with some level of constraint or restrictions on it, the most prominent being environmentally related. As a result, the redevelopment agency, as the "purchaser" of the property, must assume ownership of the property with these constraints, which adds a degree of risk to the redevelopment. The capability and willingness of the agency to accept and mitigate this risk often determines the role and make-up of the redevelopment organization.

Prior to the transfer of BRAC property, it must go through a two-step screening process. First, the military department (in this case, the Navy) solicits input from other DoD agencies and other federal government organizations regarding their interest in acquiring all or portions of the property. Properties no longer needed within DoD are considered "excess," while properties not useful to other federal agencies are declared "surplus." In past rounds, this process often took a long period of time and sometimes resulted in agencies putting in a claim for large portions of bases for which they had no current need or did not have the funding to develop or maintain. This process has been streamlined for the 2005 round, however, other federal agencies may still step in and claim portions of the installation that are critical to the civilian redevelopment. The LRA must be aware of this and take steps to prevent situations that could impede its objectives.

Some communities are often fearful that federal agencies will impose their needs and locate undesirable federal activities in an unwilling community. In reality, federal agencies will only locate their Job Corps facilities or their Bureau of Prisons facilities

⁵ The term "redevelopment agency" is used here to denote any public or quasi-public organization that is directly involved in the reuse of a military property that has been earmarked by the government for closure or realignment. Specific forms that this agency might take are discussed in detail throughout the chapter.

with local support. The Job Corps activities at the U.S. Naval Base in Charleston, South Carolina or at Loring Air Force Base in Maine occurred at the behest of the local communities and their Congressional delegations.

The threat of federal "land grabs" is also a myth. Far more serious, however, is the potential for DoD agencies, such as Reserve or National Guard units, to make piece-meal facility requests following the closure announcement and prior to the base closure property being declared excess. These piecemeal military agency requests can thereby create a "spotted leopard" effect on the overall remaining base property. This may be an issue that will have to be addressed at BNAS.

Once the "fed-to-fed" screening is completed, the remaining property is designated as surplus by DoD and the LRA is then responsible for screening other requests for the property. This includes providing notice of the property's availability to state and local government agencies and other organizations that are eligible to acquire surplus property through Public Benefit Conveyance (see below). This includes agencies that provide services to the homeless population, state agencies such as the Department of Transportation for roads or airports, public utility providers, etc. The LRA can then deal with interested agencies regarding uses that are compatible with its reuse plans. The final surplus property screening priority is accorded to state and local governments equally as well as federally recognized Native American Indian Tribes. There is no hierarchy at all in the federal screening process among state and local agencies and recognized Indian Tribes, since all state and local government as well as Indian Tribal requests are accorded equal standing.

There are several methods by which title to property can transfer either directly to the redevelopment agency or to other parties. The choice of methods is determined by several factors including the wants and needs of other governmental agencies, the value of the property, the extent of planning that has been done, and the condition of the property. As the seller, the DoD has the sometimes conflicting objectives to 1) transfer the property as expeditiously as possible and 2) obtain the most value for the taxpayer. DoD is also required by law to ensure that the property is environmentally safe prior to transfer.

To facilitate the reuse planning process, OEA is authorized to provide grant funds to communities impacted by a closure. These grants, which typically require some local or state matching funds, can be substantial⁶. OEA also provides technical assistance to BRAC communities.

3. Transfer Mechanisms

The following sections describe the available transfer mechanisms available under BRAC.

⁶ Between 1989 and 2003, OEA gave out 78 multi-year grants averaging \$1.8 million each, and 24 single-year grants averaging \$165,000 each (source: 8/10/04 presentation by OEA Director Patrick O'Brien to the National Association of Installation Developers, an Association of Defense Communities, in Tempe, AZ)

a) Public Bid Sale

DoD provides the military department with the authorization to sell, through an open bidding or sealed bid process, surplus government or BRAC property for any use, including a broad range of commercial, office, industrial or residential uses. A public bid sale is subject to full disclosure of information concerning approved local land use zoning in-place and the identification of any environmental restrictions placed on the property. Public Bid sales can be a useful property transfer mechanism where the LRA has identified the future use (such as specific family housing areas) in its base reuse plan, and where the LRA wants to conserve its limited resources by encouraging the private sector to bid for and redevelop the property, subject to local land use zoning conditions.

b) Negotiated Purchase

States, local governments, Indian tribes, and other public agencies can purchase surplus or BRAC property at the fair market value, as appraised by the military department or the General Services Administration (GSA) acting as the disposal agency. Information on individual negotiated purchases must be submitted to the appropriate committees of Congress for review and approval. The transfer of property through negotiated sale or through public bid sale typically has fewer "strings" attached as compared with the other transfer mechanisms.

c) Economic Development Conveyance

The military department may transfer BRAC property at a discounted price for long-term economic development purposes, provided that the LRA devotes the proceeds from any subsequent sale or lease of the EDC properties for at least the first seven years after the initial transfer to support economic development of, or related to, the installation. Because of the slow pace of military department property transfer from 1994 to 2001, a large share of the 1988-1995 BRAC EDC transfers were made without cost consideration (so-called "No Cost EDC's). BRAC properties in rural areas could be transferred without cost through the EDC mechanism⁷. However, the latest language in the reauthorizing legislation does not make reference to "rural" bases.

It appears that the location of a BRAC base, either urban or rural, is no longer a criterion in the applicability of the low or no cost Economic Development Conveyance. Initially, EDC's were to be at no cost for rural bases, defined as those outside of a MSA, while non-rural bases were subject to military department obtaining the fair market value for the real and personal property. In the 1999 amendments to the BRAC law, all EDC's were eligible for no-cost status. However, during the House-Senate conference committee meetings on the FY 02 Defense Authorization Bill, language was added to Section 2905(b)(4)(B) (as amended through the FY 05 Defense Authorization Act) stating that the Secretary of Defense "shall seek to obtain consideration in connection with any transfer under this

⁷ A "rural" base is not located within a recognized Metropolitan Statistical Area (MSA) as determined by the Office of Management and Budget (OMB). According to information on the OMB website, the Town of Brunswick is not located within the greater Portland MSA or the Lewiston-Auburn MSA.

paragraph of property located at the installation in an amount equal to the fair market value of the property, as determined by the Secretary.” However, it goes on to state that the transfer “may be without consideration if the redevelopment authority.....” agrees to reinvest all proceeds from the subsequent sale or lease of property into the redevelopment (to support economic development) for a period of at least seven (7) years. Thus, the community can still get property at no cost (or reduced cost) but needs to prove to the DoD that the funds are needed for economic development purposes.

The EDC authority also permits the sale of BRAC property at fair market value to the LRA. For properties closed in the upcoming 2005 BRAC round, the military departments will be required to seek consideration equal to the fair market value for the EDC property⁸. The regulations governing the EDC authority allows the disposal agency⁹ to provide multi-year payment terms. Unlike negotiated sales, a permanent record file is maintained by the DoD disposal agency on the EDC sales transaction, but without the record being submitted to the congressional committees for review prior to implementing the property transfer. In the past rounds, the flexibility that is inherent in the EDC transfer mechanism has allowed many communities to successfully acquire and redevelop properties that would otherwise have been very difficult to effectively use for job generation.

d) Public Benefit Conveyance

In addition to the authorities allowing transfer of property directly to the LRA or a private sector entity, additional mechanisms permit transfer of military property to other governmental agencies or certain public organizations. These typically involve the transfer of the property’s title from DoD to another federal agency (sponsor), which then subsequently transfers whole or partial ownership to a state, local or not-for-profit organization.

It is important to note that direct “Fed-to-Fed” transfers hold priority over transfers to the LRA or others. The requests for DoD surplus property by other agencies are funneled through the LRA for inclusion in its Reuse Plan. Conflicts that arise between the LRA and these agencies must be worked out early on in the planning process. Public benefit conveyance may include the following:

(1) Educational Transfers

The Department of Education may transfer surplus or BRAC properties for school or educational uses without cost to tax-supported schools or non-profit educational institutions. Full title to the property is actually “earned” over a

⁸ Fair Market Value is defined in general as the price, in cash, that a willing buyer and a willing seller would agree on without undue influence on either party. There are several formal definitions of market value used by different organizations such as the Appraisal Institute, the Controller of the Currency and the banking industry.

⁹ The military department (Navy, Army or Air Force) can designate another agency to act on its behalf to dispose of surplus property. This can include the General Services Administration, the Army Corp of Engineers or an internal organization.

thirty-year period through constructive use of the property for approved educational purposes.

(2) Health-Related Transfers

The Department of Health & Welfare may transfer surplus or BRAC property for public health (including research) purposes. Health-related transfers can also include medical facilities, water systems, and sanitary sewer treatment facilities among other public health uses. Full title to the property is also “earned” over thirty years through its constructive use for approved public health-related purposes.

(3) Park, Recreation & Wildlife Conservation Transfers

The Department of the Interior can obtain surplus BRAC properties from DoD and transfer it to states and communities for park, recreation, and wildlife conservation purposes. These transfers can be made for discounts up to 100 percent (i.e., without cost) with a further stipulation that the facilities be reserved in perpetuity for public purposes.

(4) Historic Monument Transfers

At the recommendation of the Department of the Interior’s National Park Service, DoD can similarly transfer historic properties without consideration to be preserved in perpetuity for national historic monument purposes. The historic park area can also include commercial or office facilities to provide a rental income to support the historic landmark area.¹⁰

(5) Public Airports

Subject to the recommendation of the Federal Aviation Administration (FAA), DoD can transfer airports and aviation-related facilities in perpetuity to support public airports. Airport conveyances can include the runway and aviation facilities, related personal property as well as revenue-producing industrial, commercial, and support facilities that can be leased to provide a rental income stream in support of the public airport. These restrictions can be released only with the approval of the FAA and in close cooperation with state aviation officials. The FAA’s approval and involvement is dependent on the need for future federal airport funding and support to permit use of the airport by commercial aircraft as part of the national airport system. An airport can also be transferred to the LRA for private use through the other available mechanisms such as an EDC or public bid sale.

(6) Housing the Homeless

In pre-1995 BRAC rounds, the Department of Health & Urban Development (HUD) could serve as a sponsoring agency to lease or transfer title at no cost to

¹⁰ It is important to note that during the property screening process, buildings or other facilities may be identified as having historic value. The State Historic Preservation Office (SHPO) determines the status of any such claims. If property is listed or is eligible to be listed on the National Historic Register, additional development constraints may come into play.

local representatives of the homeless as a priority claim among all state and local applicants, under the provisions of the McKinney-Vento Homeless Assistance Act. This priority claim feature no longer applies to applications for BRAC property, however the LRA does need to recognize and work to accommodate these needs in its reuse planning. In addition, under the McKinney Act, HUD must formally approve the LRA's reuse plan to ensure that the needs of the homeless have been accounted for¹¹.

(7) Public Port Facilities

The Department of Transportation's Maritime Administration can convey harbor activities, supporting rail yards, and port facilities (including pipelines) to recognized public port authorities for long-term port and economic development operations.

(8) Correctional Facilities

At the recommendation of the Attorney General (Department of Justice), the military disposal agency may transfer BRAC property for federal, state or local correctional facility use in perpetuity. Many LRA's around the country, particularly those in rural areas, have used this provision to support local economic development and create jobs and investment in their communities.

(9) Highways & Public Roads

The Secretary of Transportation can transfer the acquisition right-of-way for approved interstate highways and federally assisted highways without cost consideration to state departments of transportation. Typically, however, internal roads and streets at a facility are included in an EDC to the LRA, which then may keep and maintain them or subsequently turn them over to the local municipality.

(10) Conservation Conveyances

A relatively new form of property conveyance, authorized in the 2003 National Defense Authorization Act, allows for the transfer of property around military bases directly from DoD to eligible public and private conservation entities for preservation as well as recreational uses. These may include contaminated property and can include perpetual conservation restrictions, but may also be later sold with or without restrictions under certain circumstances. Developed initially to protect land around existing military bases from encroachment, this powerful new authority may play a role in the 2005 BRAC round.

e) Other Conveyance Issues

State and local governments have the option of negotiating directly with the federal government for the purchase of surplus federal property. Neither the state nor local government has priority in this process. It is important to understand, however, that under the terms of federal laws and regulations, all sales of property must be at fair market value. Fair market value is typically determined through an appraisal. While

¹¹ Additional information regarding housing the homeless claims and the effect on transfer can be found in Chapter IV.

the U.S. Army Corps of Engineers is often used by the military services to perform many of the appraisals, some contracted appraisers are also used.¹²

It should also be understood that the federal government often restricts the ability of the organization that acquires surplus property to resell the property, typically for a three to five year period. This restriction typically takes the form of an excess profits clause, which requires that profits from a resale be returned to the federal government. This provision essentially eliminates the possibility of "pass through" sales, where a community would negotiate a set price for a property and then pass the property on to a private concern. In these instances, the military service generally receives a percentage of the sale price.

If no interest has been expressed once a property has been made available for a PBC or a negotiated sale, the federal government will dispose of the property through a sale to the general public. These sales are usually in the form of a public auction or a sealed bid sale. This form of sale reduces the possibility of "undue influence" on the sales process, and provides the federal government with a method of property disposal that has a degree of certainty relative to when a parcel of property will be disposed.

This form of sale does not impose restrictions on the resale of the property. The possibility exists that if the community wanted to acquire a particular parcel, they could bypass the negotiated purchase option, and "take their chances" at an auction. This could result in a lower acquisition price, but also involves the risk that the property will be acquired by another organization. Property acquired by a private organization or individual however, would be subject to local zoning and land use controls.

4. Environmental Considerations

Although dealt with in more detail in later chapters of this report, the property transfer process under BRAC is significantly impacted by current federal laws regarding the environment. All federal actions, including the disposal of property, are subject to the requirements of the National Environmental Policy Act of 1969, as amended (NEPA), the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). These laws result in a very complex process through which both the military department and the community must work together to affect the reuse of the property. In simple terms, the government is responsible for assessing the condition of the property and to clean up (remediate) any hazardous substances or conditions found, prior to transfer¹³. Even after mitigation, the transfer of properties may be subject to on-going environmental controls and constraints that may impact future uses.

¹² Differences of opinion regarding the value of property often arise between the military disposal agency and the LRA. In such cases the LRA may need to hire it's own appraiser to value all or portions of the property.

¹³ With the exception of non-friable asbestos containing materials, lead paint, and certain other contaminants.

Since most military facilities, including Navy bases, included various industrial activities within their boundaries, the properties invariably have environmental issues ranging from minor contamination from petroleum spills, to asbestos-containing materials, to major ground-water contamination problems. As a result, the redevelopment process is heavily influenced by the extent of contamination, the amount of information that has been collected and analyzed to-date and the clean-up/mitigation efforts that have been carried out.

The environmental clean-up process adds several layers of additional complexity to the reuse of the property, as state and federal regulators as well as other local groups get involved in the decision-making process. A more detailed analysis of this issue is provided in chapter VI.

5. Transfer of Title

Most property that is transferred between two parties, whether they are private individuals, corporations or public entities, is done on what is called a fee simple basis in which all of the rights inherent in the real estate (absolute ownership) are transferred “unencumbered by any other interest or estate subject only to the four powers of government”¹⁴. This ownership interest is represented by a written warranty deed that conveys to the grantee (buyer) the title to the property free and clear of all encumbrances, except those specifically set forth in the document¹⁵. A warranty deed effectively insulates the buyer from the risk that there are other, unknown claims on the property. However, when the government transfers property, it utilizes a quitclaim deed, which is “a form of conveyance in which any interest the grantor (seller) possesses in the property described in the deed to the grantee without warranty of title”¹⁶. The seller provides all information the property that it has but ultimately the buyer takes on the title risk (which can be covered by insurance, but has a cost associated with it).

The existence of known and unknown environmental conditions on or near a piece of real property can add another layer of complexity and uncertainty. Some parcels may be transferred with deed restrictions on what can be done with it by future owners, or subject to certain actions by the government. For example, properties that have been cleaned up may be transferred with easements allowing the government or others to go back and monitor or investigate environmental conditions, or may restrict certain future land uses.

These issues may significantly impact the redevelopment potential of the property. What may be acceptable to a public redevelopment agency may not be to a private developer/investor or to a banker making a loan on that property. Differences in title and the possible need to indemnify future buyers may add additional costs to the redevelopment process. Specific issues regarding the transfer of parcels at BNAS will be analyzed in the next chapter.

¹⁴ The Dictionary of Real Estate Appraisal, 2nd Ed., American Institute of Real Estate Appraisers; p. 83

¹⁵ Ibid, p. 322

¹⁶ Ibid, p. 243

6. Zoning and Entitlements

The value of a parcel of real estate is absolutely dependent on what can be done with it – whether it can be used to build houses, retail stores, grow crops, etc. This is determined through zoning, which is the authority of local government agencies to regulate land uses for the health and welfare of the public. It is the most powerful tool that the community has to influence the redevelopment process because it determines, through an open public process, what should and should not occur on the property. Zoning also regulates density of development, along with requirements for infrastructure (streets and utilities) and aesthetic considerations. All of these entitlements work to shape what a single property or a collection of properties will not only look like in the future, but also how they will interact with the rest of the community.

BNAS is currently zoned by the town as “Business and Industry 5 - BNAS”, a designation that is not defined or detailed in the town’s regulations. During the course of the redevelopment planning effort, the town will need to develop new zoning for the land occupied by the Navy in order to effect an orderly and fiscally prudent transition from its current uses to those determined through the public planning process to be in the best interests of the Town.

B. Case Studies of Military Base Redevelopment

Appendix A provides a detailed case study analysis of several military property transfers that illustrates important findings regarding what has worked and what has not in military base redevelopment at locations around the country over the past forty years. There is no defined and approved “Best Practices” manual for base reuse – each base and the community or communities in which it is located is unique. However, there are certain commonalities among successful, and not-so-successful, redevelopment efforts that need to be analyzed. The lessons learned from this collective experience can then assist the Town of Brunswick in developing an effective and productive reuse planning process.

In preparing for any possible realignment or closure of Brunswick Naval Air Station, it is useful to investigate all various alternative organizational structures that meet community or regional needs, especially as they relate to the type and condition of the facility to be reused as well as local market conditions. The case studies summarize the organizational influences for fifteen different LRAs nationwide, both in terms of: (1) the initial policy “planning LRA” and (2) the long-term “implementation LRA”. In addition, one community case describes a successful redevelopment where the city did not form an LRA and relied entirely on a strong real estate market and its local land use zoning capacity.

There are many different variations within each of these LRA structures to meet uniquely local needs. The fifteen local organizational examples are summarized in terms of their general long-term LRA structures as follows:

- Single Jurisdiction LRAs:
- Multi-Jurisdiction LRAs:
- Cooperative State-Local LRAs:

- Quasi-Public LRAs:
- City/Town LRA Supported by Master Developer:
- No-LRA: Rely on Land Use Zoning-Military Department Sale:

C. Key Issues Facing Brunswick

1. Lessons Learned from Case Studies

The case studies of redevelopment efforts presented in the previous section highlight the great deal of flexibility that exists in structuring both the initial reuse planning organization as well as the more permanent implementation entity. The key lessons from this history include:

- The need for broad representation and input from stakeholders during the reuse planning process
- The importance of strategic leadership on the part of the organization that not only encourages a wide range of public input and discourse, but also recognizes that decision-making must occur in an expeditious manner.
- The need for strong technical and managerial skills to understand and deal with the complex issues that arise during redevelopment.
- The involvement of experienced development professionals during the implementation phases to ensure that the process and the actual development meet the needs of the market.
- The need for an independent implementation authority that can own property, borrow money and act quickly and decisively to develop the property.

Having a clear master plan that reflects the needs of the community and is developed through an open, consensus-building process will provide the guidance necessary to implement the plan effectively. A consensus-based plan that is strongly supported by community stakeholders will also serve as an effective negotiating tool with the Navy and private developers. Once the plan is in place, the implementing LRA needs to be able to go to work without having to constantly bring decisions before the public.

2. Current Navy Policy Regarding Property Transfer

It is anticipated that changes will be made in the methods used by the military departments in the property transfer and redevelopment process under BRAC 2005. In earlier rounds, the impact of closure on the community, in terms of job losses and fiscal conditions and the need to weigh the long-term viability of the approved reuse plan, carried more weight than is expected in the current round.

The Navy has indicated that it intends to aggressively pursue “public sales” of property, where real estate parcels with strong market potential are put up for auction and sold to the highest bidder. This may include environmentally contaminated property that has yet to be cleaned up, using the Early Transfer Authority (ETA) provisions added to federal

law in 1996¹⁷, where the Navy relies on the buyer to perform the required clean-up and reducing the purchase price to reflect the estimated costs. Under federal law, the Navy is responsible for the clean up of any hazardous conditions resulting from their use of property. However, the ETA process allows for a more rapid and, perhaps, more cost effective clean-up, thereby allowing the Navy to transfer the property for redevelopment sooner than it would be possible under traditional methods.

While the Navy's approach can help speed up the redevelopment process, the risk to the local community is that it may be left without the resources necessary to complete the remainder of the reuse plan. Past experiences have shown that redevelopment is extremely costly, often requiring wholesale replacement of obsolete utility systems, building demolition and increased maintenance expenditures. As a result, the proceeds from early phase transfer of the more marketable real estate may need to be "banked" to pay for the longer-term costs incurred during the latter stages of development. By allowing the Navy to "cherry-pick" the most valuable and easily sold parcels and sell them via public bid, the community may be left with more expensive, long term problem. It is therefore critically important to view the Base as a whole, rather than a series of unrelated properties. Establishing effecting zoning and other land use regulations for the property is one of the more effective tools available to the town to control unwanted or premature development. Extra caution should be taken in evaluating Navy requests for early transfer of property and should be deferred until the property must be looked at in its entirety and the reuse plan completed.

An alternative approach that the Navy may seek to pursue is to offer the Base in its entirety to buyers through a public bid sale, after it has gone through the screening process. The value of the property would depend largely on the zoning and land use regulations that are placed on the property by the Town, as well as on the transfer of the Navy-owned utility systems and other infrastructure. In this case, the Town's reuse plan will serve as the basis for future zoning and how the property will be valued in the marketplace.

3. Other Concerns

a) National Guard Facility Plans

Another issue that may be encountered by the community is the transfer of key property parcels to other Federal or military agencies, without due consideration of the community's reuse plans. In Brunswick's case, the Maine National Guard has indicated an interest in construction a large regional training and administrative facility at BNAS. Although no specific plans have been developed¹⁸, the current proposal calls for an approximately 230,000 square foot facility, located on approximately 15 to 20 acres in the wooded area west of the main gate, with construction potentially starting in 2008. This would be a "tri-service" Reserve Center that would provide training, classroom, administrative and support services to Army National Guard, Air Force Reserve and Marine Corps Reserves units from

¹⁷ CERCLA §120(h)

¹⁸ Based on a conversation with a representative of the Maine National Guard.

throughout the southern Maine region. Some activities or services might be shared with other Navy facilities on the Base, should the Base remain open. If the Base is closed, the Guard may be able to utilize existing facilities or sites on the Base for their proposed project, but they have not considered this option at this time. As a federal agency, they could acquire property from the Navy directly, without necessarily being part of the community's reuse planning effort. Alternatively, they could work with the Town to jointly plan the redevelopment so that mutual goals could be achieved.

b) Airport

The airfield facilities at BNAS, which are described in detail in the following chapter, are a critical component of the installation, utilizing more than half of the 3,000+ acres. The two 8,000 foot runways are capable of handling nearly any commercial aircraft and the other support facilities rival many major airports. However, the future of the airport without the military is highly uncertain. Preliminary indications, based on discussions with representatives from the Maine Department of Transportation and the Federal Aviation Administration, are that there is little demand in the region for additional civilian airport capacity from potential users such as commercial airlines, general aviation or business aircraft. Existing airports in Portland, Wiscasset and Auburn provide a wide variety of aircraft services and access to the national system. This does not preclude, however, the potential for the airport to continue to serve military aircraft including the Navy Reserves, perhaps under some type of joint use agreement, and/or other civilian users. The anticipated costs of operating and maintaining the facility may require substantial federal, state or local investment to maintain it as a public airport. On the other hand, reusing this portion of the Base for other, non-aviation uses is also likely to be very costly due to the possible need to remove runways, taxiways and other paved areas. The reuse plan will need to carefully evaluate the market and financial feasibility of continuing to operate the airport.

c) Privatized Housing

Most of the housing units located at BNAS have been included in an innovative new federal program that permits the Navy and the other military branches to privatize these assets in order to obtain funding for renovations and construction of new units. The program, created in the 1996 Defense Authorization Act and implemented by the Navy in 2004, spun off over 4,600 Navy housing units located at eight installation throughout the northeastern portion of the country to a limited-liability company owned by the Navy and GMH Communities Trust, a large privately held real estate construction and management company (in partnership with two other companies, The Benham Companies and Centex Construction) that is listed on the New York Stock Exchange (symbol - GCT). The Navy has transferred the units to the partnership (under at 50 year lease) while retaining ownership of the land. The partnership manages the properties, investing in new units and renovating others, using nearly \$520 million in funds borrowed from the capital markets and secured by the real estate. The debt service and management costs are paid for from the Basic Allowance for Housing (BAH) that is provided to military personnel. The program

allows the Navy to improve the housing it provides its employees in a more cost effective manner.

The privatized units at BNAS include 320 units located on the Base, 231 units located on government-owned property on McKean Street, and 177 units in Topsham. These units are maintained by the Navy (through the new partnership) and the Navy pays the towns a service fee for police and fire protection for those units that are not within the fence line of the Base. In addition, the Navy purchases water and sewer services for these developments from the local utility providers, but owns the underlying distribution infrastructure.

A potential issue regarding the redevelopment of BNAS is the status of the privatized housing in the event of a BRAC decision to close the Base, and the potential impact on other housing in Brunswick and the Midcoast Region. Depending on how quickly the closure of the Base occurs and the rate at which military personnel transfer out of the region, these units could experience high vacancy rates and/or be offered at below-market rates to the general public in order to keep them full. This could have a negative economic impact on private-sector landlords in the region. A more thorough analysis of this issue and the impact on the redevelopment of BNAS is included in Chapter IV.

d) Bath Iron Works

Another issue of regional significance that will impact the planning for BNAS is the future of Bath Iron Works (BIW). As the state's largest employer, and a major property owner and employer in Brunswick, BIW has been a mainstay of the economic health of the region. With a current workforce of approximately 6,000 civilians, BIW (which is owned by General Dynamics Corporation) designs and builds Navy warships, with their current contract for Aegis-class destroyers winding down. They had competed with Ingalls shipyard in Mississippi for a share of the work to build 12 of the Navy's next generation warship, the so-called DD(X) destroyer, however, the initial order was subsequently reduced to 7 ships and then to 5, with the Navy indicating that it might prefer to give the entire order to one shipyard, with many feeling that they would all go to Ingalls. The loss of this contract will likely result in a further reduction of BIW's regional workforce.

The Navy's Superintendent of Shipbuilding division (SUPSHIP) oversees the construction at BIW and maintains administrative offices there. These Naval personnel are supported by BNAS through the provision of housing and services.

The direct impact on the town is unknown; however, it is generally believed that some of the existing BIW facilities in Brunswick will continue to operate, due to their unique role in supporting the on-going shipbuilding efforts.

e) Town Common

As described in more detail in the following section concerning legal issues, a portion of the land acquired by the federal government for the construction of the Brunswick

Naval Air Station was transferred from the town. It had obtained the property in the early 1700s under the terms of a grant from the Pejepscot Proprietors, the original grantees of the lands in the region (at the time Maine was still part of Massachusetts which in turn was still an English colony). A 1,000-acre tract was provided as "Town Commonage". A map from the era (Figure II-1 below), obtained from the Pejepscot Museum in Brunswick, identifies the general location of the tract, which has been overlain onto the current Town GIS property map shown in Figure II-2¹⁹.

The terms of the grant and the terms under which the Navy acquired the property from the town is currently being researched, under the belief that there may be some type of historic reversionary interest. Land similarly granted for educational and religious purposes was also believed to be part of the Navy acquisition.

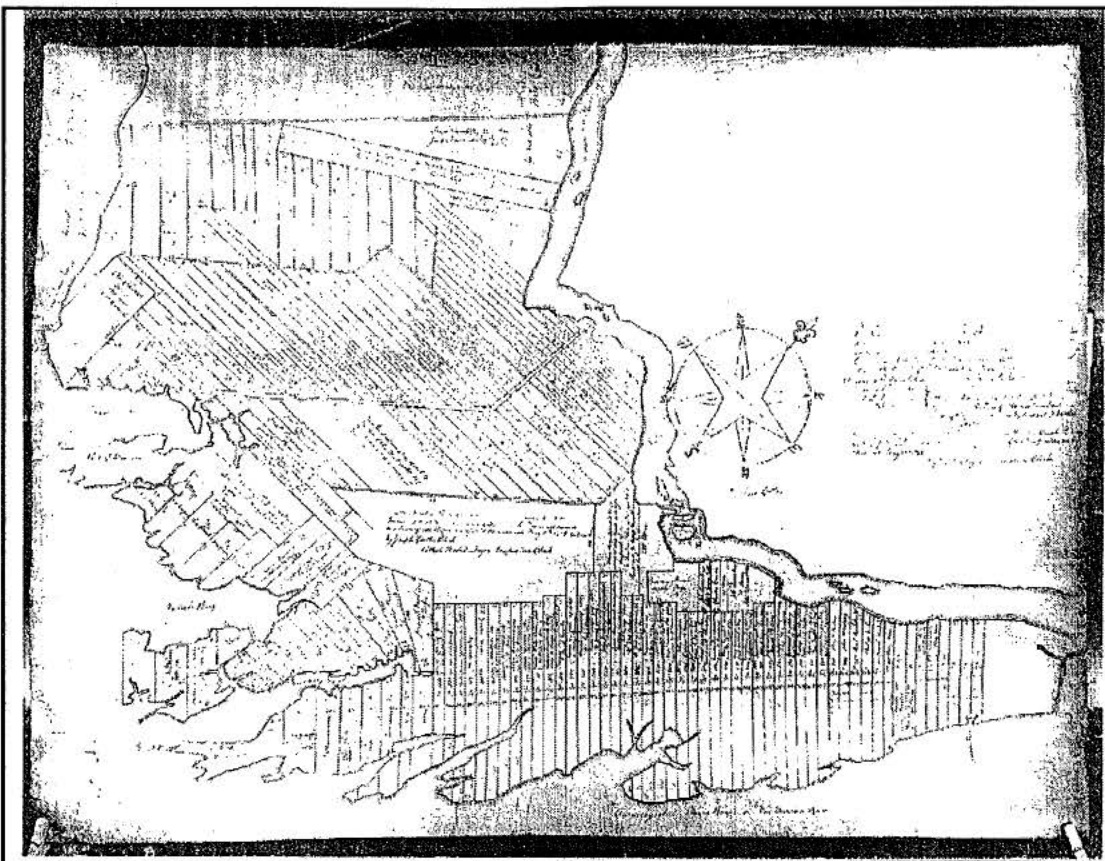
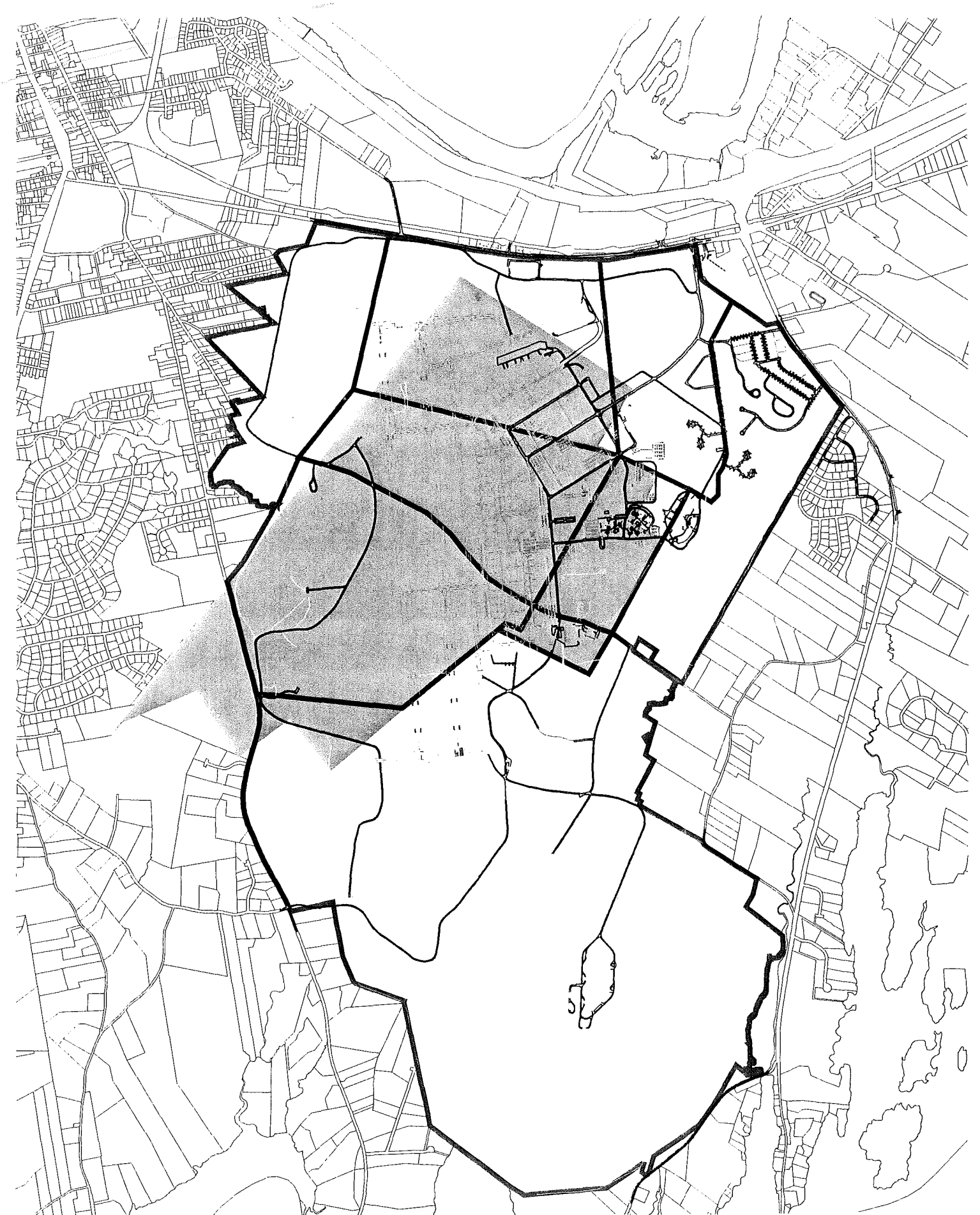


Figure II-1 – Historic "Town Commonage"

¹⁹ The history of the historic Town Commons has been researched by the Town Commons Committee. Portions of the original grant not acquired by the government have been assembled and are currently in use as public park/open space. See <http://www.brunswickme.org/commons/> and www.curtislibrary.com/pejepscot.htm

**Figure II-2
Approximated Location
of Historic Town Common
Brunswick, ME**

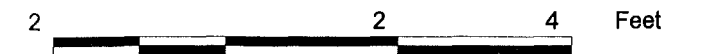


Base Boundary
 Original Base Parcels (partial)*
 Town Common**
 Parcels

This Figure illustrates the possible location of the original town common which has been approximated based on the following sources.

*Based on the "Metes and Bounds Survey of Second Taking of Land", U.S. Naval Air Base, Brunswick, Maine, Jan. 14, 1943

** Based on the "Plan of the Brunswick lots in 1741 and of the Topsham lots in 1768"



**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

D. Legal Issues

1. Introduction

Several important legal considerations must be taken into account during the planning for the redevelopment of federal property. These include 1) having a clear understanding of federal, state and local regulatory jurisdiction over property, 2) understanding how the federal property was acquired and any reversionary or other rights that go with the land, and 3) an understanding of the legal framework for cooperation among jurisdictions for any redevelopment effort. These issues are discussed in the following sections.

2. Limitations on Existing State and Local Regulation of BNAS

There are two distinct limitations on the ability of the State of Maine or Town of Brunswick to regulate activities at the BNAS. The first stems from the extent to which the State may have ceded some or all of its legislative authority over BNAS to the federal government; the second stems from the Supremacy Clause of the U.S. Constitution and intergovernmental immunity jurisprudence.

a) Legislative Jurisdiction

Legislative jurisdiction refers to the authority to legislate and to exercise executive and judicial powers within a particular area. The federal government may acquire derivative legislative power from a State pursuant to Article I, Section 8, Clause 17 of the U.S. Constitution by consensual acquisition of land and/or cessation of legislative authority over that land. The legislative jurisdiction acquired may be exclusive, which means that the Federal government possesses all of the authority of the State and the State has not reserved to itself the right to exercise any authority concurrently with the United States, with limited exceptions related to matters such as taxation and civil and criminal service of process. In these areas, only federal law applies,²⁰ and the State can neither define nor punish crimes within those areas. Alternatively, the federal government may acquire concurrent legislative jurisdiction, in which the State has reserved to itself the right to exercise all of the authority granted to the Federal government concurrently with the Federal government. Concurrent jurisdiction represents more of a partnership in which both State and federal criminal and civil laws apply and both State and federal officials may enforce their respective laws.

Partial legislative jurisdiction refers to those instances in which the Federal government has been granted certain of the State's authority, but where the State has reserved the right to exercise either by itself or concurrently with the United States, other authority. Finally, proprietorial interest refers to those instances in which the Federal government has acquired some degree of right or title to an area in the State, but has not obtained any measure of the State's authority over the area.

²⁰ Several federal statutes have been enacted that make the substance of some State laws applicable.

Since May 1989, the BNAS has been subject to concurrent legislative jurisdiction.²¹ See An Act Transferring Concurrent Legislative Jurisdiction over Brunswick Naval Air Station, Chapter 56 Private and Special Law, Approved June 23, 1989 (attached as Exhibit A). Thus, currently, the United States and Maine jointly hold and exercise all the rights accorded a sovereign, subject to the Supremacy Clause of the U.S. Constitution. This means that both State and federal officials may enforce their respective laws and legislate with respect to such land and persons residing or present there, subject to the limitations arising under the Supremacy Clause.

b) Limitations Arising Out of the Supremacy Clause

The Supremacy Clause provides that the U.S. Constitution and laws of the United States are supreme. U.S. Const. Art. VI, cl. 2. As a result, the Supreme Court has repeatedly held that absent clear Congressional declaration to the contrary, the activities of the federal government are shielded from direct regulation by any state. E.g., *Goodyear Atomic Corp. v. Miller*, 486 U.S. 174, 180 (1988) (it is “well settled that activities of federal installations are shielded by the Supremacy Clause from direct state regulations”). Thus, even though the State has concurrent legislative jurisdiction over BNAS, absent specific Congressional authority, neither the State nor the Town may directly regulate federal activities there. See, e.g., *id.*; see also *Hancock v. Train*, 426 U.S. 167, 178-79 (1976) (state could not require various federal facilities, including army facilities, to obtain air license under State program) (subsequently superseded by Congressional amendment). This prohibition extends to application of local zoning requirements. E.g., *United States Postal Service v. Town of Greenwich Conn.*, 901 F. Supp. 500, 504 (Conn. 1995) (“Courts have consistently held that the local municipalities cannot regulate the United States Postal Office regarding its opening of post offices.”) (citing cases); see also *Don’t Tear it Down, Inc., v. Penn. Ave. Develop. Corp.*, 642 F.2d 527 (D.C. Cir. 1980) (federal instrumentality not required to comply with District of Columbia historic landmark protection act by obtaining a demolition permit from the mayor).

3. Retrocession

Retrocession is the process whereby the Federal government relinquishes some or all of its authority back to the State. It is governed here by 1 M.R.S.A. §§ 8 et seq. (transfer of legislative jurisdiction) and 10 U.S.C. § 2683 (relinquishment of legislative jurisdiction). As a general matter, the relevant Secretary has broad discretion to relinquish to a State legislative jurisdiction under his control. 10 U.S.C. § 2683. Relinquishment is accomplished by filing the requisite notice with the Governor and under State law requires review by the Attorney General and approval of the Legislature. *Id.*; 1 M.R.S.A. § 8. In the event that the Federal government seeks to relinquish any of its existing legislative authority over BNAS, it would need to comply with the procedure outlined under 1 M.R.S.A. § 8. Specifically, the Secretary or other duly authorized department, agency or officer would need to file a notice of intent to relinquish jurisdiction with the Governor. *Id.* at § 8(1). The Governor is required to provide a copy of the notice with

²¹ Prior to then, some portions of the BNAS were subject to proprietorial legislative jurisdiction and others were subject to exclusive legislative jurisdiction. See Exhibits A and B respectively to May 10, 1989 Notice of Intent to Establish Uniform Concurrent Jurisdiction over BNAS lands.

the Attorney General and obtain his comments and recommendations on the request, whereupon it would then be submitted to the Legislature. For the transfer to be effective, the Legislature must approve the transfer as set forth in the notice. *Id.* at §8(2). The State is then required to record a duly authenticated copy of the notice and Act approving the transfer in the registry of deeds of the county where the land or other area is located. *Id.* at §8(3).

In the event the Base should be closed, given these jurisdictional issues, we recommend that the Town and State immediately seek retrocession of all federal jurisdiction. The principal reason for this is that, although arguably the Town would have jurisdiction over what would now become largely non-federal activities, as long as either the Base itself remained owned by the Navy, or any other federal instrumentality obtained control over a portion of it, the Town would still not have jurisdiction over all/or a part of the Base. Of critical importance here is to make sure that whatever zoning decisions the Town made would be enforceable.

4. Local Zoning

The BNAS is shown as being within an "I5" (Business and Industry 5/BNAS) district on the Town of Brunswick Zoning Map; however, there are no provisions for such an I5 district contained in the Brunswick Zoning Ordinance. There are provisions on other "I" districts,²² classified generally as "Large Scale Business, Industrial & Institutional" districts. Clearly, the Brunswick Zoning Ordinance needs to be amended, in accordance with Section 108 of the Ordinance, either (a) to enact specific zoning regulations for the I5 district, or (b) to change the BNAS property classification from I5 to a district (or districts) addressed by the Ordinance.

The Town of Brunswick's 1993 Comprehensive Plan²³ does contain some provisions that should be relevant in connection with any proposed amendment to the to Brunswick Zoning Ordinance as it relates to the BNAS property. For example:

"The Town Council should take steps to obtain clear Brunswick ownership of the 1,000-acre Town Commons when and if BNAS becomes available for civilian use. Certain portions of the original 1,000-acre grant are currently being used by the U.S. Navy as a naval air station. It is the intention of the Town Council, at the earliest practical date, to reunite such acreage with the remainder of the 1,000-acre commonage. Meanwhile, the Town should continue to exercise direct supervision and control of that portion of the 1,000-acre commonage that is not being used by the U.S. Navy. The Town Commons should be carefully protected against private development and should be re-used in a manner that benefits all inhabitants of the Town of Brunswick." (p. 39)

²² I1 (Business and Industry 1/Industry Road); I2 (Business and Industry 2/Church Road); I3 (Business and Industry 3/Bath Road); and I4 (Business and Industry 4/Exit 22).

²³ "Town of Brunswick Comprehensive Plan for the 1990's" - Adopted by the Brunswick Town Council October 18, 1993. It appears that the Town may be in the process of amending the 1993 Comprehensive Plan.

“If the Brunswick Naval Air Station closes, the Town should preserve the housing units associated with BNAS (e.g., McKeen Street and the Base property itself) if they are in good condition. A joint Town/Brunswick Housing Authority committee should ensure that a percentage of these units are made available on a sale or lease basis to low- and moderate- income families.” (p. 50)

“The Town should begin immediately to prepare its case of ownership of the Town Commons in the event of the closing of the Brunswick Naval Air Station. If BNAS closes, development of this property should be held to the standards for rural and growth areas articulated by this Plan. Coastal and undeveloped wooded areas on this property should be stringently protected.” (p. 75)

“The Town should carefully evaluate the following potential industrial sites already identified and rate them as to suitability, according to the growth and rural areas of this Comprehensive Plan:

d. Brunswick Naval Air Station” (p. 85)

“Brunswick should market itself as a destination for light industry, office, and research and development in appropriate areas that have good access to interstate rail and airports. Business parks should be part of a planned setting and serviced by public utilities. The Brunswick Naval Air Station, the existing industrial park on Church Road, and the River Road Area are appropriate locations for business parks.” (p. 195)

These provisions in the Comprehensive Plan may need to be revisited, both as to desired outcomes and as to practical results. An important element in this consideration obviously is the status of title to the Base property should it cease to be used by the Navy. Unfortunately, based on our review of copies of each of the instruments identified on the “Historical Property Information” timeline list set forth on the plan entitled “General Notes - Brunswick Naval Air Station Property - Civil” (Sheet 2 of 10) prepared by Sebago Technics, recorded October 23, 1997 at the Cumberland County Registry of Deeds in Plan Book 197, Page 458,²⁴ we find that none of the instruments convey any qualified fee, such that the duration of the United States’ interest may come to an end by the happening or non-happening of some event specified in the conveyance. That is, we

²⁴ The timeline list, which identified over 70 instruments recorded at the Cumberland County Registry of Deeds, is preceded by the following statement:

“The Naval Air Station Proper encompasses property which was acquired by various means of conveyances from both private and municipal owners over the years. Some of the property was taken by eminent domain, some by monetary transaction, and a few parcels by land swap. The following is a timeline list of the index search for the United States of America. Listed are only those parcels of land that pertain to the Naval Air Station Proper located in Brunswick, Maine.”

The Sebago Technics timeline list runs to September 1996. We have not conducted an independent title search of the BNAS properties, and have relied entirely on the Sebago Technics timeline list for purposes of identifying the instruments conveying BNAS property interests to the United States.

find no possibility of reverter or other future interest in any BNAS property that would be triggered by a closing of the Base.

Thus, in order to obtain title to the former commons area, for example, the property would either have to be conveyed by the Navy to the Town pursuant to one of the Base Closure property transfer mechanisms described above, or purchased by the Town. Alternatively, it could be regulated through zoning, as opposed to owned in fee, like any other real property.

5. Regional Cooperation

In addition to the zoning and other municipal powers of the Town itself, the State has authorized municipalities or quasi-municipal corporations to enter into interlocal agreements with other municipalities or quasi-municipal corporations for any purpose authorized by their own charters and/or statutory powers. Since the loss of employment at the Base will affect the entire region, a consolidated regional response might be a useful way to begin to meet the challenge closure poses. The need for regional cooperation, moreover, may become even more pronounced if the threatened selection of a single shipyard results in a substantial reduction in force at BIW.

Under the Interlocal Cooperation Act (30-A M.R.S.A. § 2201), municipalities are encouraged, whenever it is mutually advantageous, to:

... provide services and facilities in a manner and pursuant to forms of governmental organization that will accord best with geographic, economic, population and other factors influencing the needs and development of local communities.

The statute authorizes municipalities to enter into agreements for joint or cooperative action and to create special organizations for that purpose. It even contemplates entering into such agreements with quasi-municipal corporations and the federal government. *Id.* § 2203. Such an agreement must be approved by the governing bodies of the participating entities and must specify its duration, its organizational structure, purpose, method of forming, and the method to be used to partially or completely terminate the agreement and to dispose of any property. *Id.* If the Agreement involves the provision of service or facilities over which a state officer has constitutional or statutory authority, it must be approved by the state officer.

A typical example of how the statute can be used is the Tri-Community Landfill. Pursuant to an Interlocal Agreement, the communities of Ft. Fairfield, Limestone, and Caribou created the Tri-Community Landfill to deal with their solid waste disposal needs. The Board consists of representatives from each of the municipalities, and manages all aspects of the financial and operational facets of the Landfill.

In the case of the redevelopment of BNAS, an interlocal agreement might be used in conjunction with adjoining communities, water and sewer districts, and even the federal government. It could be used to develop, on a regional basis, an industrial park; housing; air transportation, or recreational opportunities. The key point is that the statute provides

a mechanism for the Town to enlist other entities to share both the costs and benefits of any redevelopment effort.

6. State Organization

Some of the benefits that could be achieved through an interlocal agreement or agreements, of course, could also be achieved through creation of a state redevelopment authority. No such overarching statutory authority exists at this time,²⁵ but the State has experience in creating such an entity as a result of the establishment of the Loring Development Authority (LDA). The history of the LDA is described elsewhere in this study, but its organizational structure and statutory authority are worth considering here.

The LDA, which is a public municipal corporation, has broad powers, including the powers to sue and be sued; to exercise eminent domain; to provide for public safety by imposing appropriate regulations; to charge and allocate fees; to enter into contracts, to enter into loans, and to borrow money, including issuance of bonds, among others. It provides for regional representation and, although a majority of the Board consists of members from "affected communities," the Board also includes members from all over the State. As described above, that model has helped to build statewide support for the LDA's redevelopment efforts. The Commissioner of Economic and Community Development also sits on the Board and, critically, the Authority receives financial support from the State. To encourage job creation, the Legislature also created a tax increment fund, which receives 50% of the State employment tax revenues generated by new jobs.

These powers and the LDA's structure have been helpful in large part because it operates as a single purpose entity, with only one focus: redevelopment of the Base. In contrast to the Town or several municipalities, which have numerous other responsibilities, this allows a full-time redevelopment effort focused on this one issue.

Another example of a special state-legislated development entity is the Kennebec Regional Development Authority (KRDA), created in 1997 by the 118th legislature (P&SL 1997, c. 79) and later amended (see Appendix). The KRDA was formed to acquire land and develop a first class business park (First Park) in Oakland. At the time of its creation, the Authority was comprised of 24 communities in three counties all of which contributed annual funding towards the operations and financing of First Park. In return for this funding, each community would receive a percentage of the net tax revenues from the development, after deductions for expenses and host community service costs. This unique arrangement, which effectively combines elements of both inter-local agreements and state-sponsored statutes, allowed for the long-term financing of a relatively risky public investment focused on job creation, with the fiscal risk and the ultimate benefit that would result from additional employment opportunities, spread over a large geographic impact area.

²⁵ To be sure, the State provides some assistance to communities through a variety of programs in the Department of Economic and Community Development.

The pros and cons of an interlocal agreement approach compared to creation of a state instrumentality are complex. On the one hand, as suggested above, the creation of a separate municipal corporation has two obvious benefits: (1) a single focus and (2) greater likelihood of state funding and support. On the other hand, it potentially reduces the degree of local control over the redevelopment effort. For example, the LDA's statute creates an LDA Planning Board, which is charged with zoning and other land use decisions on the Base, thereby supplanting the local zoning process. To be sure, LDA involves a base in three communities, so this structure arguably could be limited to a base that encompasses more than one jurisdiction, but nonetheless it suggests a potential limitation on local control. In addition, the makeup of the Board of such an entity might dilute local control over the decisions about reuse and various development projects.

III. FACILITIES ASSESSMENT

This chapter of the BRAC Preparedness Strategy for the Town of Brunswick focuses on the physical characteristics of the Navy property, including environmental factors, that need to be taken into consideration should the Base be closed and redeveloped. This chapter provides a preliminary inventory of the existing assets of the Base, as well as a summary of past and present activities that may influence any future redevelopment actions. All of the maps referenced in the following narrative are located at the end of the chapter.

A. Introduction

Brunswick Naval Air Station (BNAS), like most military installations, is a multi-purpose "campus" that has been built and changed over many years to serve a variety of purposes. First and foremost it is an airport, and has been since its initial development in the late 1930s on the site of a municipal airfield. It served as a major military pilot training and operations base from World War II onward. More recently, its primary mission has been to house and maintain various patrol aircraft (currently five squadrons of P-3 "Orion" anti-submarine patrol and a squadron of C-130 transport aircraft, among others) and other Navy aviation and non-aviation activities. The Base also provides support activities to other military activities in the state.

As such, it can be considered both an "industrial" facility where aircraft are hangared, maintained and flown, as well as a "support" facility with offices, housing and various ancillary uses associated with a relatively self-contained operation. The physical assets found at the Base, including buildings, roads, runways, utilities and other infrastructure systems, are of various ages and condition. Some facilities serve very special purposes while others are relatively generic and could be reused for a variety of alternative activities. Because the Base is so self contained, there is a wide range of facilities and land uses that are not directly attributable to the primary mission of the Base, but support the resident employees and their families. These include retail stores, extensive recreational facilities and other resources.

The Base is reported to contain 3,157 acres within the main Cantonment Area in Brunswick (the main Base) plus housing complexes on McKeen Street in Brunswick (77 acres) and in Topsham (80 acres). Other sites owned or controlled by the Navy include an undeveloped 66-acre site off Old Bath Road in East Brunswick.

The main Base is divided into several distinct land uses including residential, industrial/administrative, aviation-dependent, recreational and open space. A large part of the open space that is located on the south side of the Base consists of a protective buffer around the Navy's weapons storage facilities. With the exception of the industrial/administrative area, most of these areas are relatively distinct and separated from other uses. The central administrative core of the Base includes a mix of office, shop and support space along with various "public" uses such as recreational facilities.

B. Major Buildings/Facilities

This section provides a summary description of the primary built environment at BNAS. It is based in large part on data and information provided by the Navy through the geographic information system (GIS) they maintain²⁶. More detailed data on many individual facilities, such as building floor plans and land use data layers, is available in the GIS database provided by the Navy. It should be noted that the data obtained may not include all facilities on the property. Over the years, since the Base was originally developed, facilities were sometimes built, added to or demolished by different Navy organizations and not all of the information was necessarily recorded in the current database. However, it is believed that the data is substantially complete and provides a reasonably adequate view of the built environment at BNAS.

1. Buildings

The Brunswick Naval Air Station contains a variety of buildings serving various Base functions. These buildings include aircraft/airfield support facilities, Base emergency response and security stations, administrative and training areas, recreation and retail establishments, medical facilities, storage areas, and housing. The facilities' construction covers a time span from the 1940's to the present day, and new facilities continue to be added to the Base. Over the past decade, many of the older vintage facilities have been demolished and replaced. Although most buildings are numbered, not all are and the numbering system used by the Navy is not consistent. Furthermore, some buildings may have more than one name, depending on the information source.

It should be noted that these descriptions are based on review of existing maps, aerial photos, other printed sources and limited personal observation. Individual inspections of the buildings were not undertaken for this analysis. For reuse planning, more comprehensive inspection and analysis of all buildings should be conducted.

General descriptions of some of the major facilities within the Brunswick Naval Air Station are listed below. The descriptions are provided in a general order from north to south through the central Cantonment Area of the Base. Family housing units are not included in these descriptions. Figures III-1 (Buildings and Airfield) and III-4b (Existing Land Use, Cantonment Area) show the location of the major buildings within the core Cantonment Area.

a) Main Gate Area

Pass and decals are issued at a new facility constructed in 2004 adjacent to the Main Entrance, which was moved several hundred feet into the property along Fitch Avenue. The former pass building on Bath Road is used for other security purposes.

b) Naval Mobile Construction Battalion Cluster

This cluster of approximately 12 small metal-frame buildings (believed to be shops and offices) is located adjacent to Bath Road on the northern boundary of the Base. It

²⁶ Digital copies of the databases provided by the Navy are included in the Addendum to this report.

is used by the Reserve "CB" battalion. There does not appear to be direct access to Bath Road from the site.

c) Fuel Farm

This cluster of structures includes two large fuel tanks and containment berms, along with other facilities relating to the provision of aviation fuel to the airport.

d) Hangar 6

Hangar 6 is the newest of the Base's hangar facilities, constructed in 2004. The 174,217 square foot facility contains hangar, maintenance shop and administration space. The hangar deck has six bays capable of handling both the existing P-3 aircraft as well as 737-800 aircraft that are proposed to replace the P-3 platform. The maintenance shops are located on the ground floor and the administrative space is on the second floor. The facility is located on Pegasus Street, which was extended across the apron area.

e) Hangar 3

Hangar 3 is a two-story, 75,440 square foot structure located at the intersection of Seahawk Avenue and Pegasus Street. The facility was recently used for the storage of snow removal and airfield maintenance equipment. The snow removal equipment storage has since moved to a new facility in 2004. The facility has also previously provided hangar space for two rescue helicopters. The helicopter detachment was reassigned in 2004 and is no longer on the Base. Maintenance shops are located on the ground floor and administrative space is located on the second floor. This 1940's era structure has no elevator and has had structural repairs performed on the roof trusses, and has been earmarked by the Navy (in its most recent facilities plan) for demolition.

f) Air Operations/Fire Station

Air Operations is located in Building #200, which contains approximately 20,759 square feet. The facility contains the air traffic control tower and passenger terminal area. The facility is located at the intersection of Orion Street and Seahawk Avenue. A new control tower is currently under construction on the west side of the airfield and will replace the facility in Building #200. The Base Fire Department is located in Building #292, a 10,665 square foot facility located adjacent to Building #200. The facility's location provides direct access to the airfield as well as access to local roadways. The department is responsible for responding to airfield emergencies as well as structure emergencies. Also in this area is Building #45, a 3,000 square foot warehouse-type building used for hazardous waste storage and transfer.

g) Station Security

Base security police are located in Building #41 located on Seahawk Avenue across from the flight line and hangars. This facility is a single-story building currently used for administration and training. It is earmarked for demolition in the facilities plan.

h) Supply Warehouse

Building #294 is known as the Station Supply Warehouse. The facility is located on Seahawk Avenue and contains approximately 64,530 square feet of general warehousing space. There is a loading dock on the north side of the building for truck traffic. The single-story facility has a concrete masonry unit exterior.

i) Historic Bunker

Building #44 is a small 1,258 square foot earth-bermed arms magazine located outside the weapons area on Fitch Avenue at Pelican Street. The facility has been designated as having historic value.

j) Building 9

This 8,888 square foot building is used as office space by one of the patrol squadrons.

k) Hangar 1

Hangar 1 contains approximately 94,035 square feet of hangar, shop and administration space. The hangar area contains four hangar bays. Maintenance shops and duty offices are located on the ground floor with the administration area located on the second floor. The facility was constructed in the 1940's and does not have an elevator. Recent improvements to this building include a structural rehabilitation of the roof structure, completed in 2003. The facility is scheduled for demolition, to be replaced by the Hangar 6 facility. The facility is located at the intersection of Orion Street and Fitch Avenue.

l) AIMD Ground Support

Maintenance of the airfield ground support equipment is located in Building #86. The 31,980 square foot facility is located on the flight line and is accessible by the airfield only. Ground support equipment that is currently maintained in this building includes aircraft tugs and stairs for aircraft access. The facility is located on Orion Street within the flight line. The facility stores snow removal equipment used to keep the airfield clear. The facility was constructed in 2004 and contains approximately 18,000 square feet.

m) Hangar 4/Building 250

Hangar 4 and the adjoining Building #250 on Orion Street, contain a total of approximately 178,963 square feet of hangar, maintenance shops and administrative space. The hangar deck (estimated to be about 90,000 square feet) is capable of accommodating two aircraft. The administrative area is located on the second floor. The facility was constructed as part of the original Base development in the 1940's. Attached to Hangar 4 is the Base headquarters, located in Building #250, which contains approximately 90,000 square feet of shop and administration areas. The office facility houses the following entities: administration, command staff, IT/data processing, JAG office, public affairs, and the supply department. The facility is located adjacent to the airfield on Orion Street. The Station duty office is located adjacent to the headquarters facilities.

n) Hangar 5

Hangar 5 was constructed in the 1982 and contains approximately 163,454 square feet. The facility is located on Orion Street. The hangar contains seven bays used for aircraft maintenance. One bay is used for corrosion control work. Maintenance shops are located on the ground floor with administrative space located on the second floor.

o) Public Works

The Public Works complex is located on Huey Drive at the south end of the flight line (off Orion Street), having been recently moved here from the opposite end of Orion. The administration office is located in Building #53 and contains approximately 10,000 square feet. Additional public works facilities include Building #584 that contains approximately 7,200 square feet of general warehouse space, and Building #19 that contains approximately 6,000 square feet of carpentry shop space. The Operations and Maintenance facility (O & MN) is the former DPW and is located on Orion Street and contains approximately 7,200 square feet in Building #252 and 15,000 in Building #225. The facility is used to repair heavy equipment. Building #252 was constructed in 2003 while #225 is a 1950's era structure.

p) Wing Headquarters

The headquarters for the Commander Patrol and Reconnaissance Wing Five is located in building #87, located on the eastern side of the core area off Pegasus Street. This 52,513 square foot facility, built in 1988, is the Base's most substantial office building.

q) Reserve Center

The Surface Naval Reserve Center is housed in Building #151. This 14,400 square foot office facility, located on Fitch Avenue at the entrance to the core Cantonment Area, was believed to have been built in 2001. The facility is a two story pre-engineered metal building with metal siding. Building #150 is a single-story structure with a concrete masonry unit exterior. The 13,196 square foot facility located on Sewall Street contains classrooms utilized by the reserves, office space for the legal department, and office space for the government workers union.

r) Other Facilities

Community Facilities - Educational organizations, a post office, and a credit union are located in Building #20. The facility contains approximately 25,697 square feet and is home to the Navy College Learning Center, New Hampshire College, and Embry-Riddle University. The facility is located on Burbank Avenue. Other community facilities include a new 6,500 square foot children's day care center (Building #26) and Building 25, a 10,000 office building used by the Base personnel office, both located across Burbank Avenue.

Training Facilities - The Base has 6 training buildings on base. Building #54 contains approximately 30,000 square feet, Building #639 contains approximately 3,540 square feet, and Building #644 contains approximately 10,100 square feet and houses

the training facilities for the P-3 aircraft. Buildings #16 and 82 are also listed as training facilities. Combined, they contain approximately 270,000 square feet. The Navy also recently built a new small arms firing range. The single-story, cast-in-place concrete facility is located on Pegasus Street. The 4,242 square foot facility contains 5 shooting lanes, range master's control area, and storage area. The facility was constructed in 2004.

Weapons Storage and Operations – These uses are located in a compound located in the southeast quadrant of the Base. Ordnance storage facilities within the weapons compound include Buildings #59, 60, 62, 63, 64, 69, 71, 76, 126, 127, 128, 223, 285, 286, 287, 288, 289, 290, 291, 539, 543, 544, 548, 549, and 626. Building #126, 127, and 128 are National Guard Magazines. Magazines are concrete bunkers with earth-bermed roofs. The storage facilities in total contain approximately 204,215 square feet. The weapons storage area is surrounded by a buffer area with a radius of approximately 3,000 feet extending to the property boundaries on the south side of the Base. The area within the buffer is generally woodlands.

Medical Facilities - Medical and dental clinics are located in Building #645, a 25,354 square foot facility located on Sewall Street. It provides emergency services 24 hours a day and serves local military personnel and retirees. Inpatient services are referred to local area hospitals.

Lodging Facilities – Because of BNAS' role as a major Navy Reserve training facility, several facilities are dedicated to providing short-term transient lodging. The Navy Lodge is located in Building #31 and has 26 rooms available to military personnel and retirees. The Lodge is located on Burbank Street adjacent to the Exchange. Building #512 houses the Orion Inn, a Visitor/Transient bachelor quarters facility that includes 75 suites, including 10 executive suites. The facility also contains three barracks type areas. The three-story facility located on Pegasus Street has approximately 61,432 square feet of space.

Residential Facilities – Within the core Cantonment Area there are several buildings used for residential habitation. These include the lodging facilities described in the previous paragraph as well as eight older three-story, 22,174 square foot barracks buildings (#212 thru #215 plus #217 thru #220), Building #512 and two new BEQ complexes (described in the housing section). The older barracks are currently believed to be vacant and are scheduled for demolition by the Navy as funding permits.

Recreation - Several recreation facilities are located in the core area including the recreation mall and bowling alley located in Building #583, a 28,000 square foot field house located in Building #211, and a 16,000 square foot fitness center with gymnasium and indoor courts located in Building #25. Building #29 houses the auto/hobby shop and contains approximately 12,000 square feet. There are several outdoor facilities including a soccer field and baseball/softball fields, tennis courts, and picnic areas. These facilities are located throughout the Cantonment and

residential portions of the Base. A 9-hole golf course with clubhouse and snack bar are located on the very southern end of the Base. The facilities include the course, putting practice area, driving range, 3,000 square foot clubhouse area, and gravel parking area. The course is accessed from Harpswell Road (Route 123) on the road leading to Dyers Gate and is open to the public as well as military and retirees.

2. Airfield

Brunswick Naval Air Station owns and operates an active airfield. The airfield includes two parallel runways, each 7,850 feet long and 200 feet wide; a parallel taxiway easterly of the runways that is 75 feet wide; taxiways perpendicular to the runways for circulation; airfield lighting system; navigation system; approximately 134 acres of concrete parking apron; helicopter landing area, and support facilities. The support facilities include a control tower, administration area, hangars and repair facilities, ground equipment support facility, and deicing facilities. The airport generates approximately 60,000 to 70,000 operations annually²⁷. Figure III-1 shows the airport in relation to the rest of the Base.

The primary aircraft at the Base is the P-3 Orion, a Lockheed four-engine turbo prop. The P-3 is used to fulfill the primary mission of the Base and constitutes 85 percent of all operations. Rescue helicopters were stationed at Brunswick until 2003. There are currently no helicopters stationed at Brunswick.

The runways, taxiways, and aircraft parking apron were repaired in 2001. Additional parking apron was added adjacent to hangar 6 in 2003/2004.

Construction of a new control tower and support facilities is underway. The new facility located on the west side of the airfield will replace the facilities in building #200.

The airfield perimeter fencing was upgraded in 2004 to comply with current DoD regulations. The seven-foot high chain link fence with barbed wire encloses the airfield, parking apron and support facilities.

Prior to use as a civilian airfield, the facility would need to be brought up to FAA standards. The parallel runways, positioned approximately 700 feet apart, do not permit simultaneous operations (commercial and general aviation). In addition, the aids to navigation used by the military to assist pilots locate and land at the airport may not meet FAA standards. A detailed airport reuse plan will be required prior to transfer.

3. Utilities

The facilities at BNAS are served by a variety of utility systems that vary greatly in age and condition. Many include components that date back to the initial development of the Base in the 1940s, while others are nearly new. The Navy has made significant efforts to replace older systems wherever possible and to bring existing systems up to modern

²⁷ An operation is defined as a take off or a landing. Operations data is from 1999 to 2001.

standards. However, many of the utility systems may not meet current industry and/or local municipal codes and standards.

In addition, as a single entity, when installing utilities the military typically does not necessarily follow the same procedures that would govern installation in the public realm. For example, instead of keeping underground utilities in the streets or other dedicated right-of-way, they would more typically be run "point-to-point". While less costly to the Navy, in the event of redevelopment and the transfer of property to private ownership, this sometimes can result in functional or economic restrictions on the property.

The Navy also owns and operates the water, sewer and stormwater utility systems at the McKean Street housing site.

a) Water

Potable water for use on BNAS is obtained from the Brunswick and Topsham Water District. There are two 12-inch connections to the Water District's water main in Old Bath Road providing service to the Base. The estimated daily use of water is about 90,000 gallons.

The on-site distribution system includes 187 fire hydrants, 303 main line valves, and 113 service connection and hydrant valves. Distribution piping includes 10,430 feet of 6-inch pipe, 25,060 feet of 8-inch pipe, 24,795 feet of 10-inch pipe, 12,285 feet of 12-inch pipe, and 2,140 square feet of 18-inch pipe plus service piping of various sizes from 2-inch to 12-inch. The majority of the main line piping is made of asbestos cement piping.

The majority of the distribution system was installed prior to 1980 as indicated by the use of asbestos cement pipe. The pipelines are located out of the traveled way in most cases. The service lines do travel cross-country from Old Bath Road to the developed area of the Base crossing under the concrete parking apron at the north end of the Base. Main lines, services, hydrants and valves have been added as new facilities are constructed.

BNAS does not have individual meters at each building. Metering is done on a master metering basis.

Two wells on site provide potable water. The golf course and the Dyer's gate guardhouse are serviced using individual wells. The wells are provided due to their remote location in relation to the water distribution network. A non-potable high-pressure fire protection system including water storage facility, fire pumps, and distribution system provides protection to the 5 aircraft hangars.

Figure III-2a.1 illustrates the location of the major water lines at BNAS and Figure III-2a.2 shows the water system layout at the McKean Street housing site.

The Brunswick and Topsham Water District have indicated that they would consider acquiring the Base distribution system only if it met their current specifications, and if they had easements for repair and maintenance. The District would need to inspect the facilities prior to acceptance.

b) Sewer

The wastewater collection system at the Base includes sewer mains, laterals, force mains, manholes, and pump stations. Wastewater from the Base discharges to offsite collection facilities on Old Bath Road, which are owned and operated by the Brunswick Sewer District and is treated at their treatment plant. The estimated daily flow to the Sewer District's facilities is 90,000 gallons.

The Base's collection system includes 376 manholes, 20 oil/water separators, and 4 pump stations. Gravity sewer mains include approximately 1,303 feet of 6-inch pipe, 15,654 feet of 8-inch pipe, 2,172 feet of 10-inch pipe, 3,491 feet of 12-inch pipe, and 1,180 feet of 18-inch pipe. Gravity main pipe materials are vitrified clay, asbestos cement, and polyvinyl chloride. Force mains include 4,950 feet of 10-inch pipe, and 560 feet of 4-inch pipe.

The locations of the pipelines do not follow specified routes except for the lines installed within the housing developments. Within the housing developments, the sewer is located along the roadways, off the edge of pavement. Within the working portions of the Base, the lines were run as was convenient.

The vitrified clay lines were installed prior to 1960, the asbestos cement lines were installed prior 1980. Polyvinyl chloride pipe are the most recently installed lines and are post-1980 construction.

Figure III-2b.1 illustrates the location of the major sewer lines at BNAS and Figure III-2b.2 shows the sewer layout at the McKean Street housing site.

There are three subsurface disposal systems on the Base. They are located at the golf course, Dyer's gate, and at the weapons administration facility. The disposal systems were utilized due to the remote location of the facilities relative to the sewer system.

c) Storm Water

The stormwater collection system at the Base includes storm drains, culverts, manholes, and catch basins. The majority of the stormwater discharges to Mere Brook and ultimately the ocean. The Base collection system includes 160 manholes, 810 catch basins, and approximately 77,176 feet of pipe ranging in size from 8 inch to 72 inch. Pipe materials include vitrified clay, asbestos cement, polyvinyl chloride, and reinforced concrete.

Recently constructed projects have included the construction of detention basins to control the increased runoff and to address water quality issues to comply with Federal and State regulations. We are aware of 4 detention facilities on site.

Figure III-2c.1 illustrates the location of the major stormwater systems at BNAS, and Figure III-2c.2 shows the stormwater layout at the McKeen Street housing site.

d) HVAC

In the past heat was provided to the onsite buildings from a central steam plant. The steam plant (Building 233 located near the main flight line) was decommissioned and eventually demolished in 2000. Individual heating systems were installed for each building. Fuel for the heating systems was originally oil, however, in 2001, Maine Natural Gas installed a natural gas main to the Base and conversion to natural gas systems began. A majority of the non-housing buildings have been converted to natural gas. Maine Natural Gas owns, operates, and maintains the gas lines on Base. New facilities utilize natural gas heating systems. The gas distribution system is located along the roadways off the edge of pavement. There are also some cross-country runs. The natural gas distribution system for the Base and the McKeen Street Housing are illustrated in Figures III-2d.2 and 2d.3.

Portions of the steam distribution remain in place including 78 steam pits, and 18,460 feet of steam and condensate return lines. Steam lines range in size from 14-inch to 1-inch, condensate return lines range in size from 6-inch to 1-inch. Steam and condensate return lines are insulated and some of the insulation may be asbestos containing materials. Figure III-2d.1 indicates the location of the abandoned steam lines on the Base.

Base housing utilizes fuel oil for heating with individual heating units for each building (some multi-unit buildings share a furnace). There are 350 # 1 oil tanks and 148 #2 oil tanks on Base. Some of the tanks have secondary containment others are in vaults or inside structures. The majority of these tanks have a capacity of 275 gallons. There do not seem to be any active underground tanks.

In general, air-conditioning is provided only in administrative areas of buildings or through individual window-style units.

e) Telecom

Verizon Communication provides telephone service to the Base. They own and maintain their facilities on site. Their facilities include 4 manholes, duct bank, pole line and cable. The Base provides communication service to their facilities. They own and maintain fiber optic, and communications systems including 70 manholes, fiber optic lines, communication lines and cable, duct banks and pole lines.

C. Roads

There are two major access points for the Base; the Main Entrance off of Old Bath Road, and Dyer's gate off of Route 123. There are two other access points that are not normally opened - Forrestal gate, and Coombs Road gate. The Main Entrance was upgraded in 2004 to add additional access lanes and to relocate the guardhouse to minimize the traffic back-up on Old Bath Road. The Main Entrance is open 24 hours per day. The Dyer's gate facility was

relocated closer to the developed area of the Base in 2004 and is open during business hours. This gate is utilized for deliveries to the Base and for Contractor access. Each gate has facilities for vehicle inspections. BNAS contains approximately 99,885 feet of bituminous paved roadways. Roadway widths range from 12 feet to 80 feet. The roadways were inspected in 2000 and for the most part were in good shape at that time. Road improvements have been made since that inspection on Fitch Avenue adjacent to the Main Entrance and Orion Street adjacent to the Dyer's gate area. A listing of named roads with width and length is available in the Addendum information.

D. Natural Environment

1. Topography & Soils

The undisturbed topography of the area around the Base is characterized by low rolling hills and deeply incised streams. In the developed area of the Base, the topography has been altered so that the area is mostly level. The Base area slopes gently from the northwest to the southeast. For most of the Base, slopes are between 0 and 3 percent. Slopes between 8 and 15 percent are present at stream banks.

The Soil Survey for Cumberland County published by the United States Department of Agriculture issued in August of 1974 does not indicate soil types on the Base. The abutting areas are indicated as Windsor series at the north and west boundaries, Hollis series to the east, and Buxton series to the south. The Windsor soils are deep, excessively drained, nearly level, coarse-textured soils. The soils are glacial outwash deposits with a depth to bedrock of 5 feet or more. The Hollis soils are shallow, somewhat excessively drained, moderately coarse-textured soils. The soils are formed in glacial till with a depth to bedrock of 1 to 1 1/2 feet. The Buxton soils are deep, moderately well to somewhat poorly drained, medium-textured soils. The water table is at a depth of 1 to 2 1/2 feet and the depth to bedrock is 5 feet or more.

2. Vegetation

The Base contains a significant amount of undeveloped areas located west of the runways and in the southern half of the Base. The undeveloped portions include forest, grassland, and wetland areas.

Approximately 1,378 acres of the Base have been identified as forest, some of which may have value as marketable timber. Grassland habitat encompasses the airfield clear zones. Rare natural communities are located at the north end of the runways.

3. Wildlife

The extensive undeveloped land at the Base supports a variety of wildlife. Open areas support small animals such as mice, and rabbits. The forested areas support wildlife including deer, squirrels, coyotes, and moose. There are no mapped deer yards on the Base. A wide variety of birds are attracted to the grasslands and wetland habitats.

The Base has experienced problems with wildlife and airfield operations. A deer fence attempts to control deer access to the airfield area. Open water areas such as detention ponds are discouraged around the airfield to minimize the potential for bird and aircraft collisions.

4. Wetlands & Surface Drainage

Wetlands represent a significant portion of the surface water features at the Base. A wetland inventory conducted in 1998 identified over 440 acres of wetland habitat. 75 percent of the wetlands are freshwater wetlands. Wetlands are located west of the runways and in the southern half of the Base. Figure III-3a illustrates the wetlands and surface water areas located on the Base.

The Base is included in four major drainage basins: Androscoggin River, Mere Brook, Middle Bay Cove, and Buttermilk Cove. Approximately 74 percent of the Base area is in the Mere Brook watershed. Mere Brook enters the Base in the northwest quadrant and flows under the airfield to the southeast quadrant to Harpswell Cove. Approximately 13 percent of the Base area is in the Androscoggin River watershed.

5. Historic & Cultural Resources

The land now occupied by Brunswick Naval Air Station has been used for farming and timberland since the early 1600's. The location near a major river made it conducive to human habitation prior to that period. Part of the property has been used as an airport from the 1930s onward. Its current use as a military installation began in 1943.

In order to compile information on archeological resources on the BNAS, a cultural resources survey was conducted by the Navy in 1996. One of the goals of the survey was to determine the potential for archeological sensitivity of the BNAS site. Archeological sensitivity means that different environmental factors - including present and past topography, sunlight exposure, slope, distance to water and availability of food and other vital materials - exist in various combinations in certain respective areas. These environmental factors cluster essential resources, such as water and food species, in these areas and thus attract human populations. Although there have been areas of archeological sensitivity identified in BNAS open space areas, there have not been any areas of archeological sensitivity identified in the developed areas.

There are no confirmed prehistoric sites on record at BNAS. There are three areas of high sensitivity located at the north end of the property adjacent to Old Bath Road. There are several areas of moderate sensitivity located throughout the Base area. Several of the areas are located along the easterly property line. A large area is identified in the golf course area, and two areas located west of the runways.

There are thirty-five sites on the Base identified as having historic archeological sensitivity, mostly old farmsteads. Six of the sites are located adjacent to Old Bath Road. There are fifteen sites within the Weapons Area including the Gatchell Cemetery. The remaining sites are located on the westerly portion of the Base and include the Skolfield Cemetery.

Sites with low archeological sensitivity will generally not require further analysis. However, sites with moderate or high sensitivity will require additional archeological investigations and should be cleared with the Maine State Historic Preservation Officer prior to construction.

E. Hazardous Wastes

Brunswick Naval Air Station is currently on the Environmental Protection Agency's Superfund list of hazardous waste sites. The Navy has conducted a comprehensive investigation of the affected areas in close coordination with Federal and State agencies. Remedial actions have been completed or are in progress. The hazardous contaminants at all the sites are below ground surface and do not present unacceptable risk to human health of environment unless excavated or disturbed.

There are 9 areas of institutional controls and land-use restrictions on the Base. These restrictions establish the requirements for working in these areas including excavation or groundwater removal. A Restoration Advisory Board provides oversight to the environmental clean-up effort and includes several public members from Brunswick.

Figure III-3b illustrates the location of these sites within the main Cantonment Area along with the current institutional controls or other property restrictions around them.

Sites 1 & 3 – Orion Street Landfill North and Hazardous Waste Burial Area

These sites are located in the Weapons Storage area and have restricted access. Digging is restricted anywhere on or adjacent to the landfill cap. Groundwater use is restricted for the large area of the Base that is bounded on the west by Orion Street, on the north by Huey Drive, on the east by the Base boundary, and on the south by Harpswell Cove.

Eastern Plume

Groundwater use is restricted for the Eastern Plume located mostly within the Weapons Storage Area. The eastern plume is located within the area bounded on the west by Orion Street, on the north by Huey Drive, on the east by the Base boundary, and on the south by Harpswell Cove. The groundwater is being pumped from a series of extraction wells and treated before being pumped back into the ground. This remediation effort has resulted in shrinkage of the plume and is expected to continue for several years before full mitigation is achieved.

Site 2 – Orion Street Landfill South

This site is located within the Weapons Storage Area. The site is bounded on the west by Orion Street, on the north by Mere Brook, on the east by an unnamed creek, and on the south by New Gurnet Road.

Site 4 – Acid/Caustic Disposal Pit

This site is located in the Public Works complex in soils beneath the east end foundation of building 584. Excavation is restricted for soils that are located immediately beneath the foundation.

Site 7 – Old Acid/Caustic Disposal Pit

This site is located in a clearing that is northeast of the Old Fuel Farm, in the northeast corner of the Base. Excavation is restricted within the site and groundwater use is restricted beyond the site limits.

Site 9 – Neptune Drive Disposal Area

This site is located in the community support area of the Base beneath the Bachelor Enlisted Quarters (Buildings 216-220) and the Galley (Building 201). This site is bounded on the west by Orion Street, on the north by Buildings 212-215, on the east by Building 211. Excavation is restricted within this area.

Site 12- Explosive Ordinance Disposal Training Area

This site is located in the southeastern portion of the Base within the Weapons Storage Area. The area is bounded on the east by the Base property line, wooded areas to the north, south, and west. This site is still active. Changes in land use and groundwater use are restricted.

Building 95 – Former Pesticide Storage Facility

This site is located on the northeast corner of the Base. The site is bounded on the west by Pegasus Street, on the north by the MWD Kennel, on the east by Sixth Street, on the south by Fitch Avenue. Excavation and groundwater use are restricted.

Old Navy Fuel Farm

The site is located in the northeast quadrant of the Base, bounded on the south by Fitch Avenue, on the west by Sixth Street, on the north and east by the recreational field. Groundwater use is restricted.

Navy Exchange Service Station, Building 538

This site is located north of Burbank Avenue behind the Navy Exchange store. Worker safety precautions are necessary for excavation in this area. Groundwater use is restricted.

The Maine Department of Environmental Protection is requesting a site-wide institutional control on the use of any wells on the entire Base (since public water is available) in order to protect the on-going mitigation efforts. The Navy is considering alternative means of achieving these goals.

F. Land Use Suitability

Land uses within the boundaries of the Brunswick Naval Air Station's main Base area have been classified into nine primary categories that reflect generalized activities presently occurring in each under military operations. These land use areas are illustrated on the Existing Land Use Maps for the entire Base and for the core Cantonment Area (see Figures III-4a and III-4b). Although these categories are comparable to those delineated as part of the most recent Base Master Plan update they are also reflect many typical land use

categories used to reflect municipal land use activities as well. The generalized land uses are listed in Table III-1 which also includes the approximate acreage contained in each area. These acreage figures were derived using a Geographic Information System (GIS) and the digital assessor's map from the Town of Brunswick's GIS services. The total acreage figure for the installation presented in the Table may vary from other sources reporting the actual size of the facility.

Table III-1 Generalized Existing Land Use
Generalized Existing Land Use
Brunswick Naval Air Station

Land Use	Approx.	
	Acreage	Percent
Airfield/Flight Operations	1,510	48.21%
Weapons Storage	898	28.67%
Residential	257	8.21%
Industrial	158	5.04%
Unreserved	156	4.98%
Flight Operations Support	71	2.27%
Administration & Training	38	1.21%
Community Support	35	1.12%
Maintenance (DPW)	9	0.29%
Total	3,132	1

Source: Town of Brunswick digital Assessor's Map, and RKG Associates, Inc.

Airfield/Flight Operations

The largest portion of the facility's land area is dedicated to airfield and flight operations, which contains approximately 1,510 acres. The primary focus of activities in this area centers on the use and maintenance of the installation's parallel runways and apron areas. This area includes the hangar buildings as well as aircraft maintenance facilities. The fuel facility is located at the northern end of this land use area. A considerable portion of the area is preserved as open space that acts as a protective buffer for flight activities and includes portions of the clear zones and accident potential areas located at either end of the runways.

Flight Operations Support

Immediately adjacent to the east side of the airfield is an area presently dedicated to support of flight operations at the installation. There is in fact a mixture of residential and non-residential uses located here. There are a handful of smaller buildings that are generally used for public works maintenance activities. However, the barracks buildings are also located here as well as an administrative office building. There is approximately 70 acres associated with this area; however, a significant portion of the site is affected by on-going hazardous materials cleanup operations.

Community Support

Situated at the center of the Cantonment Area is a cluster of buildings that currently provide community services. These services and activities include medical offices, day

care, recreational activities, and educational facilities. It also contains the Base Exchange. This land use area contains approximately 35 acres.

Administration and Training

Also centrally located in the Cantonment Area are the installation's administration and training facilities. This land use area contains just under 40 acres and houses the command's administration and communication offices, as well as classroom/training facilities and the air reserve center.

Residential Area

As illustrated on the Existing Land Use map, residential uses occupy approximately 260 acres in the northeast corner of the installation. There are approximately 320 family housing units presently located here that includes a mix of single- and multi-family dwellings, including the Base Commander's residence.

Industrial Area

At the northern perimeter of the installation, along Bath Road, is a 160-acre land use area generally dedicated to industrially oriented activities. As illustrated on the land use map, a significant portion of this area is presently undeveloped. However, the area also contains a cluster of buildings used by the Construction Battalion, and other related warehouse and maintenance facilities.

Weapons Storage

At the southern tip of Base is an area approximately 900 acres in size that is presently dedicated to weapons storage. Although only a relatively small portion of this area is actually used for weapon-related uses, a large buffer is maintained for safety purposes. A portion of this area is also located in the flight operation clear zone and accident potential zone.

Other Land Uses

The Navy operates a public 9-hole golf course at the southern end of the Base that includes a small clubhouse and other supporting structures.

Reuse Issues

The existing data was reviewed in an effort to identify environmental and other data that could impact the use of the property. Currently the Base area is used for flight operations and aviation maintenance, industrial, administration and support, residential, weapons, and community services. The major development has occurred in the northeast quadrant of the Base. Existing infrastructure has expanded to serve the developed area in northeast quadrant. Little infrastructure exists in the southern half of the Base.

The Town of Brunswick has zoned the northerly portion of the Base as Zone 1A and 2 Aquifer Protection. The area adjacent to the southeasterly boundary is zoned Natural Protection Zone.

There are 20 active and former contamination sites on Base. As of October 2001, six sites remain active for soils and thirteen remain active for groundwater. Active soil sites

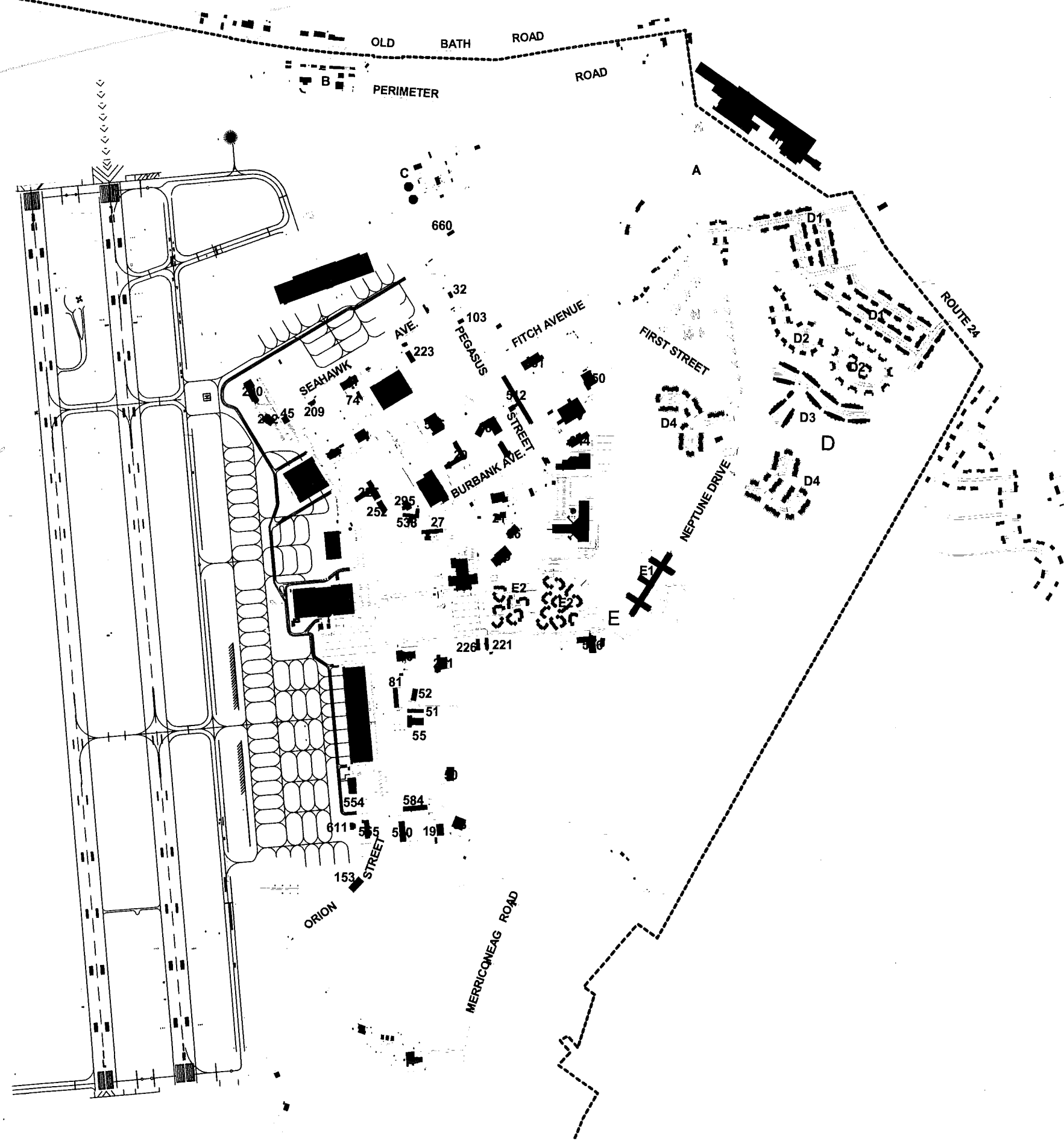
include site 12 in the weapons area and sites 7,9,17, POL 1, and POL 2 located in the northeast quadrant. Active groundwater sites are also located in the northeast quadrant. There are nine areas of institutional controls and land use restrictions on Base.

There are 33 sites of historic archaeological sensitivity on Base including three cemeteries. Four of the sites are at the north border adjacent to Old Bath Road. The remaining sites are located in the southerly half of the Base.

There are rare natural communities located in the sand plain grasslands located at the north end of the runways. There are no mapped deer yards located on the Base.

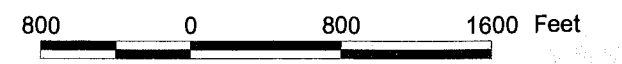
The most suitable area for redevelopment is located in the northeast quadrant. The area has the infrastructure necessary to support development. This area has seen an increase in development in recent years with the construction of the new housing units.

**Figure III-1
Buildings and Airfield**



Major Buildings at BNAS

A	Main Gate
B	"CB" Complex
C	Fuel Farm
D	Family Housing
D1	Marina Landing (2003)
D2	Brunswick Gardens
D3	Midway Terrace
D4	Woodland Village (2000)
E	Enlisted Housing
E1	Transient Party Quarters
E2	Permanant Party Quarters
1	Hangar (Old)
4	Hangar / Shop
250	Base Headquarters
5	Hangar / Shop
6	Hangar (New)
87	Wing Headquarters
150/151	Reserve Center
11	Base Exchange
645	Medical Center
294	Supply Warehouse

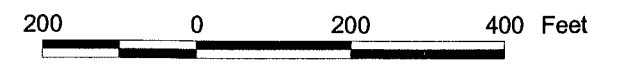


**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

Prepared by RKG Associates, Inc. and OEST Associates, Inc. - April 2005
Sources: Dept. of Public Works, NASB; and RKG Associates, Inc.

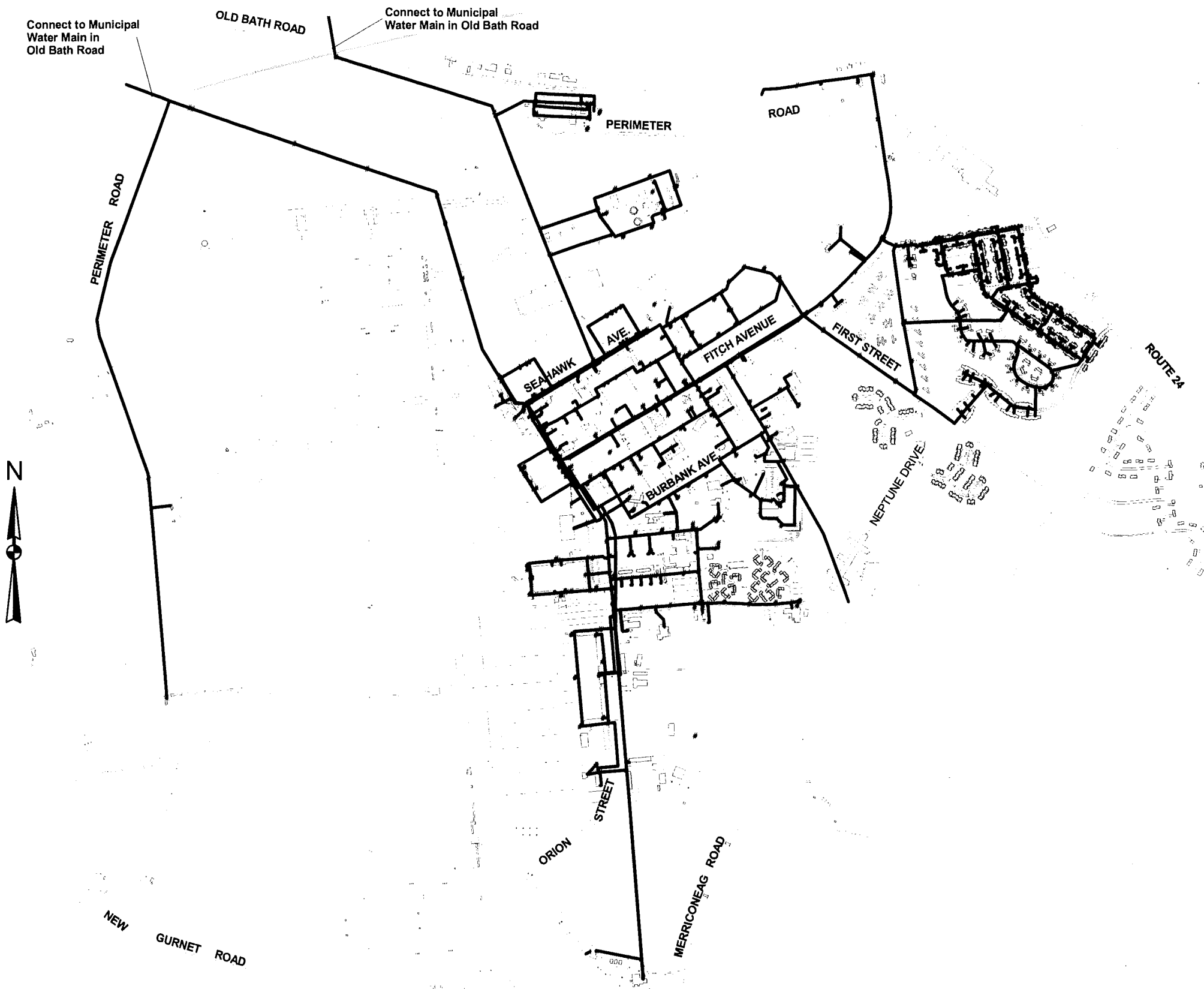
Figure III-1a
Buildings
McKeen Street Housing



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Brunswick Naval Air Station
Town of Brunswick, Maine

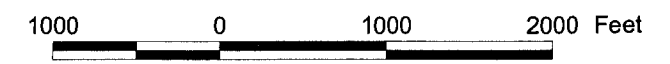
Prepared by RKG Associates, Inc. and OEST Associates, Inc. - April 2005
Sources: Dept. of Public Works, NASB; and RKG Associates, Inc.

Figure III-2a.1
Water Distribution
System



Legend

- Water Structures
- Water Lines

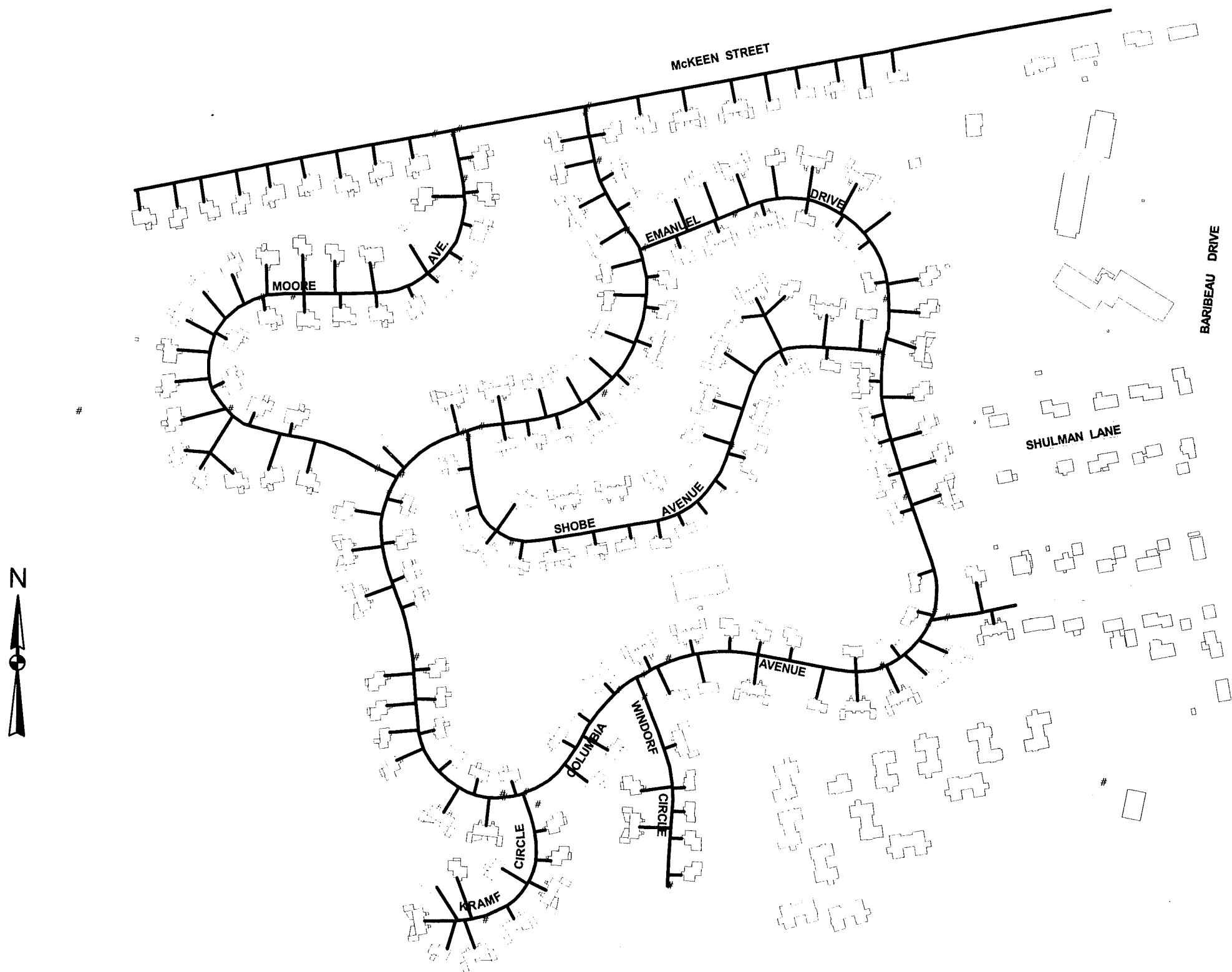


**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

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Figure III-2a.2
 Water Distribution
 System
 McKeen Street Housing



Legend

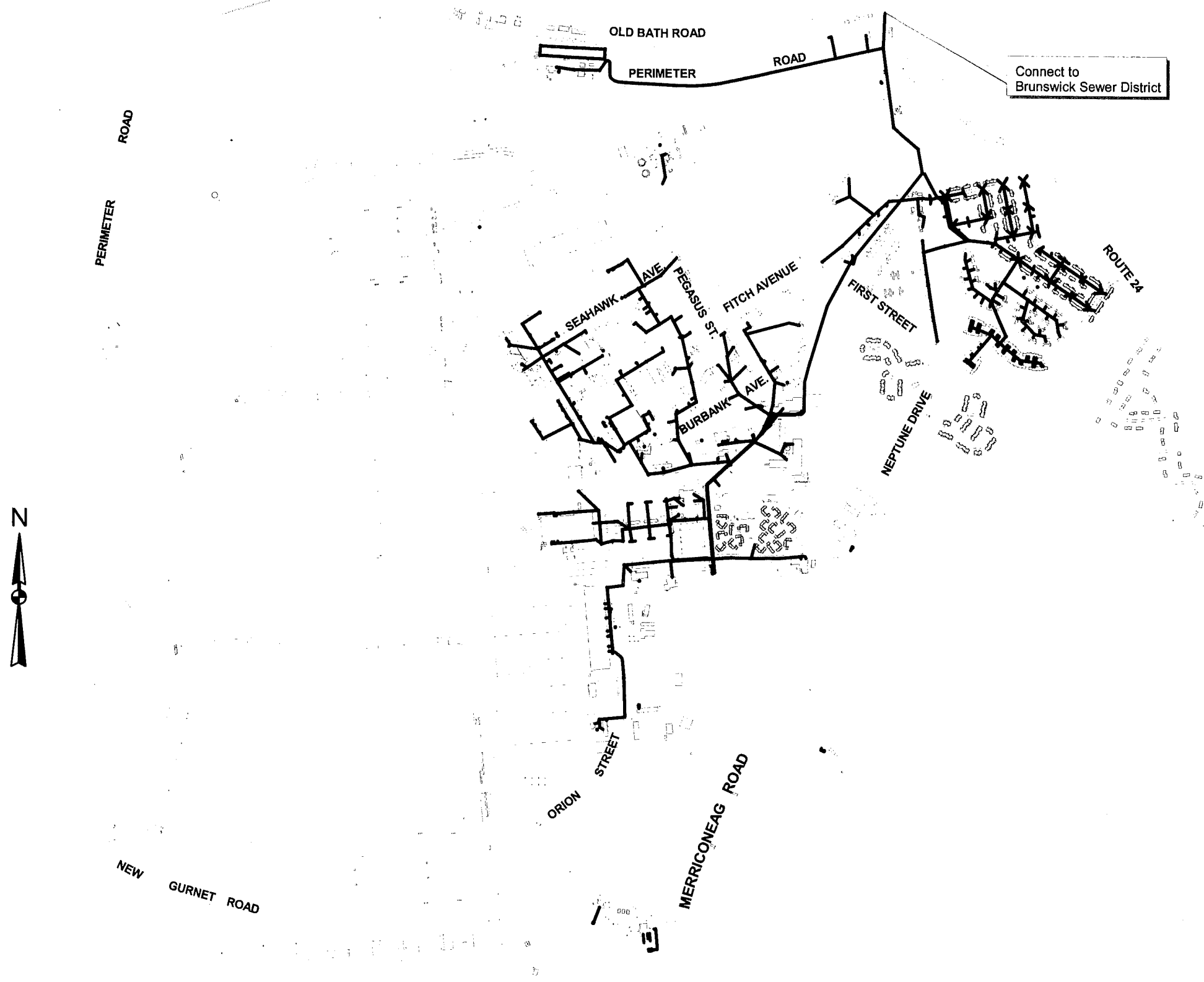
- # Water Structures
- Water Lines

200 0 200 400 Feet

**BRAC Preparedness Strategy
 Brunswick Naval Air Station**

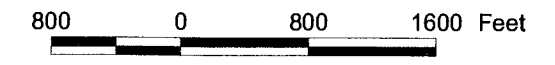
Town of Brunswick, Maine

Figure III-2b.1
Sewer Infrastructure



Legend

- Sewer Manhole
- Sewer Line

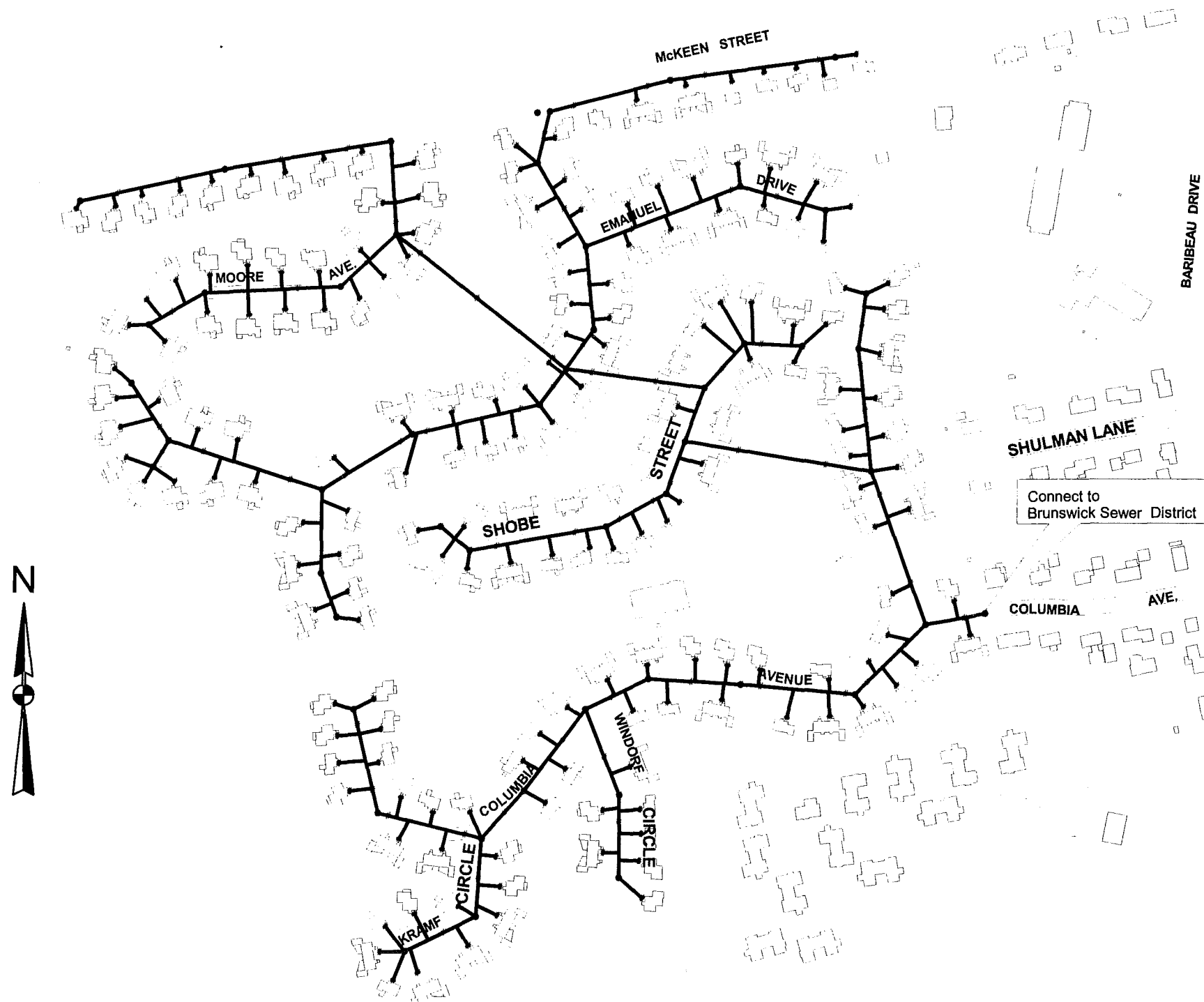


**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

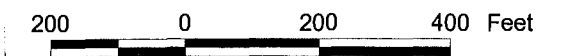
Prepared by RKG Associates, Inc. and OEST Associates, Inc. - April 2005
Sources: Dept. of Public Works, NASB; and RKG Associates, Inc.

Figure III-2b.2
Sewer Infrastructure
McKeen Street Housing



Legend

- # Sewer Structures
- Sewer Line



**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

Figure III-2c.1
Storm Water
Infrastructure



PERIMETER ROAD

PERIMETER ROAD

ROUTE 24

SEAHAWK AVE.

PEGASUS ST.

FITCH AVENUE

FIRST STREET

NEPTUNE DRIVE

BURBANK AVE.

ORION STREET

MERRICONEAG ROAD

NEW GURNET ROAD

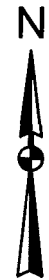
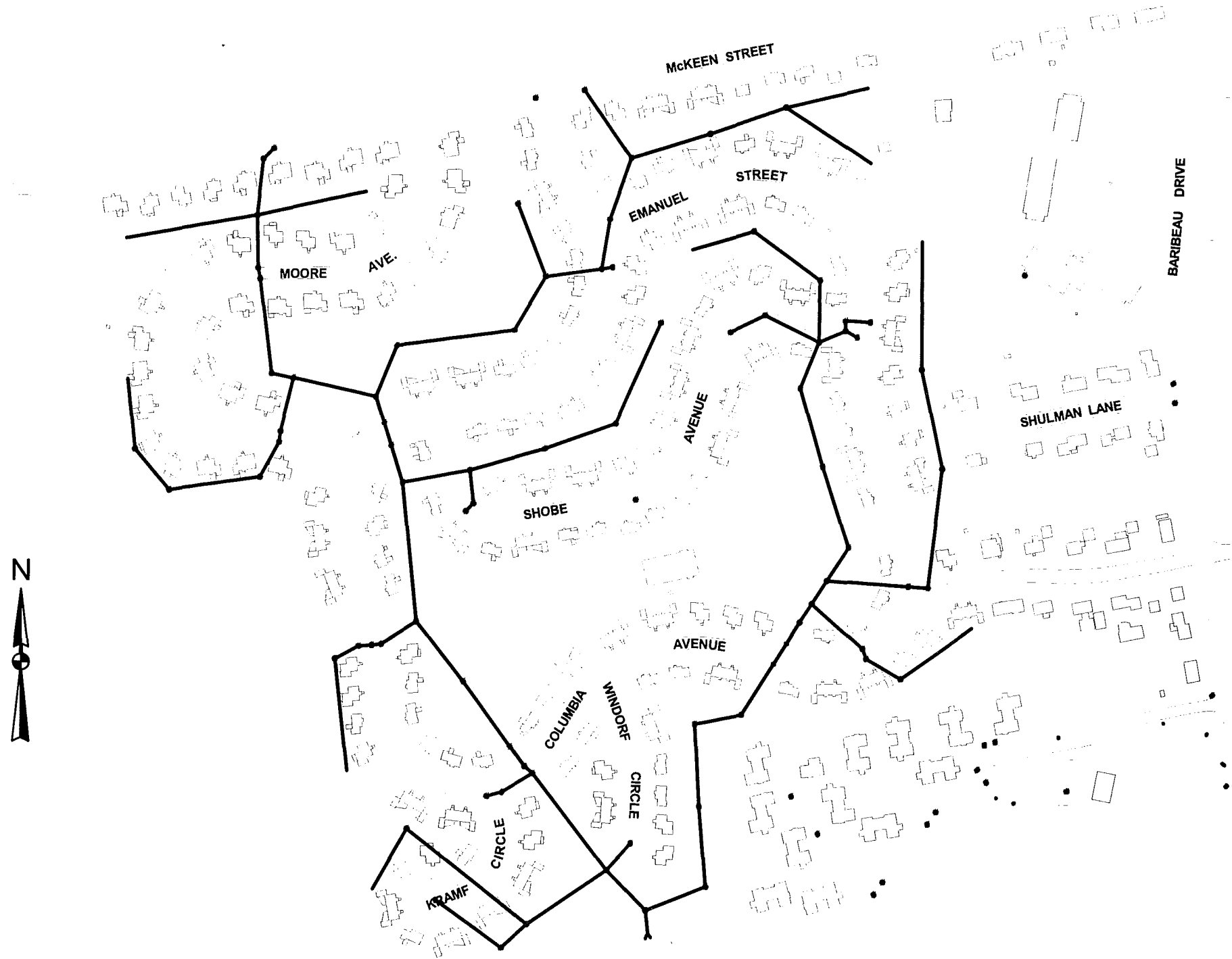
Legend

- Storm Water Structures
- Storm Water Lines




900 0 900 1800 Feet

**BRAC Preparedness Strategy
Brunswick Naval Air Station
Town of Brunswick, Maine**

Figure III-2c.2
 Storm Water Infrastructure
 McKeen Street Housing



Legend

-  Storm Water Structures
-  Storm Water Lines
-  Bldg-lines.shp

**BRAC Preparedness Strategy
 Brunswick Naval Air Station**

Town of Brunswick, Maine

**Figure III-2d.1
Abandoned
Steam Lines**

NOTE:
ALL STEAM LINES ARE
UNDERGROUND AND MAY
REQUIRE REMOVAL

NOTE:
STEAM LINES
ABANDONED YEAR 2000

Legend

-  Steam Pits
-  Steam Lines



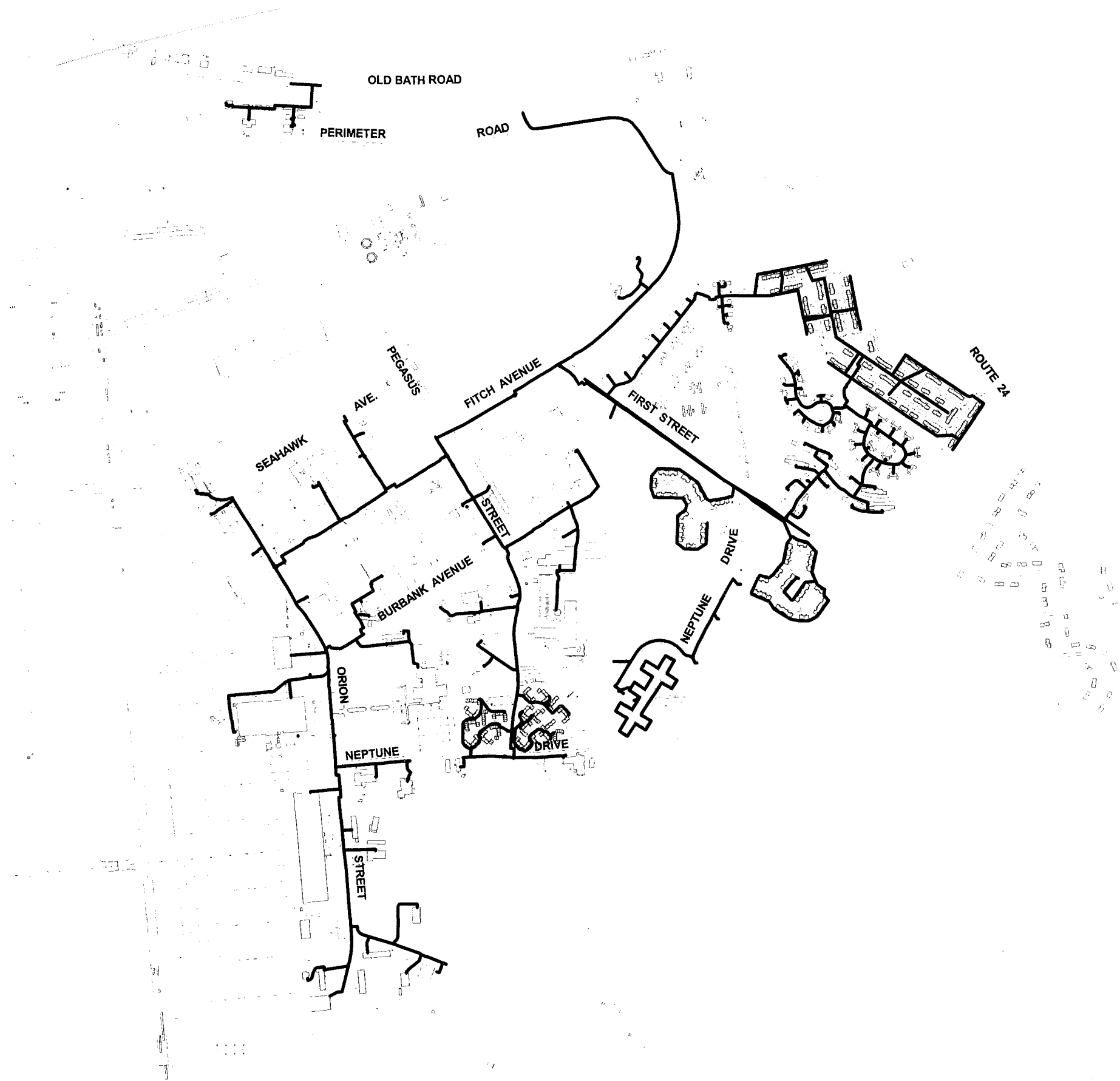
**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

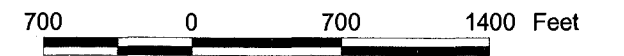
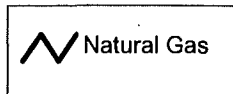
SITE OF FORMER
CENTRAL STEAM PLANT



Figure III-2d.2
Natural Gas
Distribution



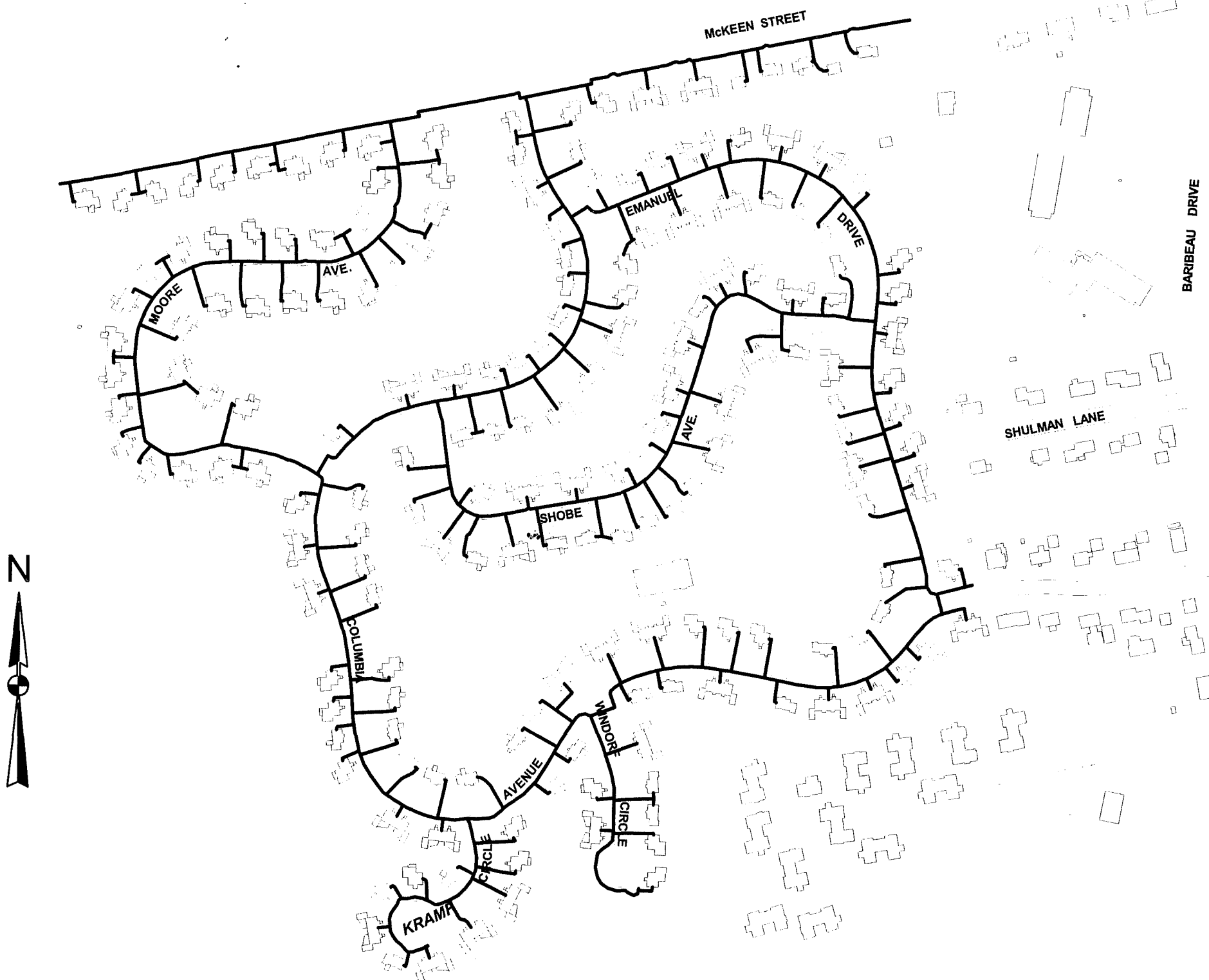
Legend




**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

Figure II-2d.3
Natural Gas
Distribution
McKeen Street Housing



Legend

 Natural Gas

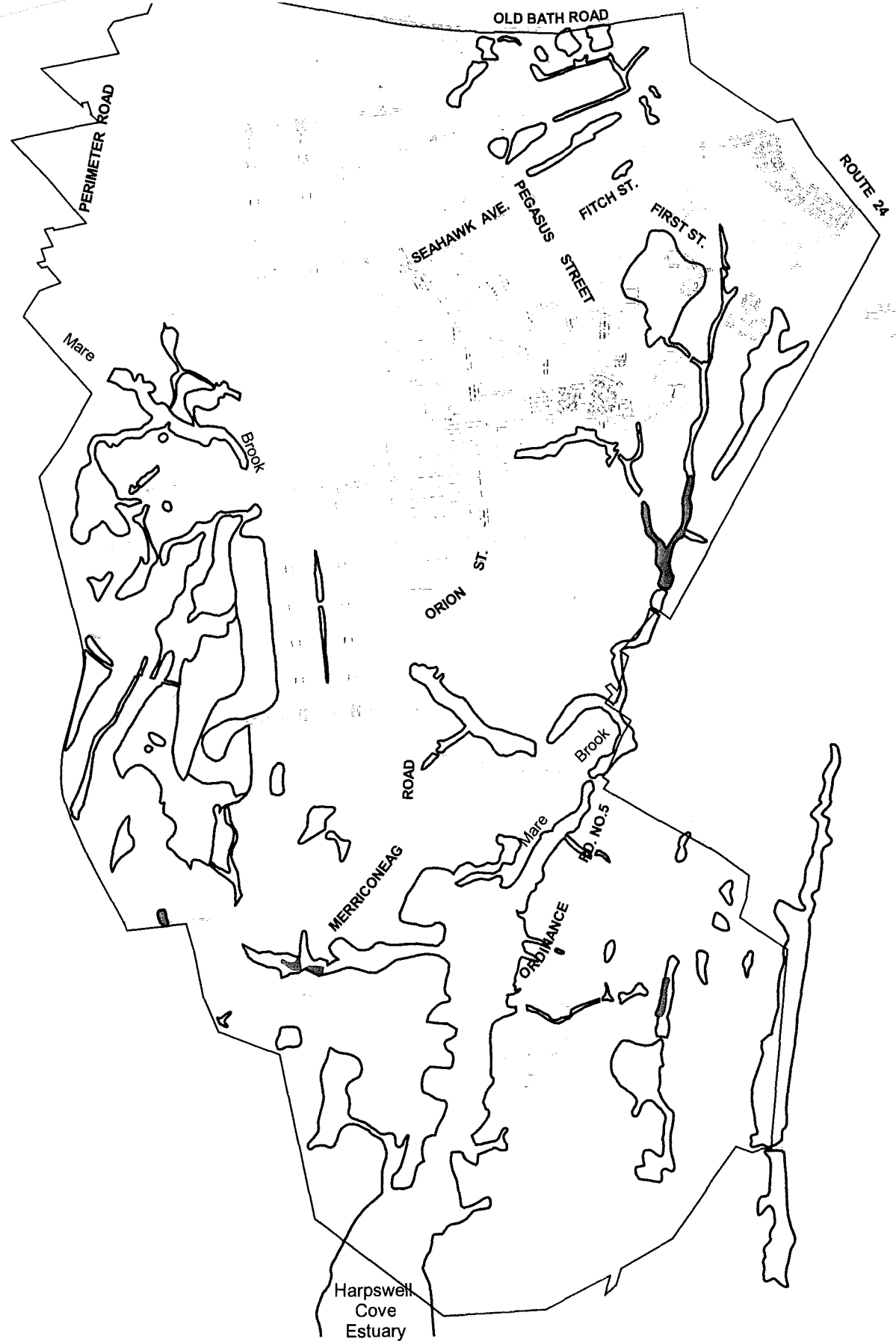
200 0 200 400 Feet

**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

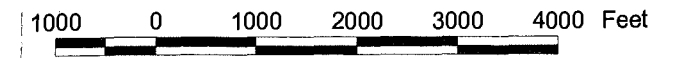
Prepared by RKG Associates, Inc. and OEST Associates, Inc. - April 2005
Sources: Dept. of Public Works, NASB; and RKG Associates, Inc.

Figure III-3a
Wetlands & Surface Waters



Legend

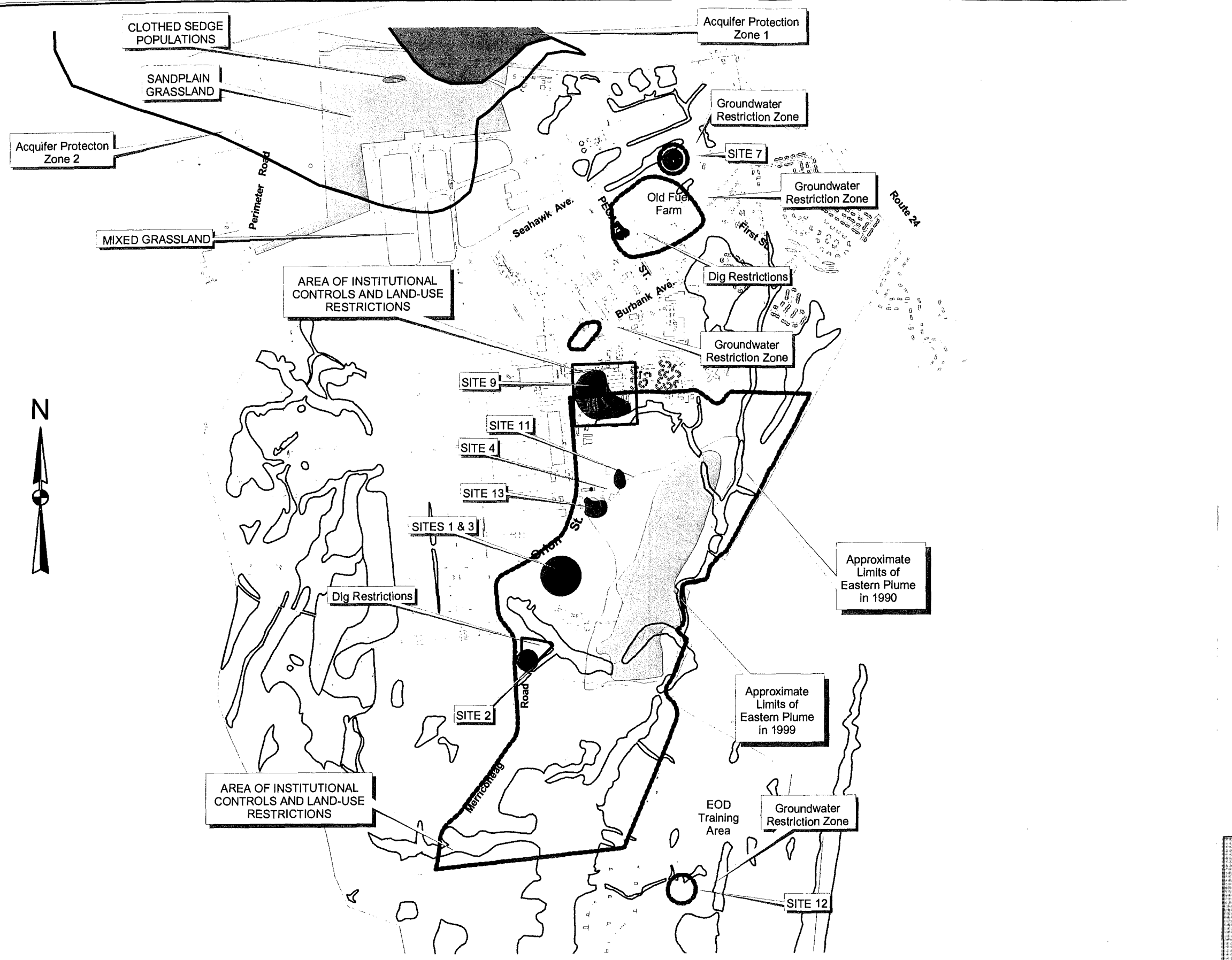
-  Wetland Limits
-  Ponds
-  Streams



**BRAC Preparedness Strategy
Brunswick Naval Air Station**

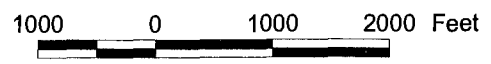
Town of Brunswick, Maine

**Figure III-3b
Environmental
Site Constraints**



Legend

- Acquirer Zone 1
- Acquirer Zone 2
- Clothed Sedge Populations
- Sandplain Grassland
- Mixed Grassland
- Restrictions
- Groundwater Restriction Zone
- Site Limits
- Wetland Limits
- Plume-1990
- Plume-1999

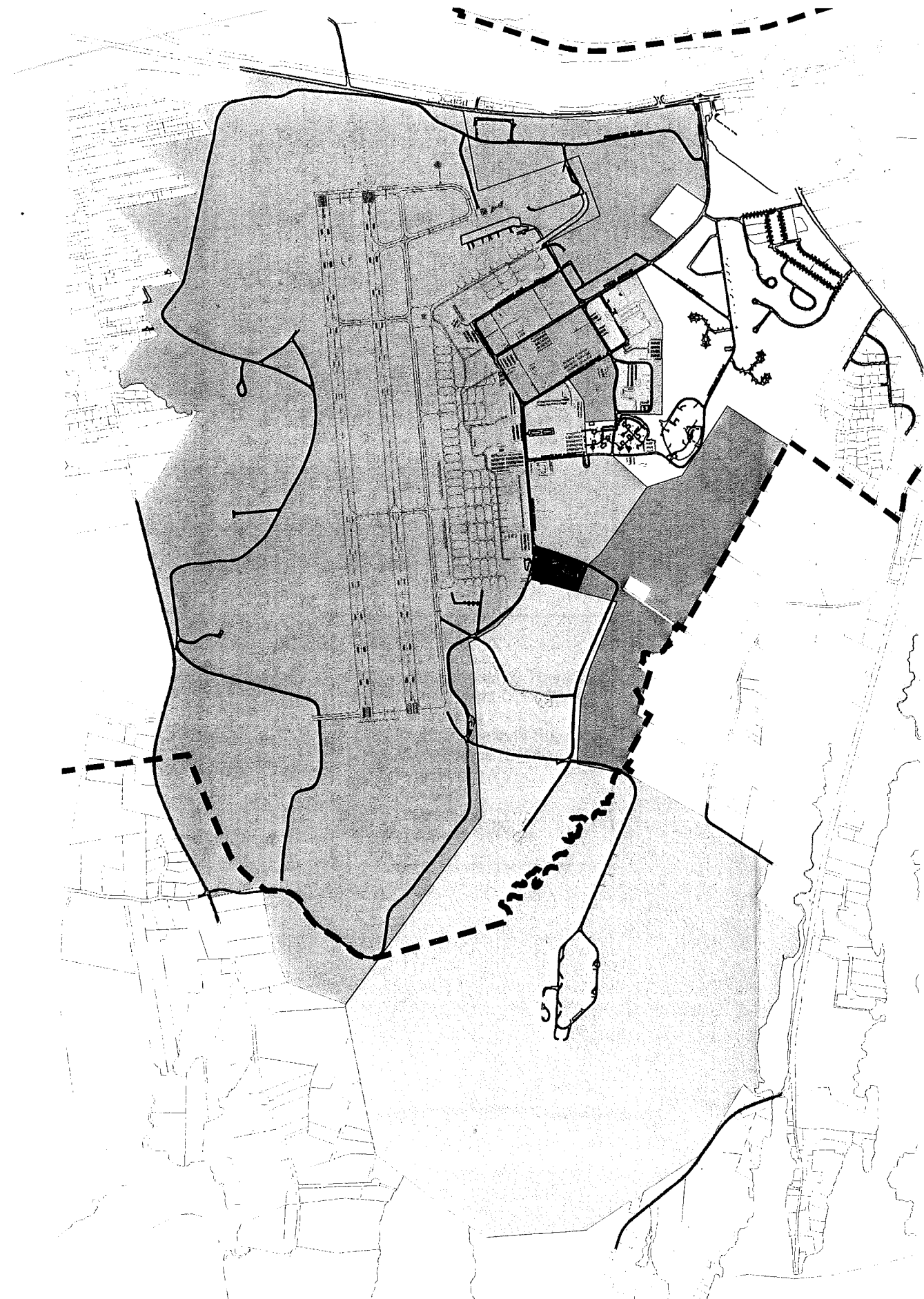


**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

Prepared by RKG Associates, Inc. and OEST Associates, Inc. - April 2005
Sources: Dept. of Public Works, NASB; and RKG Associates, Inc.

**Figure III-4a
Existing Land Use**



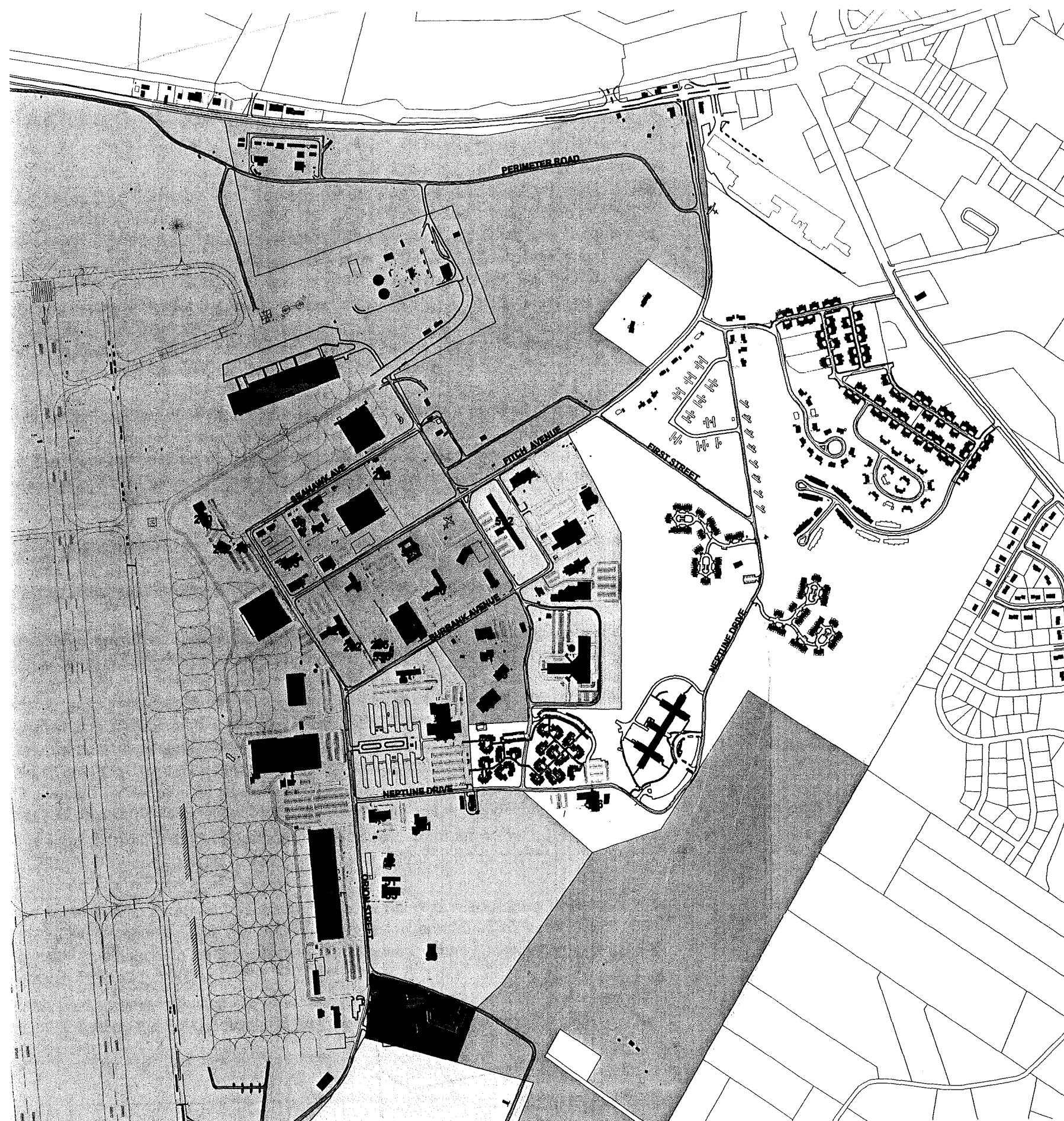
- Existing Land Uses**
- Administration & Training
 - Airfield/Flight Operations
 - Community Support
 - Flight Operations Support
 - Maintenance (DPW)
 - Industrial
 - Residential
 - Unreserved
 - Weapons Storage
 - Growth Boundary (town zoning)



**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

**Figure III-4b
Existing Land Use
Cantonment Area**



- | | |
|---------------------------|----------------------------|
| | Buildings |
| Existing Land Uses | |
| | Administration & Training |
| | Airfield/Flight Operations |
| | Community Support |
| | Flight Operations Support |
| | Maintenance (DPW) |
| | Industrial |
| | Residential |
| | Unreserved |
| | Weapons Storage |



**BRAC Preparedness Strategy
Brunswick Naval Air Station**

Town of Brunswick, Maine

IV. MARKET & ECONOMIC CONDITIONS

Introduction

This chapter of the BRAC Preparedness Strategy for the Town of Brunswick summarizes the economic and market conditions in the region that will influence the ultimate redevelopment of the base. A more detailed analysis of economic, demographic and other data is contained in Appendix B. The economic and demographic trends in the Mid-Coast Region and in the rest of the state (particularly southern Maine) provide the foundation for the strengths, weaknesses and opportunities for the redevelopment of BNAS.

The Navy's existing uses of the 3,000+-acre installation are driven by the department's specific mission requirements and, for the most part, are not directly related to the economy of the state or region. The availability and cost of housing and labor in the area indirectly plays a role in the operations of the Base because of the Navy's need to employ civilian workers and to house military personnel. Under reuse, future market conditions combined with local and state land use regulations, will impact the type of uses that are financially feasible to develop on the property, as well as serve as the underlying foundation for valuing the various property elements.

The following points summarize the findings of the detailed economic and market analysis, which focuses on factors that contribute to economic growth including population, employment and income trends, as well as on current real estate trends and activity levels.

- Population growth is shifting from Cumberland County toward Sagadahoc County. Cumberland County's population increased by 9.2% between 1990 and 2000, compared to an increase in Brunswick of only 1.3% over the same period. Over the next 5 years, the population is expected to grow at a faster rate in Brunswick compared to Cumberland County. Meanwhile, Sagadahoc County is expected to grow the most between 2004 and 2009 compared to the State of Maine, Cumberland County and the Town of Brunswick. These demographic shifts are driven in part by the demand for more affordable housing options outside the greater Portland metro area and the availability of land for development.
- The number of households is expected to increase approximately 1.3% per year in Brunswick between 2004 and 2009, adding over 580 new households, accounting for nearly one half of the region's growth.
- The population in Brunswick is getting older as the region continues to prosper as a retirement community and the existing population continues to age. The highly educated population in Brunswick and Cumberland County increased substantially between 1990 and 2000.
- Household income, adjusted for inflation, did not increase between 2000 and 2004. In 2004 dollars, the 2000 household income was \$44,349 while the 2004 household income was \$44,332.

- Employment trends indicate a shift from manufacturing industry to a more service sector economy. Occupation trends are consistent with the employment trend, indicating a shift from production occupations to real estate, finance and insurance, and other service occupations.
- The largest industries in the region that continue to flourish are the health care industry, manufacturing, retail trade, finance and insurance, and professional scientific and technical services. The largest employers in Brunswick include Bath Iron Works, BNAS, Bowdoin College, Mid Coast Health Services, Town of Brunswick, LL. Bean, Parkview Hospital, MBNA, Wal-Mart, Arrowhart Cooper Industries, Hannaford Brothers, Downeast Energy, Shaw's and Brunswick Publishing.
- The real estate market in southern Maine continues to grow and improve, with substantial price appreciation in recent years. The demand for industrial and commercial land north of Portland is expected to continue as sites become sparser and prices continue to increase in closer proximity to downtown Portland. Various parcels are available throughout the Brunswick region to develop business and industrial parks and there is an identified long-term need for more sites.
- The office market surrounding the Greater Portland Region has been performing exceptionally well compared to its regional counterparts in Southern New Hampshire, Boston, and Hartford. While there is some evidence of enhanced demand for office space outside of the in-town and suburban Portland markets, its strength is generally untested in the more rural communities. Small businesses dominate the market for office and industrial uses.
- The housing market has been particularly strong, with rapid appreciation of prices and substantial new growth in single-family housing and to a lesser extent, multi-family units.
- During the 1990s, there was an average of 180 housing units added annually in the cities and towns of the core market area surrounding Brunswick with the town (at 52 units per year) representing about 30% of the annual growth. The absolute change in housing units in Brunswick, on an annual basis, was about equal to that of the City of Portland.
- Brunswick has the largest share of multi-family housing units in the core market area

In general, the current and short-term forecasted real estate market trends affecting southern and coastal Maine support the redevelopment of BNAS. However, the housing market in Brunswick and the surrounding communities is significantly impacted by the presence of BNAS. In addition to the approximately 750 units of on-base family housing, the facility's military and civilian population account for a large proportion of the multi-family housing stock in the immediate region.

1. Description of the Brunswick Regional Economy

The economy of the region is somewhat more diversified than many other areas of Maine; and as a result, it has been better positioned to survive shifts in the state and national economy. Major local employers in the medical, military and education sectors are less affected by shifting economic times than more traditional industries. Brunswick

currently serves as a service center community for its immediate region, with Bath playing the role of manufacturing center in this area due to the presence of Bath Iron Works (BIW), Maine's largest private employer with over 6,000 employees. Another neighboring community, Topsham, has a developing retail and business presence. Together, these communities are creating a regional center that can offer alternatives to the Greater Portland, Augusta, and Lewiston-Auburn hubs. Brunswick makes up approximately 46% of the labor force, and the town's retail sector makes up approximately 66% of total sales for the region²⁸.

Brunswick is the fifth largest community in Maine. Its location makes it something of a gateway to "the rest of Maine", particularly the coastal region along Route 1 to the north, since it is situated just north of Portland and the most populous southern coastal areas of the state.

2. Employment Trends

Employment grew slightly from 2002 to 2003 in Maine, with an increase of 0.7% in all jobs, while New England experienced negative job growth of 1.9% during that time, and the national growth was 0.5%. Over the past 7 years, the number of jobs in Maine has increased an average of 1.6% per year. However, Maine's manufacturing sector lost more than 7,000 jobs in that same period, although manufacturing jobs are also generally decreasing nationwide. Government jobs increased by 4,800 jobs in 2003, partially offsetting the loss in manufacturing sector jobs²⁹.

Employment increased in Cumberland County in recent years. According to the County Business patterns provided by the Bureau of Labor and Statistics, the number of employees in Cumberland County increased by 6 percent from 140,731 in 1998 to 148,683 in 2002. Over the same period the employment in Sagadahoc County increased by only 1% from 13,318 in 1998 to 13,499 in 2002.

Recent employment trends indicate a shift from manufacturing (NAIC 31) and administrative, support, waste management and remediation (NAIC 56) industries to a more service sector economy. In Cumberland County, the largest decreases occurred in the manufacturing and administrative, support, waste management and remediation industries. In Sagadahoc County, on the other hand, the manufacturing industry and the administrative, support, waste management and remediation industry remained stable with zero net losses or gains according to the Bureau of Labor and Statistics. The job loss trend in the manufacturing industry follows suite with the rest of the United States, while the entire economy shifted from manufacturing and production to other more efficient industries.

Overall, the majority of industries in Cumberland County increased in number of employees. The decreases in major industries between 1998 and 2002 were compensated for in other growing industries in higher demand. As a result, the economy in

²⁸ BEDC report

²⁹ Maine Department of Labor

Cumberland County has remained healthy in recent years without any major economic changes. It is important, however, to acknowledge that the closure of the Brunswick Naval Air Station or Bath Iron Works could have adverse effects on the local economy, especially since the Cumberland County economy relies on the consumer and commercial demands driven by the population of the Brunswick Naval Air Station. Without a disruption of the Naval Air Station, the local and regional economy is projected to continue to flourish in the coming years.

The Brunswick and Cumberland County employment trends are similar to the trends for the entire State of Maine where the service industry is expected to grow the greatest over the next ten years. However, comparing Brunswick with the Cumberland County labor force characteristics, Brunswick has a lower percentage of people working in finance and real estate. However, the Cumberland County employment base is predominately driven by the City of Portland, which serves as the financial center for the state³⁰ and is influencing the financial industry.

3. Commuting patterns

The BEDC report indicates the number of residents who live and work in Brunswick decreased from 61% in 1990 to 54% in 2000. This is perhaps a result of the increased retiree population and the increased housing costs trends. Because fewer people live and work in Brunswick, and the number of jobs increased, there is an increase in the number of people commuting into Brunswick to work.

In 2000, there were approximately 15,000 employees in Brunswick with over one-third of those living in Brunswick. The remaining employees live in Topsham (10%), Bath (6%) and the surrounding region (27%).

The increased number of commuters may be a result of the increased cost of housing in Brunswick, while the increase in household income (adjusted for inflation) has not necessarily increased. Because of the decreased live/work population base, traffic volumes have increased along major arterials.

While approximately 55% of BNAS military employees reside in the Town of Brunswick, the remaining live in the surrounding towns, principally, Topsham (8.5%), Bath (8.3%), Lisbon Falls, (3.9%), Yarmouth (3.5%), Harpswell (2%), Freeport (2%), and Lisbon (2%)³¹. (See Figure IV-1)

Approximately 18% of BNAS civilian employees reside in the Town of Brunswick, the remaining primarily live within Cumberland (8%), Sagadahoc (30%) and Androscoggin (11.65%) counties.³² (See Figure IV-2)

³⁰ BEDC Report

³¹ Department of the Navy

³² Department of the Navy

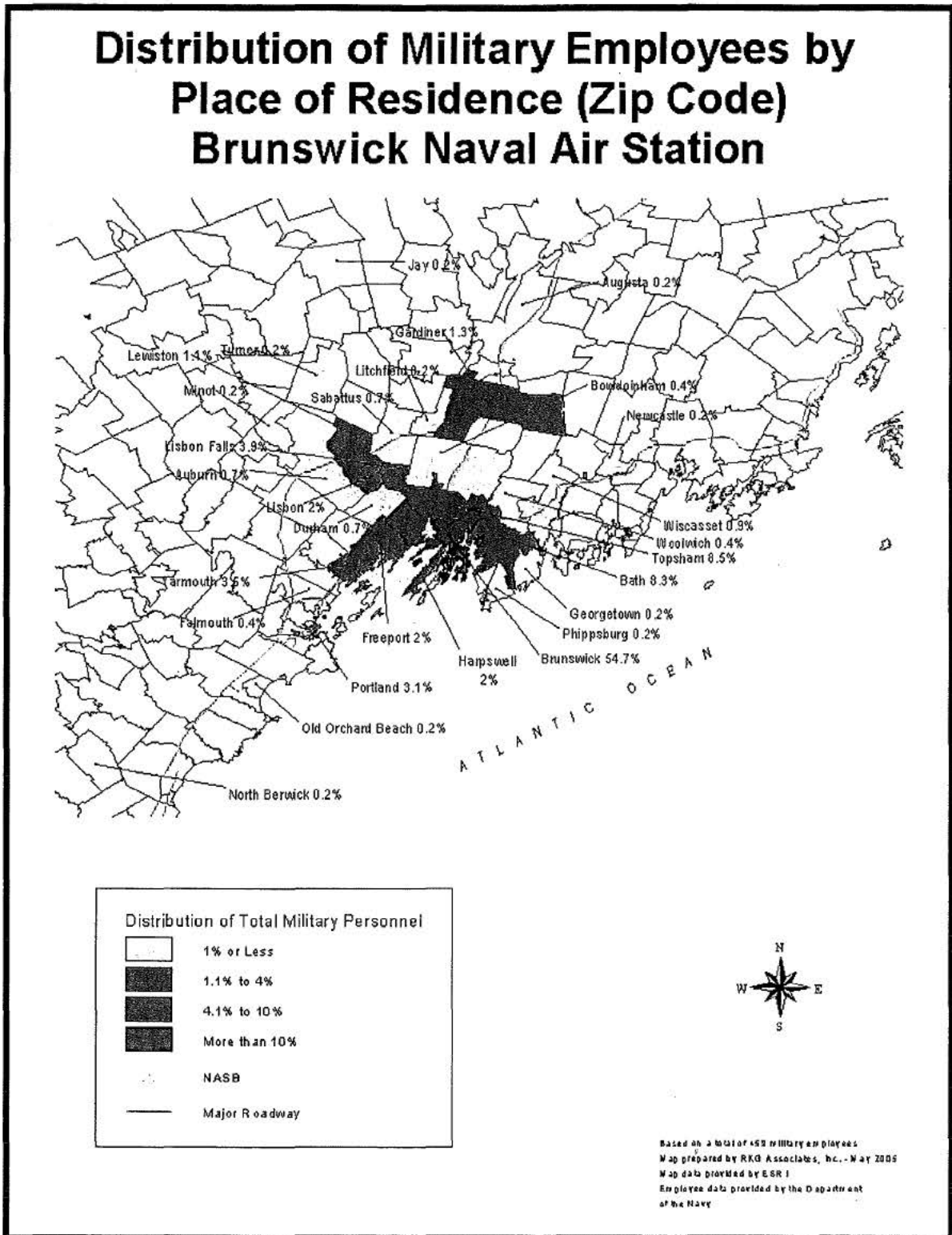


Figure IV-1 Distribution of Military Employees by Place of Residence

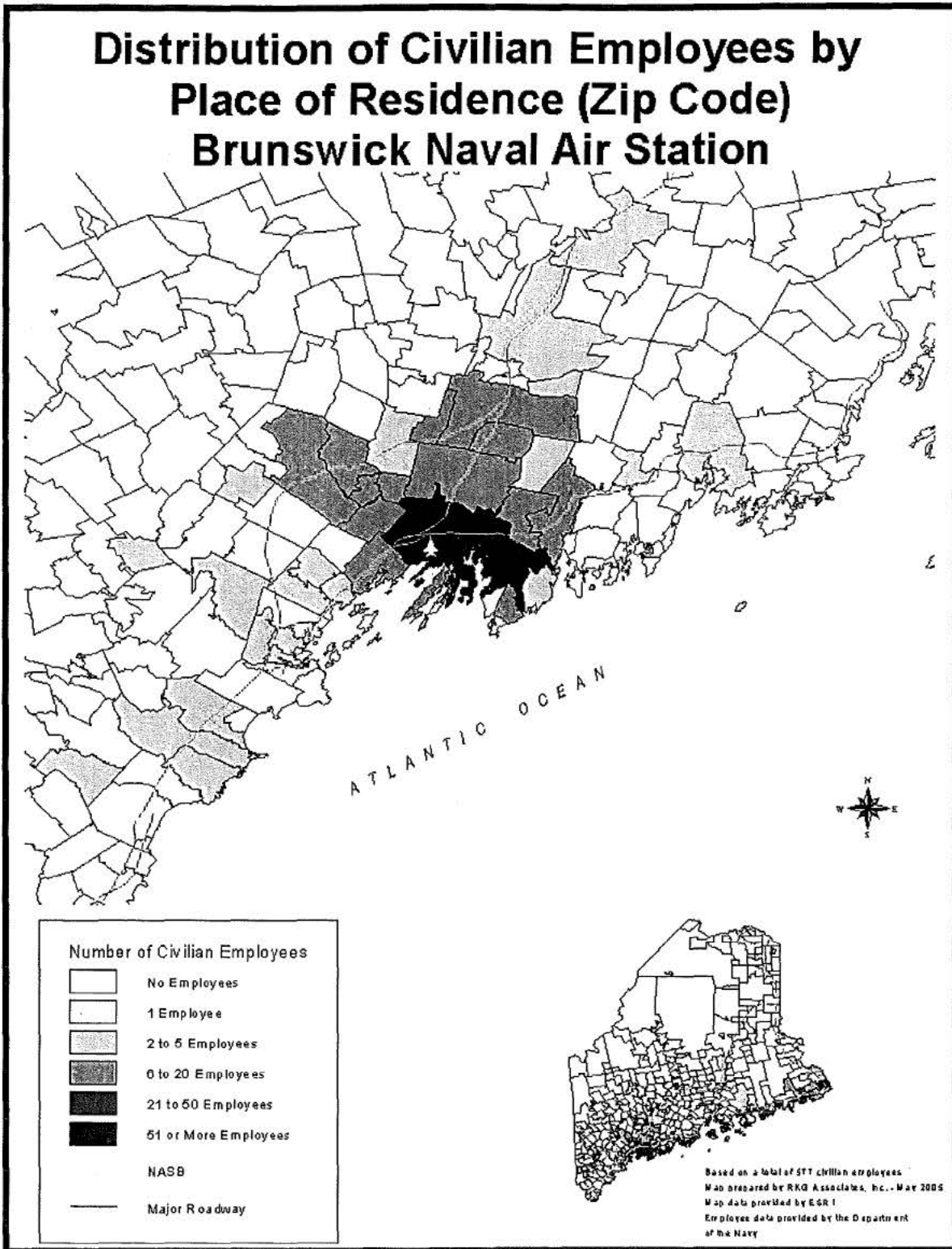


Figure IV-2 Distribution of Civilian Employees by Place of Residence

4. Largest Industries and Employers

Brunswick is a diverse economy, attributed to the unique sectors that help make the region flourish. Through an inventory process, the following industries were identified as drivers for the Brunswick economy; Medical Sector, Food and Lodging, Manufacturing, Bank Finance and Insurance, Downtown Retail, Cooks Corner Retail, Education,

Military, Art and Cultural Base, Non-Profit, Service Sector, Building Supply and The Real Estate Community, Retirement Industry, Natural Resources Industry and Recreation. Additionally, as of 2003 there were over 800 individual businesses in Brunswick. The largest employers in Brunswick, listed by number of employees, are shown in Table IV-1. Not all of the employees shown in the list are believed to be full-time.

Table IV-1

Largest Employers Brunswick	
Name	Average Employees
Bath Iron Works	1,100
BNAS	817 (civilian)
Bowdoin College	742
Mid Coast Health Services	702
Town of Brunswick	655
L.L. Bean	387
Parkview Hospital	366
MBNA	350
Wal-Mart	264
Cooper Industries (Arrowhart)	200
Hannaford Bros.	192
Downeast Energy	175
Shaw's	130
Brunswick Publishing	128
Source: Brunswick Economic Development Corp.	

In addition to BNAS, Bath Iron Works plays an integral part of the local economy acting as the largest employer, historically providing a degree of economic stability in the region. However, potential downsizing of the Navy's shipbuilding programs may seriously impact BIW and the local economy.

5. Regional Industrial Market Trends

The commercial real estate market in the greater Portland and southern Maine region has experienced several solid years of value appreciation, with significant increases in land value and building prices coupled with rapid expansion. However, the erosion of the manufacturing sector is leaving a large inventory of older and functionally obsolete buildings as the industrial market transitions to a more production, distribution and warehousing function. Meanwhile, new construction of flex buildings is on the rise, with a trend toward selling the units in a condominium form of ownership. There is also a trend toward adaptive reuse of the larger and older manufacturing facilities. There is a shortage of buildable approved land in the region and as a result, the demand is outstripping supply in the Southern Maine-Portland market.

The first business park was constructed in Brunswick in 1982, and since that time approximately 750,000 square feet on 184 acres has been developed for manufacturing, office, or production distribution purposes. Construction during the 1980s far outpaced the construction patterns in the 1990's and 2000's. Approximately 604,396 square feet of

space was developed in the 1980s, 153,810 square feet in the 1990s and an estimated 31,500 since 2000. Over the 22 years of development between 1982 and 2005, the absorption rate was 35,986 square feet per year. During the 1980s, while development was at its highest, the absorption rate was 76,000 square feet or 17 acres per year. In the past five years, the absorption rate has been an estimated 15,000 square feet or 5 acres per year, slowing substantially from the rapid development noted in the 1980's.

While the demand for industrial space exists, so does the reality that construction and development costs are high, and the trend toward more build-to-suite developments continues. In addition, there is a large vacant inventory in the market consisting of manufacturing/industrial buildings that have functional obsolescence. These buildings need to be either readapted for up-to-date use, or torn down and the land redeveloped. Overall, the industrial market continues to be relatively healthy as development continues throughout southern Maine and development trends move northward toward Brunswick.

6. Regional Office Market Trends

The greater Portland office market is doing quite well compared to regional office market trends elsewhere in New England. Compared to the southern New Hampshire, Boston and Hartford office markets, the Portland market has the lowest vacancy at 7.1% compared to 19.2%, 19.9% and 20.6%, respectively. Overall, the market has performed well in recent years with a healthy level of construction, and increased demand for owner-user office space. Between 2000 and 2004, while much of the country experienced only stable absorption rates while large companies downsized and a large sublease market emerged, the Portland market continued to achieve absorption rates above 100,000 square feet per year, except during 2003 when the market only absorbed 23,675 square feet. However, it is expected that healthy absorption will continue as construction slows and the market absorbs the remaining space, creating an upward shift on rental rates.

B. Residential Market Trends

Because of the potential impact of the closure of Brunswick Naval Air Station on the local and regional housing market, this section of the analysis provides a review of the housing and residential market within the Town of Brunswick, as well as that of adjacent communities. A rapid closure and movement of Navy personnel away from the area could result in a dramatic increase in the overall inventory of vacant, and available, housing stock. In addition to Brunswick, surrounding communities that may be impacted by the closing of the base, with respect to their housing supply, include Bath, Durham, Harpswell, Topsham and Freeport, which is referenced to as the Brunswick core market.

In 2000, the Town of Brunswick had 8,720 housing units, accounting for about one-third of the roughly 25,000 units in the six-town core market area. This compares to over 111,000 units in the greater Portland Metropolitan Statistical Area (MSA) and 40,500 in the Lewiston-Auburn MSA. It is important to note that Brunswick is not in either MSA. Between 1990 and 2000, the total number of housing units in Brunswick rose by 523 (6.4%) or about 52 units per year, while the core market increased by 1,797 units (7.8%).

Approximately 57% of the town's housing units (4,944) in 1990 were single-family homes, compared to 67% in the core market. Another 27% (2,392) were multi-family homes and 16% (1,384) were mobile homes. This compares to 22% and 10% respectively for the core market. The preponderance of multi-family units reflects the influence that BNAS has had on the local market, and includes the roughly 750 units that are owned or controlled by the Navy in Brunswick (573) and Topsham (177).

Between 1990 and 2000, 88 multi-family units and 119 mobile homes were added in Brunswick. Throughout the core market, 142 multi-family units were added, while only 16 mobile homes were added, indicating that the other communities lost mobile homes. Projecting these housing trends suggests that for every 100 housing units that could come on to the Brunswick market, e.g., if BNAS were to close, this would represent a two-year supply of housing for Brunswick and about a six month supply for the core market as a whole. Moreover, based on the Census trends, every 100 single-family housing units that could come on to the Brunswick market would represent a three-year inventory for such housing. In other words, if 2,000 formerly military occupied housing units suddenly came on the market, this would represent a forty-year supply for Brunswick (assuming nothing else was built) or, conversely, a ten-year supply for all of the core market.

The Brunswick rental market is scattered among multiple owners with no real concentration of rental housing by any one owner. According to local property managers, there are only a handful of apartment complexes (60 units or more) in the Brunswick area. Most rental complexes are small and independently owned. Turnover of rental housing in the market is typically three months or less.

The self-reported median value of single-family housing in Brunswick from the Census 2000 data was \$135,000, up 15% over 1990, and \$133,700 for the core market (up 15.2%). These estimates ranged from a low of \$95,200 in Bath to \$169,800 in Freeport. Gross monthly rent reported in the Census data were \$534 in Brunswick and \$623 in the core market in 2000, up 12% and 20% respectively. Current (2004) market rents in Brunswick and the core market range from about \$620 for one-bedroom units to over \$1,000 for three bedroom units. Single-family home sales in the market range from about \$150,000 to over \$350,000 (median is approximately \$250,000) with new homes priced at the upper end of the range. Waterfront property is typically priced at \$500,000 and up. Condominium sales range from just over \$100,000 to \$250,000 or more, while mobile homes sell for \$55,000 to \$60,000 with pad rents in the \$265 to \$285 per month range.

Interviews with local real estate professionals indicated that the housing market is relatively strong, with rising prices and relatively short marketing times. Demand for housing is coming from both local and Portland area buyers, as well as from out-of-state with a large proportion of retirees.

Conversations with area real estate brokers suggest that if BNAS were to close, and 1,500 to 2,000 housing units (excluding the approximate 750 military housing units, on-base and off-base) were to become available to the greater Brunswick market, the market would become oversupplied, prices would drop and that estimated absorption could take

5 to 10 years, all other things being equal. This is a qualitative assessment that is in line with the more quantitative assessment from trends in the core market over the last decade. This assumes that there would be no other housing developed in the market. This is unrealistic, as there will still be a market for new development, particularly toward the higher end of the pricing range. If the Navy-owned units were included, then the impact on the market would be proportionally greater.

Conversations with the Brunswick Assessor indicate that the majority of the Navy housing (if sold as condominiums) would be priced below the average price of new housing in Brunswick (currently about \$250,000 or so). The exact pricing of these units remains uncertain as there are still unanswered questions about this housing, e.g., will the land also be for sale. It is presumed by brokers and others active in the market that some portion of the military housing may be demolished and other portions would begin to address the affordability issues confronting Brunswick and surrounding communities. Additionally, any substantial decline in area housing prices could precipitate an influx of area renters and/or first time homebuyers, noting that apartment rents in Brunswick are well below those in Portland, as an example.

The potential downsizing of Bath Iron Works and the secondary impact that BNAS has on employment, home-ownership and consumer spending throughout the region must also be considered. It is reasonable to estimate that an expanded inventory of 2,000 to 2,750 housing units (which includes the Navy-owned housing) on the market could result in an approximately 15 to 20 year absorption period. This substantiates the need for the Town of Brunswick and the Navy to work together to determine what will happen with the Navy housing in the event of closure or realignment.

V. OPPORTUNITIES & CONSTRAINTS

A. Introduction

This chapter of the BRAC Preparedness Strategy for the Town of Brunswick presents a summary of the major opportunities for the redevelopment of the 3,157-acre facility, should the Base be designated for closure by the Secretary of Defense on May 16, 2005. The chapter also highlights the potential constraints that may impede or delay development.

The opportunities and constraints presented here are not meant to be all encompassing, as many other ideas and concepts will undoubtedly emerge throughout the planning process, and additional data will be uncovered. The preliminary ideas presented here highlight the future land uses that may be possible, based on existing market and economic trends as well as on the physical assets at the Base and in the region.

B. Redevelopment Opportunities & Constraints

Should Brunswick Naval Air Station close because of the 2005 BRAC process; the town will be faced with the prospect of guiding the redevelopment of the property as it transfers from federal ownership. This redevelopment effort will be influenced by many factors, not the least of which is the Reuse Plan that will be created for the property, and the explicit goals and objectives that are stated in the plan. The Local Redevelopment Authority that will be created to develop the plan and implement the redevelopment efforts will need to analyze alternative uses for the property. The attributes of these alternatives and their relationship to the community's goals and objectives can be viewed from several broad perspectives, as discussed in the following sections.

1. Economic Development

BNAS is currently one of the state's largest employers and a critical component in the region's economy. With more than 4,400 military and 700 civilian jobs, and a combined payroll reported to be more than \$115 million, BNAS supports a substantial portion of the retail and service activity in Brunswick and the region. Replacement of the jobs that will be lost as a result of a BRAC action will likely be a key goal of the reuse plan.

a) Opportunities

BNAS is largely an industrial and office campus that supports the Navy's aviation and training missions. There are significant physical assets including land, buildings and infrastructure that can support future civilian job creation with only minimal changes. Many of the installation's buildings are potentially adaptable to a wide range of commercial and industrial uses and could be sold or leased to new or existing companies. While many are in good condition and several are relatively new, having been constructed or substantially rehabbed during the past few years, several others are older (1940-1960 vintage) and include some that have been targeted for replacement by the Navy. Most buildings have adequate parking and utilities for reuse along with loading docks and other features comparable to private-sector

facilities. There is also a mix of office and commercial spaces in the built-up portion of the Base (the “Cantonment Area”) along with some housing (dormitories) and residential support facilities such as food services, recreational areas, classrooms and medical facilities. The Existing Land Use map shown and described in the Land Use section of Chapter III indicates the general land use patterns in the Cantonment Area.

The actual condition of the individual buildings and their capability to support private sector employment was not determined as part of this preliminary analysis. Because the military is exempt from local building codes and other regulations, some facilities, particularly older buildings, may require substantial renovation in order to be occupied under redevelopment. New military buildings tend to be built to the most current building codes, including all ADA compliance levels, which would make them readily marketable.

As discussed in the Economic and Market Conditions chapter, there is currently a moderate demand for industrial and commercial space in the region, and the Town of Brunswick has identified the need for additional land and facilities to continue to capture its share of the region’s growth. Although job-generating development could take place almost anywhere on the Base, it would most feasibly occur where there are existing utilities and where there is easy access to and from the regional road network, in or around the existing Cantonment Area.

Job creation activity can take place across a spectrum of activity. Economic development efforts typically focus on the industrial and commercial sectors of the economy due to generally higher wages and skill levels that are provided. However, the service sector is Maine’s fastest growing source of jobs and will likely provide a portion of the future employment under most redevelopment scenarios.

Industrial/Commercial - As described in the Facilities Assessment chapter, there is over one million square feet of buildings preliminarily described as ‘industrial’ and suitable for a wide variety of manufacturing, research and development, warehousing and distribution, and other related uses (including aviation-related industrial uses). These buildings range in size from relatively small structures suitable for individual companies with a few employees to very large structures capable of supporting large-scale enterprises or possibly multiple users³³. The bulk of the industrial facilities is located adjacent to the airport and consists of the large hangars and numerous smaller support structures. Two of the older large hangar buildings (#1 & #3) have been earmarked for demolition by the Navy due to their age and condition³⁴. A similar structure, Hangar #2, was torn down in 2001. The largest structure on base, Hangar 6 (182,000 square feet), was built in 2004 to replace these older wood frame structures. Hangar #5 (163,000 square feet), Hangar 4/Building 250 (179,000 square feet), and

³³ Among the largest structures on the Base are the hangar buildings, which range from approximately 65,000 to over 180,000 square feet. These may require substantial investment in order to separate utilities and common areas for multiple tenants within a single structure.

³⁴ BNAS May 2004 Facilities Plan. Although planned for demolition, it is dependent on funding being approved and provided in future years.

Building 86 (32,000 square feet) are the other large airside industrial structures. Building 294, located between Fitch and Seahawk Avenues, is a 64,000 square foot warehouse building. The remaining industrial-type buildings vary in size and age and are scattered throughout the Cantonment Area or are located elsewhere on the Base.

Office – Several of the industrial buildings have varying amounts of office space integrated into them, some of it of relatively high quality (for example, the Base Headquarters in Building 250). There are also several stand-alone dedicated office buildings within the Cantonment Area. These include Building 87, the 52,000 square foot Wing Headquarters built in 1988, and other smaller structures. Building 645 is a fully equipped medical center that could potentially be used for offices. Condition of these facilities varies, with at least one administrative building (#20) earmarked by the Navy for demolition in its planning, while others are in good condition including some that are relatively new. Because of way the military funds construction, some older buildings may have relatively high quality office space within them.

Retail/Commercial – The core area of BNAS includes several retail outlets to serve the residents and employees at the Base. These include a 52,000 square foot Navy Exchange and several smaller retail outlets such as fast food, restaurants/clubs, a bank, post office and similar uses. There are also recreational facilities including gymnasiums and health clubs, along with two hotel operations (the 26 unit Navy Lodge and the 72 unit suite-style Orion Inn). All of these could potentially continue under redevelopment or could be converted to other uses.

There is vacant land to the west of the existing entrance road and along Bath Road that could support a variety of commercial and industrial uses, including retail and office, although there are some wetlands in this area that would need to be taken into account and that might limit large-scale development. The existing industrial “core” also offers several vacant parcels potentially suitable for in-fill development. The demolition of older or outmoded buildings, including the barracks, would also present opportunities for new development to occur.

In the event the airport were closed and no longer operated (see Airport discussion below), the land utilized by the runway and taxiways could potentially be available for redevelopment. At other military bases around the country that have closed in past BRAC actions and where the airfields were not longer utilized, the paved areas have been used for roadways to support industrial development. The large amount of land would be suitable for large-scale manufacturing users, or for development of large warehouse and distribution uses. In at least one case (Glenview Naval Air Station), the runways and taxiways were removed to allow for high density mixed development to occur. However, the cost of removing these components can be very high, although some of these costs may be offset by the value of the aggregate by-product that can be used elsewhere.

b) Constraints

The primary concerns that the Reuse Plan will need to address regarding economic development of the Base include vehicular access to the industrial and office facilities, along with the capacity and location of utilities systems. Currently, the Base is accessed from two points, the Main Gate located off Bath Road and the Dyer Gate, located on the southwestern edge of the airfield.

As described in the Facilities Assessment chapter, the Main Gate access is somewhat constrained due to the limited distance between traffic lights on Bath Road and the resulting back ups which occur during shift changes. Any redevelopment would likely need to address these issues, possibly through a relocation of the entrance to the west so that it aligns with the entrance to the Shaw's plaza. Without the Navy presence, it is assumed that the gatehouse, which the Navy moved further in along Fitch Avenue in order to better control traffic, would not be needed, thus improving traffic flows. The redevelopment of the Base for industrial uses might also increase the number and frequency of large truck movements on Bath Road, also causing additional problems as they make their way from Route 1 into the property.

Dyer Gate brings traffic from Harpswell Road through the golf course and into the Cantonment Area, and was recently built to allow contractors and trucks access to the Base without having to tie up traffic at the Main Gate. The longer route to this access point, however, brings traffic through downtown Brunswick and largely residential neighborhoods as well as directly through the golf course. Future plans that include an increase in the number or frequency of vehicle traffic may require additional roadway considerations.

The condition of the buildings themselves may also be problematic. Lead paint and asbestos will need to be removed prior to leasing or sale³⁵. In addition, buildings that are not compliant with current ADA regulations³⁶ will also need to be renovated prior to certain uses. The costs of these "remedies" can sometimes be greater than the value of the property.

The adequacy of the utility systems at BNAS will need to be assessed as part of the Reuse Plan to determine if there are specific issues regarding the redevelopment of the Cantonment Area or other portions of the Base. Although the Facilities Assessment chapter identified the key infrastructure systems and their relative capacity to handle existing use levels, the age and condition of the individual

³⁵ The Navy is not required to remove asbestos (non-friable) or lead paint prior to transfer.

³⁶ Americans with Disabilities Act, Public Law 336 of the 101st Congress, enacted July 26, 1990. The ADA prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation. It also mandates the establishment of TDD/telephone relay services. It also prohibits discrimination on the basis of disability in "places of public accommodation" (businesses and non-profit agencies that serve the public) and "commercial facilities" (other businesses). The regulation includes Appendix A to Part 36 - Standards for Accessible Design establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility.

components and their ability to service specific reuse requirements is not known at this time and could potentially require new investment.

Another possible constraint to economic redevelopment of the Base is the availability of a skilled workforce. As was shown in Chapter III, unemployment in the Brunswick area is currently about 4%, below the statewide average of 5% but higher than that for Cumberland County. With the potential retention of some military personnel (those reaching retirement) along with the civilian employees of BNAS and potentially some of those downsized from BIW, this issue may not seriously affect the reuse of the Base. However, differences in skill requirements and wage rates between private sector small businesses likely to occupy buildings at the Base and the existing workforce could result in temporary shortages of labor. However, the potential increase in the availability of workforce housing (see below), which is likely to occur if the Base closes, will serve to offset any negative influences in this area.

2. Housing

a) Opportunities

The Navy owns approximately 750 units of family housing on Base or in the nearby vicinity, along with over 900 beds for single sailors (both transient visitors and permanent party employees). The existing housing varies in age and condition, ranging from the nearly new (built in 2003) Mariner Landing development along Route 24 to the 1960's era housing in Topsham. The family housing is clustered on the eastern side of the BNAS property along Route 24, with a woodland buffer between it and the main industrial Cantonment Area. There is also a substantial amount of undeveloped land elsewhere on the Base on which additional housing might be developed. This includes in-fill potential along the western edge of the property as well as the large Weapons Storage Area on the southern side of the Base. The development of new housing in these areas will depend largely on the long-term use of the airport, since much of the available property lies within or in close proximity to the noise and safety zones at the end of the runways. As the Market and Economic Conditions chapter pointed out, there is relatively strong demand for housing in Brunswick and the region, particularly for affordable workforce housing. The existing Base housing and the potential for new construction could be an important part of the Reuse Plan.

The dormitory-style housing, located between the Cantonment Area and the family housing area, is also new and consists of 190 2-bedroom town-house style suites (permanent party Bachelor Enlisted Quarters) and a 250 room (2 beds per room) transient visitor BEQ. The older, multi-floor dormitories (BEQs) in the Cantonment Area have all been slated for demolition by the Navy and are unlikely to be redeveloped due their age and condition. The new housing could be used for institutional uses such as a college or secondary school, for transient seasonal use during the summer or for other needs requiring housing for individuals. Since these units do not include individual kitchen facilities, supporting facilities such as the nearby enlisted personnel club (NiteFlight, Building #516) or enlisted mess hall (#201) would likely need to be retained along with them.

Should the airport no longer operate, there is the potential for substantial housing development in the southern portions of the BNAS property. The 900+ acres surrounding the Weapons Storage Area is potentially developable for rural housing and portions of the property adjacent to Harpswell Cove could have relatively high potential value.

b) Constraints

The family housing at BNAS is currently “privatized” as described in Chapter I. Under a 50-year ground lease, the Navy transferred the improved properties to a Limited Liability Company (LLC) in which it is a majority owner (believed to be approximately 97%) along with a private sector concern (GMH Capital Partners). The BNAS housing was included as part of a very large and complex transaction involving over 4,600 units at eight Navy installations throughout the Northeast. The LLC subsequently borrowed over \$500 million in bonds to begin renovating and replacing the housing units. In Brunswick, the LLC took over operations of the 198 newly built units (Mariner Landing and Woodland Village) along with the older neighborhoods on the Base, the McKeen Street housing and the Topsham Annex housing. A detailed analysis of the privatized housing and the impact on the community is included in the Appendix.

Whether or not the family housing will be included in the BRAC process is uncertain. A preliminary analysis of the situation concludes that the privatized units have effectively transferred to a third party (the LLC) and will not be available for conveyance through the traditional BRAC methods (EDC, PBC, etc.), instead these will be either continue to be owned and operated by the LLC or will be sold off through market sales.

A related issue is the impact of the potential closure on the overall residential real estate market in Brunswick and the surrounding communities due to the loss of an estimated 1,500 to 2,000 military tenants and/or homeowners from the “off-base” market. The impact on rents and price levels will depend to a large extent on how fast the Navy realigns (downsizes) the various activities at BNAS. If closure takes place over an extended period of 18 to 36 months, then the impacts will be less severe than a rapid pullout. The sudden increase in vacancy rates resulting from the closure will undoubtedly pull down achievable rent levels for landlords, resulting in a reduction of income. The inclusion of the 750 units of privatized housing on the market at the same time may exacerbate the situation. As rent levels decline, Brunswick may become more competitive with the greater Portland market, drawing renters from the south, particularly with the relatively large number of 3 and 4 bedroom units including in the Navy housing inventory.

The older dormitory buildings remaining in the core Cantonment Area will most likely need to be demolished by whoever redevelops the Base.

3. Airport

a) Opportunities

The extensive airport layout and facilities at BNAS may provide an opportunity for improving both passenger and airfreight connections between Maine's mid-coast region and the rest of the nation and/or world. The 8,000-foot runways are capable of handling a wide range of commercial aircraft as well as nearly all types of general aviation and corporate aircraft. The Navy is currently completing construction of a new air traffic control tower on the west side of the runway. With few airspace restrictions such as encroachment of residential uses, physical barriers or local air traffic congestion, the BNAS airport has certain key advantages over other facilities. In addition, BNAS is located on the "Great Circle Route" from Europe and as such, is among the first airports encountered in US airspace.

The Reuse Plan will need to carefully analyze the potential demand for additional airport capacity. Future uses of the airport might include the following:

- Federal aviation facility
- Customs/Immigration clearinghouse and inspection station for special needs and/or overflow capacity at major hub airports (clearing passengers through customs, particularly during peak travel periods, is a major bottleneck and sources of delays). Since cargo shipments are now restricted in the bellies of passenger aircraft, there is a potential for an international cargo customs clearing facility. Right now, these cargo flights are coming into crowded and expensive airports for customs clearance and the delay in getting goods to market is a huge problem. If planes could land at an airport like BNAS and quickly clear customs then proceed to their ultimate destination, they could save time and money.
- FAA-operated facility for research and development, flight testing, aircraft maintenance, repair and overhaul certification, flight school or regional FAA administrative facility.
- Private sector aviation dependent/related facility
- Aircraft maintenance, repair and overhaul facility
- Research and development facility for defense-related industries, unmanned aerial vehicle (UAV) design/testing, etc. With Bath Iron Works, which is owned by major defense contractor General Dynamics, located in Brunswick and Bath, there could be some opportunity for its other aviation-related divisions or some other large government contractor to utilize significant portions of BNAS.
- Aircraft completion center. For example, an airline manufacturer that has capacity issues at its primary facility could fly the aircraft "green" to a completion center where it would be outfitted with seats, interior fit-out, exterior painting, etc.
- Cold weather testing facility
- Joint use airport serving Navy and Air Force reserves, Coast Guard units and/or Homeland Security aviation needs

Any of these potential uses could be combined with general aviation and commercial aviation activity. The extensive inventory of airside buildings and support facilities, plus the new air traffic control tower, would make the BNAS airport a logical choice for expanded aviation activity.

b) Constraints

The primary constraint facing civilian use of BNAS airport is the lack of current and near-term foreseeable market demand for air services. Discussions with officials at the Maine Department of Transportation, the Federal Aviation Administration and other airports indicate that there is currently ample capacity within the existing airport system in Maine to handle commercial and general aviation needs for the foreseeable future. Figure V-1 shows the location of BNAS and the location of other major commercial and general aviation airports serving the Maine and New England markets.

Portland Jetport, located approximately 26 miles southwest of Brunswick, is the state's predominant commercial airport and currently has several airlines operating over 50 daily commercial flights to national markets. The Jetport handled approximately 1.37 million passengers in 2004, up nearly 10% from 2001, but only equal to the levels reached in 1998/1999. Total operations were just over 89,000 in 2004, down substantially from a high of 129,000 in 1998. In addition, the airport handled 33 million pounds of cargo in 2004, down 5% from the previous year. The airport features a 6,800-foot primary runway and a 5,000-foot crosswind runway. The airport is forecasting a slight increase in passenger traffic over the next ten years, based on general population growth in Southern Maine. Estimated capacity of the Jetport as currently configured is approximately 3 million passengers annually. A majority of its market for both passengers and cargo is drawn from the Portland area and south.

Other commercial airports that serve coastal Maine include Boston's Logan Airport and Manchester, NH. The advent of Southwest Airlines to Manchester resulted in very competitive fares on most flights to and from this airport, resulting in a migration of the southern Maine market from both Portland and Boston. Bangor has commercial service that serves northern Maine including the northern coastal area, and there is seasonal service to Rockland and Bar Harbor from Boston. Augusta and Presque Isle also have limited commercial service. General aviation is served by several small and medium sized public airports throughout the region. According to Maine DOT, the number of general aviation aircraft registered in the state as well as the number of operations at public airfields, appears to be stable.

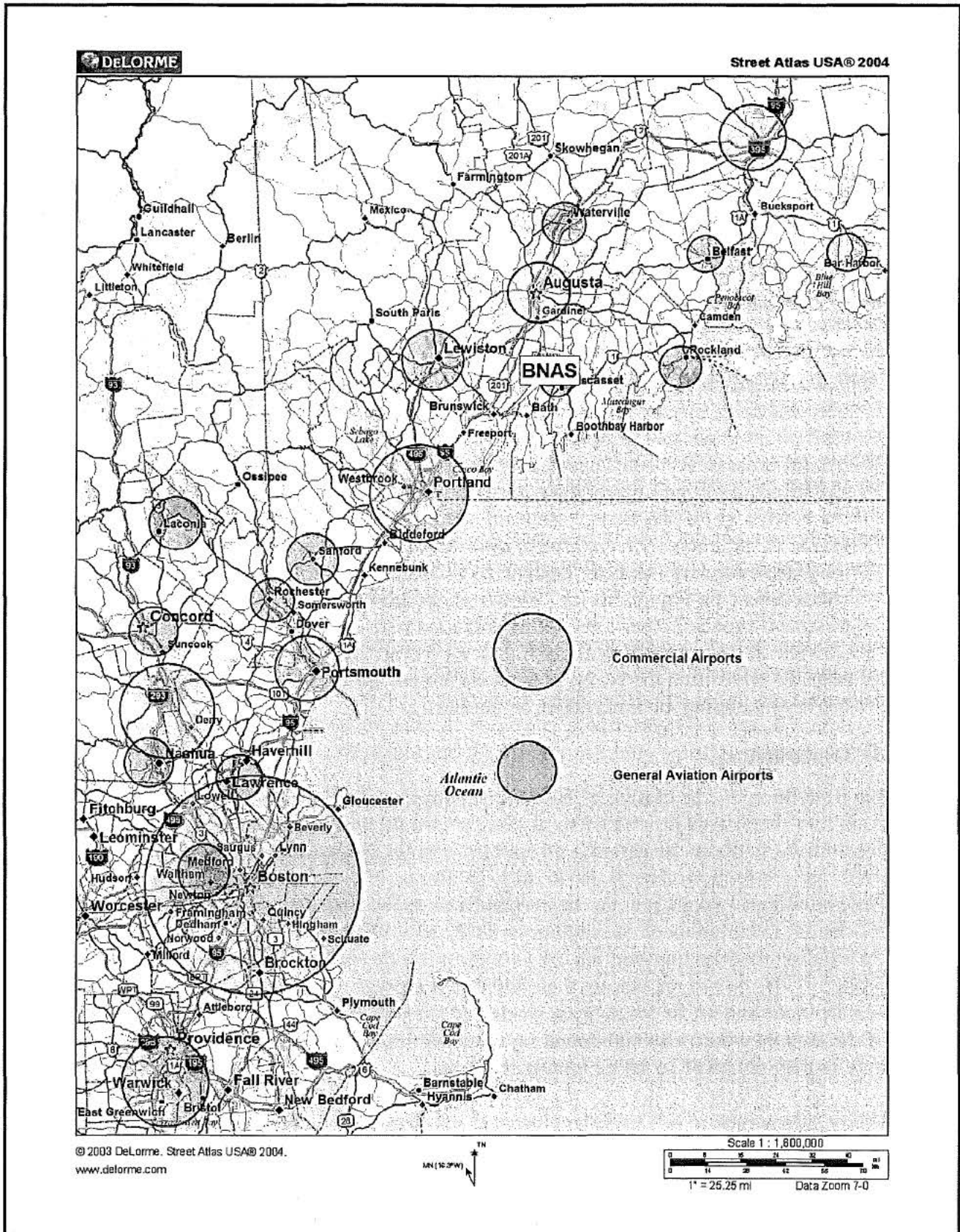


Figure V-1 – Major Commercial and General Aviation Airports Serving New England

4. Natural Resources/Environment

a) Opportunities

The actual “built” environment at BNAS is estimated to take up less than 50% of the total area, or somewhere in the vicinity of 1,200 to 1,500 acres. The remainder of the Base is predominately open space consisting of wooded areas, open fields and wetlands. The Base also includes several thousand feet of frontage on Harpswell Cove, a tidal estuary. Redevelopment of the Base in the event of a BRAC closure would provide opportunities to preserve open space, wetlands, wildlife habitat and other important environments.

b) Constraints

The constraints facing the Base’s natural resources include the fact that many have been impacted by past development or are in fact the product of development (e.g. the sand plains grasslands at the north end of the runways). A small portion of the Base’s natural areas have been impacted by contamination, however, these sites have been identified, analyzed and remediation is in process. The largest area of impact is on the west edge of the Base, just south of the Cantonment Area, where the Eastern Plume is. A relatively large area to the west of Orion Street and Merriconeag Road to the Base boundary has been designated as having institutional controls and land use restrictions (see Figure III-4a). However, as the plume shrinks due to the on-going treatment process, other uses within this area may be permitted with proper analysis and review by all interested parties. However, this property may be the last to actually transfer from Navy possession unless an immediate use is proposed for conveyance using the Early Transfer Authority.

5. Other Issues

Roads & Street – The closing of BNAS and subsequent redevelopment and incorporation back into the town’s urban and rural “fabric” would provide an opportunity to improve connections between the eastern and western parts of the community. Currently, the only roadway connections are Bath Road and Route 1, both relatively busy highways. Redevelopment would permit the reestablishment of at least one road to connect the residential neighborhoods along Harpswell Road with those on Route 24, by extending the existing road leading through the golf course to Dyers Gate at the southern part of the property. If the airport closes, then additional cross-town connections could be made. Maintenance and repair for the new roads and streets added to the town’s system because of the closure would also add operating costs for the Department of Public Works, which may or may not be offset by new property taxes.

Utility Infrastructure – The redevelopment of the Base could substantially expand the coverage area and the potential customer base for both the Brunswick Sewer District and the Brunswick-Topsham Water District. Whether or not these organizations acquire the Base systems will need to be analyzed in greater detail in the future, and will depend on many factors including the condition of the systems and the impact on the existing customer base. Currently both districts sell product/service (water and wastewater

treatment) to the Navy on a wholesale basis, with rates subject to negotiation. If the on-base systems are acquired by the districts, they would then sell products/services to individual users who would pay for them on a retail basis, based on their respective regulated rate structures. Alternatively, the systems could be acquired from the Navy by another entity that would own and operate them, for example a master developer, who would then need to negotiate separate agreements for services.

C. Future Reuse

If the Base closes, the potential redevelopment of the property will likely include a combination of new development along with redevelopment/continued use of existing buildings and infrastructure. As pointed out in the preceding sections, there is potential for significant in-fill development within the core Cantonment Area, which is served by utilities and has few environmental or other constraints. This would require the creation of new lots, possible realignment or replacement of utilities and construction of new buildings in between those that are retained. The ultimate density of development will depend on market demand as well as parking requirements, setbacks and other land use regulations that are adopted as part of the reuse planning. While no conceptual alternative plans were developed as part of this pre-planning analysis, it is estimated that an additional 500,000 to 1,000,000 square feet of new construction could be accommodated within and around the industrial/commercial core area. Replacement of existing small structures could potentially yield even more new space.

There is also potential for additional residential development adjacent to the existing on-base housing areas on the east side of the Cantonment Area. Although there are wetlands in this general area, environmentally sensitive development could add a number of cluster-type units to the mix. The entire southeastern side of the Base is currently open space that could be developed, working around the wetlands and the environmentally constrained parcels.

The current weapons storage area offers the largest contiguous parcel for new residential development. The area, located mostly in the Town's Rural Area, is partially constrained with a few small contamination sites, adjacent to the Flight Zone (which prohibits or restricts construction) and wetlands/resource protection zones. However, the remaining developable land would be suitable for the large-lot residential uses permitted under Rural Area zoning elsewhere in Brunswick. Alternatively, this site could be used for other uses requiring large areas such as institutional use (education, medical, etc.) that are consistent with the Town's rural area. Other bases have successfully reused the weapons storage bunkers on an interim basis for storage and agriculture, including mushroom growing.

Some infill residential uses could be accommodated on the west side of the Base abutting the existing neighborhoods. Although possibly impacted by noise from the airport, new residential development, properly designed and soundproofed, could be developed along street extensions up to the airport boundary road by pushing back the existing fence line. Other potential uses for this area include housing or parking for Bowdoin College staff and students.

The most dramatic land use change would occur if the airport were closed. This would open up over 1,200 acres of land for redevelopment. The runways and taxiways could accommodate a substantial amount of new industrial and commercial development, which could potentially be accommodated without having to remove the concrete and asphalt. The large areas on the west side of the runways could be redeveloped with open space, housing, retail (most likely on the northern portion near Bath Road) or other uses. The north end of the runways is constrained by the Town's aquifer protection overlay zone, archeologically sensitive areas and critical habitat areas. The south end of the airport (some of which is in the Town's Rural Area) could accommodate residential uses, open space as well as possible expansion of the golf course.

Redevelopment is likely to take many years to accomplish. Just filling up the existing Industrial/Commercial space, at the average rate of absorption Brunswick has experienced in the recent past, could take 15 to 20 years. Existing housing represents a 10 – 15 year supply at current rates. Therefore, the Town should plan to be involved with the transition of the base from military to civilian use over a long time frame.

VI. REUSE PLANNING

Chapter II – Organization and Governance, provided an overview of how property at closed military bases is transferred from the Department of Defense (DoD) to other public or private sector users. In this chapter, key reuse and implementation concepts are addressed, including interim use leasing, and how environmental issues can affect redevelopment efforts. Finally, alternatives for creating a Local Redevelopment Authority (LRA) to manage reuse planning and redevelopment activities are highlighted, along with a possible time line, prioritized action plan and estimated cost schedule for planning and redeveloping Brunswick Naval Air Station

A. Interim Redevelopment Efforts

It is important to understand that property at BNAS may not be transferred immediately upon the closure of the facility. This delay in the actual transfer of property is due to a variety of factors relating to existing rules and regulations regarding the disposition of real property and environmental issues. It will also depend on the timing of the Navy's reorganization and realignment of its remaining military units. Consequently, the reuse plan needs to address interim approaches for the redevelopment of the site. Two key short-term redevelopment efforts involve interim use leases and the care and custody of surplus property.

1. Interim Use Leases

Under the provisions of general DoD leasing authority³⁷, communities are able to lease surplus property for new job-producing purposes. DoD lease provisions also permit the community to lease the property for less than fair market value. Interim leases are typically used to put surplus property to productive uses prior to the completion of the environmental impact statement (EIS) for the entire installation (see discussion in the following section) and before final disposal decisions are made by the Navy.

Unfortunately, DoD leasing terms are often restrictive: one-year leases, renewable for up to five years, with thirty-day cancellation clauses. The later provision may allow the Navy to terminate the lease for the purpose of making the final property transfer to the community. The community can then lease or sell the property directly to existing or prospective private sector tenants. Although lessees (tenants) may make capital improvements while under an interim lease, the ability to obtain financing is very limited due to the uncertainty of final disposition.

Once the Navy has issued a final disposition decision for the property (and has complied with the NEPA process) but prior to actual transfer³⁸, the LRA (or other recipient of the property) may enter into a long-term Lease in Furtherance of Conveyance, or LIFOC.

37 Section 2833 of the National Defense Authorization Act of 1996. Also, 10 USC 2667(a-f).

38 Because environmental clean-up activities may take several years to complete, actual transfer of portions of the property may not be possible until completed. Thus, the LIFOC permits the LRA to proceed with redevelopment on the remainder of the installation as if owned in fee.

Under such a lease, the recipient essentially takes full control over the property and can proceed with redevelopment. LIFOCs often take the form of a "Master Lease" to the LRA (or other designated entity) for the entire property, which can then sublease individual parcels to end users pending ultimate transfer of title. Before DoD can issue a LIFOC it must complete an Environmental Baseline Survey (EBS) and issue a Finding of Suitability to Lease (FOSL), under requirements set forth in the CERCLA legislation.³⁹ More information on the use and content of leases is found in the DoD's 1997 (or updated) Base Reuse Implementation Manual.

2. Care and Custody of Surplus Navy Property

Prior to transfer, the Navy can contract with a public or private organization to maintain the remaining Navy surplus properties that are not otherwise leased. As individual properties are leased, the Navy Care and Custody responsibility is in turn reduced.⁴⁰

It is important to obtain, as soon as practical, the actual costs and level of standards used currently by the Navy for maintaining existing property and the level to which property will be maintained once declared surplus. It is generally very desirable for the LRA to receive the C&C contract if possible, in order to acquire a detailed understanding of the property and its infrastructure systems. These contracts, which may be on the order of several million dollars annually, may range from the continuation of the entire base at full maintenance levels (as if still occupied) to a barebones, caretaker level with only minimum intervention. *The preservation of key assets – buildings, utility systems and other essential infrastructure that may be needed for effective redevelopment - is essential.* If buildings or systems are allowed to deteriorate, they may end up being very costly to repair or replace. Similarly, the physical condition of the base is an important consideration as the LRA attempts to market the facility for reuse.

Care and Custody (C&C) negotiations will require detailed specifications concerning the Navy's maintenance standards as well as an identification of how the public organization will perform these services. In several recent BRAC cases, the LRA received the overall C&C contract and then subcontracted with various private sector businesses for the individual tasks. If BNAS is slated for closure and the Navy begins a phased pull out of its tenant activities at the base, the level of interim care and custody is also critically important. If the transition takes a long period of time, portions of the base may fall into serious disrepair before occupancy by the LRA can occur. Therefore, the LRA should be ready to enter into negotiations with the Navy immediately after the closure list is announced.

B. Environmental Issues

Environmental issues, which cover a broad spectrum and can be categorized as substantive and procedural, cannot be avoided in the reuse planning and property disposal processes.

³⁹ See also Section 2834 of Defense Authorization Act of 1996 regarding environmental liability under a LIFOC.

⁴⁰ Loring Development Authority's 10-year Care & Custody contract with the Air Force was instrumental in the successful redevelopment of that rural base.

Substantive environmental issues include those that are associated with the actual condition or circumstances present at the facility identified for eventual transfer out of the federal property inventory. These include the quality, quantity, and location of contaminants (actual or suspected); the presence of threatened or endangered species and their habitat; the adequacy and condition of waste water treatment systems to accommodate future development; the identity and location of above and below ground storage tanks, particularly those used for petroleum products; and the identity and location of activities and facilities which by their nature represent a risk of contamination, such as landfills, burn pits, and other sites where ground water runoff may pose a risk of contamination.

With respect to procedural environmental issues, the primary prerequisite involves compliance with the requirements of the National Environmental Policy Act (NEPA), the statutory basis for the development of the Environmental Impact Statement (EIS) which is required for any major federal action. In addition, the reuse authority must be cognizant of the requirements of the Community Environmental Response Facilitation Act (P.L. 102-426).

This statute requires the United States to conduct a detailed search and review of records, aerial photographs, chain of title documents as well as a physical inspection of the property and interviews with current or former employees in order to identify the real property on which hazardous substances and petroleum products or their derivatives were stored for more than one year, or are known to have been released or disposed of. By law, the federal agency head must provide the results of this investigation to the appropriate state official (in the case of property not on the National Priorities List [Superfund]). The identification of clean parcels is not complete until state official concurs with the results of the investigation. A failure to non-concur within 90 days will be deemed a concurrence.

The identification of contamination, or the risk of such contamination, is essential to the recipient of the property. This is because the provisions of the Superfund Law⁴¹ imposes joint, several, and strict liability on the owner or operator of real estate for cleanup costs. While the same statute requires that federal property be cleaned up before transfer, lending institutions and prudent business practices mandate that the recipient be independently satisfied that the United States has met its legal obligations. While the United States retains liability for contamination cleanup costs after transfer, the costs of actually determining the source of subsequently identified contaminants, the allocation of responsibility for cleanup costs where the contamination is determined to have been caused both before and after transfer (or by a tenant in the event of an interim lease), and the inhibition on the part of investors, lenders, and subsequent occupants (tenants and owners) lead to the protective practice of thoroughly identifying all potential sources of contamination before transfer takes place.

1. Environmental Conditions at BNAS

The identification, analysis and clean up of environmental contamination at Brunswick Naval Air Station has been ongoing since the early 1980s, soon after federal laws were passed that required DoD to begin focusing on these issues. Brunswick was selected as

⁴¹ Also known as the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

one of the first naval facilities to start this process, and in 1983 the Navy published an Initial Assessment Study. That report identified a total of ten potentially contaminated sites and began the long-term cleanup process, seven of which were identified for further analysis and actions. Since that time more than twenty years ago, a huge effort has gone into further analysis and implementation of mitigation procedures by the Navy in close cooperation with state and federal agencies and the local community.

BNAS was designated as a Superfund site in 1987 based on the conditions found during those initial activities. Thirteen sites totaling approximately 34 acres were included in the listing. Since that time, remediation programs have been implemented for all of the sites and clean up has been completed for many. Continual monitoring and analysis is being conducted. The process is under the direct control of the Navy with regulatory interaction by the federal Environmental Protection Agency and the Maine Department of Environmental Protection. A Restoration Advisory Board (RAB), made of Navy staff, regulators and local citizens (represented by the Brunswick Area Citizens for a Safe Environment), meet regularly to monitor on-going activities.⁴² All documentation involved with the clean-up is maintained in an Administrative Record which is available to the public in hard copy and on CD (local copies are available in the Curtis Library in Brunswick).

Figure III-4a (in Chapter III) shows the principal contaminated sites on the base and the areas of institutional controls or other land use restrictions as the currently exist.

The on going clean up at the base will eventually lead to a Record of Decision (ROD). The closure of BNAS will result in a new environmental review and analysis process that will lead to the ability of the government to legally transfer the property to another entity. This will include the completion of an Environmental Impact Statement for the closure and subsequent reuse, and another ROD for that purpose. Because of the extensive work done to-date, the level of effort needed to complete those portions of the EIS that concern hazardous substances and related issues will be greatly expedited. Similarly, because the environmental clean-up process is so far along (relatively speaking), the Navy's ability to transfer large portions of the property has been enhanced, allowing for more rapid redevelopment.

It is critically important for the LRA to understand that lead paint and asbestos are not included as hazardous materials that the Navy is legally required to clean up prior to transfer. Many of the older buildings, heating systems and other structures on the base may have these materials and their clean up will be the responsibility of the property recipient.

2. The EIS Process

The most significant procedural environmental undertaking affecting a closed base becoming available to the community is the Environmental Impact Statement (EIS). This

⁴² It would be very useful for the Town of Brunswick to secure formal representation on the RAB, in order to better understand and monitor the clean-up process through the re-use and transfer phases.

document is required for major federal actions significantly affecting the quality of the human environment. The EIS evaluates the environmental impact of the closure and reuse of a military facility, any environmental effects which cannot be avoided (should certain proposals be implemented) and alternatives to the proposed action. The LRA's approved Reuse Plan is supposed to be used as the "preferred alternative" for disposal purposes in the EIS. With respect to base closure property, the EIS does not evaluate the decision to close; but rather focuses on the process of property disposal, including the reuse of the property. The EIS must also evaluate the effects on minority and low income communities, when it appears that the disposal of the property will have a disproportionate and adverse impact on such communities.

Because an essential element of the EIS is the identification of measures to mitigate or avoid the adverse consequences of the proposed reuse, it is critical that the affected community be an active participant in the development of the EIS, preferably as a Cooperating Agency. Such status will ensure that mitigation measures are consistent with the position of the local reuse authority.

3. The Impact of Environmental Contamination on Redevelopment

It is important to recognize that the EIS is not unrelated to the identification, location, and quantification of contaminants. The development of the local Reuse Plan, which should be incorporated into the EIS as the Preferred Alternative and adopted in the Navy's Record of Decision (ROD), must take into account those parcels of real estate that, by virtue of known or suspected environmental impairment, will not be available initially for development. Such constraints may result in their availability at a substantially later time than the bulk of the property, may result in the retention of easements to facilitate long term remediation projects or may restrict any transfer for the foreseeable future. Alternatively, certain uses may be allowed (pending completion of certain actions and/or the institution of land use controls) while others are not. The integration of the information concerning contamination as a potential constraint on reuse planning is a difficult but essential element of the planning process.

Although an Environmental Baseline Survey (EBS) must be completed in order to transfer federal property, it must be recognized that the EBS is not an in-depth environmental evaluation of the property in question. There are numerous items identified for follow up and further evaluation, as part of the planning process. With respect to those parcels which are identified as clear of environmental impairment, it is unlikely that contamination will subsequently be discovered. It can be anticipated that as the Navy continues its quantification, qualification, and remediation of environmental problems, parcels of real estate that initially appear to be contaminated will be cleaned up, identified as posing no risk to human health and the environment, or will otherwise be removed from the list of reuse impediments. Furthermore, some parcels may be available for long-term lease, but not transfer. Such leasing can be fully incorporated into reuse planning, provided that the activities on the leased property do not interfere with monitoring or remediation activities or pose a threat to human health or the environment.

In the reuse planning process, the integration of identified environmentally impaired property in the planning process is essential. Such integration ensures that property which will not be available for a lengthy period of time because of the requirement for remediation before transfer is not included for near term use. Similarly, the inclusion of such considerations in the planning process may present an opportunity to influence the Navy's allocation of scarce cleanup funds to remediate property that is included for near term uses, rather than allocate such funds to remediate problems that are of no consequence to the reuse plan.

Properties with relatively high market value under the Reuse Plan may be eligible for consideration under DoD's Early Transfer Authorization, which permits the recipient to carry out the clean-up in exchange for direct payment from the Navy or for a reduction in the purchase price (if any).

4. Reuse Planning and the EIS Process

The integration of reuse planning, the preparation of the Environmental Impact Statement, and the identification of contamination represent a complex and interrelated process. The Navy should complete the EIS within 12 months of submission of a reuse plan. The identification of uncontaminated property, as required by the Community Environmental Response Facilitation Act, and the concurrence of the appropriate state official, "...shall be made not later than 18 months after..." the final decision to close a base. The difficulty inherent in this sequence of events is that the reuse authority needs the Clean Parcel Identification to ensure that its reuse plan is not inconsistent with the cleanup requirements or the retention of real estate due to environmental constraints. The real estate cannot be disposed of until the Record of Decision (ROD) is issued for the EIS and the Navy has determined what parcels are available for transfer in fee, for lease, or for retention for cleanup. Only full coordination between all of the parties will ensure that there are no disconnects in this interrelated process. In Brunswick's case, the identification of sites and the ROD may be issued relatively quickly (perhaps in less than 12 months), which makes the timely completion of the Reuse Plan imperative.

C. The Homeless and Surplus Military Property

Title V of the 1987 Stewart B. McKinney Homeless Assistance Act requires that any surplus federal property, both real and personal, be identified by the owning agency to the Department of Housing and Urban Development (HUD) for evaluation of its suitability for use to assist the homeless. The "homeless" is defined broadly to include not only persons and families who are currently without shelter, but also persons who have recently been without shelter or are at higher risk of losing their current shelter, due to drug or alcohol abuse, domestic abuse, loss of employment, or physical disability. *Ownership or a leasehold interest is not given directly to homeless persons or families; instead, Homeless Assistance Providers (Providers) are expected to show organizational stability and financial capability to successfully use the property, and are entrusted with an appropriate interest for an appropriate period of time.* Such uses can include not only emergency shelter but also outreach and intake services to help people get into shelters, transitional housing, while homeless people are rehabilitated or retrained to become self-sufficient, and permanent affordable housing, along with warehouse and office space for Providers, services to the

homeless (such as medical and mental health clinics), or operations which support Providers (such as collection points for donated property for resale). These uses are identified by HUD as being part of a "Continuum of Care" that meets a variety of needs of the homeless at various stages of their lives.

LRA's initially perceived the McKinney Act as a problem because it gave Providers the first priority claim on surplus military buildings, leaving the LRA's with what was left over; moreover, it allowed new applications to be made every six months, potentially disrupting redevelopment plans in midstream. The 1993 Base Closure Community Assistance Act alleviated some of the concern by giving the LRA a second claim, after the first McKinney round of Provider claims, which would have priority over all subsequent McKinney Provider claims. Amendments to Section 2905(b)(6) of the Act provide a special exception to the normal McKinney Act process (which continues to hold for all non-BRAC surplus federal property) where the LRA is charged to work with Providers to "balance" the legitimate housing-the-homeless needs *for jurisdictions represented on the LRA* with the community's needs for new job creation (emphasis added). LRA's with broad representation (e.g. a regional or multi-County LRA) may have more potential Providers and needs to take into account.

The Fiscal Year 1996 National Defense Authorization Act provided the Secretary of Defense the discretion, after consulting with the LRA, to reject any HUD recommendations if the Secretary concludes they are not "consistent with the highest and best use of the installation as a whole, taking into consideration the redevelopment plan submitted by the redevelopment authority." The amendments ensures that the DoD "shall give deference to the redevelopment plan submitted" when making its decisions. In other words, DoD must justify any disagreement with the Reuse Plan, including the Plan's recommendations on use of property by Providers on behalf of the Homeless. This amendment also diminished the likelihood that a disappointed Provider could subsequently sue to overturn LRA's reuse decisions. However, it does not alleviate the LRA's need to try and accommodate identified needs to the best of its ability.

D. Organizing the Local Redevelopment Authority

1. Organization

As described in Chapter II – Organization & Governance, the Department of Defense (DoD) works with only one organization, referred to as Local Redevelopment Authority (LRA), in initiating the process of reuse planning and eventual property transfer. DoD generally requires that the LRA be created by either a state or local government body most directly impacted by the closures.⁴³

Often planning and eventual redevelopment involves two different LRA's. The initial LRA is usually responsible for the preparation of the reuse plan. This effort requires

⁴³ A variety of governmental organizations have been responsible for creating LRA's including Governors, state legislatures, city councils, majors and county board of supervisors/commissioners. The Office of Economic Adjustment, the agency representing the Secretary of Defense, will not referee conflicts. They will however work with local and state officials to establish a compromise agreement for creating an LRA.

consensus building, especially in situations that involve a multi-jurisdictional perspective. Planning LRA's generally need a broad membership of public and private sector individuals, especially individuals with business and/or real estate development experience. The role of the planning LRA chairperson is critical. The involvement of numerous interest groups and the relatively short-time period allocated to planning, typically 12 to 18 months, requires a chairperson that is able to ensure that all members and viewpoints are heard. The chairperson will also be responsible for maintaining open and practical discussions even as conflicting opinions abound and heated discussion flourish. In addition, the chairperson must have the leadership ability to keep the process moving forward and the patience to help forge consensus.

In Brunswick's case, because of the Navy's desire to accelerate the transfer process and the availability and quality of the necessary environmental information, the Town may be pressured to complete its Reuse Plan even faster. Efforts to rush the process should be carefully considered, since thorough public participation is a prerequisite for a successful, long-term plan.

Although planning LRA's have included as many as 60 individuals, they typically range from 10 to 15 members. In some communities separate subcommittees are formed to report back to the planning LRA in areas such as the environment, economic development, education, social and human service needs and historic preservation. Adding people brings in more talent and energy, but takes more time and organizational effort to manage the process.

It is also important that the planning LRA takes a different point of view than the save-the-base organization. The decision has been made, the base is closing and now is the time to confront difficult redevelopment and economic issues. It also is exceedingly important that the planning LRA focus on developing a community and regional consensus on how best to reuse the former military installation.

Once the Reuse Plan is adopted, the types of issues confronting the LRA change from consensus building and preparation of a land use plan to implementation and management of a redevelopment effort. In many ways the eventual permanent organizational structure will be influenced by the nature of the property to be managed. For example, if a decision is made for the LRA itself to acquire a significant portion of a closed military facility, a large organization with extensive property management and development capabilities will be required. Conversely, if only a small portion of the site, or no property at all is acquired, the size and structure of the organization would be substantially different. In essence, an implementation LRA should be established so that it has the capability in terms of staff, skills and authority to best manage redevelopment efforts.

Chapter II provided several case studies of different LRA's around the country, followed by an analysis of alternative organizational structures. These include a locally controlled (Brunswick only) LRA, an organization with regional and/or state representation, as well as legally distinct entities such as development authorities or economic development

corporations. Each has advantages (and disadvantages) that are unique to and should be based on the potential reuse of the property that is envisioned and agreed upon. The makeup of the “planning” LRA need not be the same as the “implementation” LRA.

Regardless of the LRA organizational model that is chosen, it must be appropriately staffed and funded to carry out its mission. Although federal grant funds will likely be available to offset some of the costs of planning the reuse of BNAS, significant investment on the part of the Town and/or the LRA will be needed, depending on how the reuse is carried out.

Other models for organizing and implementing the redevelopment include:

Master Developer

Some implementation LRA's have decided to maintain a small staff and contract out various marketing, financing and development tasks to a private sector master developer. In the cases of Vint Hill Farms and Glenview Naval Air Station (see LRA case studies in Chapter II), an outside firm was retained, through a competitive bid process, to provide a range of maintenance, engineering, marketing and management functions for a fee (“development advisor”), but did not take actual title to the undeveloped property (although it may be able to also be the developer of specific parcels within the overall plan). In other instances, the master developer is retained, usually subject to various performance standards, to redevelop the site. This approach has been used at Mare Island Shipyard in California and the Naval Undersea Warfare Center in Connecticut.

Private Sector Acquisition

During the preparation of the reuse plan by the planning LRA, it could be determined that it is not practical due to financial or management reasons for a local or state organization to acquire property at a closed or realigned military installation. Under this approach the community would use the reuse plan as a basis for preparing land use regulations (zoning as well as site plan and subdivision regulations) to guide eventual redevelopment of the facility. In the case of BNAS, the Department of the Navy would then be able to sell the property, as noted earlier, by sealed bid or public action. Although the private firms acquiring the property would assume all the risks associated with redevelopment, a great deal of public sector cooperation would most likely be required in order to provide certain types of municipal services such as water, sewer, and transportation access.

Although no one organizational technique for managing redevelopment efforts can be regarded as the best approach for a specific community, there are some basic lessons learned during the past 15 years about how to best manage the process of redeveloping closed and realigned military bases.

Financial Self-Sufficiency

It is important to emphasize that the permanent local reuse organization must become financially self-sustaining, especially with regard to maintaining and managing the property over the long-term. Department of Defense planning assistance, protection and maintenance agreement support, and care and custody contracts will generally phase down during the third to the fifth year of the base reuse process (if not sooner), as title is

transferred to the local redevelopment organization or some other entity. Therefore, the permanent organization must be structured and staffed to become the full-time, financially responsible manager and developer of the property over the long-term. Long-term revenues for LRA operations typically come from property sales and leasing, management fees, grants, payments in lieu of taxes or continued funding from other governmental agencies (such as the host community or state).

Simplifying the Reuse Process for the Customer

The reuse organization can improve its chances for success by simplifying the location process in relation to other competitive locations. For instance, the Devens Enterprise Commission (Massachusetts) has reduced the permits required for a private development initiative from 15 state and/or local permits previously needed in the three towns where the base is located, down to one permit for any plant or activity locating at Fort Devens.

It's the People – Not the Organizational Chart

The ultimate success in any military base reuse effort depends first and foremost on the motivation and determination of the community leadership and staffing serving on the reuse process, not in the formal organizational structure that the community may have adopted. It is also exceedingly important that an implementing LRA have board members with experience in financing and property management, as well as attracting new business prospects.

Let the Property Reuse Determine Organization Structure

It is no great surprise that airport authorities tend to be best suited to acquire airport property and that education properties should be transferred to education institutions. However, having too many “cooks in the kitchen” can slow down and sometimes jeopardize the property transfer process.

Local Land Use Planning and Zoning

The Town of Brunswick has in place a well-designed and effective set of zoning and land use controls and a very knowledgeable staff to provide the basis for regulating the future use of the base. Much of the base has already been included within the Town's Growth Area (only the area at the south end of the property adjacent to Harpswell Cove is located in the Rural Area) which will allow for flexibility and innovative land use patterns to emerge. The Town has just begun to update its Comprehensive Plan, which can provide a strong context for the Reuse Plan to move forward. The goals and objectives found in the existing planning documents, combined with the data and information provided from this analysis and substantial additional public input, will move the Reuse Plan along relatively quickly and efficiently.

2. Staffing

a) Planning LRA

At a minimum, the planning LRA will require full-time staff support, particularly if the committee includes many talented volunteers and subcommittees. Based on the experiences described in the case studies as well as other situations, staffing for the planning LRA would include the following:

- Executive director – manager of the planning effort and the volunteer LRA committee(s)
- Land planner – obtaining and interpreting land use plans
- Financial analyst – internal fiscal management and external impacts
- GIS specialist
- Administrative assistant

Other staffing might include an engineer and/or property manager who can focus on the buildings and infrastructure at the base, a legal specialist with contracts and land use knowledge, an environmental specialist to deal with the many regulatory requirements and a marketing person to begin the process of finding future users for the property. Since some of the infrastructure funding is likely to come from state and/or federal grant sources, a staff person knowledgeable with funding and reporting requirements (HUD, EDA, etc.) would also be desirable. These staffing requirements can be obtained either through direct hire, through existing Town staff resources or through contracting with one or more consulting organizations.

Because of the relative speed at which the planning process is likely to move forward (due to the Navy's perceived desired for rapid transfer and other considerations), the establishment of the planning IRA and getting it staffed and operating should be the Town's first priority is BNAS is on the May 16 list.

b) Implementation LRA

If the community decides to acquire most of the base property and manage the redevelopment from within, it will need a relatively large organization to successfully carry out the plan. The staffing needs for the actual redevelopment of the base will depend on the course chosen in the Reuse Plan. A LRA that serves only in a facilitation role will need only a handful of staff to guide the private sector (and/or master developer) through the process. On the other hand, if the LRA plays a larger role, or if there is property that will take a long time to redevelop and there is a need for interim management and caretaker responsibilities, then the staffing requirements will be proportionally greater. This would include property management specialists and crews (unless contracted out), legal expertise, marketing and sales people, etc. Typical LRA's that take on the implementation "in house" have annual budgets ranging from a few hundred thousand dollars to a few million dollars.

E. Timeframe for Initiating Redevelopment Efforts

Before significant redevelopment efforts can be initiated, a number of key tasks must be completed by the planning LRA and the Department of Defense. While there has been criticism in the past about the time period between closure and actual property transfer (frequently 3 to 6 years or more) a major portion of the time required to complete property transfer is primarily due to federal statutory requirements. Outlined below is a brief explanation of key steps (and approximate time estimates) required to transfer military facilities designated for closure to other users.

Generally, a two to six month period is required for a community or region to establish a planning LRA. This process can begin once DoD releases its recommended list in mid-May, however, it will be late September or October before the list is "final" and formal planning can begin in earnest. DoD Office of Economic Adjustment staff will work with local officials in organizing the LRA and providing initial grant funding for staffing purposes (once the final list is out, probably beginning November). The LRA must then determine who will prepare a reuse plan – in-house staff and/or an outside consultant. If it is decided that a consultant will be used then a Request for Proposals (RFP) needs to be prepared, sent to consultants and interviews conducted in order to hire a consultant. Contracts will then need to be negotiated and a schedule established for completing the reuse plan.

Normally it takes six to twelve months to prepare and approve a reuse plan. The reuse plan should contain.

- An inventory and analysis of on-base features and significant community attributes that could influence future redevelopment efforts. Note: much of the baseline information needed for the Reuse Plan has been collected and analyzed in this report, which will help shorten the time frame to complete the Reuse Plan.
- A redevelopment vision and an identification of reuse alternatives.
- A preferred land use plan and a strategy for implementing the plan. The implementation strategy should also include financing and market elements, as well as an operating plan to guide property acquisition.

While the information outlined in this report provides a basis for a portion of the reuse plan, if BNAS is designated for closure, significant additional information will be required concerning existing site conditions as well as a detailed examination of the financial implications of redevelopment. In addition, during the preparation of the reuse plan a variety of opportunities should be made available for public review and comments. Although an extensive public involvement process may increase the time and complexity of the reuse planning process, the public understanding and commitment to redevelopment efforts will most likely be stronger at the completion of planning activities.

After the adoption of the reuse plan the implementation LRA should be established. During this time period, six to eighteen months, additional engineering studies and business plans are generally prepared in order to guide initial redevelopment efforts. A marketing program is also usually initiated.

A key element in the transfer of any property at a closed military base is compliance with the National Environmental Policy Act (NEPA), which also involves the completion of an Environmental Impact Statement (EIS). The EIS is based on preferred land use plan identified in the reuse plan prepared by the LRA. Generally, the EIS must be completed within one year of the adoption of the reuse plan.

Two key actions by the Department of the Navy that are required before surplus property can be transferred is the preparation of the Findings of Suitability to Transfer/Lease (FOST/L) and the Record of Decision (ROD). Both of these documents require review and approval at

various levels of the Department of the Navy as well as other federal agencies, a process that in the past has taken as long as two to three years to complete. A major factor in each one of these actions involves documentation relating to environmental cleanup efforts. The advance stage of analysis and mitigation at BNAS will likely shorten this process significantly.

As noted earlier, past property transfers under previous BRAC rounds has often taken three to six years, if not longer. Presently the Department of Defense would like to shorten this process to two to four years. While this is a worthwhile goal, it must be recognized that community reuse planning efforts, that involve a realistic public involvement effort, will take two to three years at best. Hopefully, the Department of the Navy can complete their tasks during the same time period.

F. Action Plan

This section of the BRAC Preparedness Strategy for the Town of Brunswick lays out a preliminary series of decision points and action items that will come into play if the Brunswick Naval Air Station is included on the Secretary of Defense's closure list on or around May 16, 2005. If BNAS is not on the initial DoD recommended closure list, the Town will still need to remain vigilant during the following four months since there is a possibility that the BRAC Commission could add it to a revised list. As stated elsewhere in this report, even if it does not get targeted for closure, there is a possibility that the base will grow. In that case, it is recommended that the information and data provided in this report serve as a basis for the Town to work closely with the Navy to facilitate growth related issues such as housing and transportation.

If the base is included on the BRAC list, then it is imperative that the Town immediately begin a deliberate public process to create a *planning LRA* (either on its own or in conjunction with other communities and/or the State) and begin the reuse planning process on a timeline that coincides with the formal submission of the final BRAC list to Congress. It is highly likely that once the list is announced, there will be a period of confusion on the part of the general public. A series of initial public hearings by the Town Council to explain the process might be warranted.

The Reuse Plan can then be started in January 2006 (assuming no delays in the generation/approval of the list) with a targeted completion date of December 2006. During those 12 months while the Reuse Plan is being developed, the Town can begin to undertake preliminary steps towards integrating the Navy property into the community as part of the reuse planning process.

Prior to the completion of the Reuse Plan, an *implementation LRA* should be created (if it is decided that a different LRA structure or organization is necessary) so that it may take over from the planning LRA upon completion of the plan and prior to any property conveyance.

Optimistically, the Reuse Plan can be completed within a twelve month period, the Town can then initiate rezoning of the land by updating the Comprehensive Plan and approving new land use regulations and be prepared to acquire the property or approve transfers to other parties (through the permitted conveyance mechanisms) beginning sometime in 2007. Based

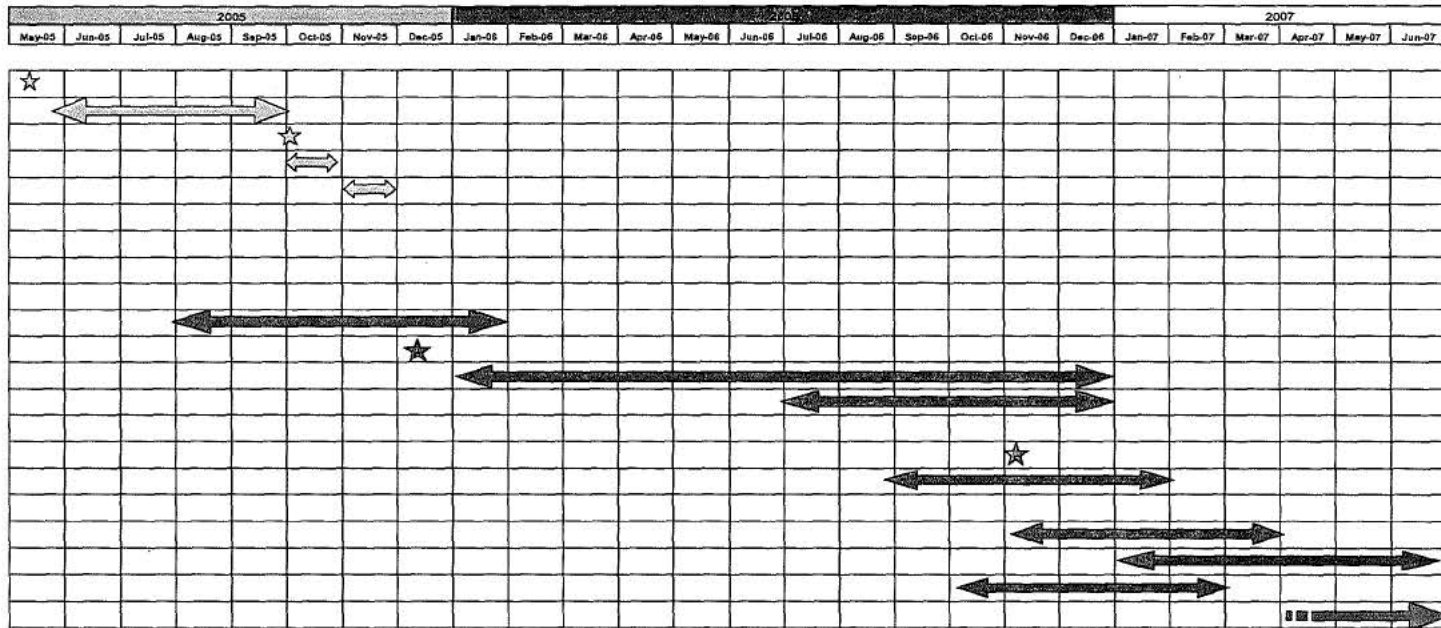
on the experience at other installations around the country, it is likely to take several years for all of the property to ultimately transfer from the Navy and ultimately to the end users.

The following list describes some of the more detailed actions that will occur beginning in May 2005 and running through 2007. The timing suggested by this list is optimistic, and assumes that there are few major issues that arise during the initial planning process, including delays resulting from environmental conditions of the Navy property or actions of other federal or state agencies, legal actions preventing the planning or reuse efforts to progress, or changes in the BRAC process precipitated by Congress, DoD or others. The timeline also assumes that the Town and the LRA that is created is adequately funded and staffed to accomplish these objectives.

ACTION PLAN	
2005	
Government Actions	
May 16, 2005	DoD list released
May – September	BRAC Commission deliberations
September 30, 2005	BRAC Commission recommendations to President
October 30, 2005	President approves final list
Local Actions	
If BNAS is not included on DoD list	
May – October	Monitor BRAC Commission deliberations in case BNAS is put back on list.
September	Initiate creation of Town/Navy Committee to provide input and coordination with any growth issues that may arise from realignment actions that impact BNAS.
If BNAS is on DoD List	
May 2005	Initiate creation of Reuse Planning Committee (Town Council/staff)
May	Hold public hearing (TC) to explain process
May – October	Monitor BRAC Commission deliberations in case BNAS is removed from list.
June – September	Solicit input regarding make-up of committee, i.e.: Town focused, Regional representation, State involvement.
June – July	Develop "white paper" summarizing pros and cons of each (staff/consultant)
July – August	Contact other communities, regional organizations, state representatives, state officials (staff)
September	Hold public hearing (TC)
August – October	-Develop internal "business plan" for organizing and staffing LRA (staff), develop by-laws, etc. -Begin discussions with Navy regarding potential care and custody agreements
October	Council decision to create LRA
October	Appropriate funding for initial support & match
October – November	Request formal approval of committee as LRA from Governor and DoD
November	Apply to OEA for planning grant
November – December	-Interview/hire/appoint LRA staff -Estimate space needs -Find office space
November – December	-Appoint LRA membership -Select chairperson -Appoint subcommittees
2006	
January 1, 2006	-Begin Reuse Plan -Develop Request for Proposal -Outline goals and objectives -Estimate requirements (tasks, resources, costs) -Initiate Planning -Hire outside resources (if needed)
December 31, 2006	Complete Reuse Plan
July – December	Initiate creation of Implementation LRA
July – December	Begin property screening and analyze property transfer requests
October – December	Formally create/reform LRA, appoint new committee members, re-staff (if necessary)
2007	
January – on	-Acquire properties through EDC, negotiate and approve Public Benefit Conveyances, negotiate/oversee Public Bid sales. -Continue selling/leasing property to achieve Reuse Plan goals

**Town of Brunswick
BRAC Preparedness Strategy
DRAFT Action Plan and Timeline**
(Best Case Scenario)

- Government Actions**
- DoD closure/realignment list released (5/16)
 - BRAC committee deliberations
 - BRAC committee decision
 - President approval
 - Congressional approval/List finalized
 - OEA Technical Assistance
 - OEA Financial Assistance
- Local Actions**
- Initiate preliminary planning for Reuse
 - Create Planning LRA
 - Undertake Reuse Plan
 - Develop Zoning & Land Use Regulations
 - Create Implementation LRA
 - Begin Property Screening
 - Evaluate Early Transfer Opportunities
 - Negotiate PBC and EDC parcels
 - Facilitate Public Bid Sales
 - Acquire Utilities & Infrastructure
 - Transfer Property





VII. APPENDICES

This section of the BRAC Preparedness Strategy contains information referenced in the previous chapters, which is presented here for reasons of clarity and additional detail.

In addition, included with this report is an Addendum containing reference materials used in the analysis that will be useful to the Town as it goes through the Reuse Planning process.

APPENDIX A - CASE STUDIES OF MILITARY BASE REDEVELOPMENT

The following analysis illustrates several important findings regarding what has worked and what has not in military base redevelopment at locations around the country over the past forty years. There is no defined and approved “Best Practices” manual for base reuse – each base and the community or communities in which it is located is unique. However, there are certain commonalities among successful, and not-so-successful, redevelopment efforts that need to be analyzed. The lessons learned from this collective experience can then assist the Town of Brunswick in developing an effective and productive reuse planning process.

1. Local Redevelopment Authority Organizational Issues

In preparing for any possible realignment or closure of Brunswick Naval Air Station, it is useful to investigate all various alternative organizational structures that meet community or regional needs, especially as they relate to the type and condition of the facility to be reused as well as local market conditions. This section summarizes the organizational influences for fifteen different LRAs nationwide, both in terms of: (1) the initial policy “planning LRA” and (2) the long-term “implementation LRA”. In addition, one community case (Alexandria, VA and Cameron Station) describes a successful redevelopment where the city did not form an LRA and relied entirely on a strong real estate market and its local land use zoning capacity.

There are many different variations within each of these LRA structures to meet uniquely local needs. The fifteen local organizational examples are summarized in terms of their general long-term LRA structures as follows:

Single Jurisdiction LRAs:

- Nottoway County, VA. – Fort Pickett
- Village of Glenview, IL. – NAS Glenview
- City of Millington, TN. – NAS Memphis (with two component LRAs)

Multi-Jurisdiction LRAs:

- Lawrence & Indianapolis, IN. – Fort Benjamin Harrison
- Beeville & Bee County, TX. – NAS Chase Field
- Greenville & Greenville County, SC. – Donaldson AFB

Cooperative State-Local LRAs:

Ayer, Harvard & Shirley, MA. – Fort Devens
Portsmouth & Newington, NH. – Pease AFB
Aroostook County, ME – Loring AFB

Quasi-Public LRAs:

Chicopee & Ludlow, MA. – Westover AFB
Watertown, MA. – Watertown Arsenal (two closures: one failure and one a success).
Fauquier County, VA. – Vint Hill Farms Station

City/Town LRA Supported by Master Developer:

Vallejo, CA. – Mare Island Naval Shipyard
South Weymouth, MA. – NAS South Weymouth

No LRA: Rely on Land Use Zoning-Military Department Sale:

Alexandria, VA. – Cameron Station

a) Initial Planning LRA⁴⁴:

Reuse planning is an effort in local participatory democracy that generally requires a region-wide perspective. Usually, there are numerous interests that must be given a full opportunity to participate. Many of these interests can also exercise a great deal of leverage to block development, perhaps even having a practical veto, if their concerns are not addressed. It is often said that the three critical elements in a successful base reuse plan are consensus, consensus, and consensus.

The need for a consensus plan is also vital to DoD and the Navy, which must use the community's base reuse plan as the "preferred alternative" in the future real property disposal considerations. An initial reuse steering committee or the planning Local Redevelopment Authority (LRA) requires broad public sector as well as private sector membership. In many communities, local political leaders are often business people and can sometimes bring both perspectives to the table. However, these perspectives sometimes differ dramatically, and a balance must be struck so as not to prevent all parties from being heard. Because the reuse of the base will require private investment and will also have as a major impact on the local and regional business community, special efforts should be made to assure that this business perspective is included in the LRA. The inclusion of the state's Congressional Delegation and local state legislators in the initial planning process is important, since they will most likely play a critical role throughout the redevelopment process.

The steering committee may need to bridge local jurisdictional boundaries, where the economic influence of the base extends far beyond its former boundaries. Representatives from minority and disadvantaged groups, such as advocates for

⁴⁴ This section is largely based on: Brad Arvin, Lynn Kusy & John Lynch, "Community Organization," in John E. Lynch-ed., *The Community Base Reuse Planning Process: A Layman's Guide*, (Washington, National Association of Installation Developers, 2004), pp. 8-11.

housing-for-the-homeless within the area covered by the steering committee, should also be involved (although this concern may not arise in Brunswick). Native American tribes also have certain rights to excess federal property, and therefore must be included in the planning process if necessary. In effect, most military bases must be woven back into the economic fabric of the community. However, it should be noted that the larger and more diverse the steering committee is, the more difficult it will be to reach consensus on the many critical issues that would be faced during the process.

The leadership of the planning authority is crucial. With many interest groups and a short time to plan, a chair of the committee should be carefully chosen to ensure that all members and viewpoints are given ample opportunity to be heard. The chair will be largely responsible for creating and maintaining a collegial and open atmosphere for the participants even as conflicting opinions abound and heated discussions flourish. The chair must have proven leadership abilities to keep the process moving, and the patience to help forge consensus⁴⁵.

There are no specific limits on the size of the initial base reuse steering committee or planning LRA. Reuse committees have included as many as 57 members involved in the Futures Group for the initial Mare Island Naval Shipyard reuse plan (see: Vallejo LRA case example), or as many as 60 members in the case of Lowry AFB on the east side of Denver. However, planning local redevelopment authorities have typically ranged from nine to 15 members, often with separate subcommittees reporting to the larger group, in such fields as economic development, aviation, education, social and human services, historic preservation, and the environment. Another variation is a relatively small core board with a larger group of volunteer committee members that form the subcommittee structure.

An effective planning LRA must take an entirely different perspective than the previous pre-BRAC "save-the-base" group. The two different perspectives cannot be combined without future problems or failure. The planning LRA must have expertise in real estate and economic reuse feasibility, recognizing that the key to success is in integrating the physical assets of the base into the local market economy. The LRA must focus on the future, not dwell on the closure decision.

In the course of its final deliberations toward reaching a consensus based reuse plan, it is important for the steering committee to consider what permanent organization(s) should be created to manage the civilian reuse of all or major portions of the base property. The permanent reuse organization should also depend on the specific types of property reuse intended for the former base.

b) Permanent or Implementation LRA

The most grievous error in base reuse organization is trying to create a "governance" structure well before the final land uses are agreed upon. Premature efforts to create a

⁴⁵ The consensus opinion among the consultants and participants involved in the case studies is that the chair should not be an elected official.

permanent organization often result in predetermining the eventual land uses and the base reuse plan without a public dialogue process.

The permanent organization, or “implementation Local Redevelopment Authority” will differ markedly from the initial broad-based planning committee. Now, the focus must be on selling and leasing property; maintaining the utilities, roadways and common property; and providing for the business-like operations and financing of a major real estate holding. As discussed in the Beeville-Bee County LRA case example for NAS Chase Field, the former policy steering committee should be abolished promptly since its purpose has been achieved. The type of LRA organization approach selected for Brunswick will facilitate but not cause future economic development success. Consequently, the LRA organizational structure that is chosen will be very important in attracting and responding to future private sector clients and investors.

The LRA case examples cited below were not selected because they were universally successful. To the contrary, one community (Watertown, MA) actually experienced two closures – one a dismal failure; the other a huge success). Another LRA was initially successful beyond all belief (Beeville, TX. – NAS Chase Field), but had inherent failure in its permanent LRA structure that led the community to flounder in its long-term economic development mission. Finally, the third community (Millington, TN – NAS Memphis) organized itself properly but was left with such poorly maintained excess property with limited highway access, marketing the property to industry has been extremely difficult, despite better than average market conditions.

One final caution, while the specific organizational structure for the LRA will of course be important, it will be the quality and professionalism of the LRA board and its permanent staff that will determine the future success of the base reuse process.

Finally, there are seven basic principles involved in identifying the most appropriate long-term LRA implementation organization. These seven principles have also been annotated to identify where they apply in particular to the specific LRA case examples summarized further in this section:

Seven Basic Permanent LRA Organizational Principles⁴⁶

1. Let the property reuse determine the organizational structure. It will be of no great surprise that airfields are often managed by airport authorities, and educational properties are almost always transferred by statute to educational institutions. (Millington, TN.)
2. Create a business-management entity and select board members experienced in financing and property management as well as in attracting new business

⁴⁶ Ibid, page 11

prospects. (Watertown, MA; Lawrence, In; Chicopee, MA; Ayer, MA; Portsmouth, NH; Watertown, MA; Fauquier County, VA; among others.)

3. Cross city and county boundaries when needed. Allow the base reuse organization to reflect the regional nature of the impact wherever possible. (Lawrence, IN.; Beeville, TX; Greenville, SC.; Chicopee, MA; Portsmouth, NH; among others.)
4. Respect the local land use planning and zoning roles for jurisdictions where the base is located. (Nottoway County, VA.)
5. Research thoroughly the legal authority provided by state statutes for redevelopment authorities in your state. (Fauquier County, VA)
6. Wherever possible, try to isolate the implementation LRA from partisan or inter-jurisdictional politics. (All the LRA case examples except Beeville, TX.)
7. Require the public appointment of all board members to ensure that the long- term public benefits accrue to the community at large. It is important to note that the Secretary of Defense is also called upon by statute to “recognize” any implementation LRA receiving DoD planning assistance or economic development property conveyances. (All the LRA case examples, except for the first Watertown, MA closure experience.)

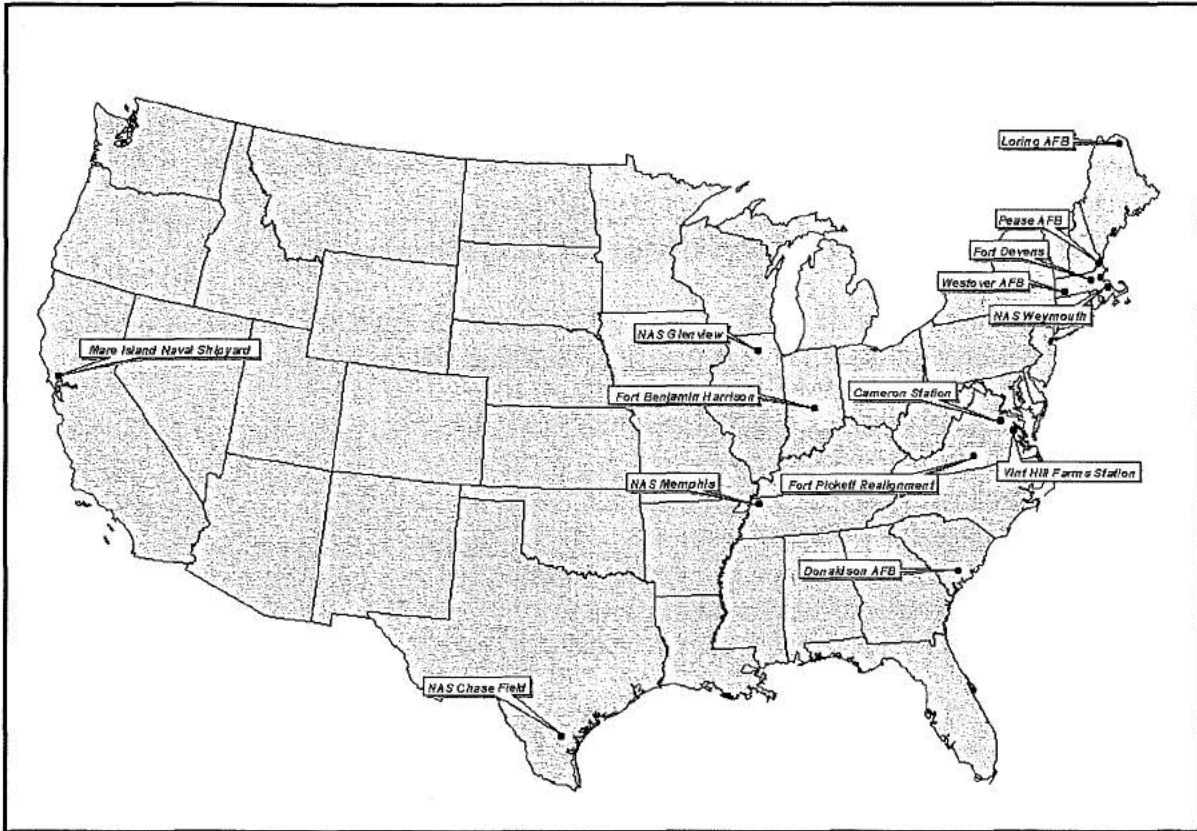


Figure VII-1 Comparable Case Study Locations

2. Case Studies

a) Nottoway County, VA – Fort Pickett Realignment

Implementation LRA Role Defined Largely by the Jurisdiction with Land Use Planning Role

The realignment of the 41,000 acres at Fort Pickett from an Army Reserve activity to a Virginia National Guard operation, announced in the 1995 BRAC, threatened a small rural community in Southside Virginia that had previously experienced very slow economic growth. The BRAC announcement also included the transfer of the 3,400-acre Fort Pickett Cantonment Area, which contained many older World War II era buildings, to the County, acting in cooperation with the small Town of Blackstone.

Planning LRA Process: In addressing the multi-county economic impact, Nottoway County invited the adjoining four counties of Amelia, Lunenburg, Brunswick, and Dinwiddie to participate as equal partners on the initial Fort Pickett “planning LRA.” The initial base reuse plan envisioned the relocation of the Virginia National Guard headquarters to the Fort from Richmond, joint use of the Army airfield, the transfer of about 1,000 acres to the Virginia Tech Agricultural Research Center, and the reuse of individual buildings at the remaining 2,400 acre “Pickett Park” complex as incubator facilities for new small businesses in the region.

Resolution of the Implementation LRA Structure: The initial test marketing of the Pickett facilities for small expansion businesses offered promising results. When the time came to form the “implementation” LRA (1997), the four surrounding counties insisted on retaining the previous five-County decision structure. It became evident that Nottoway County would be expected to cover all of the Pickett Park operating costs, but the other four counties would all be involved in the marketing, management and reuse policy decisions.

For a brief period, Nottoway County considered using an older State of Virginia authority that had been adapted in recent years to fit the specific situation at Vint Hill Farms (another BRAC facility). However, the state statute involved the appointment of LRA directors by the Governor, based on nominations submitted from local jurisdictions. As a result, this state-authority option would have allowed for a majority membership from outside of Nottoway County, and it was unacceptable to the Board of Supervisors.

The Board of Supervisors determined that implementation LRA role should be vested in the Nottoway County Board itself. The County submitted its rationale to the Office of Economic Adjustment, emphasizing its sole responsibility for all land use planning and zoning within the County. The other four counties submitted an appeal for retaining the existing five-county structure. Acting on behalf of the Secretary of Defense, OEA confirmed and recognized Nottoway County as the “approved” local redevelopment authority.” In effect, the OEA decision set an important precedent in

relying on the jurisdiction with local land use planning responsibilities to define the final nature of the implementation LRA structure.

Regional Economic Development Progress: The Fort Pickett reuse has been great success story from the perspective of Tri-Service, Reserve and Guard military training activities under the auspices of the Virginia National Guard, as well as new civilian job creation at Pickett Park. For the past five years, the post has exceeded the 60,000-space Active Duty and Reserve/Guard training activity levels at Fort Pickett that was a standard level prior to the 1995 BRAC. New ranges are being constructed and new facilities added to support the additional tri-Service training activities. Local active duty and Reserve/Guard personnel continue to patronize the Blackstone restaurants and businesses. The State of Virginia relocated the Virginia Guard headquarters to Fort Pickett and added another 200 jobs to the area.

All of the usable 92 scattered structures on the Pickett Park site have been occupied with new firms or incubator activities, with the additional benefit of attracting outside industry to the County's existing empty industrial sites. For instance, a new \$30 million sawmill was constructed at Pickett Park by ArborTech in 2000, to produce about 75 million board feet of lumber a year. A second-shift operation is now underway which will employ 50 local residents. ArborTech is the largest single plant investment in Nottoway County history. Other small or expanding firms have been attracted to Pickett Park, such as Metalspray North America (a metal coating firm with 30 employees), or Homespun Home Fashions (a sewing manufacturer with 10 employees), or Structural Concepts & Components (12 employees). Trout River Lumber Company began operations first on Pickett Park in 1998, and then relocated to a new permanent 60,000 square foot industrial building, employing about 25-30 new workers, at the previously unoccupied Crewe industrial park. Trout River Lumber, however, is now renovating its original Pickett Park facility for additional new production.

Hudson Industries followed the same pattern in locating its start-up operations at Pickett Park, while constructing its new 60,000 sq. foot sewn products facility also at Crewe, employing 75 new workers. Colonial Forest Products followed the same course in opening its new lumber milling plant in November 2000, employing 50 additional workers at Crewe.

Southside Virginia Community College has opened a new industrial incubator facility at Pickett Park, with six new fledging firms as tenants. The Community College also conducts its highly successful heavy equipment operator and truck driver training programs at Pickett Park. Southside Electric Company has also opened a new satellite transmission-reception facility at the Park. Like many rural communities in Maine, job creation in the face of the transportation and market constraints in Southside Virginia was a challenging task. Nevertheless, the Fort Pickett LRA is making good progress on behalf of Nottoway County and the Town of Blackstone by working aggressively with small start-up and expanding companies⁴⁷.

⁴⁷ Source: John Hill, Fort Pickett Redevelopment Authority, (434) 298-0366.

b) Millington, TN – NAS Memphis:***Cooperative Navy Community Unable to Reuse Isolated BRAC Property***

The realignment of NAS Memphis and the relocation of a major Navy aviation training activity to Pensacola, announced in the 1993 BRAC round, caused a significant dislocation to the small city of Millington, located a short drive from Memphis. The relocation of the aviation training mission resulted in an abrupt population decline in Millington during 1996 and 1997, from about 19,000 residents to 12,000 people in the City following the closure and realignment.

Land areas classified as excess by the Navy (about 1,890 acres) included the airport and supporting facilities, but only one decent hangar building suitable for civilian reuse along with structures that had not been maintained and were in poor condition. The Navy also retained a small property surrounded by airport grounds that required highly restrictive access easements across the City portion of the property.

The direct highway access through the retained Navy property (Singleton Parkway) that connected the airport and the developable BRAC property with a major thoroughfare had remained closed by the Navy for many years. The street, which was improved at the City's expense, was opened briefly prior to September 11, 2001 attack, but was then closed again immediately thereafter. The initial base reuse plan emphasized the difficulty in trying to redevelop the excess Navy lands without adequate road access, by way of Singleton Parkway, through the Base to Highway 385, the major regional belt loop on the north side of the Memphis metro area.

As part of the 1993 realignment, the Navy relocated its Office of Naval Personnel from Washington to Millington, and the main base essentially became a Navy business park. For some unexplained reason, the Navy did not show the same cooperation to the City of Millington that the Navy had demonstrated previously at NAS Chase Field in Beeville, TX and other facilities.

Initial Planning LRA: The initial 12-to-18-member reuse planning committee included representatives from the State, Shelby County, and business-public representatives from the City of Millington. The reuse plan focused on how to open and market the excess land, but with little encouragement in the face of the Singleton Parkway access problem. Some individual facilities (such as the Navy brig on about three acres) could be reused under a Criminal Justice public benefit transfer, but Millington's main job replacement efforts were best directed toward the City's proposed business and industrial park.

Implementation LRAs: Tennessee law authorizes two types of development bodies: (1) an Industrial Development Board, which is essentially a publicly appointed non-profit corporation that is also authorized under Section 501(c)(3) of the IRS Code; and (2) a Public Airport Authority. The City appointed two separate but cooperating entities to accept and reuse the former NAS Memphis excess BRAC facilities:

Millington Industrial Board: This seven-member board is appointed by the Mayor with the approval of the Board of Alderman. The Industrial Board is responsible for managing the 1,335-acre Economic Development Conveyance (EDC) transfer to the City of Millington as well as other economic development activities in the City. There is one major tenant on-site – the Swift Trucks Academy – a truck driving school that annually graduates 3,300 qualified truck drivers. The other main focus of the Millington Industrial Board has been its nearby Highway 51 business park. The Board invested about \$4 million in infrastructure improvements at the park, and has attracted Ingram Micro, with 750 employs, as the principal employer at the park. Other employers include Aggreko (an industrial generator firm) and Sparco computer.

Millington Airport Authority: This nine-member Airport Board, also appointed by the Mayor with the approval of the Board of Alderman, is responsible for managing the 550-acre public airport conveyance sponsored by the FAA. The Millington Airport was certified this year for the FAA “Military Airports Program.” This year’s IAP-MAP program will be used to construct some needed “T” aircraft hangars. The airport is also sustained by a contract from FEDEX to serve as a weather backup airport for the FEDEX operations at the Memphis Airport as well as by a \$150,000 grant from the City.

In creating two separate LRA entities, Millington was following an LRA organizational principal: allowing the property reuse purpose to dictate the needed type of organization. For job creation purposes, it is important to have fee-simple title to land and facilities available for industrial-commercial clients, and hence the need for the Millington Industrial Board. Similarly, aviation property transferred to airport authorities can only be used for leasehold revenue-generating purposes unless approved by FAA.

As a prescriptive solution, the City of Millington now realizes that the continued closure of the City-financed Singleton Parkway is a serious impediment to the City’s future economy. The City is prepared to force reopening of the Parkway at the end this year, when its lease-back for a park, recreational lake, and riding stables to the Navy ends. From all indications, the City now realizes that its responsiveness to the Navy over the years has not been reciprocated. The City will insist on the re-opening of the Singleton Parkway between the Navy office park and the Navy family housing to the EDC property⁴⁸.

It is important to note that the individual LRA structure adopted by the community may be largely irrelevant in the real estate marketplace when the military releases poorly maintained facilities and land with without adequate public access.

⁴⁸ Source: Phil Whittenberg, Executive Director, Millington Industrial Development Board, (901) 873-2400.

c) Glenview, IL – NAS Glenview:***Village Acting as LRA Master Developer with “Development Advisor” Support***

The 1993 BRAC closure of the Glenview Naval Air Station (now known as “The Glen”) encompassed nearly two-square miles (about 1,120 acres) in the middle of a small suburban village of about 38,000 residents, located 20 miles from the center of Chicago. The Village had previously annexed the Air Station property in 1971, and the Village now chose to redevelop the closing Navy facility as a new quality mixed-use residential-office-retail community rather than retain the 350 acres of runways and taxiways as a public airport. With Chicago’s O’Hare International Airport ten miles away and the Palwaukee General Aviation Airport only five miles away, reuse of the Glenview facility for an airport was quickly dismissed.

Initial Planning LRA: Following LRA designation in late 1993, the Village trustees mobilized immediately to appoint a 24-member, multi-jurisdictional planning committee to “take charge” of the reuse planning for the property. Along with the Village of Rantoul in central Illinois (site of the former Chanute AFB), Glenview also secured approval from the State Legislature for special state tax increment financing (TIF) authority, making this authority applicable to both closed military bases. The initial Glenview reuse plan called for demolition of most of the 108 Navy buildings (of particular note was the historic Hangar One, which would be adaptively reused for retail use). Additionally, all runways/taxiways as well as the outmoded Navy utility systems would be removed.⁴⁹

Village serves as the Glenview Implementation LRA: The Glenview Village Board of Trustees determined that the Village itself would assume the key responsibility as its own LRA/Master Developer for the new Glenview project. To accomplish this, an Economic Redevelopment Department was created and supplemented with five key consulting teams: Mesirow Stein Real Estate as Development Advisor, Skidmore Owings & Merrill as Master Planner, MWH for infrastructure design and construction administration, Robbins Salomon & Patt as Legal Advisor, and URS Corporation to conduct environmental due diligence. The Village Trustees approved the base reuse plan in 1995, and authorized a \$60 million bond issue to help underwrite the costly infrastructure improvements needed to support the plan.

The Glenview TIF district also included an unusual revenue sharing agreement with the surrounding schools, park district, and library district: under normal TIF law, these districts would not receive any tax benefits from a tax increment financing project for up to a maximum of 23 years. In this instance, however, the Village included language in the new TIF law that allowed them to share approximately half of the new, incremental property tax revenues generated from the development with these other districts to cover their new service costs (i.e. pay for the education cost of a new child living at The Glen), or “keep them whole,” for the duration of the project. Additionally, a consolidated review commission, or “super-commission,” composed

⁴⁹ Dick Shields & Karen Butler, “Chicago Bases That Made it Work,” in John E. Lynch-ed., *Case Studies in Base Conversion*, (Washington: National Association Installation Developers, 2002), pp. 23-31.

of the combined officials of the three different planning, appearance, and zoning review boards, provided a “one-stop shop” for entitlements, which also shortened the zoning process from 10-12 months to only three months.⁵⁰

Development Advisor's Role: In managing the base redevelopment role, the Village supplemented its considerable expertise by retaining the Chicago development firm of Mesriow Stein Real Estate, Inc., who participated in everyday work with the on-scene Village development team. The Village also retained Skidmore, Owings & Merrill to prepare its final base master plan, which was approved after extensive public hearings by the Glenview Board of Trustees in February 1998.

Protracted Navy-Village Property Transfer Negotiations: The extensive Glenview public improvements (about \$170 million) needed to transform the property into a mixed-use project proved to be an insurmountable hurdle that ended the Navy's goal of receiving large property sales proceeds from the NAS Glenview property. The 140-acre “Great Park” system, the 45-acre storm-water/recreation lake, the 32-acre native prairie preserve, in addition to needed road and infrastructure improvements, as well as the removal of the airfield runways all suggested that there would be hard bargaining over the final transfer value for the NAS property.

The Village took the position that the DoD Base Reuse Implementation Manual (the BRIM) allowed the Navy to receive the net cumulative discounted fair market value for the property over 15 years, but only after adjusting for infrastructure, marketing, and development costs associated with the community's approved base reuse plan. The Village was negotiating based on a comprehensive Business/Operational (B/O) Plan that showed the property had negative value, and the Village was carefully reading “scripture” – DoD's own “BRIM.” The Village essentially maintained that the development expenses exceeded any likely future land sales proceeds. Several times, the negotiations broke down as the Navy tried to press the Village to increase its offer for the property.

The Village and the Navy did eventually reach a settlement in two separate agreements under the Economic Development Conveyance property transfer authority. First, in May 1996, the Village agreed to purchase the 109-acre golf course for \$2.1 million, with the proceeds being used to build a nearby Navy day-care center. Second, in July 1997, the Village acquired title to the remaining 920 acres without cost – this was ultimately justified from the Navy point of view because the Navy appraisal for the property, just like the Village B/O Plan, concluded it had negative value.

Glenview Project Today: “The Glen” today is the quality mixed-use project envisioned in the 1998 master plan. Over 95 percent of the 700-acre private development land has been leased, sold, or under contract. Four hundred acres of open space have been preserved. About 400 of the 1,500 residential units have been completed and the entire residential project will be finished by 2006. The two golf

⁵⁰ Butler, op. cit., p. 30.

courses are in play, and the office-industrial projects will be fully absorbed by 2010.⁵¹ Glenview is clearly a remarkable success story in planning and developing immensely valuable real estate.

Cautions – Glenview Experience as it may Affect Future BRAC Closures: The Glenview LRA experience is important for several useful reasons: (1) the retention of a private sector “development advisor” to the Village acting as the LRA; (2) the formation of a joint multi-jurisdictional expedited land use zoning process; and (3) the creative adaptation of a tax increment financing structure in cooperation with the adjoining taxing districts/

But, the Navy (and the other Military Departments) have reacted to their lack of real estate sales success and their environmental cleanup experiences during the 1988-1995 BRAC rounds to insist: (1) on environmental cleanup to “current-use” standards only rather than the cleanup standards prompted by community’s base reuse plan, and (2) a new emphasis on land use sales – preferably open public bid sales – in relation to other public benefit conveyances or economic development conveyance transfers.

The final 2005 environmental cleanup and property transfer procedures will still be influenced heavily by the Congress after the final 2005 decisions. Yet, it is clear that it will be difficult to apply this highly successful Glenview property transfer experience to most other BRAC situations in the future.

d) Lawrence & Indianapolis, IN – Fort Benjamin Harrison:

LRA Multi-Jurisdictional Cooperation in Successful Base Reuse

Fort Benjamin Harrison, an historic Army post on the eastside of Indianapolis contained within the small City of Lawrence, was closed under the 1991 BRAC decision. At the time of closure, the Fort employed 1,050 civilian and 3,600 military personnel and had an annual payroll impact of about \$125 million.

Complex Intergovernmental Structure: The reuse of Fort Harrison took place within a “confusing” relationship between the Cities of Indianapolis and Lawrence. As a result of the 1969 local government unification, or “Unigov,” the mayor of Indianapolis also serves as the County Executive for all of Marion County (including the city of Lawrence), and the City-County Council serves as the county-wide legislative body. Lawrence and two other small Marion County cities remained as autonomous incorporated municipal units, with their own mayors, city councils, and municipal structures.⁵² However, the personal and inter-city relationships were cooperative, and the City of Lawrence assumed the primary role for redeveloping the Fort Harrison property. Later, Indianapolis itself would be affected by the 1995

⁵¹ See: “www.glenview.il.us/glen/”

⁵² J. Lynn Boese, “Fort Benjamin Harrison”, *Economic Development Commentary*, Spring 2001, reprinted in John E. Lynch ed., *Case Studies in Base Conversion* (Washington: National Association of Installation Developers, 2002), p. 17.

candidate closure of the Naval Air Warfare Center, which was retained by a creative City-sponsored privatization initiative.

Ad Hoc Planning LRA and the Early Fort Harrison Reuse Plan: The City of Lawrence, the City of Indianapolis and the State of Indiana created a 20-member task force composed of local business leaders, citizens and city officials, which was led by a five-member executive committee of elected officials. The task force identified four principal goals for the property: (1) create a new city center for all of Lawrence; (2) maximize the property economic potential; (3) replace the lost jobs; and (4) preserve the Fort's natural and historic resources.

The 2,400-acre Fort Harrison property, with its historic structures and its wooded, rolling terrain along Fall Creek on the north side of the Fort, lent itself to a very base reuse planning concept with the following elements: (1) creation of the Fort Harrison State Park, including the Fort's superb golf course; (2) development of market-rate and senior housing; (3) creation of a community college campus; (4) development of industrial and commercial sites; (5) creation of a new "downtown" for the city; and (6) construction of new roads merging the Fort property with the city (while easing traffic through the city itself).⁵³

A small consultant team provided the supporting real estate market and BRAC implementation perspectives for the city's base reuse plan, which was submitted to the Army and DoD in December 1994. The key feature in the Fort Harrison planning process was that the plan itself was driven entirely by its city leaders and local citizens. The key to the public acceptance of the reuse plan was the appointment of approximately 100 city leaders and local citizens to five subcommittees of the task force. These subcommittees vetted various reuse alternatives that were ultimately submitted to the task force for inclusion in the reuse plan.

Implementation LRA: Formidable challenges still remained for a new implementation LRA: replacement of the Fort's central heating plant at a cost of about \$4 million; upgrading outdated roads and sewer-water lines costing about \$22 million; demolition of one million square feet of inadequate buildings, and preservation of 75 historically significant buildings dating back to as early as 1908. The Fort Harrison Reuse Authority (FHRA) was comprised of five business and citizen members, one each appointed by the mayor of Lawrence, the mayor of Indianapolis, the city-county of Indianapolis, the city council of Lawrence, and the county commissioners of Marion County. The FHRA was organized in 1995, as a quasi-independent entity to the City of Lawrence, and had the authority to accept title to excess land and borrow monies to finance improvements to the BRAC property.

Although the base was not officially closed until September 30, 1996, the Army accepted the FHRA's application for Economic Development Conveyance in April 1996, at which time a Memorandum of Agreement was executed for the purchase by the FHRA of approximately 500 acres of the Cantonment Area. In September of

⁵³ *Ibid*, pp. 15-16

1996, a "Lease in Furtherance of Conveyance" was executed with the FHRA. At about the same time the Army accepted the State of Indiana's application for public benefit conveyance for approximately 1,900 acres of the Base to become the Fort Harrison State Park. By 1999, substantially all of the land had been transferred to the FHRA by the Army.

FHRA also assumed a "property developer's role" by the formation of a not-for-profit Lawrence/Fort Harrison Development Corporation, which could function both in redeveloping the City's downtown as well as on the Fort itself. The new corporation managed the development and sale of the first 200-lot residential subdivision and the renovation of the 320,000 square-foot Gates-Lord Hall as a temporary (4-to-5 years) office for 850 DFAS personnel, while Building One (which was retained by the Army) was being rebuilt by GSA.

The development of the new Lawrence town center began in 1999 and now has a 28-room boutique hotel that opened in the summer of 2002, 9 restaurants, and 150 new businesses. The new town center is being made possible by the cooperative relocation of the Army's post exchange-commissary to the Army Reserve site. A new campus for Ivy Tech College, with 2,500 students, together with a new Indianapolis-Marion County library, were all managed and developed by the FHRA and the Corporation.

In total, FHRA and its Lawrence/Fort Harrison Development Corporation have been responsible: (1) for attracting 150 businesses with 1,800 jobs to the Ben Harrison project, (2) for building \$15 million in roadway improvements needed to "open" the Fort and the Lawrence downtown to public access; (3) for demolishing one million square feet of outmoded structures; and (4) for creating a long-needed new downtown and civic center for the City of Lawrence. With this as a storied background of inter-governmental cooperation, the Fort Benjamin Harrison was selected by the National Association of Installation Developers for its "Installation of the Year" award for 2000.

e) Beeville, TX – NAS Chase Field:

Early Recovery Success, but a Defect in the LRA Structure Impairs Future Economic Progress

The 1991 announced closure for the Naval Air Station-Chase Field, located in Southeastern Beeville, Texas, prompted a remarkable economic recovery through an early community organizational response and superb cooperation from the Navy.

Initial Planning Organization: Following BRAC announcement, a 23-member NAS Chase Field reuse steering committee was quickly formed, with equal representation from the City of Beeville (the location for the Navy family housing enclave), Bee County (Chase Field), and the Bee County Community College System. The steering

committee was chaired first by Wil Galloway, a local business leader, and later by Bill Dirks, the Chairman of the Bee County Community College Board.

The immediate threat to the Beeville community was the imminent "moth-balling" of 396 units of Navy family housing concurrent with the Navy curtailment of operations at Chase Field in early 1993. Realtors and local homeowners in Beeville were especially worried that this large number of unoccupied housing units would impair the Beeville residential market for many years to come.

After an anxious public hearing on the initial reuse plan, the steering committee made an unusual request to the Navy to approve an interim use lease for the family housing, authorized under 10 USC 2667, as the Navy phased-down its operations. The steering committee also offered to operate or maintain the family housing for the military families until they were reassigned. The Navy acted quickly, in fact well in advance of the normal housing-the-homeless screening process under the McKinney Act.

Permanent LRA Organization and Economic Recovery: At the time the final base reuse plan was scheduled for approval in mid-1992, the Texas State Prison system offered to establish a minimum-security facility on the Chase Field site, while allowing the community to retain the airfield and flight line for economic development uses. The prison system's proposal involved about 1,100 employees and would clearly offset the civilian job loss at Chase Field (about 950 Navy jobs). The steering committee readily accepted the prison proposal.

Following the submission of the approved Chase Field base reuse plan to the Navy and DoD in mid-1992, the permanent Beeville-Bee County Redevelopment Authority Corporation was established with nine members representing a diverse business and real estate background. As a product of the strong consensus derived during the base reuse planning process, the larger 23-member steering committee was retained as an overview policy committee, which would meet quarterly. This decision to retain the steering committee in parallel with the Authority proved later to be a critical mistake.

The new Beeville-Bee County Redevelopment Authority Corporation approved the interim use lease for the Navy family housing in December 1992, just as the new prison construction workforce as well as the new prison guards began to arrive in Beeville in early 1993. As the military phased down, the housing units were renovated and made available for civilian reuse almost immediately. The Redevelopment Authority Corporation was able subsequently to purchase the housing for about \$400,000 from the Navy, and eventually re-sold the housing to a private developer for just over \$6 million. The Redevelopment Corporation also attracted three new firms on an interim use lease basis to the Chase Field flight line. Because of the new prison and promising industrial reuse of the flight line facilities, there was virtually no loss or hesitation in the Beeville economy as the Chase Field closed in February 1993.

The immediate success of the Chase Field reuse and recovery effort offered a direct contrast with Beeville's long-term outlook toward economic development – best demonstrated by the existing industrial park in the city. Over the previous four to five-year period, the industrial park had attracted only a grain elevator, which created very few jobs for the region.

As the rental of the family housing units began to generate a strong cash flow return, two banking members and the electric utility representative from the steering committee (but not the Redevelopment Corporation board) approached the chair of the Redevelopment Corporation and the Corporation's executive director with a request to help preserve the industrial park. Essentially, the Redevelopment Authority leadership was asked to underwrite the business loans on the industrial park so that the loans would no longer appear as "non-performing loans" on the local banks' records.

The authority chair and the executive director offered to present the proposal formally to the Redevelopment Authority Board, but this offer would have generated publicity and was viewed as unacceptable to the banking-utility representatives. Within six months, the banking-utility representatives had secured a majority vote by the larger Chase Field steering committee, overturning the Redevelopment Authority Board's position, and in the process, slowing the leasing process for the three firms located on the flight line. Two of three firms relocated shortly thereafter, with only the small assembly firm remaining as the single tenant on the airfield.

Beeville's momentum toward local economic development had been broken. There have been sufficient interest earnings from the sale of the housing, but there has been little or no economic development success during the intervening years. Beeville has essentially reverted to a "status quo" slow growth era, despite the new opportunities provided by the NAFTA agreement to other South Texas communities. The Beeville experience also highlights why "the permanent implementation Local Redevelopment Authority will differ markedly from the initial broad-based planning committee. Now, the focus must be on what type of entity will maintain the utilities, roadways and common property, and provide for the business-like operations and financing of a major real estate holding. The former steering committee should be abolished since its purpose has been achieved."⁵⁴

f) Greenville, S.C. – Former Donaldson AFB

Early LRA Consensus and Property "Reverter" Clause Leads to Reuse Success

The pre-BRAC closure of Donaldson AFB involved a major community impact where the city and county were initially unorganized but were located within an agricultural and textile-based regional economy destined for new high tech growth. The City and the County of Greenville retained a "reverter" clause for the 2,472-acre

⁵⁴ Brad Arvin, Lynn Kusy, & John Lynch, "Community Organization" in John E. Lynch, ed., *The Community Base Reuse Planning Process: A Layman's Guide* (National Association of Installations Developers, February 2004), pp. 8-11.

airbase facility in the event that the property was no longer needed by the Air Force. As a difficult offsetting handicap, however, Greenville was already served by an adequate municipal airport, and, as a result, FAA cautioned that it would not support the creation of a new civilian airport.

Community Organization: On the day following the December 1962 closure announcement⁵⁵, Mayor David Traxler called a meeting by the city, the chamber of commerce, and the County Legislative Delegation for the two-fold purpose of appealing the closure decision, while at the same time organizing local efforts to reuse the Donaldson facilities.⁵⁶ New enabling legislation was immediately introduced and enacted in the 1963 South Carolina State Legislature to authorize the creation for the first time of the Greenville County Planning Commission, which would be permitted to “accept, contract for, and disburse federal funds, in connection with economic development plans for the incorporated and unincorporated areas of Greenville County.”

Later in the reuse “implementation” phase, the “Donaldson Management Committee” was formed, composed of one member each from the Greenville City Council, the County Legislative delegation, and the County Planning Commission, and the County Development Board. Everyday management was provided by a new Donaldson Center “resident engineer.”

Property Transfer and the “Reverter” Clause: During World War II, the City and County of Greenville purchased the land and leased the Donaldson facilities to the Federal Government. In 1948, the Air Force purchased the Donaldson land on a fee-simple title basis in order construct a permanent base. The sales agreement contained a “reverter” clause that if the government were to abandon the Base for military purposes, “the fee-simple title would revert to the city and county, provided further that . . . the United States would have the right to remove or otherwise dispose of any and all fixtures, structures, or other improvements.”

At the time of the Korean War expansion, beginning in 1950, the Air Force insisted on permanent title deeds for most other air bases leased nationwide. One of the rare base exceptions with a remaining reverter clause was the deed for Donaldson AFB. For instance, during the 1989-2005 BRAC rounds, only about 4 percent of the affected BRAC land was affected by reverter clauses – generally to the Public Domain – but a few reverter clauses did still remain in the property deeds for the 1988-2005 BRAC rounds at Bergstrom AFB in Austin, TX; Wurtsmith AFB in

⁵⁵ During the series of military base closures in the 1960s and 1970s, DoD closure or realignment decisions were announced by the Secretary of Defense – without any Commission public review process authorized for the 1988, 1991, 1993, and 1995 BRAC decisions, and now the 2005 BRAC process.

⁵⁶ The City and Greenville County had worked cooperatively together for many years. Both jurisdictions were nervous over the closure’s economic threat to the environment. When the property “reverter” clause was identified to their economic development consultant, however, the community leaders were astounded by the rejoinder: “How soon can you get the military off the base?” See: John E. Lynch, *Local Economic Development After Military Base Closures*, (Praeger Publishers, New York, 1970), pp. 69-83.

Oscoda, MI; and K.I. Sawyer, MI; along with Tidelands-reverter clauses in the Navy's deeds at Mare Island Shipyard, in Vallejo, CA and at the San Francisco area Navy properties.

The question of the remaining reverter-rights and the "on-site" or "off-site" fair market values for the Donaldson equipment and facilities became contentious. The Army Corps of Engineers and GSA offered a \$696,600 "on-site" appraisal value, but eventually agreed to a \$421,650 purchase price as though the facilities and equipment were to be sold "off-site." At this time, the Air Force also agreed to include in the package essential airport-related personal property and equipment for local economic development purposes.

Rapid Reuse and Recovery: The city-county purchase of the "Donaldson Center" was completed in late January 1964. Within four months, the Donaldson Center management was able to sell 101 acres for a new Union Carbide plant facility, the electrical distribution system to Duke Power, and the railroad right-of-way to Southern Railroad – with sufficient net sales proceeds to retire the city-county purchase debt completely. By the end of 1964, Mayor Traxler was able to reassure other communities: "Don't think 'defeatist'; it may be a goldmine⁵⁷."

In February 1965, Ling-Temco-Vought (now the Lockheed Martin Aircraft Center) announced its new aircraft overhaul facility on the Donaldson complex, which would operate as a publicly owned "Donaldson Industrial Airport" outside the FAA airport system. In addition to Lockheed-Martin, there are 80 firms (including 3M, Crucible Chemical, Honeywell and Stevens Aviation) with 3,800 to 4,000 jobs, together with the Donaldson Area Vocational Center, all operating today on the former base⁵⁸.

g) Ayer, Harvard, & Shirley, MA – Fort Devens:

Successful Cooperative Development by Three Towns & State Agency

The 1991 BRAC closure announcement covering the main post and the Army Intelligence training mission at Fort Devens directly affected the three Massachusetts towns of Ayer, Harvard, and Shirley, as well as the nearby town of Lancaster. The loss of about 2,200 civilian and 2,400 military positions particularly affected local retail spending in the town of Ayer.

Initial LRA Structure and Commonwealth Support: The key governance role of towns in Massachusetts was recognized by Governor William Weld in his July 26, 1991 initiative creating a Fort Devens Redevelopment Board and a Fort Devens Coordinating Committee – comprised of the secretaries of the major Commonwealth government agencies, the state legislative delegations from the region and the

⁵⁷ David G. Traxler, quoted in Research Institute Recommendations (Tax Research Institute, Inc, November 27, 1964).

⁵⁸ Donaldson Industrial Air Park corporate listing provided by Brenda Jones, (864) 277-3152.

affected towns. The Governor directed the Massachusetts Land Bank⁵⁹ to work closely with the four affected towns in order “to convert Fort Devens into productive private and/or public uses that will increase employment opportunities and bolster the local economy (while) protecting the environment.”

The initial planning organization was a Joint Board of Selectman, comprised of two members appointed each from the Towns of Ayer, Harvard, and Shirley and one member appointed from the Town of Lancaster. There was a clear recognition that any reuse plan for the Fort Devens property would require individual approval by each of the town meetings for the three jurisdictions having land use planning authority over the Army property.

There were several major limitations on the reuse of excess Devens property: inadequate highway access, especially from Route 2; an antiquated sewer treatment facility; and a surplus of older military family housing units. There were several important assets at Fort Devens as well: attractive real estate for future commercial and industrial sites, and the Fort’s main line railhead (the Springfield Railway Terminal) that served the Port of Boston. At the time, the Federal Bureau of Prisons also announced its willingness to open a medical center for treating hospitalized federal prisoners, which received strong public support.

After a series of well-attended public workshops, the Joint Board of Selectmen approved an initial Devens reuse plan, which focused on a mixed-use concept for a town center, the retention of only 240 residential housing units (mostly historic buildings), use of the rail lines, the development of an extensive business park, and a strong education component. The Devens Plan itself was well received by the public and was recognized by the Massachusetts chapter of the American Planning Association for its 1994 Planning Award.

Devens Implementation LRA: The implementation of the initial Devens reuse plan was dependent on the simultaneous approval of all three Town Meetings in Ayer, Harvard and Shirley. The Land Bank offered to provide the long-term infrastructure financing and marketing costs that would have overwhelmed the individual towns. A general agreement was reached that: (1) after plan approvals at the individual Town Meetings, the Devens land would be managed by a “Devens Enterprise Commission (DEC),” comprised of state and local business and public representatives; (2) the Commission would have the authority to approve site plan and zoning actions (one-stop approvals); and (3) the Devens and governance responsibility would be reviewed by 2030-2033 – with a view of returning the Devens land and facilities to the local town jurisdiction once the redevelopment mission had been completed.

This consensus was then incorporated into Chapter 498 of the 1993 Commonwealth Legislature, including the following provisions: (1) within 30 days of a series of

⁵⁹ The Massachusetts Land Bank, now known as MassDevelopment, is a statewide development planning and financing agency. It has taken a lead role in the management of several BRAC facilities in the state. The land Bank was originally conceived in answer to the closure of Westover AFB in 1993 (see individual write-up).

public hearings, each of the towns “shall vote to approve or disapprove the reuse plan and the Bylaws at Town Meeting;” (2) the Government Land Bank was designated as the responsible public agency or instrumentality as well as “industrial development financing authority” for the Devens site; (3) the Governor would appoint 12 commissioners to the DEC – with each town nominating two candidates to the Governor and the Governor designating six other commissioners, with no two being from the same town, and at least three residing in the Devens region; and (4) a study would be conducted between July 2030 and July 2033 for submission to the Governor and State Legislature, to determine the “permanent government structure for operations and maintenance of Devens.” The three towns took almost simultaneous Town Meeting approval actions for the Devens plan and the By-Laws in December 1994, and the Devens Enterprise Commission began operations immediately thereafter.

The Devens property (2,250 acres) was purchased by the DEC, as an Economic Development Conveyance transfer, from the Army in April 1996, for about \$17.9 million – with payment terms over six years. Approximately \$9.9 million of this purchase price was later “forgiven” as a result of the 1999 amendments to the BRAC statute.

Devens Enterprise Commission Progress To Date: The Devens joint cooperative effort by the State Land Bank and the three towns has achieved major success to date. With the DEC’s emphasis on land use “sustainability,” over 75 businesses with 4,000 employees are located today on the Devens property. To date, MassDevelopment has committed \$118 million of the State’s \$200 million authorization for infrastructure improvements and development; other public funding amounts to about \$80 million. MassDevelopment advanced its resources to accelerate the Devens clean-up program. A new \$25 million wastewater plant was installed. DEC also provides a useful one-stop permitting process for new development. Special attention has been devoted to the Devens golf course and to an open space plan that protects all wetlands. Total new private sector plant investment on the Devens project to date exceeds \$440 million.⁶⁰ As a good illustration of the dynamics at the Devens center, DEC has recently commissioned a new land use design for the Town Center, which may well return new residential development to the Devens project.

h) Portsmouth/Newington, NH - Pease Air Force Base

Local/State Cooperative Compromise

The first Base Closure and Realignment Act (Public Law 100-526) round in 1988 identified 86 military installations for closure or realignment, including five major U.S. Air Force bases due in part to the perceived reduction of the Soviet military threat. These bases were primarily Strategic Air Command facilities that had played a key deterrence role during the Cold War, serving as homes for a variety of long-range bomber and refueling aircraft missions. The first major installation slated for closure on the list was the then 35-year-old Pease Air Force Base in New Hampshire,

⁶⁰ Source: Devens Enterprise Commission, Community Relations Office, (978) 772-6340.

primarily due to the quality and availability of facilities and because of excess capacity of bases with similar functional capabilities. The base had been developed in the early 1950s on the site of a civilian airport. The BRAC Commission's recommendations were approved January 5, 1989 and the 4,255-acre base closed March 31, 1991. Closure activities that preceded that date included the transfer of both personnel and military assets to other military installations. Aircraft that were housed at Pease during its active periods included B-52 and FB-111G bombers, KC-135 tankers and numerous other based and transient aircraft. Military personnel and aircraft were withdrawn in phases beginning in June 1990, and ending in September 1990 with the exception of the New Hampshire Air National Guard (NHANG), which retained a 229-acre Cantonment Area and their fleet of 10 KC-135E tankers.

The Base is situated in Rockingham County with approximately 40% of the land located in the City of Portsmouth and 60% in the Town of Newington. The property includes substantial frontage on Great Bay and nearly three miles of frontage on Interstate 95 and the Spaulding Turnpike (NH Routes 4 & 16).

The impact of the closure, which occurred during a serious downturn in the regional economy, was significant on the surrounding communities, as well as the broader New Hampshire and Maine region. According to the Air Force's fiscal year 1989 Economic Resource Impact Statement (ERIS), personnel transfers and losses included approximately 3,460 military employees and 1,090 civilian employees working at Pease. With dependents, the total base-related population numbered approximately 10,715. The military population residing on Base numbered 4,666 (2,092 military and 2,574 dependents). The majority of military and civilian personnel and their dependents living off base resided in southeastern New Hampshire and southeastern Maine.

Initial Planning Efforts - When Pease was first announced for closure by the DoD, there was much debate at the local, regional, and state levels as to how civilian redevelopment should be organized, planned for, and implemented. Some argued for local control over redevelopment. Others argued for significant state involvement. Advocates for state control felt that the economic impacts of the closure and conversion would be felt not only locally but also throughout the state and that the costs of redevelopment would be better supported by the state than by the local municipalities. In April of 1989, the state legislature enacted a law establishing the Pease Redevelopment Commission (PRC), an eight-member body consisting of four members appointed by officials of the state government (who were required to be citizens of southeastern New Hampshire) and four locally appointed officials from Newington and Portsmouth. The primary responsibility of the PRC was to plan for the closure and redevelopment of Pease AFB.

The PRC hired a planning consultant team and established and was assisted by six citizen advisory committees, with eight volunteer members per committee. The committees studied and provided input on aviation, environmental conditions (e.g. hazardous waste), economic issues, governmental affairs, natural resources, and the

Pease facilities. Significant PRC decisions included resolutions that all reuse planning scenarios include an airport with a permanent home for the NHANG and that reuse planning for the area on the west side of the Base (primarily undeveloped land abutting Great Bay) would be limited to conservation uses such as a wildlife refuge. In developing the plan, it became evident that there was widespread state and local support for four guiding principles of the planning process - job creation, environmental quality, fiscal responsibility, and economic viability.

In early 1990 the commission approved the first phase of the three-phase planning process. This planning process had taken 9 months and involved numerous public meetings with the advisory committees, local citizens, the planning consultant, the PRC staff, and local, state, and federal government officials. The development concept envisioned an international aviation hub and high-technology industrial development. The PRC also recognized that the law that created the PRC did not provide the necessary authority to implement a base reuse plan, which needed to acquire the Base from the Air Force, develop and market the property.

Implementation Authority - In June 1990, the state legislature created the Pease Development Authority (PDA). In addition, the law provided a \$250 million bonding capacity (\$50 million obligation bonds and \$200 million of revenue bonds) to help implement the plan. The PDA consists of a seven-member board, comprised of four members appointed by the state and three members appointed by the governing bodies of Portsmouth and Newington. The state appointees consist of a single appointee each by the Governor, the President of the Senate, and the Speaker of the House, plus an appointee selected from adjacent Strafford County, unanimously agreed upon by these three. The PDA's mission statement is "To capitalize on the unique opportunities the Pease facility affords for economic benefit while preserving New Hampshire's quality of life and environment."

It took nearly seven years for the PDA to finally acquire all of the land at Pease and to fully implement the redevelopment process. Numerous issues with land transfer, infrastructure condition, environmental clean-up, zoning, interlocal agreements and a changing marketplace were dealt with and eventually overcome in the process. As the first BRAC installation "out of the gate", Pease served as a primary training ground for both military and community officials involved with base closure and redevelopment nationwide.

Despite the long start-up period, Pease International Tradeport is one of the most successful economic development projects in New England, with over 5,000 high-quality jobs in such areas as pharmaceuticals, computer networking and aircraft maintenance. Over 1 million square feet of new space has been constructed (all on leased land) and the PDA has reached financial "break-even" and is paying back the state's original investment.

i) Aroostook County, ME – Loring Air Force Base:***Statewide Support for Rural Development***

The 1991 BRAC closure announcement that closed Loring on September 30, 1994, had a devastating economic impact on the rural community of Aroostook County, Maine. The six (6) legislatively defined impacted communities of Limestone (the majority of the Loring property is located within the municipal boundaries of Limestone), Caribou, Caswell, Fort Fairfield, Presque Isle and Van Buren suffered the brunt of the economic impact of losing 1,100 civilian jobs and a Loring community that consisted of 10,000 people, which essentially represented the largest community in northern Maine.

LRA Structure: With the assistance of Federal and State officials, shortly after the closure announcement in 1991, the local community formed the Loring Readjustment Committee (LRC) for the purpose of exploring governance and redevelopment concepts. After much deliberation and significant public input, in the summer of 1993, a decision was reached to form the Loring Development Authority (LDA) as the successor to the LRC. Maine's Governor John McKernan introduced emergency legislation that created the LDA, and the Maine Legislature approved the structure of the LDA that empowered thirteen Board of Trustees (initially 11, but later expanded by the Legislature to 13) with the task of redeveloping Loring. These Trustees are all nominated by the Governor, are required to have a public confirmation hearing before the Legislature's Business & Economic Development Committee, and a confirmation process before the Maine State Senate. Of the 13 Trustees, seven (7) are required to reside in one of the legislatively identified impacted communities noted above, four (4) are required to reside outside of Aroostook County, one (1) must be a member of the Governor's cabinet (historically it has been the Commissioner of the Department of Economic & Community Development), and the remaining member can reside anywhere in the State of Maine. The governance of this authority with Trustees that are from all corners of the State of Maine has proven to be an effective model that has produced significant results.

LRA Staff: The LDA chose to be its own master developer and immediately went on a national search to hire a President and CEO who understood the base closure process, had a business background, and had a proven track record of success. This search led to the hiring of Brian Hamel, who had previously served in the capacity of Director of Finance, Administration and Marketing at the Pease Development Authority (PDA), the first base to close under the BRAC process in the 1988 round of closures. In addition to his work at the PDA, Mr. Hamel had a background in the private sector as a certified public accountant with an international accounting firm in Boston, Massachusetts, and held executive management positions at a large manufacturing conglomerate in Portsmouth, New Hampshire. Mr. Hamel has led Loring's successful development since Loring closed in 1994 and he represents one of the longest tenured CEO's of an LRA in the country. The LDA created a team of experts in various areas (i.e.: finance, marketing, real estate development, facility

management, government and legal affairs) that has proven to be creative, persistent, aggressive, professional and results driven.

Development Challenges: From a land mass perspective, Aroostook County is as large as the states of Connecticut and Rhode Island combined, but only has a population of approximately 75,000 people. The County, as it is commonly referred to in Maine, is the northern most county in Maine, borders the Canadian provinces of New Brunswick and Quebec, and has a winter season that has its ample share of winter weather. The County has also experienced a 15% decline in population over the last 15 years, and the economy has been negatively impacted by Loring's closure, a downturn in the agricultural (i.e.: potatoes) community, challenges in the forest products industry, and the disappearance of Canadian retail traffic due to the devaluation of the Canadian dollar and the imposition of taxes on goods brought back across the border into Canada. Lastly, the State of Maine has the dubious distinction of having one of the highest tax burdens in the United States due to its many fiscal challenges. All of these factors have the tendency to create negative perceptions from an economic development perspective, and these perceptions have proven to be the most difficult, although not impossible, to overcome.

Loring's Uniqueness: The LDA recognized very early that it was arguably the most difficult base closure redevelopment challenge in the country due principally to its perceived locational challenges coupled with the financial realities that the State of Maine could not afford to invest significantly in Loring's redevelopment. Therefore, the LDA was forced to very aggressively pursue unique funding and property transfer mechanisms that were not the status quo in the traditional base closure process. By working closely with its Congressional delegation, the LDA was able to seek substantial Federal funding for the planning and development process through the Department of Defense's Office of Economic Adjustment and the Economic Development Administration. In what has proven to be somewhat of a coup in the base closure process, the LDA was able to convince the Federal government of its unique and challenging status and as a result was able to get legislation passed that resulted in a no-cost transfer of the property to the LDA under an Economic Development Conveyance, and negotiated a precedent setting agreement with the Air Force that resulted in a \$30+ million investment through 1994 to protect and maintain the facility beyond the transfer date of 1997. Without question, the LDA's ability to secure this funding and the unique property transfer agreement has proven to be the cornerstone of the LDA's many successes.

In Hindsight: Although there have been many success stories at Loring, there are a few things where the LDA would have desired different results. First, 11 years after closure, the LDA still does not have its airfield instrument landing system (ILS) certified by the FAA for private use due to the massive bureaucracy and procedures involved to do so. In hindsight, this certification should have been a requirement of the property transfer. Because of these delays, many aviation opportunities have been lost. Secondly, although the Legislature granted the LDA all the powers of a municipality and corporation, it did not grant the LDA with taxing authority on

property in which it has title to and development control over. The LDA provides all of municipal services (i.e.: fire, ambulance, police, roadway maintenance), but the community of Limestone retains the right to tax the property upon sale to a third party even though Limestone provides no services. In hindsight, the LDA's enabling legislation should have granted it taxing authority on the former Loring Air Force Base property. Thirdly, there have been some challenges as it relates to transfers of Loring property to other Federal entities that have priority over the LDA in the property disposition process. In hindsight, the LDA should have insisted upon Federal legislation that transferred all property to the LRA and then subsequently allow the LRA to negotiate directly with the interested Federal agency to ensure that the goals and objective of the Federal entity were consistent with the development goals and objectives of the LDA.

Loring's Successes: Although the general consensus was that Loring could not be successfully developed due to its remote northeast location, Loring is one of the models for rural military base closure. In 11 short years, Loring has attracted of 20 entities to what is now referred to as the Loring Commerce Centre, and these entities collectively occupy over 1.8 million square feet of facility space and will soon employ 1,500 people, which represents over 100% replacement of the civilian jobs lost when Loring closed its military doors. Loring's successes have contributed over \$650 million dollars to Maine's economy and have helped curb the out migration of population that has plagued this region for decades.

j) Watertown, MA – Former Watertown Arsenal:

Elected Citizen-Run "Authority" vs. Publicly-Appointed "Development Corporation"

In weighing the importance of business and professional membership on any LRA reuse organization, there is no better example nationwide than in the Town of Watertown, Massachusetts. Watertown actually experienced two separate military base closures during the past forty years – one a dismal failure related directly to the LRA; the other a huge success.

Citizen-Based Authority Permits Salvaging: In the mid-1960s, DoD and the Army announced the closure of the main historic Watertown Arsenal. Under a "town meeting" form of government, individual citizen members of the Watertown Redevelopment Authority were literally "elected" at the annual town meeting. The Authority purchased the main historic properties from the Army for \$5.5 million, and initially attracted strong prospect interest in the site – including an initial interest from Polaroid Corporation as its national headquarters.

The citizen-based Redevelopment Authority attempted to "manage" and market the Arsenal property over a fifteen-year period without professional real estate advice. The Authority permitted extensive looting and salvaging, and its operations were "riddled with problems and infighting among the Authority members." With a follow-on Federal planning grant in the mid-1970s, the town was able to structure and sell the original Arsenal facilities to the New England Development Corp., which then renovated and restored the property into the successful Arsenal Mall.

Professional Town Economic Development “Corporation” Achieves Arsenal Success: The disappointing citizen “Authority” experience prompted the Town of Watertown to seek home rule legislation for the town through a petition to the Massachusetts Legislature. Under the new home rule provisions, an appointed Town Manager could then recommend appointments to the Town Board for public commissions and corporations.

This home rule progress coincided with the DoD December 1988 BRAC announcement, calling for the closure of the Army Materials Lab located on a separate 31-acre parcel, which had been designated by EPA as a Super Fund site. The Town Manager recommended, and the Town Board appointed nine new members with blue-ribbon business and professional expertise, to the autonomous Watertown Arsenal Development Corporation. This publicly appointed entity was organized as a Section 501(c)(3) non-profit economic development corporation. The Corporation’s professional background represented a “black and white” contrast to the previous citizen “authority” development process for the Arsenal.

The designation of the Watertown Arsenal Development Corporation as the town’s management entity for the new Arsenal property also set an important precedent for DoD/OEA in recognizing other “Local Reuse Authorities” under Section 2905 of the 1990 BRAC law. Previously, DoD had insisted that proposed local authorities must be “instrumentalities of government,” and by implication reflect the “full faith and credit” of the affected local jurisdiction. This DoD “full faith and credit” criterion was also in conflict with previous DoD practice in working with an autonomous Section 501(c)(3) non-profit economic development corporation (such as the Westover Metropolitan Development Corp., discussed separately). Within a short time, DoD/OEA did accept the Watertown Corporation as a DoD-recognized Local Redevelopment Authority.

The Corporation undertook the needed base reuse planning process, leading to the purchase of the remaining 31-acre Arsenal site from the Army under an Economic Development Conveyance authority for \$7.5 million – with reasonable terms provided by the Army. The Corporation conducted a nationwide competition for a developer, and selected O’Neill Properties as its master developer – with a net return of about \$20 million to the Town of Watertown.

The developer financed and completed the total restoration of the Arsenal site while the town provided \$1 million for rebuilding the major street fronting the property. After some initial negotiations with A.D. Little, O’Neill Properties subsequently sold the Arsenal site to Harvard Business School Publishers for \$165 million, as the Business School’s nationwide printing and distribution center.

Lessons from the Arsenal Reuse: From an LRA organizational perspective, the important lessons in the Watertown Arsenal case are: (1) the designation of an autonomous Section 501(c)(3) non-profit economic development corporation as the

LRA guiding the base reuse process on behalf of the Town of Watertown, and (2) the publicly-appointed selection of “blue-ribbon” business and professional members for the Corporation’s Board. The Watertown Corporation has effectively completed its mission; the Arsenal property is on the local tax rolls, and the Corporation is concluding its operations within the next few weeks.⁶¹

k) Chicopee-Ludlow, MA – Former Westover AFB:

Regional/State Cooperation

The series of DoD base closures announced in April 1973 (pre-BRAC), resulted in major economic impacts in both Rhode Island and Massachusetts. At Westover AFB, the Air Reserve retained the airfield and runways, but the realignment resulted in the loss of 4,000 military personnel and the related disposal of 2,300 acres at the Base. The City of Chicopee and the Town of Ludlow were severely affected by the loss of about \$54 million in annual military payrolls.

Two-Fold State and Local Organizational Steps: The Commonwealth of Massachusetts, under the leadership of Governor Francis Sargent, took immediate action to create the Massachusetts Land Bank, which was charged in part with assisting the affected communities in purchasing the excess base property from GSA⁶². Equally as important, the Land Bank staff worked jointly and cooperatively with the DoD Office of Economic Adjustment on each of the Massachusetts closure or realignment actions. The Land Bank, now known as MassDevelopment, is still active today on a wide range of economic development project financing efforts, and played a crucial role in the Fort Devens reuse efforts during the mid-1990s.

The governor and local leaders immediately formed the 17-member Westover Task Force, which first met in July 1973. The task force, representing state-elected officials, local leaders, and business leaders in the region, was charged with recommending an appropriate “organizational structure and process for converting Westover to civilian use.” In part, the task force had to find a mechanism by which the Westover reuse process could be conducted independently of the local Chicopee and Ludlow political process and without affecting the financial capacities of the two localities.

Implementation LRA: The final recommendations of the Westover Task Force included a “uniquely private sector approach” for the creation of the Westover Metropolitan Development Corporation (WMDC), a quasi-public body with a nine-member board of directors. Special legislation was enacted by the State Legislature and signed by Governor Sargent on August 1, 1974. This empowered WMDC “with all the tools of a private corporation together with the ability to issue revenue bonds

⁶¹ Source: John Airasian, Chairman, Watertown Arsenal Development Corporation, (617) 924-8240.

⁶² At the time (1973), there was no authority under the 1949 Federal Property & Administrative Services Act by which the General Services Administration could transfer or discount the sale of excess Federal property for job producing purposes. The Massachusetts Land Bank provided this necessary property financing mechanism for the affected communities in the Commonwealth. The authority for the sale or transfer of BRAC property is now authorized by Section 2905 of the Base Closure & Realignment Act of 1990, as amended.

as needed.” Finally, the legislation did not place any financial burdens on the two local jurisdictions or the State.⁶³

The WMDC board of directors is comprised of three representatives from the City of Chicopee, two members from the Town of Ludlow, and four at-large members drawn from the private sector. The chairman has always been selected from the at-large group and for many years was a stalwart local industrial leader. It is important to note that without this state-local economic development corporation mechanism – similar to a Section 501(c)(3) non-profit corporation – it is very difficult to address base closure impacts affecting two or more local jurisdictions without imposing a financial obligation or burden on the affected local towns or cities.

Westover Economic Development Progress: With a series of GSA property purchases from 1976 to 1988, WMDC assembled and developed four major industrial parks, including the recently created Airpark North. In 1981, WMDC also negotiated a joint use agreement with the Air Force Reserves for the Westover airfield – with a \$1.9 million passenger terminal⁶⁴ and office complex located in the former Air Force alert facility. By mid-2001, there were 65 companies with just over 4,000 employees located on the Westover complex.⁶⁵

More recently, the State has removed its five-percent sales tax on aircraft parts and equipment, allowing WMDC to attract the new Eclipse and Pogo aircraft overhaul facilities, involving a \$1.9 million rehabilitation of the former B-52 hangars. WMDC has nearly redeveloped all the former Westover AFB land, and is working with the Air Reserve Base Commander on an Enhanced Use Leasing privatization proposal for some of the non-excess Air Reserve lands at Westover, which will also strengthen the Reserve mission at the Base.⁶⁶

WMDC also now serves an important economic development management role for the region. In recent years, the WMDC staff has assumed the property management and marketing role for the “Westmass Area Development Corporation” – formerly a 50-year old private not-for-profit company promoting economic development – operating in cooperation with the Economic Development Council of Western Massachusetts. The WMDC staff performs all the strategic planning and marketing functions for seven industrial parks, with 3,000 acres of industrial-office property (including the Westover airparks) and employing about 15,000 people in the region.

In summary, the creation of a quasi-public, private-sector-oriented development corporation is an important Local Development Authority organizational option,

⁶³ Allan W. Blair, “Westover Airparks & Metropolitan Airport,” *Economic Development Commentary*, Fall 2001; reprinted in John E. Lynch, ed., *Case Studies in Base Conversion* (National Association of Installation Developers, Washington, July 2002), pp. 60-63.

⁶⁴ The airport terminal was built in hopes of enhancing scheduled air service to the region. After several stops and starts, air service was cancelled in favor of nearby Bradley Field, which serves the greater Hartford/Springfield area. The air terminal is sometimes used for charter activities.

⁶⁵ Blair, *ibid.*, p. 62.

⁶⁶ Robert Pyers, Director of Marketing, WMDC (413) 593-6421

where the regional economic impact or even the physical base property boundaries affect more than one jurisdiction. This LRA publicly appointed corporation organizational option is also important where a jurisdiction wishes to avoid any future “full-faith-and-credit” obligation related to the base redevelopment.

I) Fauquier County, VA – Vint Hill Farms Station:

Self-Financed LRA, Successful in an Environmentally Sensitive Locale

The 1993 BRAC closure announcement for the Army’s Vint Hill Farms Station, 40 miles west of Washington, prompted careful attention to the role of a self-financed LRA development entity. The Vint Hill LRA had to be responsible to, but financially independent from, the Fauquier County government. Any effort to create new job opportunities at Vint Hill Farms also had to recognize the “no-growth” influence of the Piedmont Environmental Council, which a year earlier had soundly defeated a Disney Corporation proposal for a large 2,500-acre “America theme park,” about six miles away in the small village of Haymarket in Prince William County.

Initial Planning Phase: The Fauquier County Board appointed a diverse 17-member citizen-business task force, chaired by a local banker to serve as the “Planning LRA.” The task force carefully included an “advisory member” from the adjoining Prince William County (which nearly borders on Vint Hill Farms), to limit the urban housing-the-homeless pressures on the Vint Hill site.⁶⁷ After considering four alternative plan designs, the planning LRA focused on an employment-oriented, mixed-use “village” with about 800 residents and 4,000 jobs, to be developed over a 20-year horizon. The goal was to retain quality high-tech jobs within Fauquier County.

An innovative assignment was given to the planning consultants hired by the LRA – calculate a long-term (20-year) financing analysis for each of the four alternative plans in comparison with the preferred final Vint Hill plan. The goal here was to ensure that the Vint Hill redevelopment project could be financially self-sustaining, and function without any future financial burden on the County. This Vint Hill practice of relating any land use plan directly to the individual plan’s long-term financial implications has remained a steadfast principle now for many years.

Implementation Phase: After a lengthy public hearing process – influenced by the long-term financial and job creation benefits from the plan – the County Board of Supervisors approved the final Vint Hill plan. The Board also endorsed the task force’s proposal that a new public authority be created, independent of the County, to implement the plan. However, this quasi-public authority concept ran into a conflict

⁶⁷ Under Section 2905(b)(6) of the 1990 Base Realignment & Closure Act, as amended, housing-the-homeless needs from the jurisdiction represented on the planning LRA must be given special attention in compiling a base reuse plan that balances housing the homeless needs with the job creation goals of the community.

with new DoD policy that encouraged LRAs to function as “instrumentalities” of the affected county or city.⁶⁸

In searching for an alternative solution to a self-sustaining LRA, the County discovered a previously unused section in the State Code entitled “Authorities for Development of Former Federal Areas” that allowed the Governor to appoint members to independent authorities at former federal sites based on the request of local officials. The Vint Hill Economic Development Authority (VHEDA) was then created in early 1996, with the seven members on its board appointed by the Governor at the recommendation of the Fauquier County Board of Supervisors. VHEDA was also empowered by the existing state authority with all the needed land development authorities, including the ability to issue tax-exempt bonds for public infrastructure.⁶⁹

LRA Organizational Option – VHEDA retains a “Development Advisor”: Vint Hill Farms became one of the first three LRAs nationally that retained minimum staffing levels by competitively selecting an outside “development advisory” firm or partner. Miller & Smith Inc, a residential developer, served as the VHEDA partner and contractor in providing a range of contract services for a fee, including infrastructure design and engineering, contractor selection and management, and construction supervision. The development advisor also assisted VHEDA in securing initial long-term financing. Title to the Vint Hill lands, however, remained with the VHEDA until resold. The development advisor also served in a joint venture role with the LRA on specific residential and commercial projects. The “advisor’s role” at Vint Hill was modified over the years as new development conditions arose.

Vint Hill Progress to Date: Despite the early “free-fall” in the Northern Virginia office and industrial market starting in March 2001, Vint Hill steadily attracted nearly 40 small firms with 930 employees, occupying over 647,000 square feet of renovated existing buildings. VHEDA has also begun lot development for commercial uses, with five lots subdivided and committed (or sold) to date. A new 46,000 sq. foot industrial flex condominium is under construction, and all of the flex condominium units have been pre-sold.

In terms of public sector growth, in 1998 the Federal Aviation Administration chose Vint Hill from 43 other sites to establish its \$95 million Potomac Consolidated Air Traffic Control Center, with 350 employees. One of the driving financing sources for

⁶⁸ From all indications, the DoD General Counsel’s office was seeking local participation in the base environmental cleanup process – including future local financial contributions. The DoD “instrumentality” concept, however, would have precluded self-sustaining LRAs, operating across jurisdictional boundaries or non-profit Section 501(c)(3) corporations, such as the Westover Metropolitan Development Authority in the 1970s and 1980s. DoD would later retreat from this “instrumentality” requirement, as highlighted separately in the Watertown, Massachusetts local reuse authority experience.

⁶⁹ This background on the Vint Hill project was largely drawn from: Owen W. Bludau, “Base Reuse in an Environmentally Sensitive Locality,” *Economic Development Journal*, Winter 2002, reprinted in: John E. Lynch, ed., *Case Studies in Base Conversion* (Washington: National Association of Installation Developers, 2002), pp.54-63.

VHEDA has been the sale of 300 finished residential home lots, generating funds for commercial infrastructure and helping to create a “village environment.” In total, over \$9 million in new roads and infrastructure investment has been made by the VHEDA – financed entirely from real estate sales and leases. Vint Hill has clearly been a financially self-sustaining success

m) Vallejo, CA – Mare Island Naval Shipyard:

City Retains a Private Sector “Master Developer” to Accept Investment Risk

The historic Mare Island Shipyard, the first Naval facility on the West Coast, was identified for closure in the 1993 BRAC, with the loss of 7,600 skilled Navy civilians and about 1,960 Navy personnel. The Shipyard itself was located on a 3.5-mile long island, with two bridges across Mare Island Strait from the City of Vallejo. The environmental analysis of the property indicated a cleanup cost of about \$200 million, possibly lasting upwards of 20 years to complete. The city showed remarkable resilience in its early community-wide contingency planning, and in seeking a “Master Developer” to help finance the major investments needed in redeveloping the Shipyard.

Initial Shipyard Base Reuse Planning: The city used the summer and fall of 1993 to compile a citizen-worker reuse planning effort, focusing on the 10.5 million square feet of usable buildings and the Shipyard’s access limitations. In effect, the 60-member initial planning LRA devoted its efforts to identifying future Shipyard opportunities and a “Conceptual Reuse Plan” even while the 1993 BRAC Commission was weighing the DoD closure recommendations.

Following the final Commission’s September 1993 decision confirming the final Shipyard closure, the city retained an independent Urban Land Institute (ULI) panel analysis of its initial Mare Island Conceptual Plan. The city prepared 25 specific questions for the January 1994 panel related to the Plan’s: market reality, immediate options for maintaining jobs, long-term optimum land uses, opportunities for private sector development, and realistic land disposition strategies and management approaches.

The ULI panel concluded that the Mare Island “transition process would take 25 or more years to be fully realized” – with little opportunity to attract Navy or private shipbuilding activity. The panel also affirmed the objectives and the logic of the “can-do” citizen-worker’s Conceptual Plan. Over the long term, the panel suggested “the conversion of Mare Island will be a positive, though initially painful, change.”⁷⁰

Implementation LRA: Both the ULI panel study and the later Mare Island base reuse plan recommended the formation of a Section 501(c)(3) industrial development corporation to protect the city from future financial liabilities during the reuse effort. Instead, the city decided to serve as the “implementation LRA” – with the City

⁷⁰ Urban Land Institute, “Mare Island Shipyard, Vallejo, California: An Evaluation of Reuse and Economic Development Opportunities,” (Washington, 1994).

Council approving all property transfers and all leases in excess of five years.⁷¹ The city staff assumed responsibility for property management and for approving short-term leases, mostly used to attract movie producers for seven films that were shot at Mare Island.

The “Master Developer” Concept at Mare Island: The overwhelming financial investment demands on the City of Vallejo and the lengthy Mare Island environmental cleanup schedule prompted the city to decide upon retaining a private sector “master developer” as its partner for the Mare Island redevelopment. The master developer concept called for the city to accept title transfer for the Shipyard property from the Navy, and then convey title immediately to specific Shipyard development parcels to its master partner. The master developer would also assume the financial investment responsibilities for the Mare Island project, and would manage the environmental cleanup program.

In 1997, after a nationwide competitive selection process, Vallejo retained Lennar Properties as its master developer-partner. Mare Island thus became the first example nationwide where the master developer approach had been adopted in organizing a military base reuse effort. The initial Lennar-Mare Island development concept involved the creation of about seven million square feet of commercial-industrial space with 1,400 homes on 650 acres, while protecting the historic and open space attractions of the site. Once the majority of the re-development is completed (referred to as the “break even point”), the master developer will receive its project cost plus an Initial Return on Investment (IRR) of 25% of project cost. All revenue above and beyond the project cost plus IRR will be shared equally between the Master Developer and the city. The break-even point is anticipated to be in calendar year 2012.

Early Property Transfer and Environmental Cleanup: In 1999, the Military Departments proposed a new legislative initiative in the 2000 Defense Appropriation Act (Section 334) that modified the existing CERCLA rules,⁷² allowing the transfer of BRAC properties to an LRA prior to environmental cleanup. This Section 334 “early transfer process” offered the City of Vallejo and Lennar the opportunity to receive fee-simple title and to clean up the Mare Island property during the redevelopment process. In March 2002, the city and the state accepted title to almost 4,000 acres from the Navy – together with \$131 million in Navy environmental cleanup funds to be paid over a six-year period. To date, the city has received title to about 1,123 acres (and conveyed this title to Lennar-Mare Island) of a total 1,450 acres to the city; the balance of the 4,000 acres largely involves tidal and habitat lands intended for transfer to the State.

⁷¹ Gil Hollingsworth, Director of Economic Development, City of Vallejo, (707) 648-4444.

⁷² The “Comprehensive Environmental Response, Compensation & Liability Act,” 42 U.S. Code 9620.

- **Vallejo-Mare Island Redevelopment Success:** The city's "master developer" approach has provided the necessary investment resources and timely environmental cleanup to proceed effectively over the past four years, with the following results:⁷³
- Over 2,000 jobs have been developed on Mare Island.
- 75 businesses have opened on the property.
- The city and its partners (principally Lennar) have invested over \$30.7 million (including some grants) in capital investment and infrastructure maintenance.
- The first phase of the 1,400 residential unit project is under construction.
- The Touro University medical college has over 400 medical students training on-campus.
- Six federal agencies have invested \$29 million in new Mare Island offices.
- Over \$122 million has been generated and invested in the Mare Island environmental remediation, which is still underway.

The vitality in the city's economy over the past few years is also evident in the new off-Island projects such as the Marina Vista Park-Waterfront (linking the Mare Strait waterfront to the downtown), the Triad twelve-block downtown development project, and the revitalization of the Solano County fairgrounds area – with a \$1.2 million square foot retail project. Over the past two years, the City of Vallejo has witnessed a sharp reversal in its city financial picture, from a normal \$9-to-\$10 million deficit to a surplus of \$4-to-\$5 million annually. It would have been very difficult for Vallejo to succeed both with the 25-year Mare Island project and with a balanced revitalization effort for the city itself without the management capacity and investment of its Lennar-Mare Island master developer for the Shipyard project.

n) Alexandria, VA – Cameron Station:

Allow the City's Land Use Zoning and the Real Estate Market to Guide the Reuse Process

For a 1988 BRAC property with immense residential market potential, the City of Alexandria allowed its normal city land use zoning process to guide the reuse of Cameron Station. The Station was a 164-acre Army facility supporting the Defense Logistics Agency (DLA), and was located just off I-95 near the Capital Beltway. DLA itself would be relocated about 10 miles away to new facilities at Fort Belvoir, with minimal job or economic impacts on the city.

The city created a citizen advisory group, but there was little need for a formal "local redevelopment authority." Essentially, the city believed that the strong real estate market itself could guide the reuse process. The city insisted that the Army transfer about 76 acres to the city for park purposes, as a public benefit conveyance, in order to support a new major residential project. The city then adopted its new

⁷³ City of Vallejo, "Major Development Updates, March 1, 2005," Economic Development Division, and "Mare Island Early Transfer Program."

comprehensive plan for the property, and allowed the Army to sell Cameron Station at public bid sale.

A regional housing developer – Greenvest LLP – was the high bidder, and purchased the Cameron Station site for \$33.2 million to build a 2,500-unit townhouse-condominium project. The Cameron Station project involved the removal of 700,000 cubic yards of former warehouse structures, construction materials and concrete. The Cameron Station townhouse-condominium project reached the marketplace in time for the 1999-2004 residential market demand explosion in Northern Virginia.

The only minor concern with the market-driven Cameron Station planning model expressed by the City Planning Department is that Greenvest itself was not previously familiar with the City development process. The specific concern was that high sales-purchase price for the property may have prompted a more intensive project (2,500 units) than the city would have preferred over the long-term.

But, in terms of the overall property transfer process, the Cameron Station reuse effort, by relying on a strong real estate market, actually called for minimal city involvement by the city, even when acting without a formal “local reuse authority.”

o) Weymouth, Massachusetts – Former Naval Air Station South Weymouth
False Starts Have Not Reduced Interest in the Former Naval Air Station

In response to the Department of Defense’s decision to close the Naval Air Station, South Weymouth (NASSW), the three host communities (Abington, Rockland and Weymouth) developed a locally initiated effort to create a redevelopment plan for the former Naval Air Station. The former air station is located 12 miles southeast of Boston and consists of 1,442 acres of land. The facility was closed in September of 1997, but the planning process exceeded two and half years with over 150 public meetings to develop various potential reuse alternatives.

Initial Planning efforts: The Naval Air Station Planning Committee (NASPC), a diverse organization of 33 members representing the local communities, elected officials and gubernatorial appointees in various area of expertise, was charged with evaluating alternative development options for the site. The NASPC’s primary goals included maximizing economic growth and job creation for the area residents, while preserving and enhancing the site’s environmental and recreational resources. In 1996, the NASPC conducted a market analysis. There were three major findings of the analysis were considered critical to developing a competitive advantage for the successful redevelopment of the site. These included:

- Enhanced access to the regional transportation infrastructure, principally Route 3;
- Development of a master planned and permitted site managed in a predictable, business-like manner with sufficient infrastructure funding to prepare the site for redevelopment; and
- An aggressive marketing program.

Building on these three recommendations, the NASPC crafted a redevelopment plan which consisted of three separate documents, including a reuse plan, which created a framework for the redevelopment; zoning bylaws, which provided the procedures for implementing the reuse plan ensuring local control of the redevelopment and addressing the need to create a unified permitting process; and enabling legislation, which provided the authority to acquire the site from the Navy ensuring orderly, locally-controlled development with the sole purpose of implementing the reuse plan within the parameters of the zoning bylaws.

Initial Reuse Plan: The development program of the mixed-use reuse plan included a total development entitlement of 3.5 million square feet of space to be occupied by uses such as office, research and development, light industrial, medical, hotel and restaurants, enclosed live entertainment, shopping malls and village retail centers. A golf course and up to 700 units of market rate senior housing were also included. Transportation improvements needed to support the program included the widening of Route 18 and a direct connector road to Route 3 to take advantage of the commuter rail station located on the site as an inter-modal facility. However, as discussed below, the original reuse plan was later changed to reflect changes in the regional marketplace.

Zoning and Land Use Bylaws were approved by the three host communities, based on the initial reuse plan. The intent of these bylaws was to promote the development of the site with a unified structure between the three host towns in an expedited, yet thorough, review process resulting in “one stop permitting.” The unified permitting process is considered to be one of the most important factors contributing to the successful redevelopment of the former Fort Devens.

Implementation Process: On August 14, 1998, the enabling legislation was signed into law establishing the South Shore Tri Town Development Corporation (SSTTDC). The five-members of the Board of Directors are appointed by each of the communities (Two from Weymouth and Rockland, one from Abington) and serves as the one-stop approval body for all development within portions of the property (zoning and approvals on the perimeter of the site is left to the individual towns). The SSTTDC, through its enabling legislation, has broad authority to implement the reuse plan. These powers include the ability to buy and sell land, tax and collect tax revenue, negotiate economic incentives, and administer and issue all construction, operations and zoning permits, including approvals, licenses and special permits, eminent domain, and issue bonds. The SSTTDC has the ability to design the site in a manner that creates a first-class mixed-use facility benefiting the towns and region for generations with recreational land, quality businesses, and local jobs for local workers. This has been demonstrated by the Board’s adoption of the Smart Growth Mission Statement “to balance economic progress with environmental protection and quality of life” and an open space and recreation plan that protects the environment.

False Starts: Because of the location of the NASSW (just 12 miles south of Boston) and its size (at 1,440 acres it's the largest development site in Greater Boston), the property has generated significant interest from the development community. The reuse plan envisioned a mixed-use development with as much as 3.5 million square feet of development, as well as 700 senior housing units. The first major expression of interest was from a retail developer. The Mills Corporation envisioned a major destination retail center, which would include more than 1.5 million square feet. However, in order to implement the Mills proposal, a new major connector road would be required to enhance access to the property from Route 3 east of the site. This roadway carried a conceptual price tag of more than \$80 million, which was assumed to be picked up by the state. After numerous public meetings, the SSTITDC Board determined state funding was not likely to be forthcoming and that the Mills plan was not viable, and that it would probably not result in the type of economic recovery that the host communities were seeking.

The SSTITDC then refocused the development plan to reflect more of an office and R&D focus, and created a three-phase development program that included several million square feet of facilities, as well as 700 age-restricted housing units. This plan was submitted for review under the Massachusetts Environmental Policy Act (MEPA). The MEPA review determined that the three-phase plan could not be implemented, due to a variety of concerns including water and wastewater treatment capacity. The MEPA review permitted the first phase of development, including 300 of the housing units and 300,000 square feet of commercial space, but did not allow for any additional development.

Given the restrictions imposed by the MEPA review, the SSTITDC Board issued a request for proposals (RFP) from developers to acquire and redevelop the site. The goal of this RFP was to transfer responsibility for redevelopment to a third party, while protecting the interests of the SSTITDC and the host communities. The RFP generated a number of responses, and two firms were interviewed. LNR Property Corporation was selected as the Master Developer for the property. LNR has developed a smart growth-oriented plan that would create a live-work-play environment for its residents. However, the plan, known as The Village Center Plan, involves substantially more housing than envisioned in the original reuse plan. The Village Center Plan included 2,850 housing units, as well as up to 2 million square feet of office/R&D/commercial space. Since the LNR plan is so different from the original reuse plan, the changes must be approved by the host communities. In addition, new zoning is required, which will also have to be approved by the host communities. These votes are scheduled to occur in the spring and summer of 2005.

The land for the original Phase I of the project was obtained from the Navy under a no-cost EDC, along with some transfers for open-space and conservation purposes. The remaining property (a majority of the developable land) is still owned by the Navy, which expects to be paid a negotiated price since no-cost EDC's are no longer mandated under BRAC.

Lessons from Reuse: The SSTTDC has broad powers to implement its reuse plan, including the ability to buy and sell land, tax and collect tax revenue, negotiate economic incentives, and administer and issue all construction, operations and zoning permits, including approvals, licenses and special permits, eminent domain, and issue bonds. Despite its extensive powers, the SSTTDC has not been able to implement its reuse plan during the more than six years since the enabling legislation was signed. Although the NASSW site is considered highly developable and marketable, SSTTDC has not been able to attract development to the site, due in part to constraints that the Federal government did not have, such as traffic mitigation and water/wastewater issues. Given changes in the marketplace, the plan proposed by LNR is dramatically different from the original vision for the site, and therefore, both a new reuse plan and new zoning bylaws must be approved by the host communities.

APPENDIX B - MARKET & ECONOMIC CONDITIONS

A. Introduction

This report provides additional background data for the BRAC Preparedness Strategy for the Town of Brunswick, which focuses on the economic environment in which the Navy property operates and that will influence the ultimate redevelopment of the base. Military uses of the 3,000+ acres are driven by the specific mission requirements of the Department of Defense and for the most part, are not directly related to the economy of the state or region. Indirectly, the availability and cost of housing and labor (civilian) does play a role in the operations of the Base because of the Navy's need to employ civilian workers and to house military personnel. Under reuse, future market conditions combined with local and state land use regulations, will impact the type of uses that are financially feasible to develop on the property, as well as serve as the underlying foundation for valuing the various property elements.

The economic and demographic trends in the Mid-Coast Region and in Maine provide the foundation for the strengths, weaknesses and opportunities for the region, and the redevelopment of Brunswick Naval Air Station (BNAS). This section analyzes the key demographic and economic indicators, including population, households, age demographics, household income trends, employment trends, major employers, leading occupations, salary and wages, real estate and market trends, and housing trends.

B. Economic Summary of Major Findings and Conclusions

The following is a summary of the major findings and conclusions based on the regional and economic market trends:

- The region's population growth is shifting from Cumberland County toward Sagadahoc County. Cumberland County's population increased by 9.2% between 1990 and 2000, compared to an increase in Brunswick of only 1.3% over the same period. Over the next 5 years, the population is expected to grow at a faster rate in Brunswick compared to Cumberland County. Meanwhile, Sagadahoc County is expected to grow the most between 2004 and 2009 compared to the State of Maine, Cumberland County and the Town of Brunswick. These demographic shifts are driven in part by the demand for more affordable housing options outside the greater Portland metro area.
- The number of households is expected to increase approximately 1.3% per year in Brunswick between 2004 and 2009, adding over 580 new households.
- The population in Brunswick is getting older as the region continues to prosper as a retirement community and the stable population continues to age. The highly educated population in Brunswick and Cumberland County increased substantially between 1990 and 2000.

- Household income, adjusted for inflation, did not increase between 2000 and 2004. In 2004 dollars, the 2000 household income was \$44,349 while the 2004 household income was \$44,332.
- Employment trends indicate a shift from manufacturing industry to a more service sector economy. Occupation trends are consistent with the employment trend, indicating a shift from production occupations to real estate, finance and insurance, and other service occupations.
- The largest industries in the region that continue to flourish are the health care industry, manufacturing, retail trade, finance and insurance, and professional scientific and technical services. The largest employers in Brunswick include Bath Iron Works, BNAS, Bowdoin College, Mid Coast Health Services, Town of Brunswick, LL. Bean, Parkview Hospital, MBNA, Wal-Mart, Arrowhart Cooper Industries, Hannaford Brothers, Downeast Energy, Shaw's and Brunswick Publishing.
- The real estate market in southern Maine continues to grow and improve, with substantial price appreciation in recent years. The demand for industrial and commercial land north of Portland is expected to continue as sites become sparser and prices continue to increase in close proximity to downtown Portland. Various parcels are available throughout the Brunswick region to develop business and industrial parks and there is an identified long-term need for more sites.
- The office market surrounding the Greater Portland Region has been performing exceptionally well compared to its regional counterparts in Southern New Hampshire, Boston, and Hartford. While there is some evidence of enhanced demand for office space outside of the in-town and suburban Portland markets, its strength is generally untested in the more rural communities.
-

In general, the current and short-term forecasted real estate market trends affecting southern and coastal Maine support the redevelopment of BNAS. While the demand for housing of all types leads the market, there is also moderate demand for office, commercial and industrial space and land that is being driven by the eastward shift in regional population growth from the Portland metro area.

C. General Economic Indicators

1. Local demographic characteristics

a) Population Trends

The population in Brunswick is characterized by a stable population base with slight growth between 1990 and 2000. Recent trends are consistent with the population trends indicated in the last 20 years. The population in Brunswick increased by 1.3% between 1990 and 2000 to 21,172 people. The population is expected to increase by nearly 7.4% by 2020 to 22,755, a less than one percent annual increase per year.

The population in Cumberland County, on the other hand, increased 9.2% from 1990 to 2000 compared to the 1.3% increase between 1990 and 2000 in Brunswick. The population increase in the overall County, but not in Brunswick, may be due to the larger population base and faster growth in the greater Portland region. In Sagadahoc County the population increased by 1,681 from 33,533 in 1990 to 35,214 in 2000 for an increase of nearly 5%, a slower rate than Cumberland County, however at a faster rate than Brunswick.

The Cumberland County population is projected to increase by approximately 3% between 2004 and 2009, an increase of 8,276 persons. The Brunswick population, on the other hand, is expected to increase by only 4.6%, or approximately 1,000 persons. Sagadahoc County is expected to increase by 5.2% between 2004 and 2009, an increase of 2,019 people. In real terms, Cumberland County is expected to increase the greatest between 2004 and 2009, however in percent terms; Sagadahoc County is expected to increase the most.

The Town of Brunswick is projected to perform in line, if not better, with the overall Cumberland County population. Although historic population trends are slightly lower than that of the County, the area is projected to grow at a faster rate through 2009. Figure VII-2 highlights the annual growth rates between 1990 and 2000, 2000 and 2004 and the projected annual population growth between 2004 and 2009 for the region.

The household population in Brunswick increased from 7,711 in 1990 to 8,150 in 2000, an increase of approximately 439 households or 5.6% over the ten-year period. The household population is expected to increase by 884 to 9,034 by 2009. Although the household population is not increasing drastically or at the overall rate of the State of Maine, it is remaining stable with small increases. Additionally Brunswick is

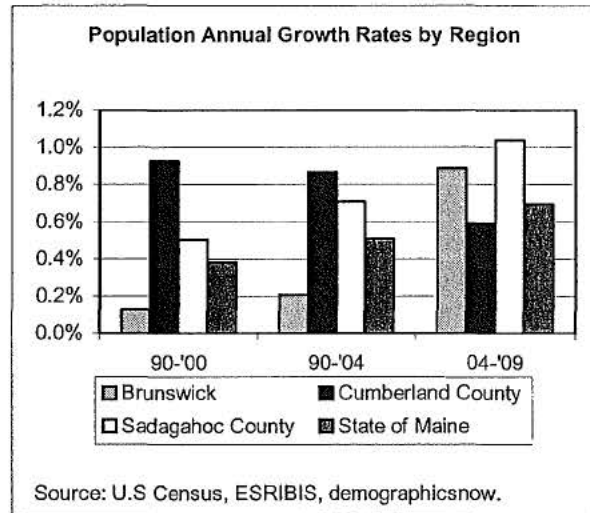


Figure VII-2

performing better than many other regions in Maine. Additionally it should be noted that school enrollment has not decreased, only shifted among age groups, further solidifying that the population base is stable.

The Cumberland County, Sagadahoc County, and the State of Maine household population grew at a faster rate compared to Brunswick. The household population in

Cumberland County increased by 1.4% between 1990 and 2004, while Sagadahoc County increased the greatest, at 1.5%. Meanwhile, the State of Maine increased 1.3%. Projections for household population growth follow recent trends between 1990 and 2004. However, between 2004 and 2009 the household population is expected to grow by 1.3% per year, in Brunswick, a faster rate in Brunswick compared to the period between 1990 and 2004. The household population is expected to grow at a rate twice as fast at 1.3%.

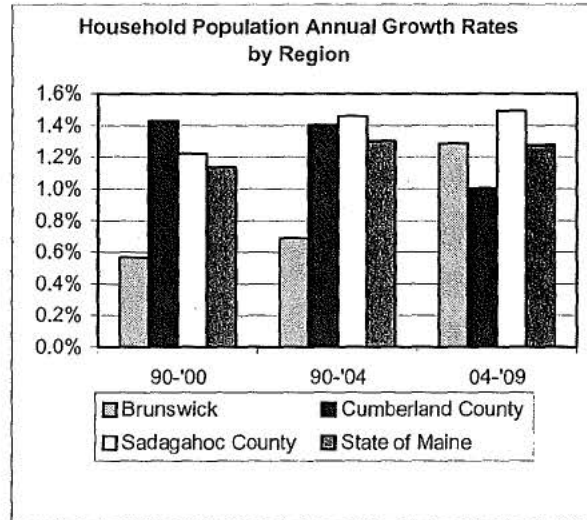


Figure VII-3

In summary, the household population trends follow suite with the population trends in all four areas. Additionally, the trends are not substantially below the State's rate of growth, therefore revealing healthy increases in population.

b) Population Age Demographics

The population in Brunswick is getting older as the region continues to grow as a retirement community and the current population ages. The median age in Brunswick has gradually increased from 24.3 in 1970, to 27.5 in 1980, to 31.0 in 1990 and finally to 35.5 in 2000 according to the U.S. Census Bureau (Figure VII-4). The population under 25 years of age has remained relatively constant between 1990 and 2000, with a net loss

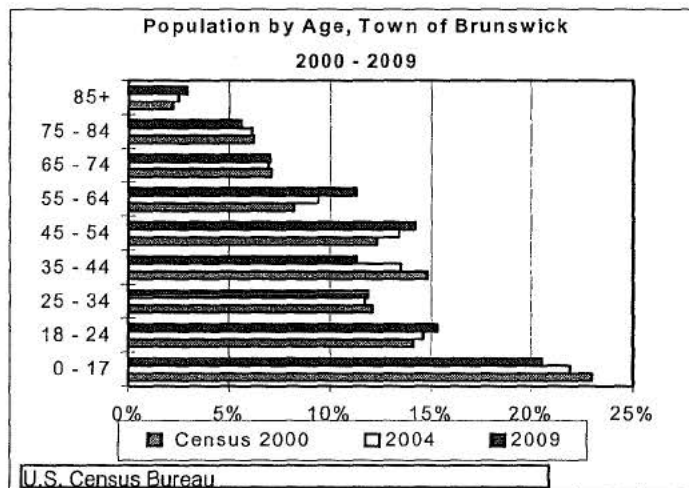


Figure VII-4

of approximately 300 persons within this age group. In percentage terms the population under the age of 25 decreased from 39% to 37% of the population in

Brunswick. Over the same period the working age group between the age of 25 and 54 decreased by only 177 persons from 8,446 (40.4%) to 8,299 (39.2%). The decrease between 25 and 54 year olds is relatively insignificant compared to the substantial loss of the under 25 population. On the other hand, the over 55 population increased by nearly 714 people from 4,295 in 1990 to 5,009 in 2000. The 55 plus age group posted the greatest percent change between 1990 and 2000, from 20.5% in 1990 to 23.7% in 2000. The median age, and the number of older residents are expected to follow similar trends indicated between 1990 and 2000 through 2010.

The aging trends in Brunswick are also occurring throughout the State of Maine, Cumberland County and Sagadahoc County. On average however, the median age is lower in Brunswick compared to all three other regions analyzed. The greatest age increase occurred in Sagadahoc County where the median age increased from 32.7 to 37.9 between 1990 and 2000. Projections between 2004 and 2009 indicate similar aging growth trends throughout the State of Maine and the region.

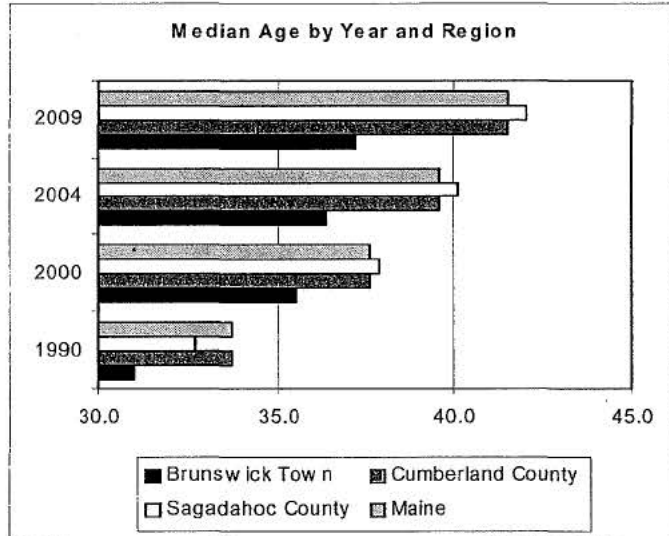


Figure VII-5

Meanwhile the household size has decreased in Brunswick, from 2.94 in 1970, to 2.71 in 1980, to 2.47 in 1990, and finally to 2.34 in 2000. The household sizes are expected to decrease even further throughout the 2010 and 2020, with an average household size of 2.27 and 2.22 respectively according to Planning Decisions Incorporated.

c) Household Income

While the population grew older, household incomes in Brunswick (unadjusted for inflation) increased. The median household income increased from \$30,894 in 1990 to \$40,317 in 2000 according to the U.S. Census Bureau. Household income increased 3.1% per year in Brunswick between 1990 and 2000. Business Information Solutions estimates that the median household income was \$44,332 in 2004, and is projected to increase to \$50,386 by 2009, an increase of nearly 13.7%. The annual increase is expected to slow, compared to the rate between 1990 and 2000, from 3.1% to 2.7% annually between 2004 and 2009, according to the Business Information Solutions. On the other hand, the projected household income is expected to grow at a faster rate than the 2.5% annual increase estimated between 2000 and 2004.

Although household income increased between 1990 and 2004, it did not increase if household income is adjusted for inflation. Adjusting for inflation⁷⁴, the 1990 and 2000 household income in 2004 dollars is \$44,796 and \$44,349 respectively. As noted above, the household income was \$44,332 in 2004. Therefore, the real household income remained relatively flat, with a slight insignificant decrease between 1990 and 2004.

Table VII-1

NUMBER OF HOUSEHOLDS BY INCOME LEVEL, TOWN OF BRUNSWICK, MAINE								
	1990		2000		2004		2009	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
< \$15,000	1,549	20%	1,207	14.8%	1,083	12.8%	987	10.9%
\$15,000 - \$24,999	1,505	20%	1,105	13.5%	1,114	13.2%	1,023	11.3%
\$25,000 - \$34,999	1,424	18%	1,152	14.1%	1,042	12.3%	938	10.4%
\$35,000 - \$49,999	1,518	20%	1,589	19.5%	1,610	19.0%	1,526	16.9%
\$50,000 - \$74,999	1,129	15%	1,483	18.2%	1,606	19.0%	1,867	20.7%
\$75,000 - \$99,999	298	4%	814	10.0%	867	10.3%	1,020	11.3%
\$100,000 - \$149,999	208	3%	565	6.9%	784	9.3%	1,091	12.1%
\$150,000 - \$199,999	85	1%	138	1.7%	191	2.3%	310	3.4%
\$200,000+		0%	105	1.3%	156	1.8%	272	3.0%

Source: ESRI Business Information Solutions

The number of households earning below a household income level of \$25,000 (Table VII-1), decreased between 2000 and 2004, from 28.3% to 26% of the household population. The number of households earning less than \$25,000 is projected to decrease even further to 22.2% of the household population by 2009. Additionally the number of households in the income bracket higher than \$75,000 increased consistently from 19.9% of the household population in 2000 to 23.7% to 2004. The number of higher income residents is increasing and is projected to increase through 2009. This trend is most likely a result of the higher income retired population and greater income earners in the region because of the large population with college and advanced degrees.

While the household income in real terms continues to remain constant between 1990 and 2000, the number of households below the poverty level remained relatively flat as well. The number of households in Brunswick below the poverty level increased by 0.2% from 661 households (8.6%) in 1990 to 781 households (8.8%) in 2000. Brunswick is well below the national average of households below the poverty level. According to the U.S. Census Bureau, the number of households below the poverty level in the United States was 13.1 percent in 1990 and 12.4 percent in 2000.

⁷⁴ Inflation Calculator, Bureau of Labor and Statistics, www.bls.gov

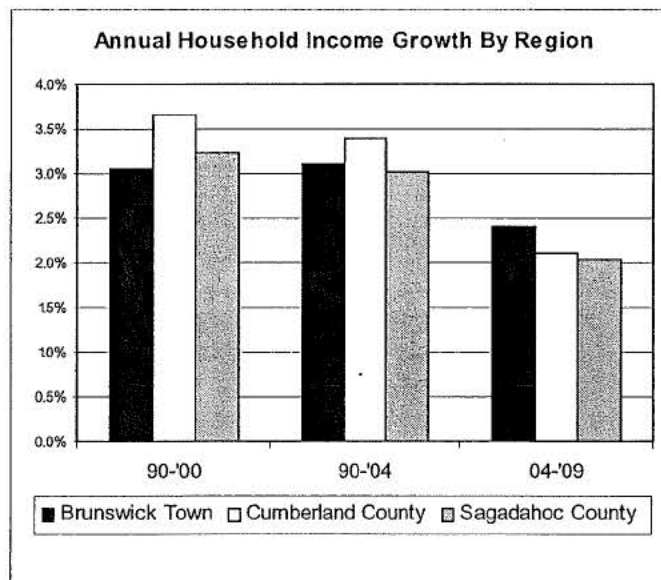
Table VII-2

MEDIAN HOUSEHOLD INCOME BY REGION 1990-2009										
	Year				Real Change			Percent Change		
	1990	2000	2004	2009	90-'00	90-'04	04-'09	90-'00	90-'04	04-'09
Brunswick Town	\$30,894	\$40,317	\$44,332	\$50,386	9,423	13,438	6,054	30.5%	43.5%	12.0%
Cumberland County	\$32,303	\$44,103	\$47,646	\$53,240	11,800	15,343	5,594	36.5%	47.5%	10.5%
Sagadahoc County	\$31,999	\$42,326	\$45,548	\$50,730	10,327	13,549	5,182	32.3%	42.3%	10.2%

Source: ESRI Business Information Solutions, DemographicsNow

Additionally the percentage of households below the poverty level is also lower than the State of Maine, with a 10.8% and 10.9% poverty rate in 1990 and 2000 respectively.

The household income in the Town of Brunswick has increased at a slower rate compared to Cumberland County, however at a faster rate than Sagadahoc County. Sagadahoc County and the Town of Brunswick increased at relatively the same rate between 1990 and 2004. However, Business Information Solutions projects that household income is going to increase at a faster rate in Brunswick compared to Cumberland and



Sagadahoc Counties between 2004 and 2009. (Figure VII-6)

2. Description of the Brunswick Regional Economy

The economy of the region is somewhat more diversified than many other areas of Maine; as a result, it has been better positioned to survive shifts in the state and national economy. Major local employers in the medical, military and education sectors are less affected by shifting economic times than more traditional industries.

3. The Mid Coast Region

Brunswick today serves as a service center community for its immediate region, with Bath playing the role of manufacturing center in this area due to the presence of Bath Iron

Works (BIW), Maine's largest private employer with over 6,000 employees. Another neighboring community, Topsham, has a developing retail and business presence. Together, these communities are creating a regional center that can offer alternatives to the Greater Portland, Augusta, and Lewiston-Auburn hubs.

Brunswick is the service hub of the region, and makes up approximately 46% of the labor force, and the retail sector makes up approximately 66% of total sales for the region⁷⁵.

Brunswick is the fifth largest community in Maine. Its location makes it something of a gateway to "the rest of Maine", particularly the coastal region along Route 1 to the north, since it is situated just north of Portland and the most populous southern coastal areas of the state.

D. Employment Trends

1. Employment Trends

Employment grew slightly from 2002 to 2003 in Maine, with an increase of 0.7% in all jobs, while New England experienced negative job growth of 1.9% during that time, and the national growth was 0.5%. Over the past 7 years, the number of jobs in Maine has increased an average of 1.6% per year. However, Maine's manufacturing sector lost more than 7,000 jobs in that same period, although manufacturing jobs are also generally decreasing nationwide. Government jobs increased by 4,800 jobs in 2003, partially offsetting the loss in manufacturing sector jobs⁷⁶.

The Bureau of Labor and Statistics analyzes employment through the NAIC classification system. This system categorically defines industries and analyzes both the number of businesses for each category and the number of employees for each industry. The industries at a summary level are defined by a two digit NAIC code. Employment and industry data are analyzed using this classification system. The most recent Bureau of Labor and Statistics employment and industry data is available through 2002. Because of the conversion from the SIC classification code system to the NAIC system, data is only available going back to 1998. Therefore, employment and industry trends are only analyzed between 1998 and 2002 in this report.

Employment increased in Cumberland County in recent years. According to the County Business patterns provided by the Bureau of Labor and Statistics, the number of employees in Cumberland County increased by 6 percent from 140,731 in 1998 to 148,683 in 2002. Over the same period the employment in Sagadahoc County increased by only 1% from 13,318 in 1998 to 13,499 in 2002.

Recent employment trends indicate a shift from manufacturing (NAIC 31) and administrative, support, waste management and remediation (NAIC 56) industries to a more service sector economy. In Cumberland County, the largest decreases occurred in

⁷⁵ BEDC report

⁷⁶ Maine Department of Labor

the manufacturing and administrative, support, waste management and remediation industries. Manufacturing (NAIC 31) recorded a loss of 4,275 jobs between 1998 and 2002, a decrease of nearly 28%. Administrative, support, waste management and remediation (NAIC 56) industry lost approximately 1,564 jobs over the same period recording a loss of 17%. In Sagadahoc County, on the other hand, the manufacturing industry and the administrative, support, waste management and remediation industry remained stable with zero net losses or gains according to the Bureau of Labor and Statistics.

The job loss trend in the manufacturing industry follows suite with the rest of the United States, while the entire economy shifted from manufacturing and production to other more efficient industries. In Cumberland County, the number of people employed by the finance and insurance (NAIC 52), real estate and rental and leasing (NAIC 53), professional, scientific and technical services (NAIC 54), management of companies and enterprises (NAIC 55), educational services (NAIC 61), and health care and social assistance services (NAIC 63) increased substantially. The net increase of all these industries totaled approximately 10,854 jobs in Cumberland County. The greatest percent increase was in the management of companies and enterprises industry (NAIC 55) with an increase of nearly 81% or 2,425 jobs. The greatest real increase in jobs occurred in the finance and insurance industry (NAIC 52) with an increase of 2,952 jobs between 1998 and 2002. Professional, scientific and technical services (NAIC 54) industry also increased substantially with an increase of 2,566 jobs between 1998 and 2002 in Cumberland County. Due to the older population and the increased demand for health care services, the health care and social assistance industry (NAIC 62) increased by 10% or 2,313 jobs over the same period.

Overall, the majority of industries in Cumberland County increased the number of employees. The decreases in major industries between 1998 and 2002 were compensated for in other growing industries in higher demand. As a result, the economy in Cumberland County has remained healthy in recent years without any major economic changes. It is important however to acknowledge that the closure of the Brunswick Naval Air Station or Bath Iron Works could have adverse effects on the local economy; especially since the Cumberland County economy relies on the consumer and commercial demands driven by the population of the Brunswick Naval Air Station. Without a disruption of the Naval Air Station, the local and regional economy is projected to continue to flourish in the coming years.

In Sagadahoc County, the number of employees increased from 13,318 in 1998 to 13,499 to 2002, an increase of only 1%. The industry that experienced the greatest employment growth was the transportation and warehousing industry (NAIC 48) with an increase of 48% or 53 employees. The professional scientific and technical services industry (NAIC 54) added 356 jobs, while the construction (NAIC 23) and retail trade (NAIC 44) industries increased slightly as well. The manufacturing industry did not reveal any net change between 1998 and 2002.

Overall, the number of employees remained relatively flat in Sagadahoc County without any major increases or decreases in any industry alone, unlike the trends in Cumberland County. As noted in Cumberland County, a closure of Bath Iron Works or the Brunswick Naval Air Station could adversely affect the economic stability of the area since a large portion of the population is employed there.

The Brunswick and Cumberland County employment trends are similar to the trends for the entire State of Maine where the service industry is expected to grow the greatest over the next ten years. However, comparing Brunswick with the Cumberland County labor force characteristics, Brunswick has a lower percentage of people working in finance and real estate. However, the Cumberland County employment base is predominately driven by the City of Portland, which serves as the financial center for the state⁷⁷ and is influencing the financial industry.

2. Occupation Trends

The occupational trends follow suite with the industry trends, moving from construction, extraction and maintenance occupations (the manufacturing industry) to more service oriented professions such as management and professional services, service, sales, and office occupations. These trends in Cumberland and Sagadahoc County are in line with the trends found in the entire State of Maine. The occupational trends reveal an increase between 23% and 27% in the number of professional management and related occupations profession in all three areas between 1990 and 2000. Service occupations increased between 7% and 9% in all three areas as well. Sales and office occupations increased between 7% and 10%, the greatest increase in the State of Maine. The production, transportation and materials moving occupations increased the most in Sagadahoc County where it increased 12%, followed by Cumberland County with an increase of 5%, and the State of Maine with very small increase of 1%. Overall, with the exception of production, transportation and moving occupations, Cumberland and Sagadahoc County shifted occupations consistent with the state trends from more labor-intensive occupations to more service and intellectual occupations.

3. Unemployment Trends

The unemployment rate in Cumberland County, Sagadahoc County, Brunswick Micropolitan Area and the State of Maine, have followed similar trends in the past ten years as Figure VII-7 highlights.

⁷⁷ BEDC Report

Cumberland County maintained the lowest unemployment rates followed by Sagadahoc County, and the Brunswick Micropolitan Area as defined by the U.S. Census Bureau. The State of Maine consistently had the highest unemployment rate between 1995 and 2005, with a ten-year low in 2000 like much of the country. Although there was a slight increase between year-end 2004 and January 2005, it may be because 2005 information is not yet confirmed and remains projected by the Bureau of Labor and Statistics.

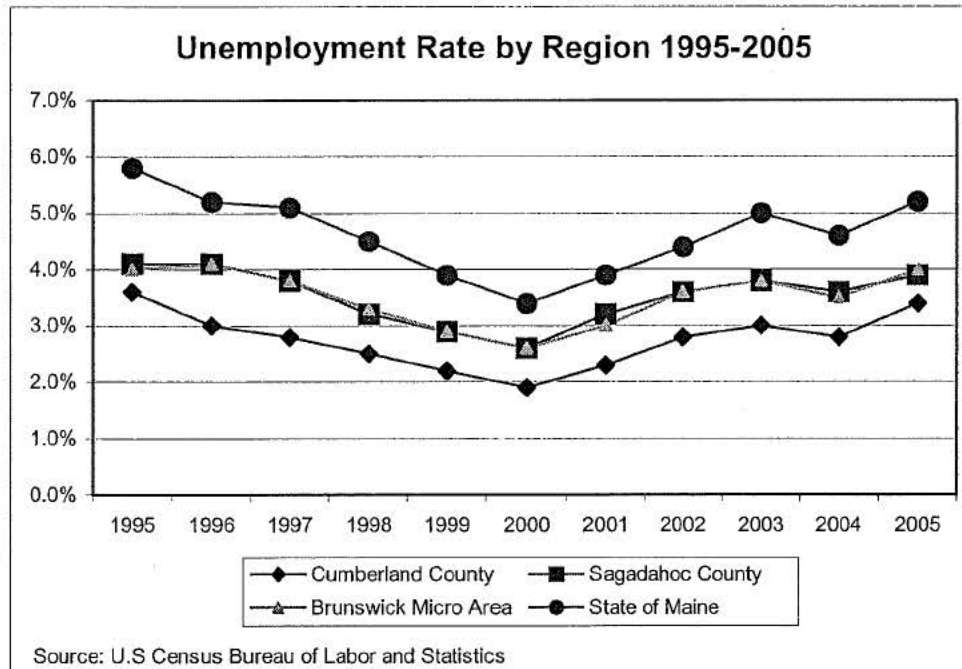


Figure VII-7

4. Labor Force Trends

The labor force in Sagadahoc County decreased by 27 people, or less than 1% between 1995 and 2004 from 15,894 to 15,867. However, the Bureau of Labor and Statistics projects an additional 3,326 people entered the labor force year-end 2004 to January 2005, an increase of nearly 21% over 2004. Historic trends confirmed by the Bureau of Labor and Statistics indicate, however, a net loss and very little net gain every year between 1995 and 2004.

The Cumberland County labor force, on the other hand, increased by 19,995 or 15% between 1995 and 2004. Similarly, in Sagadahoc County, an additional 4,540 people (3% increase) are expected to enter the labor force in January 2005. The projected 3% increase in the labor force between year-end 2004 and January 2005, is a quite aggressive projection, provided the labor force increased by only 15% over the nine-year period between 1995 and 2004. Confirmed trends, however, reveal an increase in the labor force of approximately 1.6% per year between 1995 and 2004. The gains in Cumberland

County are mostly contributed to the City of Portland, and not necessarily the rural areas in the county.

The Brunswick “micropolitan” area, as defined by the U.S. Census Bureau, provides a closer look at the local Brunswick and Bath economy, since the City of Portland drives the Cumberland County economy. According to the Bureau of Labor and Statistics, the labor force decreased by 116 people between 1995 and 2004, while employed persons increased by 32 people over the same period. As a result, there was a net decrease in the percent of unemployed people in the region. Similar to both Cumberland and Sagadahoc County, the labor force is projected to increase by 5,812, or 20% between year-end 2004 and January 2005. Despite this projection, historic trends would suggest that the growth rate is not expected to reach such rapid levels and will continue to remain steady as the shift from manufacturing to more service oriented industries continues in the region.

5. Wages by Occupation and Region

The Bureau of Labor and Statistics analyzes wages by occupation in the United States by Metropolitan Statistical Area (MSA) and by state⁷⁸. According to the Bureau of Labor and Statistics, the wages in the entire State of Maine are lower than the United States average. The hourly mean for all occupations in the State of Maine in 2003 was \$15.60 compared to the hourly mean in United States of \$17.56, a difference of \$1.96. On an annual basis, the average Maine worker makes approximately \$4,080 less than the United States average worker does annually. The annual median salary for all occupations in the State of Maine is \$26,590 compared to the annual median salary for the United States of \$28,400 a difference of only \$1,810. The difference between the mean hourly salary and the median annual salary may suggest that the discrepancy between the higher wage earners and the lower wage earners is greater throughout the entire United States compared to the State of Maine.

Overall, the wages in Maine are lower, and sometimes substantially lower than the United States averages. For instance the business financial and operations occupations make approximately \$8.31 less per hour compared to the United States average. Business and financial occupations were \$4.26 less per hour, while computer mathematical occupations make approximately \$5.92 less per hour than the United States average. In the health care industry, the variation is not as great in the business and finance industry. For overall healthcare professionals, the variation was only \$0.78 per hour, and for health care support occupations, the difference was only \$0.46 less than the United States average. The manufacturing and construction industry varied much greater among occupations. The installation, maintenance and repair occupations hourly mean wage was \$1.14 less than the United States average, while the production and construction occupations were \$0.05 and \$2.45 less, respectively.

⁷⁸ Bureau of Labor and Statistics, “November 2003 Metropolitan Area Occupation Employment and Wage Estimates”

The fishing farming and forestry occupations, and food service and food preparation occupations in Maine are the two occupations that make a higher hourly wage than the United States average.

6. Commuting patterns

The BEDC report indicates the number of residents who live and work in Brunswick decreased from 61% in 1990 to 54% in 2000. This is perhaps a result of the increased retiree population and increased housing costs trends. Because fewer people live and work in Brunswick, and the number of jobs increased, there is an increase in the number of people commuting into Brunswick to work.

In 2000 there were approximately 15,000 employees in Brunswick with over a third of those living in Brunswick. The remaining employees live in Topsham (10%), Bath (6%) and the surrounding region (27%).

The increased number of commuters may be a result of the increased cost of housing in Brunswick, while the increase in household income (adjusted for inflation) has not necessarily increased. Because of the decreased live/work population base, traffic volumes have increased along major arterials.

7. Largest Industries and Employers

Brunswick is a diverse economy, attributed to the unique sectors that help make the region flourish. Through an inventory process the following industries were identified as drivers for the Brunswick economy; Medical Sector, Food and Lodging, Manufacturing, Bank Finance and Insurance, Downtown Retail, Cooks Corner Retail, Education, Military, Art and Cultural Base, Non-Profit, Service Sector, Building Supply and The Real Estate Community, Retirement Industry, Natural Resources Industry and Recreation⁷⁹. Additionally, as of 2003 there were over 800 individual businesses in Brunswick.

An analysis of both the number of establishments and the number of employees provided by the Bureau of Labor Statistics was used to derive the largest industries in both Cumberland and Sagadahoc County. While both Cumberland and Sagadahoc County are diversified economies, they are dominated by the following key industries; health care industry (NAIC 62), manufacturing (NAIC 31), retail trade (NAIC 44), finance and insurance (NAIC 52), professional scientific and technical services (NAIC 54).

In Cumberland County, the health care and social services (NAIC 62) industry employed 16.7% of the labor force, and made up approximately 11% of all establishments. The health care and social services industry also dominated the Sagadahoc County economy providing employment to approximately 7% of the labor force and making up 10% of total establishments. The demand for health care services is predominantly a result of the older and retired population in the region. Mid Coast Health Services remains one of the largest employers in the Health Care industry with over 1,200 employees. Additionally

⁷⁹ BEDC Report

Parkview Hospital and various smaller health care centers define this region as a major health care market.

The manufacturing industry employs approximately 7.4% of the labor force in Cumberland County and makes up 3.8% of establishments. Only three of the top 14 employers work in manufacturing, a shift from 10 years ago when this economy was more reliant on manufacturing. However, Bath Iron Works remains a major employer in Brunswick and is imperative to the local and regional economy.

Retail trade is another important sector to the regional economy employing approximately 10% of the labor force in Sagadahoc County, and 15% in Cumberland County, the second largest employer. Retail trade makes up 18.2% of establishments, the greatest number of establishments compared to all sectors in Sagadahoc County and 14.8% in Cumberland County. LL Bean is one of the major retail employers in the area employing more than 300 people alone.

The professional, scientific and technical services also make up a large portion of the regional economy. In Cumberland County, this industry maintains the second largest number of establishments with 12.3%, while it employs approximately 6.4% of the labor force. In Sagadahoc County, the professional, scientific and technical services industry makes up approximately 9.4% of all establishments, and employs 6% of the labor force. In both counties, this industry is one of the top five largest industry employers.

The largest employers in Brunswick, listed by number of employees, are shown in Table VII-3. Not all of the employees shown in the list are believed to be full-time.

The BEDC report highlights that many of the largest employers reflect the aspect of a creative economy that utilizes intellectual abilities to earn a living. This creative economy is reflected in Bowdoin College, the medical professionals and the publishing company.

Recently, losses in the community include Envisionet, a software/phone bank assistance company, and Allenbrook at the end of 2004, who is choosing to relocate back to Portland. Bath Iron Works plays an integral part of the local economy acting as the

Table VII-3

Largest Employers Brunswick Area	
Name	Average Employees
Bath Iron Works	1,100
BNAS	817 (civilian)
Bowdoin college	742
Mid Coast Health Services	702
Town of Brunswick	655
L.L. Bean	387
Parkview Hospital	366
MBNA	350
Wal-Mart	264
Cooper Industries (Arrowhart)	200
Hannaford Bros.	192
Downeast Energy	175
Shaw's	130
Brunswick Publishing	128
Source: BEDC Report	

largest employer, historically providing a degree of economic stability in the region. However, potential downsizing of the Navy's shipbuilding programs may seriously impact BIW and the local economy.

E. Education and Workforce Development

1. Education Attainment

To compete in the "knowledge economy", Maine must come closer to being on par with New England in terms of higher education levels. As of 2002, Maine had the lowest percentage of graduate degree holders of any of the six New England states (8.6% vs. 13.4%). Graduate degree attainment is particularly important to many high-tech and professional areas of the economy, and is fundamental to business innovation. For the period 1994-2002, approximately 35% of New England residents had a bachelor degree, compared to 28% in the country as a whole, and 25% in Maine. However, the good news is that during that period, Maine's rate of growth in this measure was 16.2%, which is higher than the national average of 15.1% and New England's increase of 12.1% according to the BEDC report.

The educated population is growing in both Brunswick and Cumberland County. The number of people that attained a high school diploma, or lower educational attainment, decreased in both Brunswick and Cumberland County, while the percent of people that attained a bachelor degree and graduate degree increased between 1990 and 2000. The percent of the population over the age of 25 with bachelor and graduate degrees in the Town of Brunswick increased by 1,268 persons between 1990 and 2000, an increase of nearly 37.5%. Over the same period, the number of people that did not complete high school, and those that only graduated high school decreased by 870, a decrease of 14.3%. The shift to a highly educated population is also reflected in the industries and businesses that are currently flourishing in the region. A discussion of the industries and employment base are further discussed in the Employment Trends section of this report.

Table VII-4

Educational Attainment Cumberland County and Town of Brunswick								
	Cumberland County				Town of Brunswick			
	1990	%	2000	%	1990	%	2000	%
Nursery to 8th grade	8,353	5%	4,724	2.6%	735	5.8%	608	4.6%
9th to 11th grade, no diploma	15,596	10%	12,226	6.7%	1,364	10.7%	995	7.5%
High school graduate	50,403	32%	51,102	28.2%	3,976	31.2%	3,602	27.1%
Some college, no degree	28,344	18%	35,374	19.5%	2,497	19.6%	2,693	20.3%
Associate degree	13,071	8%	14,850	8.2%	790	6.2%	731	5.5%
Bachelor's degree	29,297	18%	39,378	21.7%	2,121	16.6%	2,671	20.1%
Graduate degree	14,802	9%	22,703	12.5%	1,256	9.9%	1,974	14.9%
No schooling completed	N/A	0%	969	0.5%	n/a	0.0%	n/a	0.0%
Total 25+ Population	159,866	100%	181,326	100%	12,739	100%	13,274	100%

Source: Bureau of Labor and Statistics

2. Workforce Development

An array of small business development and workforce development resources are available to new or relocating businesses throughout the Brunswick region. The following is a non-exhaustive list of resources and a brief description of those resources to assist these small and new business owners or managers.

a) Mid-Coast Council for Business Development and Planning

The Mid-Coast Council for Business Development and Planning (MCBDP) is public-private non-profit development corporation that supports business retention, expansion and attraction to improve the regional economy of Bath, Brunswick, Topsham, Richmond, Bowdoinham and Phippsburg Maine⁸⁰. Within the umbrella of this organization there are several functions served to the local business community, such as:

The Maine Small Business Development Center (Maine SBDC) Service Center co-hosted in Brunswick by MCBDP with Coastal Enterprises, Inc. (CEI). This organization serves northeastern Cumberland and Sagadahoc Counties. The SBDC provides one-on-one counseling and training assistance at no cost to potential and existing business owners and managers⁸¹. Areas of assistance include: business start-up/acquisition, business/marketing plan development, financial and business analysis, market research, sources of credit and financing, loan packaging and raising capital, cash flow analysis, accounting and record keeping, job creation, operations, personnel management, marketing and sales, government procurement, international trade, business liquidation/sale, networking linkages and technology transfer.

Regional Economic Development Revolving Loan Program is also available to small and new start up businesses. The criteria to obtain a loan is as follows: fewer than 50 employees; loans may not exceed \$40,000 with a stated preference for loans of \$25,000 or less; loans may not exceed one-third of the new funds being provided by any borrower; loans may be subordinated to financing from other lenders; funds are to be used to make loans that create or retain quality jobs.

Planning Assistance for planning boards, comprehensive planning committees, and code enforcement officers.

Maine's Community Development Block Grant (CDBG) program makes available funding and technical support for projects that achieve local community and economic development objectives, while principally benefiting low to moderate-income persons. These programs are only available to Maine towns, cities and counties for the benefit of Maine residents.⁸²

⁸⁰ www.mcbdp.org

⁸¹ <http://www.mcbdp.org/sbdc.htm>

⁸² <http://www.mcbdp.org/cdbg.htm>

The Mid-Coast Council for Business Development and Planning also provides other services that cater to new and small businesses as well as local and regional planning boards. Additional detailed information can be found on their website at <http://www.mcbdp.org/>.

b) Coastal Counties Workforce Board

This organization, which assists the coastal counties in developing a skilled workforce catering to the demand of the regional economy, relies on the employer assisted workforce development strategy where the employer provides the greatest assistance in training and developing a workforce. For additional information, their website is <http://www.coastalcounties.org/>.

c) Center for Continuing Education at University of Southern Maine

University of Southern Maine's (USM) Center for Continuing Education (CCE), located in Portland, provides lifelong learning opportunities for professionals and the general public⁸³. It provides short-term, targeted, and skill-based courses for professionals in the following areas: business, nursing and health professions, technology, human services and nonprofits. USM also offers customized training solutions to meet the specific needs of local companies.

d) Maine Centers for Women, Work and Community (WWC)

This organization focuses on the goal to help women succeed in the Maine economy. The WWC helps women acquire jobs, access higher education, start businesses, increase their assets, and become leaders in their communities. More information about this organization can be found at <http://www.womenworkandcommunity.org>.

F. Real Estate Market Factors

The general commercial real estate industry, consisting of the industrial, office and retail markets, has been performing quite well throughout southern Maine in recent years.

1. Regional Industrial Market Trends

a) Industrial Market Supply

NAI, The Dunham Group reported at the annual Maine Real Estate and Development Association (MEREDA) Conference in January 2005, that the overall commercial real estate market in the greater Portland and southern Maine region has experienced solid years of building value and appreciation, with significant increases in land value/prices coupled with rapid expansion. However, the erosion of the manufacturing sector is leaving a large inventory of older functionally obsolete buildings, as the industrial market transitions to a more production, distribution and warehousing function. Meanwhile, new construction of flex buildings is on the rise, with a trend toward selling the units in a condominium form of ownership. There is also a trend toward adaptive reuse of the larger and older manufacturing facilities.⁸⁴

⁸³ <http://www.usm.maine.edu/cce/>

⁸⁴ NAI The Dunham Group MEREDA 2005 Presentation

NAI The Dunham Group also reports there is a shortage of buildable approved land in the region and as a result, the demand is outstripping supply in the Southern Maine-Portland market.

The Brunswick Economic Development Council (BEDC) conducted a study in February 2005 to determine the need for new business/industrial parks and potential sites throughout Brunswick. Their study identified potential development sites for a new business park and projected the demand for new space based upon historical trends.

According to the study, the first business park was constructed in Brunswick in 1982, and since that time approximately 750,000 square feet on 184 acres has been developed for manufacturing, office, or production distribution purposes.

Construction during the 1980s far outpaced the construction patterns in the 1990's and 2000's. Approximately 604,396 square feet of space was developed in the 1980's, 153,810 square feet in the 1990's and an estimated 31,500 since 2000. Of the 184 acres developed, approximately half was developed for The Industrial Business Park; 60 acres was developed for the Bath Iron Works Warehouse and Tin Manufacturing Plant; and 5 acres remained in the Business Park.

Over the 22 years of development between 1982 and 2005, the absorption rate was 35,986 square feet per year. During the 1980s, while development was at its highest, the absorption rate was 76,000 square feet or 17 acres per year. In the past five years, the absorption rate has been an estimated 15,000 square feet or 5 acres per year, slowing substantially from the rapid development noted in the 1980's.

According to the BEDC, between 1982 and 2005, the business and industrial parks generated approximate \$77 million in value and approximately 1,800 jobs. The study concluded that based on historical trends in Brunswick, and current industrial and office park trends throughout the region, there is demand for at least one new business park in Brunswick with the potential to develop a second park within 20 years. The BEDC concluded that the space should cater to different manufacturing and/or production warehousing space. The projected amount of space that will be absorbed per year is estimated between 36,000 and 76,000 square feet per year. The acreage needed for this development is between 8.3 acres and 16.5 acres per year. The BEDC suggested that the failure to develop a business park could mean that the region might lose an opportunity for development as the rest of Southern Maine continues to expand.

While the demand for industrial space exists, so does the reality that construction and development costs are high, and the trend toward more build-to-suite developments continues. In addition, there is a large vacant inventory in the market consisting of manufacturing/industrial buildings that have functional obsolescence. These buildings need to be either readapted for up-to-date use, or torn down and the land redeveloped.

Overall, the industrial market continues to be healthy as rapid development continues throughout southern Maine and development trends move northward toward Brunswick.

b) Rental and Sale Rates, Vacancy

While the greater Portland area is achieving industrial land sale prices between \$85,000 and \$250,000 per acre, the Brunswick sale prices are significantly lower, between \$45,000 and \$70,000 per acre. This makes the Brunswick region much more attractive for smaller businesses and local business expansion. The appreciation of industrial park land in the greater Portland area experienced a rapid increase in value from 2003 to 2004. The average appreciation between 2003 and 2004 was approximately \$10,000 to \$20,000 per acre.

Rental rates for industrial buildings remain relatively soft since many renters are choosing to buy because of current low interest rates and a healthy real estate market (which provides the opportunity for substantial appreciation). Lease rates range from \$2.00/SF for larger spaces between 75,000 and 200,000 square feet, to \$5.75/SF for smaller spaces less than 10,000 square feet. Medium size spaces between 25,000 and 75,000 square feet have remained relatively consistent with rental rates last year. However, rental rates for smaller spaces with less than 25,000 square feet, and larger spaces with greater than 75,000 square feet, have seen some softening in the last year.

Vacancy rates are fairly low in the greater Portland industrial market, averaging below 5% vacancy. Asking rents remained stable or increased slightly in most markets during 2004. Nationally, industrial vacancy levels averaged approximately 11% for 2004.

2. Regional Office Market Trends

The greater Portland office market is doing quite well compared to regional office market trends elsewhere in New England. Compared to the southern New Hampshire, Boston and Hartford office markets, the Portland market has the lowest vacancy at 7.1% compared to 19.2%, 19.9% and 20.6 percent, respectively. Overall, the market has performed well in recent years with a healthy level of construction, and increased demand for owner-user office space.

a) Office Market Supply

The absorption of new office space has been consistent in recent years, despite the slight increase in vacancy because of the continued new construction outpacing the absorption rate. Between 2000 and 2004, while much of the country experienced only stable absorption rates while large companies downsized and a large sublease market emerged, the Portland market continued to achieve absorption rates above 100,000 square feet per year, except during 2003 when the market only absorbed 23,675 square feet. However, it is expected that healthy absorption will continue as construction slows and the market absorbs the remaining space, creating an upward shift on rental rates.

b) Rent levels and vacancy

Rental rates are slightly softening for Class A space because of two new construction projects in the downtown and suburban market. Class B space has tightened during 2004. While Class A rental rates are slightly down in Portland, Class B rental rates are slightly up at approximately 3% to 5%.

G. Regional Attributes Relevant to Development**1. Business Climate factors**

The cost of doing business in Maine continues to be higher than the rest of the United States. The cost is measured based on three factors – labor costs (75%), energy costs (15%) and tax burden (10%). Maine is in the top 10 states for high cost-of-doing-business, with its tax burden being especially high. The tax burden is often a strong consideration for businesses making site selection decisions. Investment in research and development (R&D) has been identified as a foundation and significant driver of prosperity and a high quality of life, and is key to increasing the per capita income in Maine. The state is investing heavily in this area, since Maine traditionally ranks at the very bottom of the state rankings in this category. Between fiscal years 1999 and 2003, the state spent an average of approximately \$31 million annually in support of R&D, compared to just \$4 million annually in the previous 5 year period.⁸⁵

2. Local physical features

Brunswick has sandy soils, which typically lower the cost of construction. Other environmental constraints are associated with protecting the marine environment, aquifer areas, and unique natural areas.

3. Availability of Developable Sites**a) Land Availability**

The following is a list of potential sites provided in the BEDC report:

- Industrial Park properties:
 - 3 lots ranging from 2.5 to 3.5 acres in Park
- Commercial Properties:
 - Moore Property, Old Portland Road: 100+ acres, no utilities
 - Scarponi, Old Portland Road: 1 acre, (plus, rear acreage)
 - Dwinal Property (old drive-in, Old Portland Road): 25+ acres, no utilities
 - Theberge Property: Greenwood Road, 3+ acres
 - Fox Run Property: business, retail, housing
 - Maine Street Station: 4+ acres, downtown
 - Fox Lumber property: 8.41 acres (not officially on market)

⁸⁵ "Measures of Growth 2004: Performance Measures and Benchmarks to Achieve a Vibrant and Sustainable Economy for Maine". Tenth Report of the Maine Economic Growth Council, Prepared by the Maine Development Foundation

- Columbe property: 21.6 acres adjacent to Washburn and BIW
- Washburn Lumber: 25 acres±, rail in between
- Ted Crooker Parcel: Bath Road, 17 acres (adjacent to F Crooker)
- F. Crooker Parcel: Bath Road, 23± acres, rail in between
- Ted Crooker Garages and land, Old Bath Road
- Mid Coast Hospital: Roughly 70 acres, medical/housing use
- Allen Land: 20 acres in front of Mid coast hospital (John Gerard)
- Douglass Land: 30 acres, mixed use, between RT.-1 and I-95 (John Gerard)

b) Building availability

- 147 Pleasant Street: garage, showroom, office, land, 1 acre±, for lease
- Upper Park Row: 4,000 SF office for lease, recently rehabbed
- Summer Street: Thibeault's (if they build), 1 acre ±, for lease
- 7 Industrial Parkway: 2,000 SF office for lease
- 109 Bath Road: 2,500-5,000 SF. for lease
- Turner Street: 2 properties with offices and parking, each in excess of 4,000 SF
- Commercial Properties, Industrial parkway, for lease, 10,000 SF
- 17 Pleasant Street: 2-4,000 SF , for lease or sale
- Carney House, Park Row: for sale
- Fort Andross: 200,000± for lease, parking a problem
- Atrium Golds Gym: for lease, 10,000 SF, may be taken at this time
- Senters, 6,000 SF, for lease
- There are a number of smaller spaces located throughout the downtown that could provide minimal office space
- Art Boulet Business Incubator, Inner Pleasant Street (Sweetser Office): office space comes with central reception and conference rooms

H. Residential Market Trends

Because of the potential impact of the closure of Brunswick Naval Air Station on the local and regional housing market, this section of the analysis provides a review of the housing and residential market within the Town of Brunswick, as well as that of adjacent communities. A rapid closure and movement of Navy personnel away from the area could result in a dramatic increase in the overall inventory of vacant, and available, housing stock. In addition to Brunswick, surrounding communities that may be impacted by the closing of the base, with respect to their housing supply, include Bath, Durham, Harpswell, Topsham and Freeport, which is referenced to as the Brunswick core market. This core market is compared to the nearby metropolitan areas (MSA) of Lewiston-Auburn and Portland, and the Town of Brunswick is also contrasted to the nearby cities of Lewiston and Portland (for the 1990 to 2000 decennial changes). Selected characteristics of the housing market, within each of these communities are presented next.

1. Decennial Housing Data

According to information from the 1990 US Census, there were 23,113 housing units in the core market area, including 8,197 (or slightly more than one-third) in Brunswick. By 2000, the number of housing units had increased by slightly less than 8.0% to 24,910 units in the core market, with Brunswick totaling about one-third.

Over the decade there were approximately 180 housing units added annually, with 52 in Brunswick. Of all of the communities in the core market, Brunswick experienced the greatest annual absolute growth. This average annual addition of 52 housing units in Brunswick compares favorably with the City of Portland, at 57 units annually.

However, the average annual growth, of 180 housing units in the core market is well below that for either the Portland MSA or the Lewiston-Auburn MSA, in both absolute terms and percentage terms.

a) Housing Type

The change in the type of housing stock, i.e., single-family units, multi-family units and mobile homes was unevenly distributed across these cities and towns during the 1990s. All of the communities in the core market experienced an increase in single-family units (up 10.8% in total). The cities of Lewiston and Portland both experienced growth in single-family units, as did both of the MSAs.

Overall, there was growth in the number of multi-family housing units in Brunswick and the core market as a whole, although some communities experienced a decline between 1990 and 2000. The City of Portland and the Portland MSA both added multi-family housing over the 1990s, while the City of Lewiston and the Lewiston-Auburn MSA both exhibited a loss in multi-family housing.

Only Brunswick and the Lewiston-Auburn MSA realized growth in the number of mobile home housing units over the 1990s. All other cities, town and areas, including the City of Lewiston, exhibited a decline in the number of mobile home housing units.

Table VII-5
Decennial Change in Housing Units

Location	Change in Housing Units			
	1990	2000	Avg Change	% Change
Brunswick	8,197	8,720	52	6.40%
Bath	4,236	4,383	15	3.50%
Durham	994	1,257	26	26.50%
Harpwell	3,432	3,701	27	7.80%
Topsham	3,243	3,573	33	10.20%
Freeport	3,011	3,276	27	8.80%
Core Market	23,113	24,910	180	7.80%
Brunswick as a %	35.50%	35.00%	29.10%	
Urban Centers				
Portland	31,293	31,862	57	1.80%
Brunswick as a %	26.20%	27.40%		
Lewiston	17,118	16,470	-65	-3.80%
Brunswick as a %	47.90%	52.90%		
MSA				
Portland	96,297	111,130	1,483	15.40%
Core Mkt as a %	24.00%	22.40%		
Lewiston-Auburn	36,993	40,455	346	9.40%
Core Mkt as a %	62.50%	61.60%		

Source: US Census Bureau and RKG

Single-Family Units – In 1990 there were 15,143 single-family housing units in the core market, with slightly more than 30.0% of such housing, or 4,628 units, in Brunswick. By 2000, single-family housing units in Brunswick had increased to 4,944 units, representing about 30.0% of such housing in the core market.

The average annual increase of 32 single-family units in Brunswick just led the communities and compared favorably to other urban centers (Portland and Lewiston) in both absolute terms and in percentage terms.

In 1990 and 2000, Brunswick single-family housing was a little more than one-third that in the City of Portland and out 75.0% that in the City of Lewiston. During the decade, the rate of growth in single-family housing in Brunswick exceeded that for both cities. This was not the case for the core market as a whole, where growth over the decade was just under 11.0%, as compared to 21.0% in the Portland MSA and 19.0% in the Lewiston-Auburn MSA.

Multi-Family Units – There was a modest 2.6% growth in the number of multi-family housing units in the core market, as some communities exhibited growth and others exhibited decline. Brunswick added an

Table VII-6**Decennial Change in Single-Family Housing Units**

Location	Change in Housing Units			
	1990	2000	Avg Change	% Change
Brunswick	4,628	4,944	32	6.80%
Bath	2,392	2,549	16	6.60%
Durham	816	1,101	29	34.90%
Harpswell	2,987	3,279	29	9.80%
Topsham	2,212	2,491	28	12.60%
Freeport	2,108	2,418	31	14.70%
Core Market	15,143	16,782	164	10.80%
Brunswick as a %	30.60%	29.50%	19.30%	
Urban Centers				
Portland	12,342	12,677	34	2.70%
Brunswick as a %	37.50%	39.00%		
Lewiston	6,275	6,475	20	3.20%
Brunswick as a %	73.80%	76.40%		
MSA				
Portland	59,806	72,529	1,272	21.30%
Core Mkt as a %	25.30%	23.10%		
Lewiston-Auburn	17,374	20,699	333	19.10%
Core Mkt as a %	87.20%	81.10%		

Source: US Census Bureau and RKG

Table VII-7**Decennial Change in Multi-Family Housing Units**

Location	Change in Housing Units			
	1990	2000	Avg Change	% Change
Brunswick	2,304	2,392	9	3.80%
Bath	1,736	1,742	1	0.30%
Durham	50	42	-1	-16.00%
Harpswell	169	156	-1	-7.70%
Topsham	674	768	9	13.90%
Freeport	497	472	-3	-6.00%
Core Market	5,430	5,572	14	2.60%
Brunswick as a %	42.40%	42.90%	62.00%	
Urban Centers				
Portland	18,647	19,111	46	2.50%
Brunswick as a %	12.40%	12.50%		
Lewiston	10,117	9,390	-73	-7.20%
Brunswick as a %	22.80%	25.50%		
MSA				
Portland	32,138	34,414	228	7.10%
Core Mkt as a %	16.90%	16.20%		
Lewiston-Auburn	16,358	15,805	-55	-3.40%
Core Mkt as a %	33.20%	35.30%		

Source: US Census Bureau and RKG

average of nine multi-family units annually, and accounted for about four out of every ten such units in the core market, in both 1990 and 2000. By comparison, the City of Portland realized a 2.5% growth in multi-family housing while the City of Lewiston realized a -7.2% decline. In the Lewiston-Auburn MSA, the decline was less dramatic, at -3.4%, and in the Portland MSA, the growth was more dramatic at 7.1%. Multi-family housing units in the core market are about 16.0% to 17.0% of those in the Portland MSA and one-third of those in the Lewiston-Auburn MSA.

Mobile Homes – Only the Town of Brunswick, within the core market, added additional mobile home units over the decade. In the greater market area, the Lewiston-Auburn MSA also experienced a net increase in the number of mobile home units, although the City of Lewiston did not. In 1990 and in 2000, the Town of Brunswick had more mobile homes than the cities of Portland and Lewiston, combined.

Table VII-8

Location	Decennial Change in Mobile Home Housing Units			
	Change in Housing Units			
	1990	2000	Avg Change	% Change
Brunswick	1,265	1,384	12	9.40%
Bath	108	92	-2	-14.80%
Durham	128	114	-1	-10.90%
Harpswell	276	266	-1	-3.60%
Topsham	357	314	-4	-12.00%
Freeport	406	386	-2	-4.90%
Core Market	2,540	2,556	2	0.60%
Brunswick as a %	49.80%	54.10%	743.08%	
Urban Centers				
Portland	304	76	-23	-75.00%
Brunswick as a %	416.10%	1821.10%		
Lewiston	726	605	-12	-16.70%
Brunswick as a %	174.20%	228.80%		
MSA				
Portland	4,353	4,182	-17	-3.90%
Core Mkt as a %	58.40%	61.10%		
Lewiston-Auburn	3,261	3,951	69	21.20%
Core Mkt as a %	77.90%	64.70%		

Source: US Census Bureau and RKG

Summary

Over the 1990s, there was an average of 180 housing units added annually in the cities and towns of the core market area, with Brunswick representing about 30% of the annual growth. The absolute change in housing units in Brunswick, on an annual basis, was about equal to that of the City of Portland. This was also the case for single-family housing in particular. The growth in multi-family housing in Brunswick was nominal, especially when contrasted to the City of Portland, but exceeded such growth in the City of Lewiston (likely reflecting the demolition of abandoned and sub-standard housing in the City). Of the individual cities and towns, only Brunswick exhibited growth in mobile home units.

Projecting the trends in housing from the 1990 to 2000 time period suggests that for every 100 housing units that could come on to the Brunswick market, e.g., if Brunswick NAS were to close, this would represent a two-year supply of housing for Brunswick and about a six month supply for the core market as a whole. Moreover, based on the census trends, every 100 single-family housing units that could come on to the Brunswick market would represent a three-year inventory for such housing. In other words, if 2,000 formerly military occupied housing units suddenly came on the market, this would

represent a forty-year supply for Brunswick (assuming nothing else was built) or, conversely, a ten-year supply for all of the core market.

Occupancy Status

Occupancy status of the housing units also varied across the cities and towns, with all areas except the City of Lewiston, realizing a gain in owner occupied housing. The number of renter occupied housing units increased in the core market during the 1990s, despite a decline of more than 130 units in the Town of Brunswick. Year-round vacancy in the core market declined between 1990 and 2000, but increased in Brunswick. Seasonal vacancy decreased marginally in the core market, also despite an increase in Brunswick.

Owner Occupied Housing – In 1990 there were 13,316 owner occupied housing units in the core market, representing an owner occupancy rate of 57.6%, similar to that for the Town of Brunswick. As with all housing, the Town of Brunswick accounted for about 30.0% of the growth in owner occupied housing for the core market. Owner occupancy rates for the Town of Brunswick are higher than those for either the City of Lewiston or the City of Portland; however, owner occupancy rates for the core market are about the same as those of either of the two MSAs.

Renter Occupied Housing – In 1990, there were 7,030 renter-occupied housing units in the

Table VII-9

Decennial Change in Occupancy Status

Location	Change in Owner Occupied Housing Units			
	1990%	2000%	Total Change	% Change
Brunswick	56.60%	59.80%	572	12.30%
Bath	50.40%	50.20%	66	3.10%
Durham	85.90%	86.50%	233	27.30%
Harpwell	45.70%	49.80%	274	17.50%
Topsham	67.10%	68.00%	253	11.60%
Freeport	64.50%	72.90%	447	23.00%
Core Market	57.60%	60.90%	1,845	13.90%
Brunswick as a %	34.80%	34.40%	31.00%	
Urban Centers				
Portland	38.00%	39.60%	722	6.10%
Brunswick as a %	39.00%	41.30%		
Lewiston	43.50%	43.80%	-226	-3.00%
Brunswick as a %	62.40%	72.20%		
MSA				
Portland	55.70%	59.20%	12,131	22.60%
Core Mkt as a %	24.80%	23.00%		
Lewiston-Auburn	53.70%	55.70%	2,656	13.40%
Core Mkt as a %	67.00%	67.30%		

Source: US Census Bureau and RKG

Table VII-10

Decennial Change in Occupancy Status

Location	Change in Renter Occupied Housing Units			
	1990%	2000%	Total Change	% Change
Brunswick	37.50%	33.70%	-133	-4.30%
Bath	42.40%	42.00%	46	2.60%
Durham	11.60%	11.10%	24	20.90%
Harpwell	14.00%	13.40%	15	3.10%
Topsham	27.60%	27.80%	100	11.20%
Freeport	22.40%	20.70%	4	0.60%
Core Market	30.40%	28.40%	56	0.80%
Brunswick as a %	43.70%	41.50%	-237.50%	
Urban Centers				
Portland	52.20%	53.70%	757	4.60%
Brunswick as a %	18.80%	17.20%		
Lewiston	49.00%	49.00%	-307	-3.70%
Brunswick as a %	36.60%	36.40%		
MSA				
Portland	32.10%	30.50%	2,995	9.70%
Core Mkt as a %	22.70%	20.90%		
Lewiston-Auburn	38.10%	38.00%	500	3.60%
Core Mkt as a %	49.90%	48.60%		

Source: US Census Bureau and RKG

core market, with slightly less than 44.0% of these in Brunswick. By 2000, the representation in Brunswick declined marginally to around 42.0% of the 7,086 renter occupied housing units. In Brunswick, there was a decline of -133 renter occupied units during the 1990s, which is in sharp contrast to the increase of 56 in the core market, as a whole.

Only the Town of Brunswick and the City of Lewiston realized a decline in renter-occupied housing units.

Year Round Vacant Housing Units

– Brunswick was one of the few communities to experience an increase in the number of year round vacant housing units over the 1990s, the number of year round vacant housing units, as well as the vacancy rate, declined in both urban centers and in the Portland MSA and the Lewiston-Auburn MSA, as well. As such, the vacancy rate for year round housing, in Brunswick, is among the highest for all of the communities and areas.

Seasonally Vacant Housing Units

– In total there was a decline of 18 seasonally vacant housing units in the core market, however, this is somewhat misleading as there were increase in most of the cities and towns, including 36 units in Brunswick, offset by a decline of more than 128

Table VII-11

Decennial Change in Occupancy Status

Location	Change in Year Round Vacant Housing Units			
	1990%	2000%	Total Change	% Change
Brunswick	3.70%	4.00%	48	15.90%
Bath	6.10%	6.20%	13	5.00%
Durham	2.00%	1.70%	1	5.00%
Harpswell	5.80%	4.00%	-51	-25.60%
Topsham	4.70%	3.20%	-39	-25.50%
Freeport	4.40%	2.30%	-58	-43.60%
Core Market	4.60%	3.90%	-86	-8.10%
Brunswick as a %	28.30%	35.70%	-55.80%	
Urban Centers				
Portland	6.60%	3.80%	-863	-41.90%
Brunswick as a %	14.70%	29.20%		
Lewiston	7.40%	6.70%	-162	-12.80%
Brunswick as a %	23.80%	31.60%		
MSA				
Portland	5.20%	3.10%	-1,571	-31.60%
Core Mkt as a %	21.50%	28.90%		
Lewiston-Auburn	6.20%	5.40%	-80	-3.50%
Core Mkt as a %	46.80%	44.60%		

Source: US Census Bureau and RKG

others included Bath and Durham (nominal at one).

Table VII-12

Decennial Change in Occupancy Status

Location	Change in Seasonally Vacant Housing Units			
	1990%	2000%	Total Change	% Change
Brunswick	2.20%	2.50%	36	19.60%
Bath	1.10%	1.60%	22	47.80%
Durham	0.50%	0.80%	5	100.00%
Harpswell	34.40%	32.80%	31	2.60%
Topsham	0.60%	1.00%	16	84.20%
Freeport	8.80%	4.20%	-128	-48.50%
Core Market	12.80%	6.80%	-18	-1.10%
Brunswick as a %	10.80%	13.10%	-200.00%	
Urban Centers				
Portland	3.20%	3.00%	-47	-4.70%
Brunswick as a %	18.50%	23.20%		
Lewiston	0.20%	0.40%	47	174.10%
Brunswick as a %	681.50%	297.30%		
MSA				
Portland	7.00%	7.20%	1,278	18.90%
Core Mkt as a %	25.20%	21.00%		
Lewiston-Auburn	2.10%	2.80%	386	50.80%
Core Mkt as a %	223.70%	146.80%		

Source: US Census Bureau and RKG

seasonal units in Freeport. As such, the seasonal vacancy rate declined from 12.8% for the core market, in 1990, to less than 7.0% in 2000, despite marginal increases in most communities. The Portland MSA realized an increase of 1,278 seasonally vacant housing units over the decade, despite a loss of -47 units in the City, proper. The City of Lewiston, as well as the MSA, both realized an increase in seasonally vacant housing units.

Single-Family Owner Occupied Housing

The majority (at 68.8%) of the owner occupied housing in the core market, in 1990, was single-family homes, accounting for 9,160 of the 13,316 owner occupied housing units. This increased to 72.7%, or 11,015 homes of the 15,161 owner occupied homes in 2000. Overall there was a 20.3% increase in single-family owner occupied housing in the core market, similar to the 21.1% increase in Brunswick. Both the average annual growth and the rate of growth for Brunswick exceeded that of either of the two cities, Portland and Lewiston.

Median Value – In 1990, the reported median housing value for a single-family owner occupied unit in Brunswick was \$117,300, or about 101.0% of the average for the core market, at an estimated \$116,100. By 2000, the average reported value in Brunswick had increased by 15.1% (well below the

Table VII-13

Decennial Change in Single-Family Owner Occupied Housing

Location	Change in Housing Units			
	1990	2000	Avg Change	% Change
Brunswick	2,878	3,485	61	21.10%
Bath	1,751	1,850	10	5.70%
Durham	498	707	21	42.00%
Harpswell	1,187	1,375	19	15.80%
Topsham	1,598	1,875	28	17.30%
Freeport	1,248	1,723	48	38.10%
Core Market	9,160	11,015	186	20.30%
Brunswick as a %	31.40%	31.60%	32.70%	
Urban Centers				
Portland	9,213	9,579	37	4.00%
Brunswick as a %	31.20%	36.40%		
Lewiston	5,264	5,314	5	0.90%
Brunswick as a %	54.70%	65.60%		
MSA				
Portland	41,181	52,007	1,083	26.30%
Core Mkt as a %	22.20%	21.20%		
Lewiston-Auburn	13,348	15,522	217	16.30%
Core Mkt as a %	68.60%	71.00%		

Source: US Census Bureau and RKG

Table VII-14

Decennial Change in Single-Family Owner Occupied Housing

Location	Change in Housing Units - Median Value			
	1990	2000	Change	% Change
Brunswick	\$117,300	\$135,000	\$17,700	15.10%
Bath	\$90,200	\$95,200	\$5,000	5.50%
Durham	\$104,800	\$123,500	\$18,700	17.80%
Harpswell	\$152,100	\$162,500	\$10,400	6.80%
Topsham	\$107,500	\$118,700	\$11,200	10.40%
Freeport	\$130,700	\$169,800	\$39,100	29.90%
Core Market	\$116,100	\$133,700	\$17,600	15.20%
Brunswick as a %	101.10%	101.00%	100.50%	
Urban Centers				
Portland	\$112,200	\$121,200	\$9,000	8.00%
Brunswick as a %	104.50%	111.40%		
Lewiston	\$87,200	\$87,200	\$0	0.00%
Brunswick as a %	134.50%	154.80%		
MSA				
Portland	\$118,300	\$129,400	\$11,100	9.40%
Core Mkt as a %	98.10%	103.30%		
Lewiston-Auburn	\$87,000	\$89,500	\$2,500	2.90%
Core Mkt as a %	133.40%	149.40%		

Source: US Census Bureau and RKG

estimated inflation of about 32.0%) to \$135,000. As in 1990, this was slightly greater than the estimated core market median value of \$133,700. The change in reported median housing value across all cities and towns in the core market was 15.2%; also well below the 32.0% rate of inflation. Only the reported median housing value in Freeport, which increased by 30.0% over the decade, was on par with the estimated rate of inflation.

The reported median housing value for Brunswick was slightly greater than that for the City of Portland, in 1990 and in 2000. The discrepancy was wider when compared with the City of Lewiston. However, the median value of housing in the core market is about par with that for the Portland MSA, but much more than the Lewiston-Auburn MSA.

Summary – The annual change in single-family owner occupied housing in Brunswick was 61 units during the 1990s, representing about one-third of the average change of 186 units across the core market. The percent growth in reported median home values, for all of the regions, during the last decade was less than the estimated 32.0% inflation rate. The reported median home value for Brunswick was competitive with the core market in 1990 and in 2000; but marginally more expensive than the City of Portland and well above that for the City of Lewiston. This was also the case for the core market, relative to the Portland MSA and the Lewiston-Auburn MSA.

b) Gross Monthly Rent

Gross monthly rent in 1990 was just under \$525 in the core market, which compared favorably with the Portland MSA but was well ahead of the Lewiston-Auburn MSA. The gross monthly rent in Brunswick in 1990, at slightly more than \$475, compared well against the core market and the City of Portland, but was considerably greater than that for the City of Lewiston. By 2000, the gross monthly rent in the core market had increased by almost 20.0%, surpassing the growth in either of the two cities or the two MSAs. The gross monthly rent in Brunswick increased by nearly 12.0%, but by only one-half in absolute dollars when compared

Table VII-15

Decennial Change in Reported Gross Monthly Rent

Location	Reported Gross Monthly Rents			
	1990	2000	Change	% Change
Brunswick	\$478	\$534	\$56	11.70%
Bath	\$479	\$519	\$40	8.40%
Durham	\$550	\$788	\$238	43.30%
Harpwell	\$540	\$659	\$119	22.00%
Topsham	\$539	\$636	\$97	18.00%
Freeport	\$540	\$603	\$63	11.70%
Core Market	\$521	\$623	\$102	19.60%
Brunswick as a %	91.70%	85.70%	54.80%	
Urban Centers				
Portland	\$504	\$598	\$94	18.70%
Brunswick as a %	94.80%	89.30%		
Lewiston	\$361	\$408	\$47	13.00%
Brunswick as a %	132.40%	130.90%		
MSA				
Portland	\$526	\$621	\$95	18.10%
Core Mkt as a %	99.00%	100.30%		
Lewiston-Auburn	\$375	\$432	\$57	15.20%
Core Mkt as a %	138.90%	144.30%		

Source: US Census Bureau and RKG

with the core market. As such, the gross monthly rent in Brunswick remains competitive to the City of Portland and greater than the City of Lewiston.

2. Building Permit Activity

According to data compiled by the US Census Bureau, there have been more than 1,200 building permits issued for new construction of single-family units in the core market (2000 through 2003, inclusive). On average, this equates to 302 permits per year, with nearly one-third in Brunswick. Building permit activity for multi-family units has been less robust over the same period, especially in the core market, but the average per unit permit value for Brunswick is among the highest.

Table VII-16

Building Permit Activity for Single-Family Units

Location	Number of Permits Issued				
	2000	2001	2002	2003	Average
Brunswick	86	88	97	104	94
Bath	11	3	10	60	21
Durham	31	44	49	50	44
Harpswell	0	0	76	60	34
Topsham	62	53	54	87	64
Freeport	45	44	37	57	46
Core Market	235	232	323	418	302
Brunswick as a %	36.60%	37.90%	30.00%	24.90%	31.00%
Urban Centers					
Portland	88	104	61	161	104
Lewiston	26	45	56	89	54

Source: US Census Bureau and RKG

a) Single-Family Units

In 2000, there were 235 building permits issued for the construction of new single-family housing in the core market. At that time about 86 permits, or 36.6% of the total issued were in Brunswick. Permit activity increased to 418 in 2003, however, the representation of Brunswick declined to 24.9%. The average representation of permit activity over the four years was about 31.0% in Brunswick. This notwithstanding, there were an average of 94 permits issued annually over the four years for the construction of new single-family units in Brunswick, second only to the annual average of 104 permits in the City of Portland and well ahead of the 54 permits annually in the City of Lewiston.

Over the last four years, the permit activity in the core market has averaged 302 permits annually, well above the 164 annual new units per the 1990 and 2000 US Census. Similarly, the permit activity for Brunswick in the last four years has averaged 94, nearly three times the US Census average for 1990 to 2000. While not all permits do result in occupancy, it is reasonable to assume that home building and ownership in Brunswick and the core market has picked up its pace over the trends set in the last decade.

This permit activity represented a reported investment of a little more than \$32.8 million in 2000, or an average of about \$139,600 per single-family unit in the core market. At an average investment of \$129,500 per unit in Brunswick, this lagged the core market and the City of Portland. By 2003, the investment in the core market totaled more than \$79.3 million, averaging about \$189,800 per unit. By 2003, the average per unit investment in Brunswick exceeded that for the core market, the City of Portland and the City of Lewiston.

Table VII-17

Building Permit Activity for Single-Family Units

Location	Average Reported Permit Value				% Change
	2000	2001	2002	2003	
Brunswick	\$129,498	\$162,010	\$173,735	\$197,997	52.90%
Bath	\$149,182	\$191,997	\$116,897	\$171,917	15.20%
Durham	\$120,007	\$141,156	\$138,134	\$138,557	15.50%
Harpwell	\$0	\$0	\$137,690	\$171,917	NA
Topsham	\$129,176	\$156,557	\$174,840	\$209,481	62.20%
Freeport	\$184,427	\$196,588	\$204,370	\$227,314	23.30%
Core Market	\$139,601	\$163,755	\$161,788	\$189,788	36.00%
Brunswick as a %	92.80%	98.90%	107.40%	104.30%	
Urban Centers					
Portland	\$142,246	\$106,447	\$120,389	\$120,573	-15.20%
Lewiston	\$119,489	\$118,420	\$129,129	\$115,317	-3.50%

Source: US Census Bureau and RKG

b) Multi-Family Units

Building permit activity for multi-family housing units has been well below that for single-family units over the 2000 to 2003 time. According to US Census data, the only community experiencing any significant growth in multi-family housing has been the City of Portland, averaging just over 90 permits

Table VII-18

Building Permit Activity for Multi-Family Units

Location	Number of Permits Issued				Average
	2000	2001	2002	2003	
Brunswick	0	0	14	18	8
Bath	0	0	4	0	1
Durham	0	0	0	0	0
Harpwell	0	0	0	0	0
Topsham	0	12	0	8	5
Freeport	0	0	4	4	2
Core Market	0	12	22	30	16
Brunswick as a %			63.60%	60.00%	50.00%
Urban Centers					
Portland	72	116	72	103	91
Lewiston	0	0	0	5	1

Source: US Census Bureau and RKG

per year. Brunswick has averaged eight permits per year, reflecting the development activity in 2002 and 2003. None of the other cities or towns in the core market has exhibited in significant growth in multi-family building permit activity.

The average change in multi-family units (as measured by permit activity) has been eight for the Town of Brunswick, similar to the annual average of nine during the 1990s. Similarly, the recent core market average of 16 units is akin to the 14 units annually during the last decade. In other words, assuming permits equate to

occupancies, the change in multi-unit housing in the past four months mirrors that of the previous decade.

In 1990, these building permits represented no investment activity in the core market and only \$1.7 million on average for the four years. Most all of the investment activity in the core market has occurred in Brunswick. By contrast, there has been an average

investment in multi-family housing in the City of Portland of nearly \$7.2 million annually over the same time. This notwithstanding, the average permit value for a multi-family unit in Brunswick, at about \$118,000, exceeds all other areas, including the City of Portland and the City of Lewiston.

Table VII-19**Building Permit Activity for Multi-Family Units**

Location	Average Reported Permit Value				
	2000	2001	2002	2003	Average
Brunswick	\$0	\$0	\$92,500	\$137,444	\$117,781
Bath	\$0	\$0	\$65,000	\$0	\$65,000
Durham	\$0	\$0	\$0	\$0	\$0
Harpwell	\$0	\$0	\$0	\$0	\$0
Topsham	\$0	\$101,667	\$0	\$93,750	\$98,500
Freeport	\$0	\$0	\$150,000	\$50,000	\$100,000
Core Market	\$0	\$101,667	\$97,955	\$114,133	\$106,234
Brunswick as a %			94.40%	120.40%	110.90%
Urban Centers					
Portland	\$50,847	\$87,276	\$78,403	\$88,214	\$78,557
Lewiston	\$0	\$0	\$0	\$100,000	\$100,000

Source: US Census Bureau and RKG

3. Rental Units

According to surveys completed by the Maine State Housing Authority, rents (exclusive of utilities) have continued to increase in Brunswick and surrounding communities for 1-BR, 2-BR and 3-BR apartments over the 2000 to 2004 period. The average rents in Brunswick over this five-year period have typically been on par with the core market, below Portland and above Lewiston.

Table VII-20**Survey of Average Monthly Rents for 1-BR Apartments**

Location	Average Surveyed Monthly Rent - excludes Utilities					
	2000	2001	2002	2003	2004	%Change
Brunswick	\$519	\$546	\$563	\$661	\$617	19.00%
Bath	\$457	\$501	\$549	\$613	\$563	23.40%
Durham	\$575	\$600	NA	NA	NA	NA
Harpwell	\$550	\$463	\$542	\$581	\$553	0.50%
Topsham	\$492	\$491	NA	\$613	\$513	4.20%
Freeport	\$595	NA	\$920	\$758	\$766	28.80%
Core Market	\$495	\$540	\$590	\$664	\$620	25.20%
Brunswick as a %	104.80%	101.20%	95.40%	99.40%	99.60%	
Urban Centers						
Portland	\$612	\$675	\$700	\$727	\$744	21.70%
Brunswick as a %	84.80%	80.90%	80.40%	90.90%	82.90%	
Lewiston	\$370	\$40	\$458	\$465	\$479	29.60%
Brunswick as a %	140.30%	124.00%	122.90%	142.20%	128.80%	

Source: Maine State Housing Authority and RKG

a) One Bedroom Units

In 2000, the average rent for a 1-BR apartment in Brunswick was \$519/month or slightly more than the \$495/month average in the core market, but well below that of the City of Portland. By 2000, the average rent

in Brunswick had increased 19.0%, to \$617/month, about the same as the \$620/month in the core market and nearly \$150/month more than in the City of Lewiston. Over this period, the average rent in the cities of Portland and Lewiston increased at a faster rate than in Brunswick. Over this five-year period, the average rent in Brunswick for a 1-BR apartment was \$581/month, similar to the five-year average for the core market, at \$582/month. The Brunswick average was \$100/month less expensive than the City of Portland (\$691/month) and more expensive than the \$442/month average for the City of Lewiston.

b) Two Bedroom Units

Similar to 1-BR apartments, the average surveyed rents for 2-BR apartments in Brunswick have been below those of Portland and above those of Lewiston. The change in the average rent in Brunswick, at 28.4%, over the 2000 to 2004 period for a 2-BR apartment is slightly above the 25.1% average increase for the core market. During this five-year period, Brunswick rents for 2-BR apartments have been similar to the core market as a whole. The average rent for the entire period, in Brunswick, was \$693/month, similar to the \$699/month for the core market. By comparison, the average rent for the City of Portland was \$870/month and the average for the City of Lewiston \$534/month.

Table VII-21

Survey of Average Monthly Rents for 2-BR Apartments

Location	Average Surveyed Monthly Rent - excludes Utilities					%Change
	2000	2001	2002	2003	2004	
Brunswick	\$619	\$631	\$658	\$763	\$795	28.40%
Bath	\$570	\$584	\$627	\$674	\$664	16.50%
Durham	NA	NA	\$750	NA	\$1,150	NA
Harpwell	\$688	\$650	\$716	\$799	\$800	16.40%
Topsham	\$570	\$652	\$708	\$778	\$821	44.00%
Freeport	\$788	\$941	\$857	\$986	\$900	14.30%
Core Market	\$607	\$685	\$677	\$765	\$760	25.10%
Brunswick as a %	102.00%	92.20%	97.20%	99.70%	104.60%	
Urban Centers						
Portland	\$783	\$857	\$880	\$911	\$917	17.20%
Brunswick as a %	79.10%	73.60%	74.70%	83.70%	86.70%	
Lewiston	\$456	\$497	\$558	\$560	\$598	31.00%
Brunswick as a %	135.70%	126.90%	117.80%	136.40%	132.90%	

Source: Maine State Housing Authority and RKG

Table VII-22

Survey of Average Monthly Rents for 3-BR Apartments

Location	Average Surveyed Monthly Rent - excludes Utilities					%Change
	2000	2001	2002	2003	2004	
Brunswick	\$740	\$775	\$799	\$850	\$938	26.80%
Bath	\$688	\$728	\$825	\$908	\$1,060	54.10%
Durham	NA	NA	NA	\$923	NA	NA
Harpwell	NA	NA	NA	NA	NA	NA
Topsham	\$900	\$1,100	\$813	NA	\$1,100	22.00%
Freeport	NA	\$1,000	\$1,363	\$1,525	NA	NA
Core Market	\$729	\$816	\$896	\$978	\$1,027	40.90%
Brunswick as a %	101.50%	95.00%	84.60%	86.90%	91.30%	
Urban Centers						
Portland	\$942	\$1,017	\$1,073	\$1,105	\$1,125	19.50%
Brunswick as a %	78.60%	76.20%	70.70%	76.90%	83.40%	
Lewiston	\$497	\$524	\$613	\$650	\$685	38.00%
Brunswick as a %	149.10%	148.00%	123.80%	130.80%	136.90%	

Source: Maine State Housing Authority and RKG

c) Three Bedroom Units

Over the 2000 to 2004 period the average surveyed rent for a 3-BR

apartment in the core market rose by nearly 41.0%, from \$729/month to \$1,027/month, and the average over the entire five-year period was \$889/month. The average rent for a 3-BR apartment in Brunswick increased a more modest 26.8%, going from \$740/month in 2000 to \$938/month in 2004. As such, the average rent for the entire time period in Brunswick was around \$812/month, or about 90.0% that of the core market. The rents for a 3-BR apartment in the City of Portland increased from \$942/month in 2000 to \$1,125/month in 2004, thereby indicating that Brunswick is a more affordable alternative. The rents in Brunswick, however, remain well above the average rents for a 3-BR apartment in the City of Lewiston. The five-year average for Portland was \$1,052/month, nearly \$250 more than in Brunswick. The average five-year rent in the City of Lewiston was \$594/month, more than -\$200 less than Brunswick.

Summary – Average rents for all apartment sizes (in terms of BR count) in Brunswick have remained competitive against the core market over the 2000 to 2004 period, averaging about 90.0% to 100.0% of the core market. In fact, average rents for 3-BR apartments in Brunswick are somewhat less than the core market as a whole. In comparison, the average rents in Brunswick for all apartment types, has been below those for the City of Portland and well above those for the City of Lewiston. In fact, the five-year average rent for a 2-BR apartment in Brunswick, at \$693/month, compares favorably to the average 1-BR apartment rent for Portland, at \$691/month. Similarly, the average 3-BR apartment rent in Brunswick, at \$812/month, is well below the average 2-BR apartment rent for Portland, at \$870/month.

Basic Allowance for Housing (BAH) – Military employees receive a set payment for housing costs that is based on rank and whether or not they have dependents, and that is determined on a regional basis according to where they are stationed. Rates include costs for rent and a portion of utilities (typically heat and electric). Personnel residing in on-base housing pay their entire BAH to the government (in the case of BNAS, these monies flow to the public-private partnership that has been created to own and operate the housing). Personnel electing to live off base receive their BAH which may or may not be sufficient to cover all of their housing costs in the private market. It is reported that personnel at BNAS living off base typically pay another 10% to 20% above BAH for rent (or mortgage in some cases) and utilities.

BAH rates were reset nation-wide last year, utilizing input from housing officials at each base and current market information. For Brunswick Naval Air Station, BAH rates range from \$995 per month for enlisted personnel to over \$1,800 for officers with dependents. The BAH for the Portland area is somewhat higher while other parts of Maine are substantially lower.

4. Existing Home Sales

This section reviews the sales of existing homes, typically single-family, within Brunswick and the surrounding communities of the core market. Recent (within the last year) sales and inventory data is presented in order to develop an understanding of

absorption and supply still on the market. Some limited information is presented for the sales of mobile homes and typical lease rates for mobile home parks.

a) Residential Sales

Information provided by a local realtor indicates that in the Brunswick, Bath, Harpswell and Topsham markets, there has been over 500 single-family units sold within the last year, suggesting a monthly absorption of about 44 existing homes. There is currently (April 2005) an inventory of 240 single-family homes for sale in these markets, indicating about a five to six monthly supply based on recent trends. Most of the existing single-family homes being sold are in the \$150,000 to \$250,000 price

Table VII-23

Activity for Existing Homes - April 2004 / 2005

Location	SALES - Count by Price Points for Homes in \$000s				Total	Avg/Mo.
	\$150	\$150-\$250	\$250-\$350	\$350+		
Brunswick	20	93	68	26	207	17.3
Bath	57	62	17	8	144	12.0
Harpswell	2	19	11	51	83	6.9
Topsham	16	63	14	4	97	8.1
Total	95	237	110	89	531	44.3
Brunswick as a %	21.05%	39.24%	61.82%	29.21%	38.98%	

Location	INVENTORY - Count by Price Points for Homes in \$000s				Total	Avg/Mo.
	\$150	\$150-\$250	\$250-\$350	\$350+		
Brunswick	3	24	33	4	100	5.8
Bath	7	14	12	13	46	3.8
Harpswell	1	11	12	39	63	9.1
Topsham	2	19	3	7	31	3.8
Total	13	68	60	99	240	5.4
Brunswick as a %	23.08%	35.29%	55.00%	40.4%	41.67%	

Source: Coldwell Banker and RKG

range (nearly 45.0% of the sales activity); however, about 42.0% of the inventory of homes for sale is in the \$350,000 and more price range. Over the April 2004 to 2005 period, Brunswick averaged about 39.0% of the existing homes sales activity and accounts for about 42.0% of the inventory still on the market.

It is difficult to estimate how many of the 207 home sales in Brunswick, in the last year, were to new homeowners thereby implying a new housing unit. However, trends are consistent whereby activity in Brunswick represents about one-third that in the core market as a whole. On the other hand, the inventory of housing available for sale in the core market suggests that four out of every 10 are in Brunswick.

b) Mobile Homes

Conversations with area real estate brokers indicated that sales of mobile homes are generally strongest in the spring, averaging perhaps six or so a month. Mobile homes offer a good alternative starter, and affordable home, for many first time buyers, notably in Brunswick and the Topsham markets. Sometimes mobile homes also are an attractive alternative as a seasonal or second home. Recent sales activity in Brunswick and Topsham indicate that mobile homes have been selling, on average, in the \$55,000 to \$60,000 range. One realtor indicated that lease rates in established mobile home parks ranges from \$265 to \$285/month in Brunswick. This usually includes utilities and trash removal. Another broker stated that typical lease rates in Brunswick range from \$250 to \$275/month, with full services. Lease rates were less in outlying areas, such as \$120 to \$150/month in Lisbon.

5. Military Occupied Housing

The following section presents a review of military-occupied housing in the Brunswick area, both off base and on base.

a) Military Housing Units

There are approximately 750 housing units that are directly a part of the Brunswick Naval Air Station, with 320 units, or about 43.0%, on-base. The remaining units are located off base, including 22 that are under construction. The predominant housing type is 3-BR units, comprising 59.5% of the total inventory. The 2-BR units, at 181 units, equates to 24.1% of the inventory. More than 90.0% of the 2-BR units are on base, while only 26.0% of the 3-BR units are on base. Nearly 70.0% of the 4-BR units are also situated off base.

Table VII-24

Brunswick Naval Air Station - Housing Inventory

Location	Housing Units by Number of BR				Total	% of Total
	2BR	3BR	4BR	5BR		
ONBASE						
Mariners Landing	122	0	2	2	126	16.80%
Woodland Village	0	65	7	0	72	9.60%
Midway Terrace	40	0	22	0	62	8.27%
Brunswick Gardens	0	40	4	0	44	5.87%
Fifth Avenue	1	11	3	1	16	2.13%
Under Construction	0	8	14	0	22	2.93%
Subtotal	163	124	52	3	342	45.60%
% of Total by BR	90.60%	27.80%	43.33%	100.00%	45.60%	
OFF-BASE						
McKeen Street	0	188	43	0	231	30.80%
Topsham Annex	18	134	25	0	177	23.60%
TOTAL	181	446	120	3	750	100.00%

Source: Brunswick NAS and RKG

The 126 units at Mariners Landing were constructed in 2003, while the 72-unit Woodland Village complex was built in 2001. The 177 units in the Topsham Annex are reportedly slated for demolition and are to be replaced with 126 units in Topsham and 24 units on base.

In addition to the above inventory, there is also the following:

- Six mobile homes, scheduled for removal (plus several mobile home pad sites)
- 250 units of barracks style housing that are double room and shared baths, these have 490 beds in total and were built new in 2003
- 190 units of barracks style housing that is a single room and single bath, with 380 beds, built new in 2003
- The Orion Inn, a transient hotel for military personnel, which has 72 suites, plus an unknown number of older dormitory-style rooms in Building #512.

b) Market Housing Units

There is no firm data available on where military personnel and their families may live if off base and not specifically part of military housing. Conversations with representatives of the military suggest that there may be as many as 2,000 personnel living off base in privately owned housing, with the majority residing in Brunswick, Bath and Topsham with the reminder spread over a large area from Portland to

Lewiston to Wiscasset. Of the total off-base personnel, it is estimated that perhaps 500 own homes and 1,500 are in rental units. In this analysis, therefore, it is assumed there may be 1,500 to 2,000 housing units within the core market area that are at-risk of becoming vacant should Brunswick NAS close.

6. Interviews

The following section summarizes interviews and conversations with brokers, developers and other real estate and local officials active in the Brunswick area housing market.

a) Area Realtors and Brokers

Conversations with a representative of Coldwell Banker indicated that, in his opinion, a large inventory of excess housing, brought to the market if the Brunswick NAS were to close, would have very negative impacts on the lower and middle ends of the market, but not on the higher end. However, he believes that the impact and the closing of the military Base, were it to happen, would occur over time, thereby allowing the market to make some adjustments, plan ahead and absorb vacancies. One question he pondered is what would be the cumulative impact if Bath Iron Works, a major employer in the region, were to also close or downsize? He indicated that several local area realtors have speculated that any on-base housing may go to the market for lower income families or as affordable housing. He also suggested that given rent differentials it is reasonable to estimate that some renters, now in Portland, may find home-ownership as an affordable option in Brunswick. Wholesale closing of the military base, and an increase in the housing stock, would likely depress the market and values would go down, but as negative as the initial impact might be, he was optimistic that the market would balance out over the longer term (no actual timeline was suggested). He speculated that many mid-priced homes could hit the market, say in the \$275,000 and under range.

Conversations with another representative of Coldwell Banker revealed the prominence of the military base on Brunswick as she indicated that the school system has perhaps 3,300 students with 22.0% from military families. She suggested that if the base were to close it would not likely be an all at once phenomenon, and that landlords and property managers would have advance notice and an opportunity to plan for the impact. She believed that the impact would not be abrupt and immediate but rather phased over time. As such, she suggested that the market could absorb the excess inventory housing stock, but that it would be a three to five year process. She stated that Lewiston was a little too far away to react to a base closing, but that the towns surrounding Brunswick would likely drop prices and rents as a competitive response, noting that it was likely that there would be some percentage of renter households that would become owner households.

A representative of Haggerty Realty indicated that over the long haul, say a three to five year window, the market could absorb any additional inventory of housing which could result from the closing of the military base. She believed that it was unlikely that all housing would become vacant, as retirees and second-home owners would stay, and that some housing would be demolished or would be replaced with

commercial development. She indicated that she has a waiting list for her rental units (12 in all) and that vacancy in her units is non-existent.

Conversations with a representative of Rentex, a local property management firm and realtor agency, believed that any large influx of new housing in the Brunswick market would glut prices and would take a long time to be absorbed back into a recovery. She also believes that regardless of what may happen with Brunswick NAS, the apartment rental rates in the area are due for a decline. Part of the problem in Maine, according to the representative, is that there is no rent control. The high rental prices afford many tenants, who may be on the cusp of home ownership, to consider home ownership if housing prices come down, too. The agent with Rentex also pointed out that if the base were to remain open then affordability of housing continues to be an issue. She also stated that in practical terms, Brunswick, Bath, Topsham and Harpswell are all one housing market.

Further conversations with Rentex representatives stated that the rental market is soft right now, as low interest rates have spurred home ownership. New homebuyers in the above towns has included anybody and everybody, from renters moving into their first house, to those moving up, those moving in and retirees and second home owners. She believed that in the properties she represents there is about a 5.0% to 7.0% vacancy. Regarding the retirement population, Brunswick has a silent and well-moneyed retirement age population of second home homeowners who she believes to be unaffected by a potential closing of the Brunswick NAS. She stated that there are less expensive alternatives to Brunswick and the adjacent towns, such as Lewiston (one-half hour away), but that Lewiston has an image problem.

The Brunswick rental market is scattered among multiple owners, there is no real concentration of rental housing by any one owner. According to the representatives from Rentex, there are only a handful of apartment complexes (60 units or more) in the Brunswick area. Most complexes, as such, are small and independently owned. Turnover of rental housing in the market is typically three months or less. According to the representative, there is no additional rental housing under construction, at least not of any scale. There probably is some existing inventory, which could be demolished, and perhaps should be demolished, but she believed this to be well below 20.0%.

What could make the rental market in Brunswick and the surrounding area even more tenuous is that there is no major employer discussing moving into the area. In other words, if Bath Iron Works and Brunswick NAS were to close, then there go the major employers, with no back-up on the horizon. As such, any glut of formerly occupied military housing, both on base and off base, could negatively impact the rental market and the owner market. While the college might take on some of the excess housing inventory, overall it would be little as it is not proximate to the college.

A representative of CHR Realty indicated that rentals in the Brunswick market are hard to find, and that if there were a sudden excess inventory it would force prices

downward. She indicated that with respect to homes for sale, anything on the market that is good and desirable usually has multiple offers and sells fast. She considers a good and affordable price to be around \$250,000 from her experience. Spring is a busy time in the Brunswick market and many listings are coming into her office now. The people buying new homes include those new to the market and some vacation and second home homebuyers. CHR represents Botany Place, a 100-unit condominium style community now being built in Brunswick. This is a cluster type development with units in the \$250,000 range (per the broker). The condominium market has just become attractive in Brunswick, but the town has typically not been a condominium market. She noted another cluster development, Signature Pines, being developed in Brunswick, also with housing in the \$250,000 range. She indicated that there is not a lot of "spec" housing built in the market and that there are not many builders taking on any projects in the \$150,000 to \$200,000 range. The broker with CHR believed that Brunswick was the most desirable town in the core market area (as previously defined). Affordability is an issue in Brunswick and surrounding communities, although there is some housing available in Bath that is under \$200,000. There is a lot of land available for future development, especially out of town towards Durham and Topsham. The CHR representative believed that if the military housing along (and behind McKeen Street) were to come on the market that it might be priced around \$200,000. However, if this housing were all to come on the market at once, it would be priced less, perhaps \$150,000 or less.

The CHR agent believed that there was little being developed specifically for the 55+ community, although she noted a project in Topsham (Highland Green). She indicated that many Portland area renters have become, and continue to become, Brunswick area homeowners. A market with depressed prices could accelerate this trend.

b) Area Assessors

Conversation with representatives of the assessor's office in Bath indicated that the community is undergoing its first property revaluation since 1994 and that there are likely to be increases in property values. Some of this will be reflected by the approximate 350 sales that took place over the last two years, although there has been limited construction of new housing. There have been some projects, typically small, with 8 or 9 units. According to the assessor's representative, appreciation has been about 10.0% per year over the last two years and nearly all the sales activity has been for single-family homes. Most of the housing, for sale on the market, is asking at the \$130,000 to \$250,000 range. There has been a lot of interest in the condominium market in the last year or two, but she indicated that this market is very cyclical and that Maine has not typically been a "condo" market. The current condominium market has properties selling for the high \$100,000's to the mid \$200,000's in price.

The assessor from Topsham indicated that Maine and the seacoast area are the number one real estate market for retirement homes (the 55+ community) and for second homes. According to the assessor, there is a retirement community (55+) now under construction in Topsham, which is to have 250 units when completely

developed. Currently there are about 120 units pre-sold and built, ranging in price from \$300,000 to \$700,000. Overall, there has been good growth in residential properties in Topsham, as vacant lots do not last long, according to the assessor.

A representative from the assessor's office in Harpswell stated that there has been a lot of new construction in the past few years and that the town is currently undergoing a revaluation, the first since 1998. Ever since the tragedy of 9/11, there has been investment in housing in the Maine seacoast, according to the representative, a reasonable amount of New Yorkers are retiring to the coast. Harpswell continues to grow as a retirement community and as a commuter community. Homes are selling for \$180,000 to \$3.2 million, with an average of around \$600,000 to \$700,000, suggesting that it is a different homebuyer attracted to Harpswell as would be attracted to Brunswick.

A representative from the assessor's office in Durham stated that his town is primarily a residential and bedroom community to Lewiston, Brunswick and Portland. There are limited commercial or non-residential properties in the town. For the last three years, the town has initiated a 45-permit maximum on building permits for new residential units. The homes being built are typically in the \$250,000 to \$350,000 range, as compared with the average assessed value of \$125,000 to \$150,000 for all housing in the town. The assessor indicated that there is land available for future development, but that the 45-permit moratorium is still in effect. According to the assessor, prior to the moratorium, Durham averaged 75 new homes per year. He believed that a sudden increase in vacancy, and resulting drop in prices, if Brunswick NAS were to close, could negatively impact the housing market for a 25 to 30-mile radius about Brunswick.

A representative from the assessor's office in Brunswick stated that the newer homes built in Brunswick were generally in the \$250,000 to \$300,000 range. The higher end homes often may be purchased by out-of-towners, but the assessor was uncertain of any specific mix of "who" is buying the newer homes and "where" they are originating. She mentioned that condominium developments have gained in popularity in Brunswick, in part reflecting low mortgage rates. She believed that if the military base were to close, that it would be a phased closing and that while there could be negative impacts in the real estate market they would come over time. Existing military housing, such as the properties off of McKeen Street, if they were to come on the market, would likely be lower in value than the newer units being built, i.e., those in the \$250,000 to \$300,000 range. How much less, according to the assessor, is a matter of speculation since it is unknown whether buildings and land would be part of the real estate offering.

c) Developers

Conversations with a local developer and homebuilder indicated that they more or less specialize in custom-built homes, in the \$400,000+ range. Their customer base is evenly divided between local residents and out-of-town residents. The representative

indicated that their firm had been involved in a couple of subdivision project, totaling perhaps 180 units, but that this was a ten-year phasing.

7. Conclusion

Conversations with area real estate brokers suggest that if Brunswick NAS were to close, and 1,500 to 2,000 housing units (excluding the approximate 750 military housing units, on-base and off-base) were to become available to the greater Brunswick market, the market would become oversupplied, prices would drop and that estimated absorption could take 5 to 10 years, all other things being equal. This is a qualitative assessment that is in line with the more quantitative assessment from trends in the core market over the last decade. This assumes that there would be no other housing developed in the market. This is unrealistic, as there will still be a market for new development, particularly towards the higher end of the pricing range. If the Navy owned units are included, then the impact on the market would be proportionally greater.

Conversations with the Brunswick assessor indicate that the majority of the Navy housing would be priced below the average price of new housing in Brunswick (currently about \$250,000 or so). The exact pricing of these units remains uncertain as there are still unanswered questions of about this housing, e.g., will the land also be for sale. It is presumed by brokers and others active in the market that some portion of the military housing may be demolished (although not necessarily a lot) and other portions would begin to address the affordability issues confronting Brunswick and surrounding communities. Additionally, any substantial decline in area housing prices could precipitate an influx of area renters and/or first time homebuyers, noting that apartment rents in Brunswick are well below those in Portland, as an example.

The potential downsizing of Bath Iron Works and the secondary impact that BNAS has on employment, home ownership and consumer spending throughout the region must be considered, too. As such, it is more reasonable to estimate that an expanded inventory of 2,000 to 2,750 housing units would be approximately 15 to 20 year absorption.

ADDENDUM

Additional materials are included in an Addendum to this document.

7/4/05
Per patron today:
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RKG ASSOCIATES
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