



Charleston Air Force Base Naval Weapons Station Joint Land Use Study 2008



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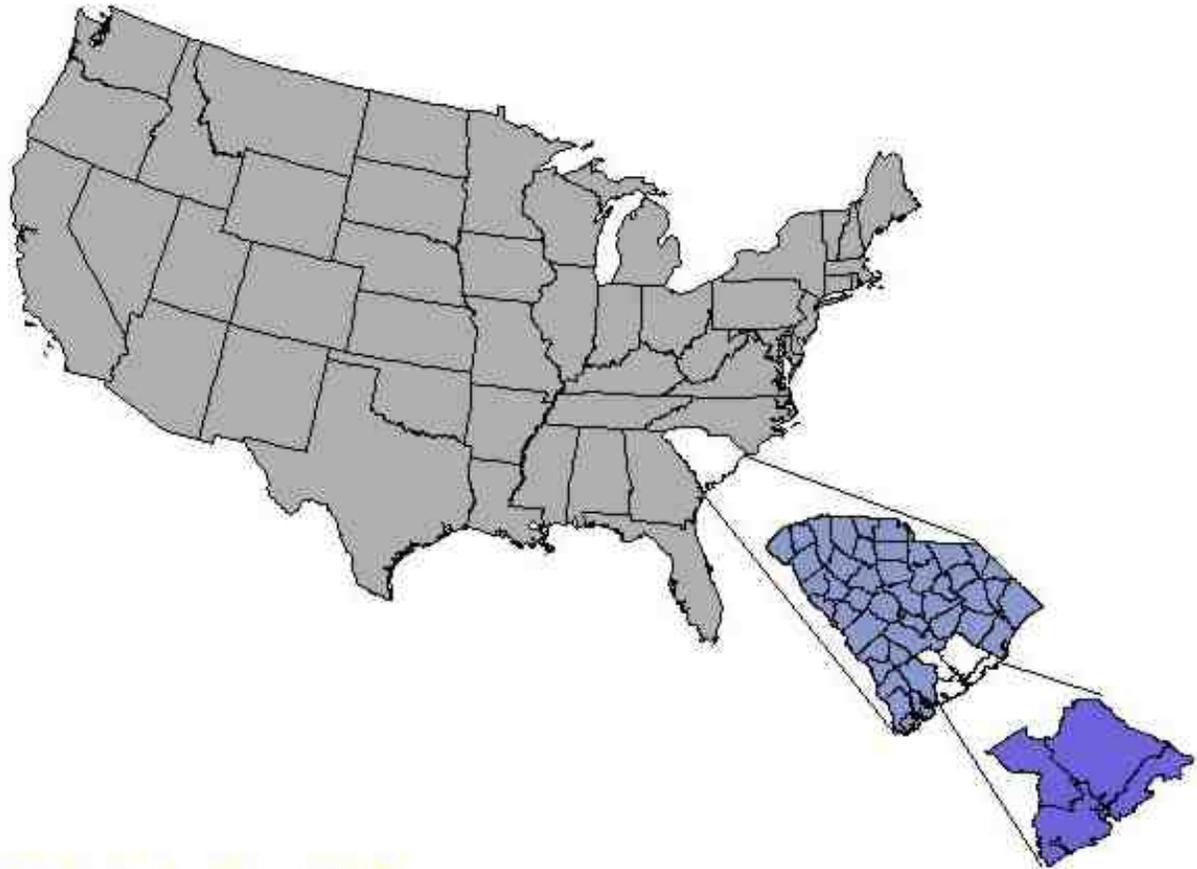
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Tammie Hoy – Lowcountry Housing Trust
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Eva Lunder – Dorchester County
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Philip Overcash – City of Charleston
Michael Rose – Charleston Trident Association of Realtors
John Snowden – Trident Technical Community College
Bill Werrell – Charleston Air Force Base
Brandon White – Charleston County

The Charleston Air Force Base and Naval Weapons Station Charleston – 2008 Joint Land Use Study is a product of an ongoing collaborative effort between local governments, Charleston Air Force Base, Naval Weapons Station Charleston, elected officials, community representatives and local residents. The Project Team would like to thank all participants for their time, effort and continued support throughout the course of this process.

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BCD Region in Continental US

Goal:

Protect the health, safety, and general welfare of the BCD Region; manage land development within the general vicinity surrounding the area's military installations; promote economically, environmentally, and socially sustainable development surrounding the area's military installations; promote the economic advancement of the BCD Region; encourage sound land use regulations to prevent incompatible land development surrounding the area's military installations.



PARTICIPATING STAKEHOLDERS

Charleston Air Force Base
Naval Weapons Station
Charleston County
Berkeley County
Dorchester County
City of Charleston
City of Goose Creek
City of Hanahan
Town of Lincolnton
City of North Charleston
Town of Summerville
Charleston Metro Chamber of Commerce
Charleston Trident Association of Realtors
Charleston County Aviation Authority
Lowcountry Housing Trust



BCDC  G



Background

The Department of Defense Office of Economic Adjustment (OEA) administers community planning assistance through the JLUS program with a purpose of promoting compatible civilian development patterns near military installations. A Joint Land Use Study (JLUS) was conducted in 1993 for the Charleston Air Force Base. Since the completion of that study, the Charleston metropolitan area has experienced significant growth and development increasing farther away from its traditional urban core. Likewise, individual municipalities surrounding the Charleston Air Force Base (AFB) and Naval Weapons Station (NWS) Charleston have experienced a high level of residential growth and commercial development over the past 15 years.

In addition to regional changes and expansion, the Charleston AFB and NWS Charleston are transitioning into a new, joint-basing structure. The 2005 Defense Base Closure and Realignment Commission (BRAC) presented recommendations for the joint basing of twelve (12) multiple military installations throughout the United States. This Joint Land Use Study (2008 JLUS) provides an overview of existing land use issues and reviews relationships between the military operations and civilian growth surrounding the Charleston AFB and NWS Charleston.

The JLUS provides a series of recommendations to assist local governments by providing a framework for municipal land use policy. This study examines land development patterns and zoning regulations from a multi-jurisdictional perspective. Comprehensive planning recommendations are provided to address and achieve the study goals through a regional perspective to further sustain military operations in the Charleston region.

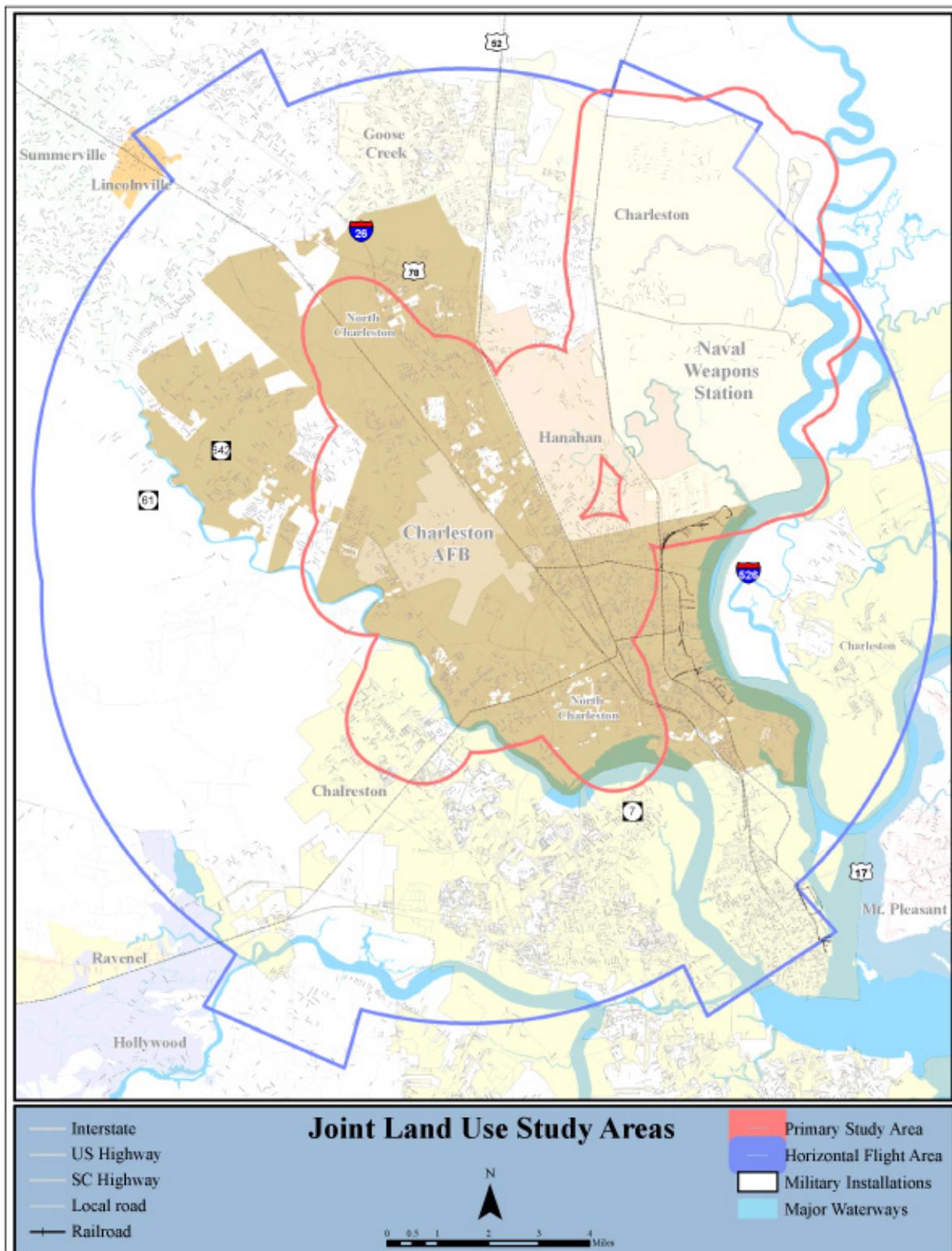
The goals and objectives of the Charleston AFB and NWS Charleston Joint Land Use Study are to:

Encourage cooperative land use planning between Charleston Air Force Base – Naval Weapons Station Charleston and the surrounding communities within the Berkeley-Charleston-Dorchester Region to ensure that future civilian growth and development is compatible with the operational mission objectives of these installations; To seek ways to reduce the operational impacts on adjacent civilian land.

This 2008 JLUS strives to increase communication between local governments within the Charleston region in hopes of achieving a cohesive relationship and vision while addressing land planning issues surrounding the Charleston region's military installations.

The 2008 JLUS serves as an update to the 1993 JLUS, using the most current and accurate information available; it also takes a more proactive stance towards limiting incompatible land uses by developing and recommending specific tools and policies for implementation. The 2008 JLUS process includes a high level of input and involvement from the general public in addition to the business community and other stakeholder groups within the Charleston region.

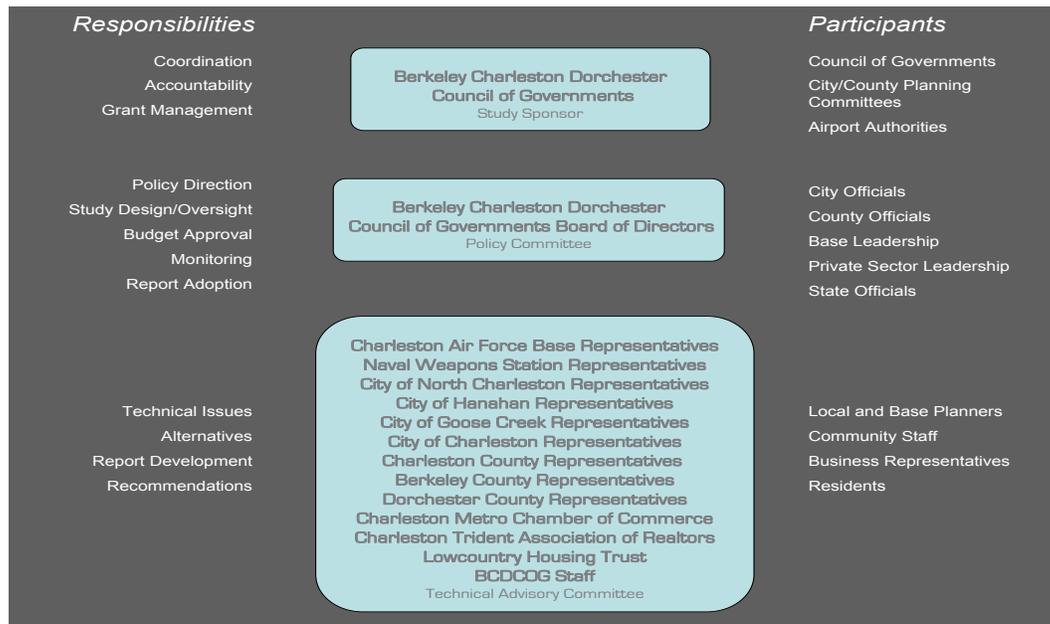
Implementation of this study will ensure the continued viability of the Charleston Air Force Base and Naval Weapons Station Charleston by serving as a practical land planning guide for local governments surrounding these military installations. This study will provide additional assistance to local leaders and educate the general public regarding the contributions, ongoing mission objectives, and future potential of the region's military installations.



Primary Study Area

The Primary Study Area extends outward one-mile from the AICUZ Zones and a one half-mile buffer surrounds the boundaries of the NWS Charleston. The second component of our study includes the horizontal surface flight area of the Air Force Base, extending 30,000 feet outward from the runways and requires a 500 hundred foot height clearance.

Jurisdictions included within in the 2008 JLUS Primary Study Area are the City of North Charleston, City of Hanahan, City of Goose Creek, City of Charleston, Charleston County, Berkeley County and Dorchester County. Jurisdictions within the horizontal flight area of the Air Force Base include portions of the Towns of Lincolnville, Summerville and Hollywood as well as portions Dorchester County, Charleston County and Berkeley County.



Organizational Structure

Sponsor

The Berkeley - Charleston -Dorchester Council of Governments is the sponsoring agency for the Charleston Air Force Base and Naval Weapons Station Charleston Joint Land Use Study. Funding was provided through the Department of Defense's – Office of Economic Adjustment and a local match was provided by the Charleston Metro Chamber of Commerce.

Policy Committee

The 2008 JLUS Policy Committee consists of the BCD Council of Governments – Board of Directors.

Technical Advisory Committee (TAC)

The TAC is comprised of representatives from the 2008 JLUS primary study area including local governments and military installations, and other community, business and civic organizations.

Chronology of Events

The 2008 JLUS intends to initiate an ongoing cooperative land use planning effort between local governments of the BCD Region and the Charleston AFB and NWS Charleston. The following is a summary of the project timeline and events leading up to the completion of this study.

1993 – The first JLUS Study was completed.

1995 – The Charleston Naval Base closed.

2004 – The Charleston Air Force based released the revised Air Installation Compatible Use Zone Report.

2005 – The Base Realignment and Closure Commission (BRAC) recommended the Joint Basing of the Charleston Air Force Base and Naval Weapons Station Charleston.

June 2006 – The BCD Council of Governments Board of Directors passed a resolution to sponsor the development of the Joint Land Use Study with the Charleston Air Force Base, Naval Weapons Charleston and surrounding local governments.

December 2006 – The JLUS kick-off meeting was held at the Holiday Inn Charleston Airport and Convention Center in North Charleston.

January 2007 – The first JLUS Technical Advisory Committee meeting was held and is scheduled to be held on a monthly basis until the completion of the study.

February 2007 – The BCDCOG Board of Directors (JLUS Policy Committee) was provided with a presentation containing an overview of the JLUS process.

June 2007 – The Project Team briefed the Policy Committee on progress of the 2008 JLUS during the June BCDCOG Board of Directors meeting. A public input and outreach meeting was held on June 14th at the Holiday Inn Charleston Airport and Convention Center in North Charleston.

July 2007 – The Charleston Metro Chamber of Commerce Developer's Council and North Area Business Council were provided a presentation and overview of the JLUS process.

August 2007 – Members of the JLUS Project Team attended the Department of Defense Sustaining Military Readiness Conference in Orlando, FL. The North Charleston Rotary Breakfast Club was given a summary of the JLUS.

September 2007 – The Project Team, with the assistance of the City of North Charleston planning staff, identified opportunities for a Transfer of Development Rights (TDR) program which will be considered as a recommendation of the JLUS. Mr. Douglas Porter with the Growth Management Institute presented on the opportunities for TDR's as a product of this study. Multiple presentations were made by Mr. Porter, including one with the Mayor R. Keith Summey of North Charleston, and the JLUS Technical Advisory Committee.

November 2007 – A presentation and summary of the JLUS process was held with New Carolina's Charleston Regional Development Alliance.

March 2008 – The Project Team distributed a mass mailing to approximately 2,000 property owners within the Clear and Accident Potential Zones, to inform residents of the April 8th public input meeting.

April 2008 – The Project Team held a public input meeting on April 8th, Colonel John "Red" Millander, Commanding Officer of the Charleston AFB and representatives from OEA were present, more than 200 residents were in attendance. Survey and information packets were distributed to citizens in attendance and uploaded to the 2008 JLUS website.

Public Involvement

Public Participation

Public input and stakeholder involvement is a significant component of this study. Multiple public input and involvement meetings were held. The Project Team has taken a proactive approach to community outreach by providing presentations to numerous community and business groups within the study area. The Project Team employed existing media relations to further promote the goals and objectives of this study. Several articles have been published by the Charleston Business Journal and the Post and Courier. The BCDCOG created a website designed to provide information relative to the ongoing JLUS. Public information brochures and surveys have been distributed to public and private property owners within the study area. A meeting notice was mailed to all property owners within the Accident Potential Zones prior to the JLUS public input meeting on April 8th, 2008.



Military's Joint Land Use Study to be presented
By Sheila Watson, Contributing Writer

A Department of Defense program that examines positive and negative effects that military installations have on surrounding communities with the North Charleston Air Force Base is the focus of a presentation at the Charleston Area Convention Center on

Rob Caison, project manager for the will present the Joint Land Use Study surrounding the Charleston Air Force communities.

COG is the sponsoring agency for the Chamber of Commerce is hosting the event.

The study's primary purposes are to identify installations and surrounding communities that are in the process of being developed.

Among the concerns included in the study is the impact of the base on the surrounding community. Other issues include the location of the base, and the impact on the surrounding community.

Among the negative military impacts, an increase in development operations. The study noted that the base is a major employer in the area.

According to documents from the project, the base encompasses a 1-mile radius around the Naval Weapons Station. A secondary radius is also shown.

The timeline for the full study is 14 months. Currently, the study is in the analysis phase, with a public input meeting scheduled for the future.



Concern arises over high-density development near Air Force Base

BY JESSICA JOHNSON

When the Charleston Air Force Base located here in 2021, it will be the largest military installation in the world.

The central location is ideal for high-density development, but that will not be the case. The base is surrounded by residential areas and other areas that are not suitable for high-density development.

Development is one of the issues that will be addressed during the study. The base is a major employer in the area.

North Charleston Planning Director Bill Goss said that developers plan to build a new residential development near the base.

City planners have approved a preliminary plan for the development. The plan includes a mix of residential and commercial uses.

Reach Jessica Johnson at jjohnson@postandcourier.com or 774-5555.

AT A GLANCE
The issue: Charleston Air Force Base is at the center of high-density development.

The problem: Surrounding development is a consideration in the base's future.

What's next: A public input meeting will be held at tonight's meeting.



Joint Land Use Study Presented at Chamber's North Area Business Council

The Chamber's North Area Business Council hosted Rob Caison, project manager, Berkeley-Charleston-Dorchester Council of Governments who presented updates and information about the Joint Land Use Study (JLUS). The JLUS is a cooperative land use planning effort between affected local governments and the military installation.

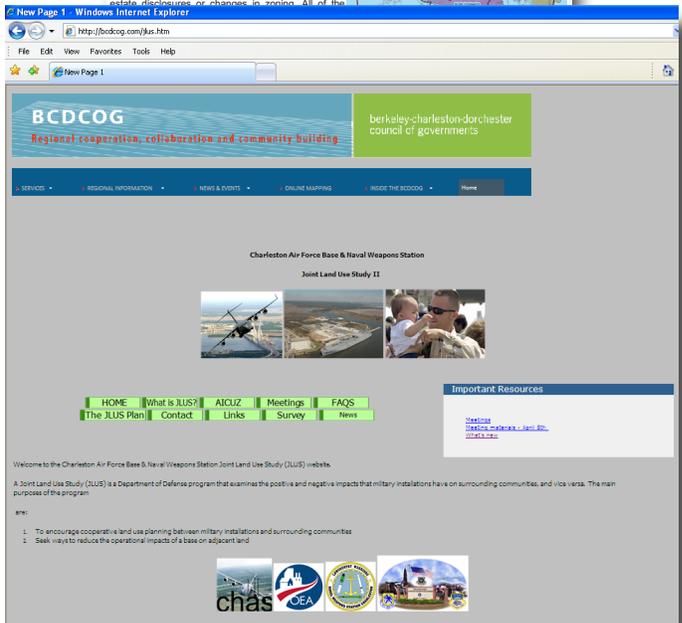
The recommendations present a rationale and justification, and provide a policy of framework to support adoption and implementation of compatible development measures designed to prevent urban encroachment, safeguard the military mission, and protect the public health, safety and welfare. The Study will examine the current and future land use in a one-mile radius surrounding Charleston Air Force Base and Charleston International Airport as well as a half-mile radius of the Charleston Naval Weapons Station.

The completed study will include specific recommendations to be implemented by the appropriate community or county to prevent further encroachment. Specific examples of recommendations could be building codes, real estate disclosures, or changes in zoning. All of this

Today (News) Events (1) Classified (1)



Charleston Air Force Base & Naval Weapons Station Joint Land Use Study II



PUBLIC MEETING

where: HOLIDAY INN Charleston Airport & Convention Center
5264 INTERNATIONAL BLVD NORTH CHARLESTON

when: Tuesday April 8th
at 7:00pm

The BCD Council of Governments respectfully invites you to attend a public meeting. Presentations will be held regarding the **CHARLESTON AIR FORCE BASE** & the surrounding community

Additional information is available at www.bcdco.com/JLUS or 843.529.0400



The JLUS Project Team held a public input meeting on April 8th, 2008, Colonel John C. "Red" Millander with the Charleston Air Force Base and representatives from the Office of Economic Adjustment were present. More than 200 citizens were in attendance.



Public Input Meeting
Charleston Air Force Base

Naval Weapons Station Charleston
Joint Land Use Study II

Holiday Inn Airport North Charleston
Tuesday April 8th, 2008

I. Opening
II. Video
III. Staff
IV. Discussion
V. Closing

JOINT LAND USE SURVEY

Name: _____
Address: _____
City: _____
State: _____
Zip: _____

Comments: _____

Circle the number that best fits your judgment.

Question	Strongly Oppose	Oppose	Neutral	Support	Strongly Support
1. Does the Air Force Base have an impact on your quality of life?					
2. Does the Air Force Base have an impact on the surrounding community?					
3. Does the Air Force Base have an impact on the regional economy?					
4. Is the military presence within the Charleston Region a valuable asset to the local community?					
5. Do you have any concerns about Base Management and Operation?					
6. Do you have any concerns regarding flight operations at the Air Force Base?					
7. Do you have any concerns regarding the Air Force Base's impact on the local economy?					
8. Do you have any concerns regarding the Air Force Base's impact on the regional economy?					
9. Do you have any concerns regarding the Air Force Base's impact on the Charleston Region's quality of life?					
10. Do you have any concerns regarding the Air Force Base's impact on the surrounding community?					
11. Do you have any concerns regarding the Air Force Base's impact on the regional economy?					
12. Do you have any concerns regarding the Air Force Base's impact on the Charleston Region's quality of life?					
13. Do you have any concerns regarding the Air Force Base's impact on the surrounding community?					
14. Do you have any concerns regarding the Air Force Base's impact on the regional economy?					
15. Do you have any concerns regarding the Air Force Base's impact on the Charleston Region's quality of life?					
16. Do you have any concerns regarding the Air Force Base's impact on the surrounding community?					
17. Do you have any concerns regarding the Air Force Base's impact on the regional economy?					
18. Do you have any concerns regarding the Air Force Base's impact on the Charleston Region's quality of life?					
19. Do you have any concerns regarding the Air Force Base's impact on the surrounding community?					
20. Do you have any concerns regarding the Air Force Base's impact on the regional economy?					

Charleston Air Force Base
Naval Weapons Station
Joint Land Use Study II

Public Information Meeting
April 8th, 2008

BCDC



Current Community & Regional Plans

The JLUS Project Team has coordinated research and analysis with members of the City of North Charleston and Charleston County's planning staff and consultant teams throughout the course of this study.

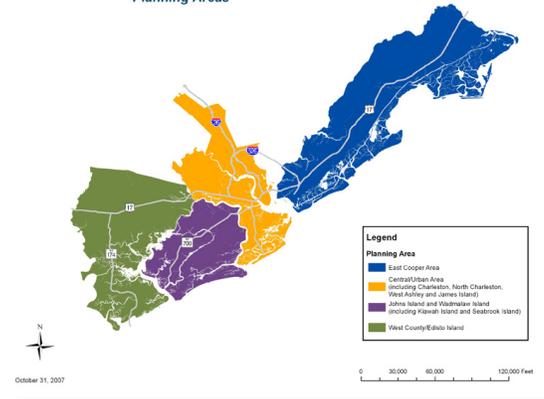
The City of North Charleston has hired Roberts and Company a Planning Consulting Firm to provide an update to the City's Comprehensive Land Use Plan. A Draft version of the updated plan was submitted on January 18th, 2008.

Charleston County hired and Clarion & Associates a Multi-service Planning and Consulting Firm to update its Comprehensive Land Use Plan. The first Draft submittal of the updates to Charleston County's Comprehensive Land Use Plan is scheduled for August of 2008.

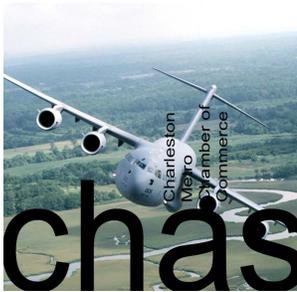


North Charleston Comprehensive Plan Update
DRAFT | MARCH 4, 2008

Charleston County Comprehensive Plan 10-Year Update:
Planning Areas



Roberts and Company
229 Peachtree Street
International Tower, Suite 2000
Atlanta, Georgia 30303



Charleston Metro Chamber of Commerce Economic Data

SUMMARY OF MILITARY IMPACTS IN CHARLESTON, 2004*

BASE OPERATIONS

Charleston Air Force Base

	Direct Impacts	Multiplier Impacts	Total Impacts
Business Sales	\$409,140,351	\$377,475,097	\$786,615,448
Employment	6,942	10,181	17,123
Labor Income	\$194,700,000	\$283,467,562	\$478,167,562

Charleston Naval Weapons Station

	Direct Impacts	Multiplier Impacts	Total Impacts
Business Sales	\$1,195,878,474	\$1,129,577,232	\$2,325,455,706
Employment	11,673	30,546	42,219
Labor Income	\$476,000,000	\$849,468,994	\$1,325,468,994

VISITORS

Military Visitors to Charleston

	Total Impacts
Business Sales	\$28,429,947
Employment	505
Labor Income	\$10,954,152

RETIREE SPENDING

	Total Impacts	Retiree Income
Business Sales	\$345,929,655	
Employment	4,431	
Labor Income	\$119,621,397	\$249,200,000

OVERALL MILITARY IMPACT ON THE CHARLESTON AREA (Includes Base Operations at AFB and NWS, Military visitors, area military retirees)

	Total Impacts
Business Sales	\$3,486,430,756
Employment	64,278
Personal Income	\$2,183,412,105

*2006 data scheduled to be released in 2008

Joint Use Facilities



Charleston International Airport

The Charleston County Aviation Authority (CCAA) acquired 138 acres of property from the City of Charleston on January 1st 1979 subject to reservations for the Air Force airfield and airspace clearance criteria. The Air Force easement on these 138 acres grants the right to prohibit uses incompatible with airfield operations, such as residential uses, but allows compatible land uses such as airline terminals, hangars, light industry, warehousing, etc.

The Charleston International Airport is operated under a joint use agreement with the United States Air Force. In 2008, revisions were made to the 1955 Jointly Used Flying Facilities Agreement which identifies stipulations for civil aircraft operations, maintenance, repair, and construction of existing facilities and major repairs and construction of new facilities.

The Air Terminal is located to the south/southeast of the airfield and offers scheduled air passenger service. The joint use agreement provides for shared use of runway and navigational aids by civilian general aviation, commercial and military aircraft.

On February 21st, 2008, the CCAA and the Secretary of the Air Force negotiated a revised contractual agreement for the Jointly Used Flying Facilities. The purpose of the agreement is to define the rights and responsibilities for maintenance and utilization of the airfield areas.

Under the terms of the agreement, the Air Force owns and operates the runway and associated flying facilities. Civil aviation operations have operated on land contiguous to the Charleston AFB since 1955 under previous joint use agreements and other real property instruments.

The new joint use agreement states the Air Force is responsible for operating and maintaining the Jointly Used Flying Facilities to support the military mission at the Charleston AFB. The Air Force is responsible solely for maintaining the Jointly Used Facilities required to accomplish the military mission.

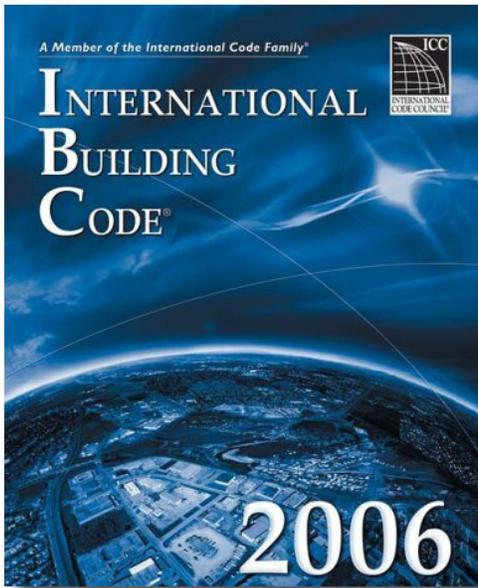
If any changes to the Jointly Used Facilities are required to support civil aircraft operations, they are to be implemented at no expense to the Air Force but shall require Air Force concurrence and be in accordance with Air Force criteria. Should the CCAA desire to upgrade any of the facilities, the design and construction improvements shall support the type of military aircraft assigned to or commonly transient through the Charleston AFB and must be coordinated with the 437th Airlift Wing.



Red Bank Road

Red Bank Road is owned by the Naval Weapons Station Charleston and bisects the base east to west. The Department of Defense granted South Carolina Department of Transportation an easement to use and maintain Red Bank Road in 1962. The road is utilized by military operations and personnel in addition to civilians primarily for access to the Bushy Industrial Park.

Existing Development Controls



Building Codes

Construction techniques can affect the compatibility of future structures in higher noise impact areas. Requirements for insulation in the International Building Code are typically based on energy efficiency and not sound attenuation. Each new structure is required to pass inspection procedures provided by the Building Code prior to issuance of a Certificate of Occupancy.

The AICUZ Study recommends the modification of municipal building codes to ensure new construction within the AICUZ Zones achieves the recommended noise level reductions. This strategy has the potential to be a key element in the prevention of the negative affects of noise associated with operations of the Charleston AFB.

Building code revisions could be employed at the state or regional level to provide uniform standards. This would contribute to the achievement of noise and sound insulation in areas located within the noise zones surrounding military airfields.

Zoning

The Primary Study area of the Joint Land Use Study encompasses a total of seven municipal jurisdictions, including the City of North Charleston, Charleston County, Berkeley County, Dorchester County, City of Charleston, City of Goose Creek and City of Hanahan. These seven local governments have individual land development regulations and zoning ordinances.

Height Restrictions

This table identifies the maximum allowable height standard for each municipality by ordinance, identifying the zones. In addition to height standards for telecommunication towers. The Horizontal Surface Flight Area of the AICUZ Study considers natural or man-made objects protruding above 500 feet at grade level to be hazardous to flight operations.

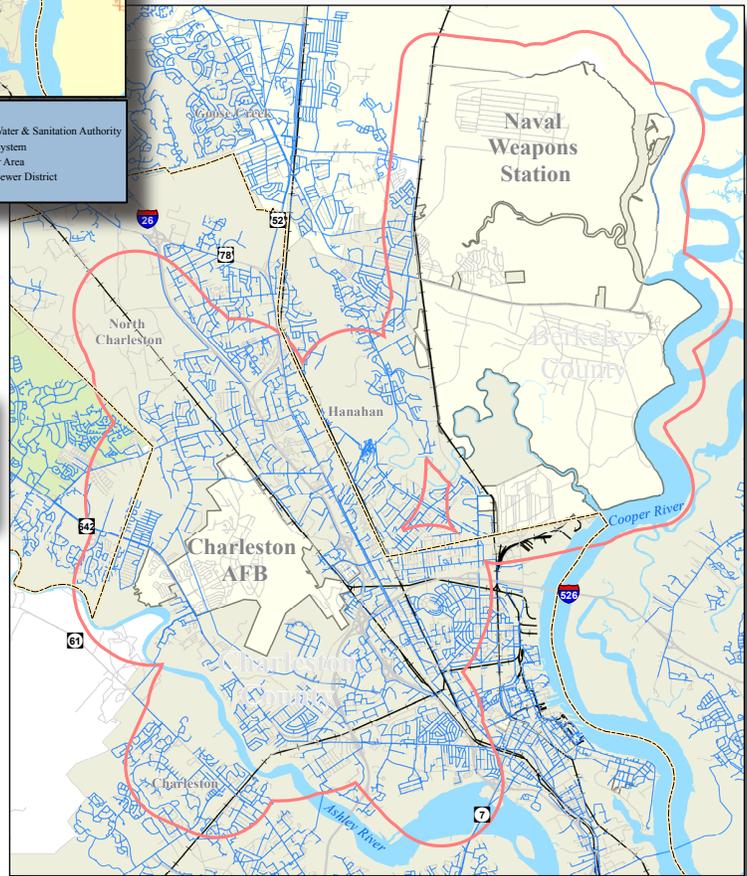
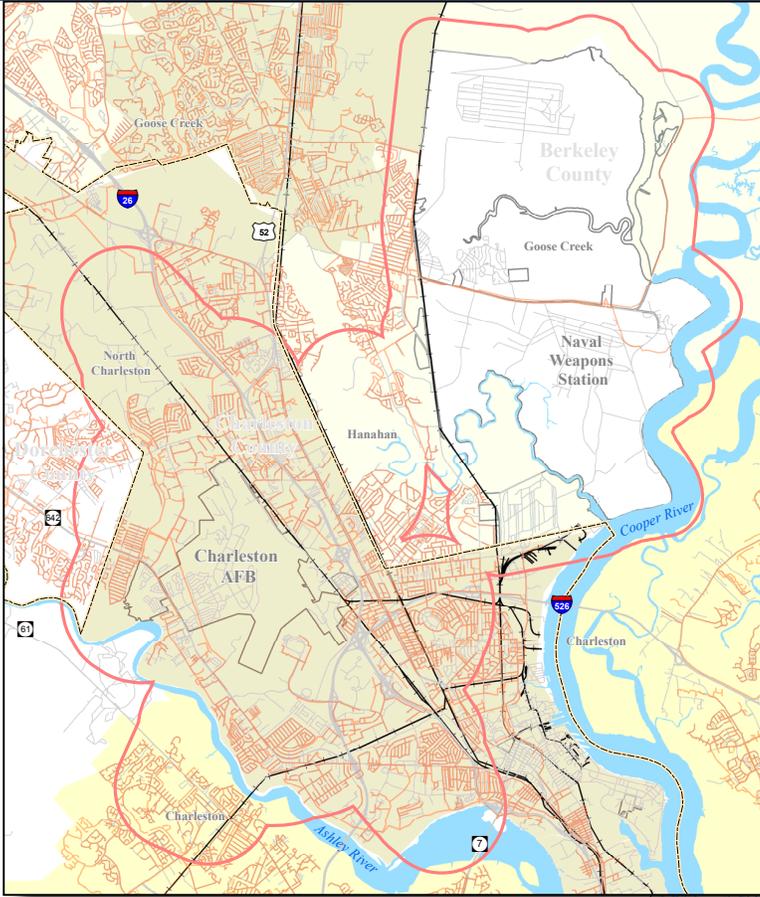


Municipality	Maximum Allowable Height	Telecommunication Towers
City of Charleston	50 ft/ 3 stories	400 ft
City of Goose Creek	50 ft/ 4 stories	300 ft light industrial 150 ft commercial
City of North Charleston	35 ft	240 ft
City of Hanahan	35 ft	100 ft residential 180 ft commercial 360 ft industrial
Town of Summerville	55 ft	300 ft
Town of Lincolnville	50 ft	setback 1 ft for every 1 ft in height
City of Hollywood	35 ft	200 ft 500 ft with special use permit
Berkeley County	35 ft	300 ft Light & Heavy Industrial 200 ft General Commercial 100 ft Office/Institutional
Charleston County	50 ft/ 4 stories	None Specified
Dorchester County	2 stories	300 ft

Water & Wastewater Service

Wastewater Service Providers

Approximately 412 miles of sewer main lines are within the study area, which comprised roughly 15% of total sewer lines in BCD region. The majority of the wastewater/sewer service within the study area is provided by North Charleston Sewer District and Berkeley County Water and Sanitation Authority.



Water Service Providers

Water service within the study area is almost entirely served by Charleston Water System, with nearly 378 miles of main lines and 13% of the total water lines in BCD region. Water and Sewer lines within the Charleston AFB and NWS Charleston are not factored in these calculations due to homeland security concerns.

Transportation

Road Projects

The Berkeley-Charleston-Dorchester Council of Governments (BCD-COG) is the Metropolitan Planning Organization (MPO) for the Charleston Region. This federal designation is identified under Section 134 of Title 23, U.S. Code, for maintaining and conducting a “continuous, cooperative, and comprehensive” regional transportation plan for local jurisdictions within the Charleston Area Transportation Study (CHATS) area. These activities culminate in a Long Range Transportation Plan (LRTP), which is used as a guide for regional growth and investment in the regional transportation system spanning over a 25 year period.

The CHATS 2030 LRTP was adopted in April 2005 and includes several road projects within the study area. These projects are illustrated on the map and coded in accordance with their respective programmed funding source, as follows:

Guide-share funds for CHATS supported improvements are typically used for roadway improvements and enhancement monies typically are used for



pedestrian and bicycle facilities. Historically, Guide-share funding has been approximately 13.993 million per year, but commitments to previously bonded projects reduce that number to about \$7 million in 2007. Enhancement funds total approximately \$700,000 per year.

Innovative Financing denotes sources other than Guide-share such as county sales tax programs, State Infrastructure Bank (SIB) funds and

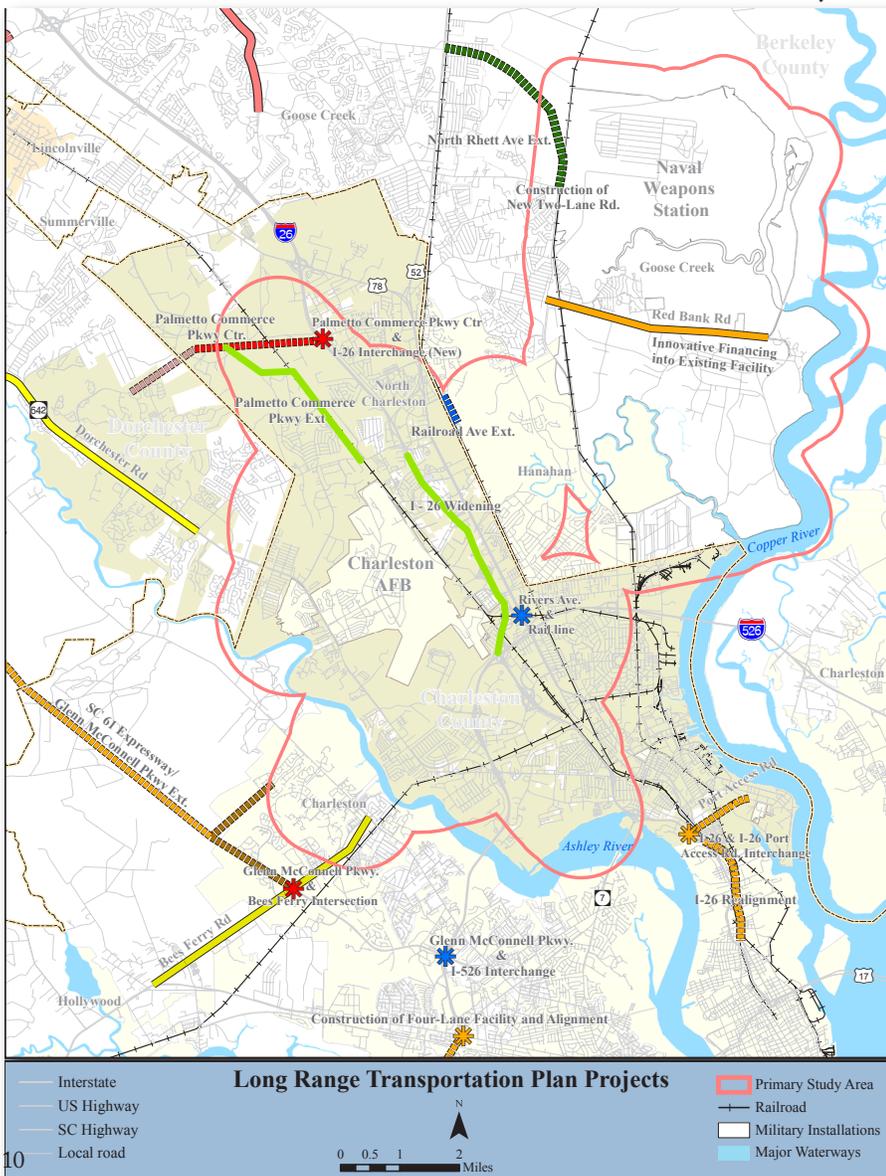
transportation impact fees. Some projects identified in the CHATS LRTP are also included in a short range (5 year) program called a Transportation Improvement Program (TIP). The TIP is a regional transportation priority program for limited transportation funding resources. Projects included in the TIP must have programmed funding sources in addition to being included in the CHATS LRTP.

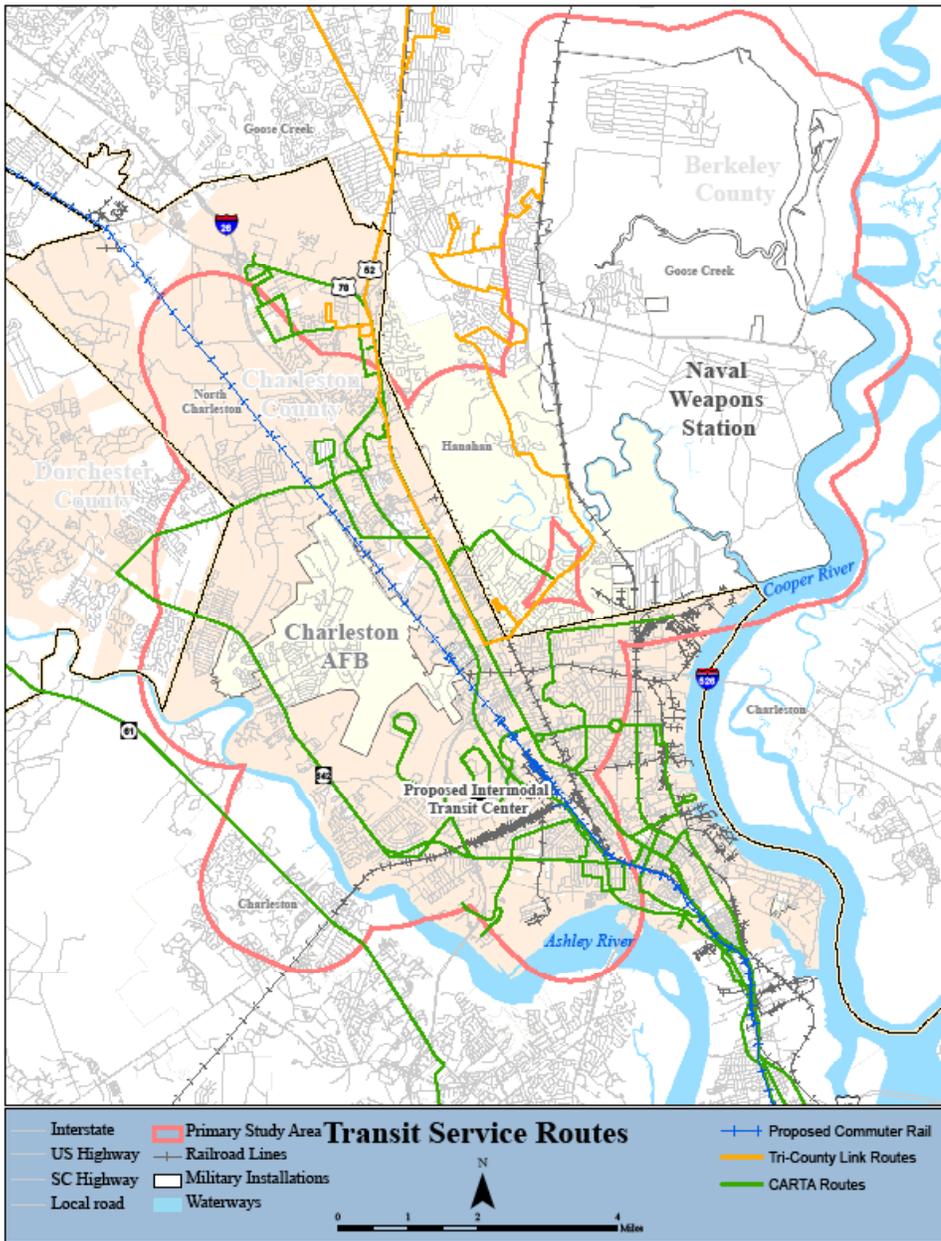
The 2007-2012 TIP includes the following transportation improvement projects within the study area:

- a) I-26 widening from I-526 to a point near Midland Park Rd., with interchange improvements at Remount Rd. and Aviation Ave in the City of North Charleston
- b) Bees Ferry Road widening from US 17 to Ashley River Rd. in the City of Charleston
- c) Railroad Ave Extension, new roadway connective Mabeline Rd. to River Landing Blvd. in the City of Hanahan
- d) Red Bank Road resurfacing and widening.

The Charleston County sales tax program and county’s application to State Infrastructure Bank has identified these additional projects:

- a) Palmetto Commerce Pkwy. extension, from where it currently ends in Palmetto Commerce Park to Ashley Phosphate Rd.
- b) Port Access Rd., providing access to the proposed new terminal from I-26





Additional transit services in the planning stage will further enhance the travel options in this area. Tri-County Link will be implementing two express feeder routes. Both routes will connect with CARTA Express Buses at the Otranto Rd. park-n-ride facility, with one providing service along US Highway 78 from the Town of Ridgeville and along US Highway 52 from the Town of Moncks Corner. CARTA has proposed to expand their Express Service by operating a route along Dorchester Rd. (SC 642), starting at a park-n-ride facility at Old Trolley Rd., which is in the southwest sector of the Town of Summerville. CARTA has also embarked on the construction of an intermodal center, located on W. Montague Ave. near its intersection with Dorchester Rd. This facility is planned to house public and private transportation providers, including Amtrak, CARTA, taxis, intercity buses, and a park-n-ride lot. Finally, the largest endeavor in the region is the proposed Commuter Rail service that would bisect the JLUS study area. The proposal is to operate on the existing freight railroad line that runs from the City of Charleston to the Town of Summerville. The line is owned and maintained by Norfolk Southern Corporation.

There is a relatively high level of transit service in the JLUS study area. This is an asset and should be considered in land use changes for the area.

More information about available transit services can be found at www.rideCARTA.com

Transit Service

Augmenting the transportation options in the JLUS study area are a number of transit routes. Transit services are provided by the Charleston Area Regional Transportation Authority (CARTA) and the Tri-County Link. CARTA provides three types of transit service: Express Route, Fixed Route, and Demand-Response Paratransit service. Last year, CARTA provided over three million rides to customers, creating a multitude of benefits to the community from preservation of public infrastructure to job creation to economic development and municipal tax revenue.

The Express service operates during the peak morning and afternoon commute times from a park-n-ride lot located at the intersection of Otranto Road and Rivers Avenue. It is a limited stop service offering a direct link between residential areas and employment centers.

The majority of the transit service offered is the fixed route, fixed schedule type. These buses serve the same destinations on a regularly scheduled interval. Within the JLUS study area, CARTA fixed routes include Routes #10, 11, 12, 13, 101, 102, 103, 104, 106, and 303. Tri-County Link operates Route B-102, which creates a transportation link to the rural portions of Berkeley County.

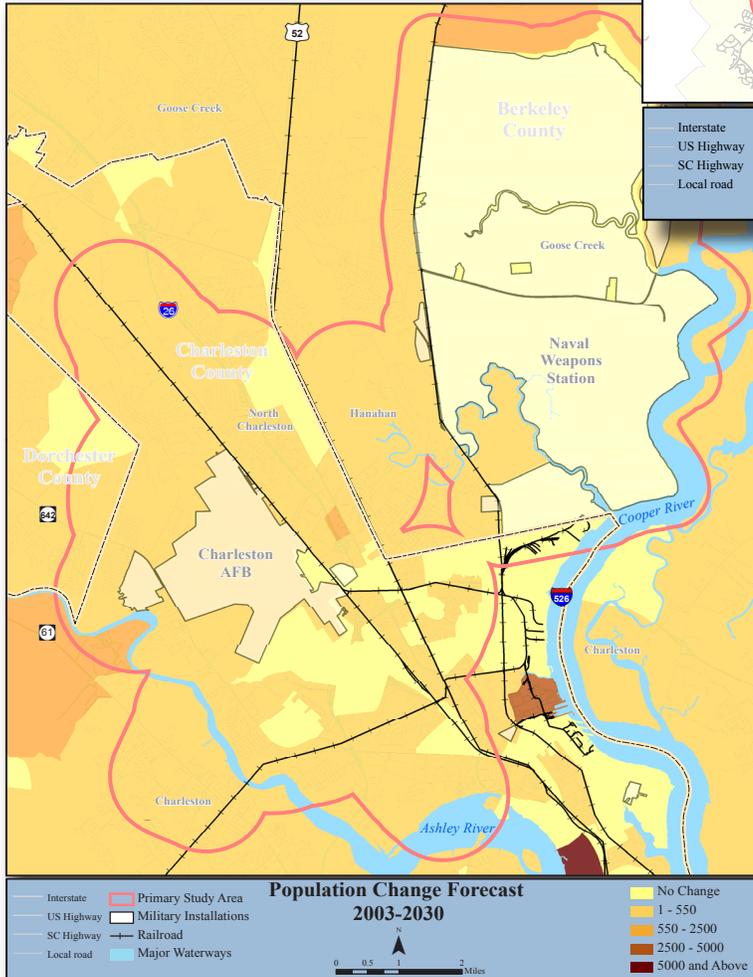
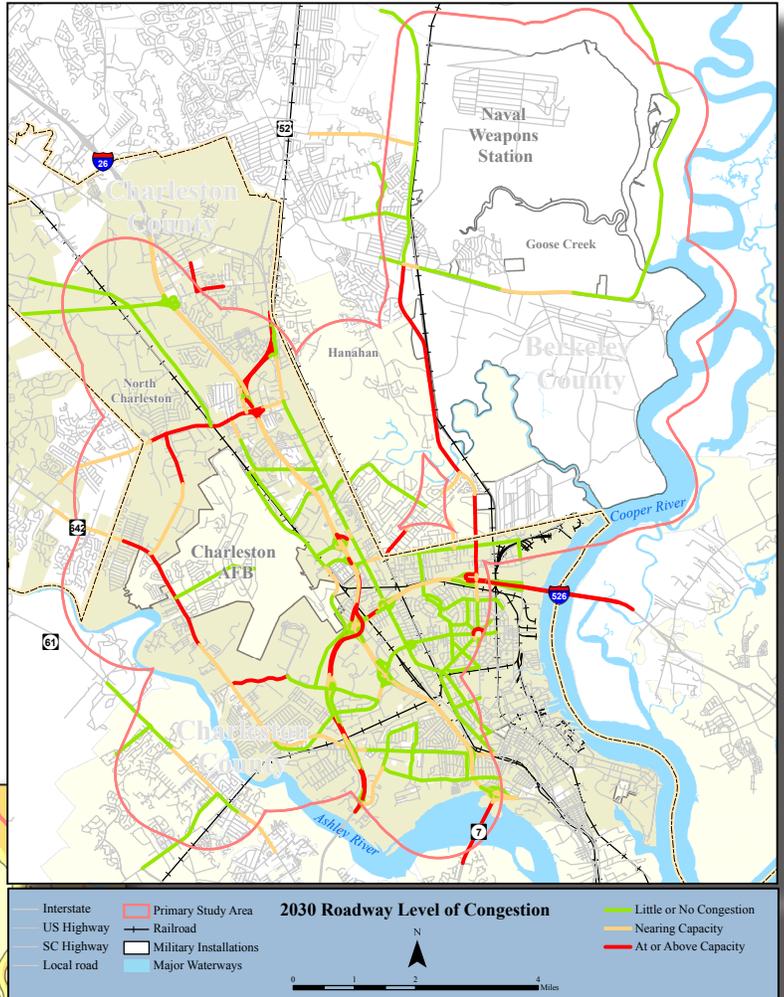


Study Area Demographic & Growth Projections

The BCDCOG maintains a Travel Demand Modeling (TDM) system as a component of the CHATS LRTP process. The purpose of the TDM is to assist in the prioritization of road projects for the CHATS study area. The TDM consists of two major inputs which includes: 1) Socio-economic data estimates and forecasts of the CHATS study area to determine trip-making characteristics and secondly, 2) A road network to assign these trips to Socio-economic data trends.

The Socio-economic data is reported by Traffic Analysis Zones (TAZ). These TAZ's are based on census information and major road networks (typically greater than neighborhood streets) are modeled in the network system. Population projections and forecasts are derived from the TDM through a land use allocation exercise using parcel level data provided by local governments within the CHATS study area. The aggregate number is then cross checked with a regional control total prepared at the state level.

The last CHATS LRTP update was conducted in 2004. The Travel Demand Model was generated for the JLUS study area at that time. Approximately 7,000 new housing units are forecasted between 2003 and 2030 in the JLUS study area. These changes are shown in the map Population Change Forecast, 2003-2030.



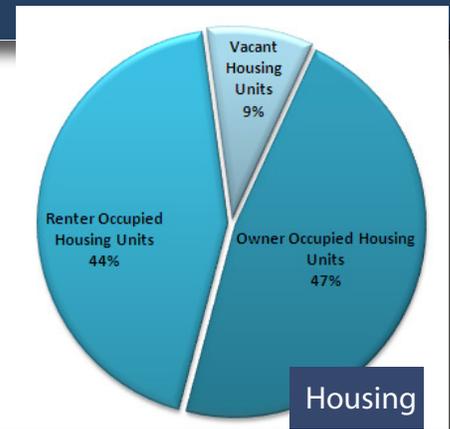
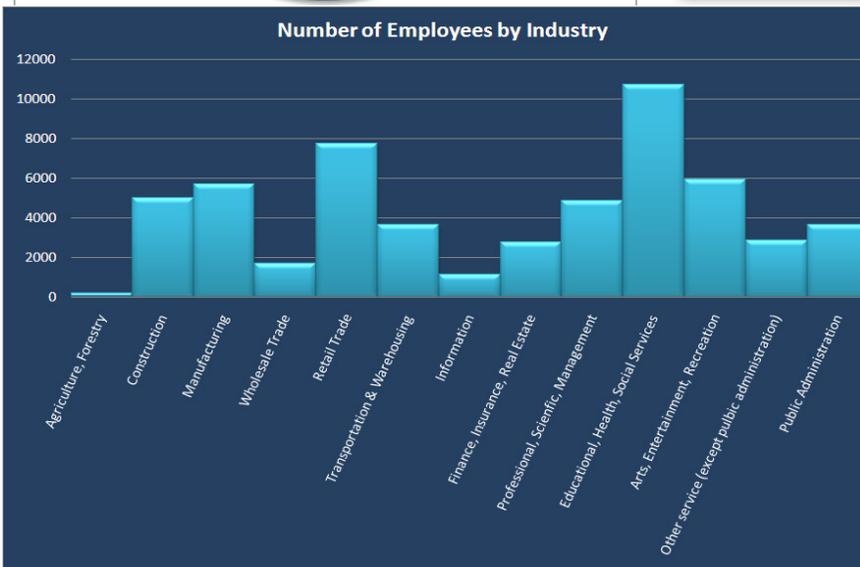
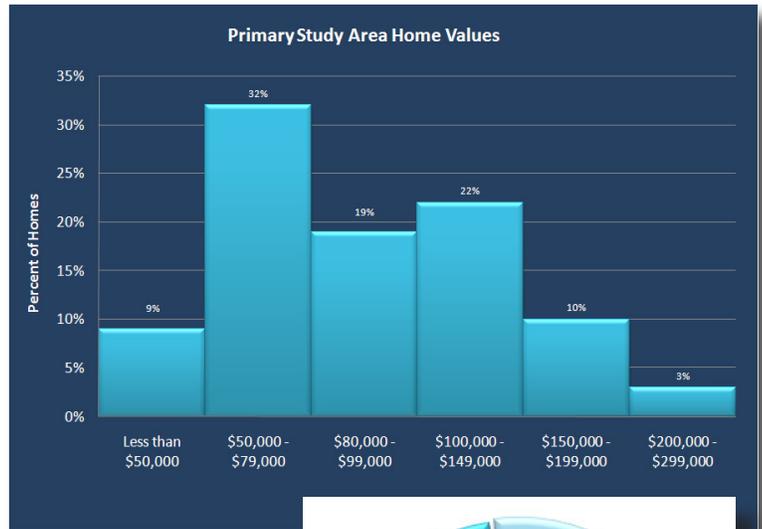
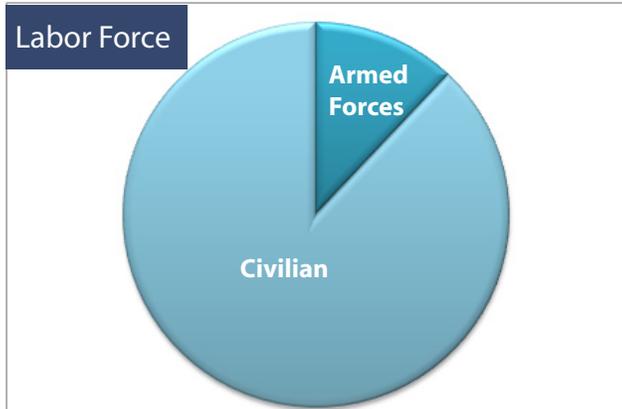
Traffic volume forecasts for the JLUS study area have been calculated using the TDM. Using housing unit and employment forecast data, the TDM calculates future traffic volumes on the roadways. The JLUS study area includes some of the most congested north-south travel corridors in the region, as forecasted for the year 2030 and identified with a level of congestion 'At or Above Capacity'



Study Area Demographics and Growth Trends

Demographics

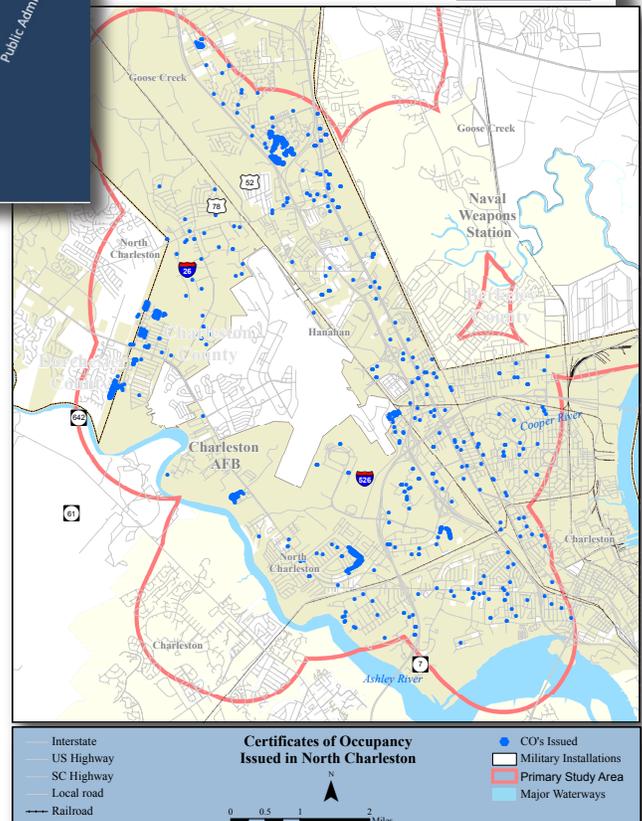
The following figures are an analysis of the demographic trends extracted from the JLUS Primary Study Area, 2000 Census Block Groups.



Primary Study Area	
Population 2000	132,864
Total Housing Units	53,925
Occupied Housing Units	49,010
Owner Occupied Housing Units	25,455
Renter Occupied Housing Units	23,555
Vacant Housing Units	4,915

North Charleston Growth

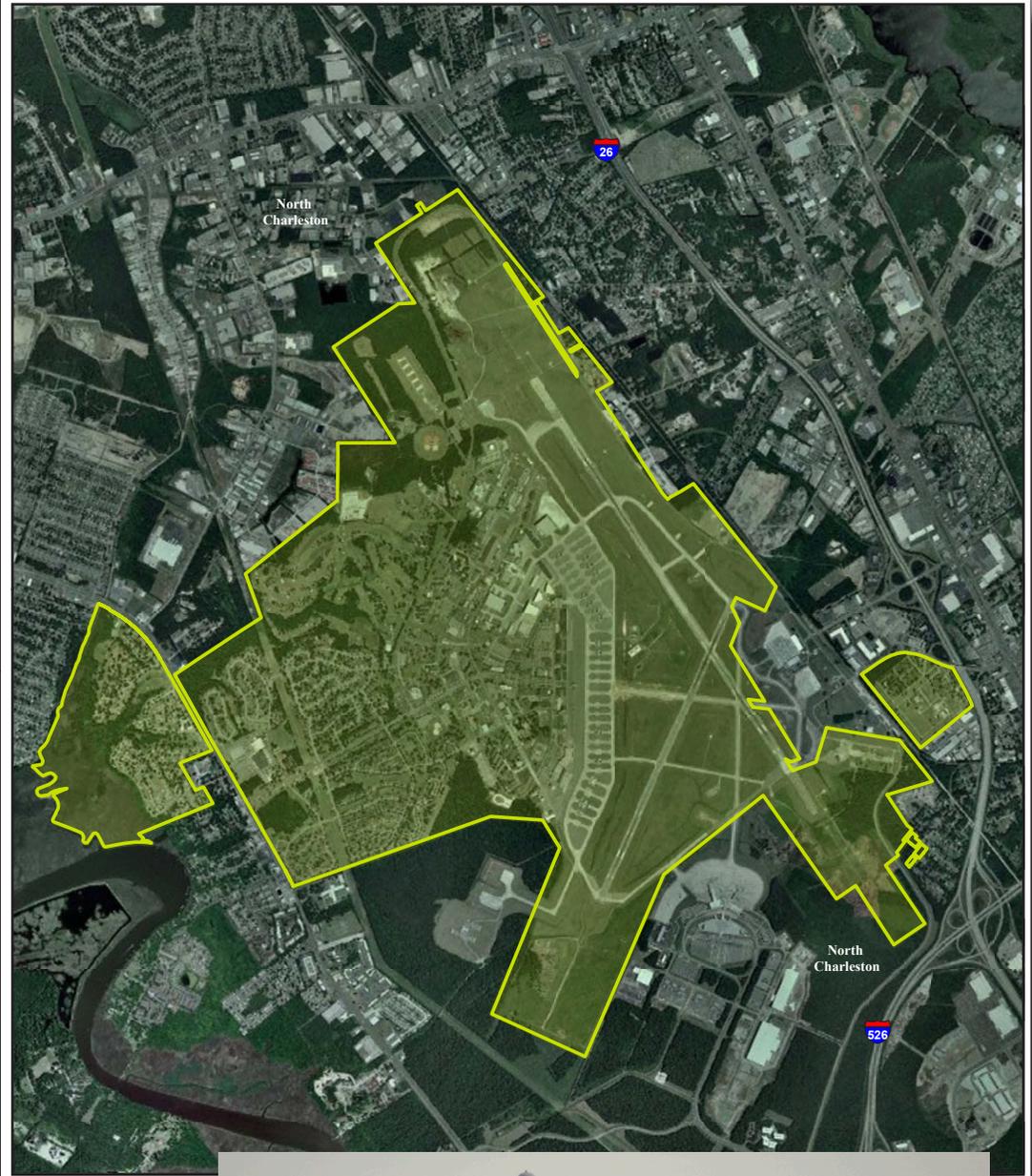
Approximately 19,600 single-family residential units, 6,830 multi-family residential units were approved by the City of North Charleston from 2000 to 2007. From April 2001 to April 2007, the City issued 1,055 general Certificates of Occupancy within the study area.



Charleston Air Force Base

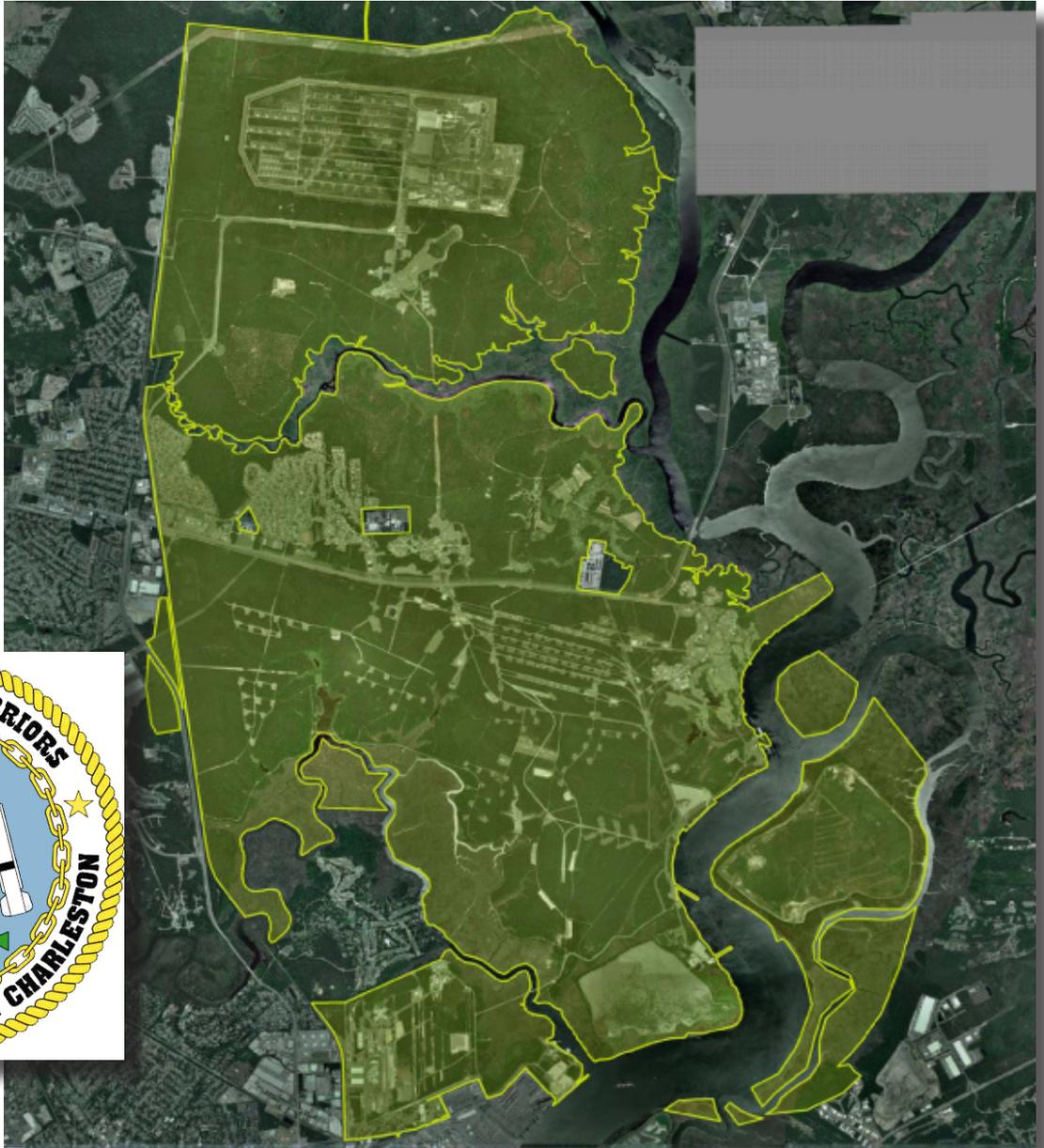
The 437th Airlift Wing (437AW) is the host unit at Charleston AFB and reports to the Air Mobility Command headquartered at Scott AFB, Illinois. The mission of the 437AW is to provide rapid mobility for America's armed forces to any problem area in the world through airlift of troops and equipment. During wartime, the 437AW is responsible for deployment and resupply of major combat units of the United States. It also provides administrative, logistical, and medical support to 437AW units, tenant agencies, and the Charleston AFB community, including retirees and their families. The organizational structure of the 437AW consists primarily of an operations group, a medical group, a support group, and a logistics group.

There are several tenant units at Charleston AFB, one of which is a flying unit. An Air Force Reserve Command unit, the 315th Airlift Wing, augments the 437AW in its airlift mission. On a day-to-day basis, reserve flight crews join active duty counterparts in the 437AW to complete airlift missions. (Information provided by the Charleston Air Force Base 2004 AICUZ Report)



Naval Weapons Station Charleston

The mission of the NWS Charleston is to maintain and operate facilities and provide, as appropriate, services and materials to support operations of commands for the operating forces of the Navy and other organizations designated by the Chief of Naval Operations (CNO) and to perform such functions and task as may be directed by higher authority. The NWS Charleston is also host to over forty (40) supported tenant commands within the Department of Defense and other Federal occupants. Major tenant activities account for the primary operations of NWS Charleston and employ over 8,400 personnel (military, civilian, and contractor).



The following is a summary of the major tenant commands and activities located at the Naval

Weapons Station Charleston as noted in the NWS Charleston Land Use and Development Plan.

- Space and Naval Warfare Systems Command (SPAWAR) Center Charleston:
- Surface Deployment and Distribution Command (SDDC)
 - 841st Transportation Battalion (841 TRANS)
- Army Field Support Battalion Afloat (AFSBn-A)
- Naval Nuclear Power Training Command (NNPTC)
- Nuclear Power Training Unit (NPTU)
- Naval Munitions Command (NMC)
- Explosive Ordnance Disposal Mobile Unit Six (EODMU 6)
- EOD Mobile Unit Twelve (EODMU 12)
- Naval Consolidated Brig (NAVCONBRIG)
- Fleet Industrial Supply Center (FISC) Jacksonville (JAX), Charleston Detachment
- Personnel Support Detachment (PSD),
 - NWS Charleston Military Sealift Command Atlantic (MSCLANT), Detachment Charleston
- Naval Public Works Center (PWC) Charleston
- Federal Law Enforcement Training Center



Safety Impacts

Air Installation Compatible Use Zones Study (AICUZ)

The Charleston AFB released an update of the 1992 Air Installation Compatible Use Zone (AICUZ) Study in 2004. The 2004 AICUZ report was examined during this Joint Land Use Study and documents operational changes for aircraft during 1992 through 2002. The 2004 AICUZ Report provides land use recommendations within the flight paths of the Charleston Air Force Base.

Air Installation Compatible Use Zones (AICUZ) – Primary Study Area

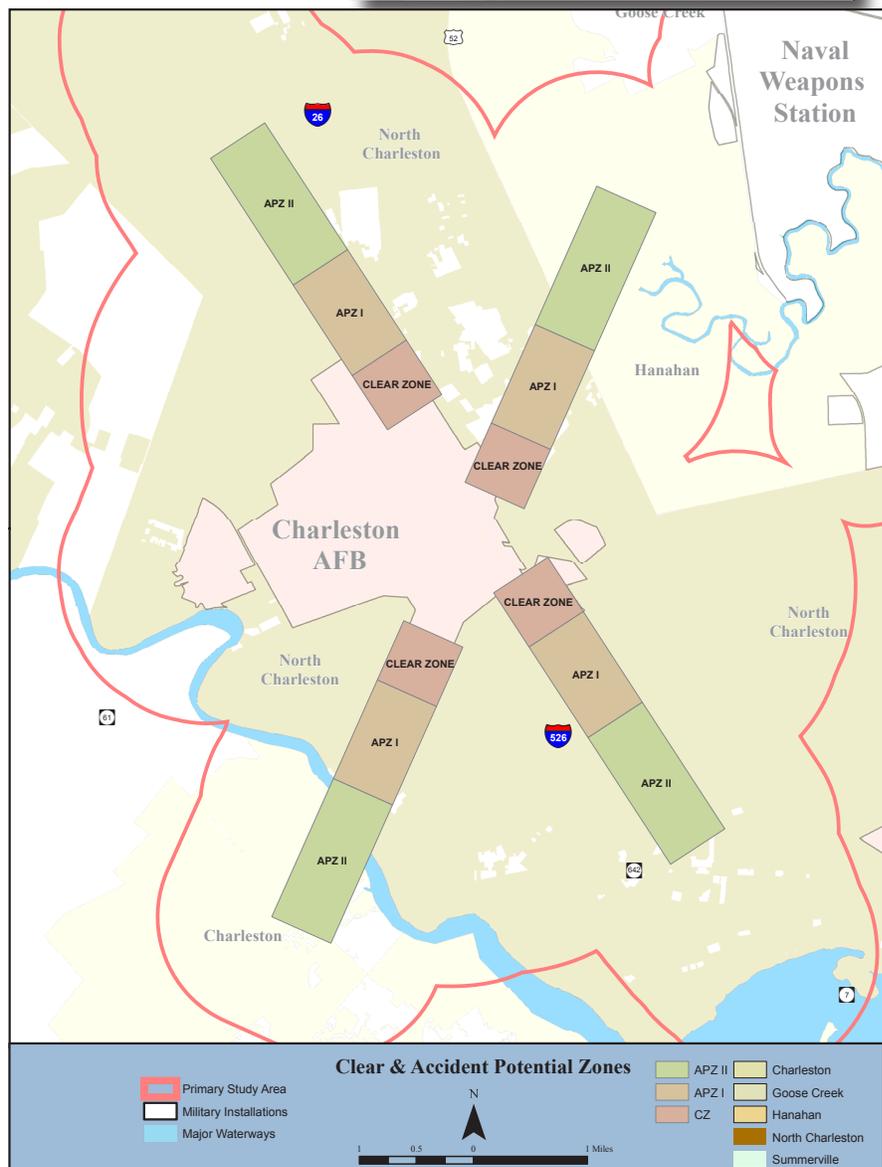
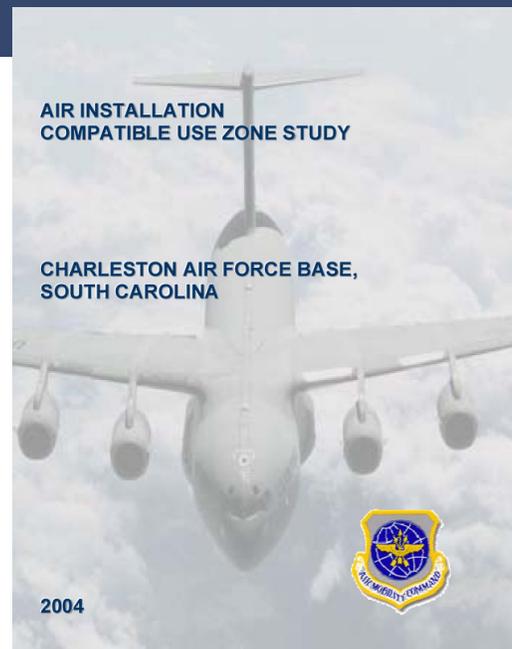
The Charleston AFB has designated specific areas surrounding the airport that are exposed to the possibility of aircraft accidents and noise contours. The basis for these specific recommendations is drawn upon the probability of Air Force Accident Data from 1968 – 1995. The AICUZ Program identifies three safety zones which include the CZ, APZ I and APZ II. The arrival of these designations was developed from an analysis of over 800 major Air Force accidents that occurred within 10 miles of an Air Force installation from 1968 to 1995. The current specifications for the 2004 AICUZ Report are listed below:

Clear Zone Surface (CZ) - An obstruction-free surface on the ground (except for features essential for aircraft operations) symmetrically centered on the extended runway centerline beginning at the end of the runway and extending outward 3,000 feet.

Accident Potential Zone (APZ) Surfaces - APZ I begins at the outer end of the CZ and is 5,000 feet long and 3,000 feet wide. APZ II begins at the outer end of APZ I and is 7,000 feet long and 3,000 feet wide.

In accordance with the 2004 AICUZ report, APZ I allows reasonable economic use of the land for uses such as industrial/manufacturing, transportation, communications/utilities, wholesale trade, open space, recreation, and agriculture. Uses that concentrate people in small areas are considered unacceptable according to the 2004 AICUZ Report.

APZ II is considered less critical than APZ I, but still holds the potential for accidents. Low density residential single-family land uses, personal and business services, commercial/retail trades uses of low intensity or scale of operation are considered compatible land uses for APZ II. Certain high density functions such as multi-story office buildings and places of assembly such as theaters, schools, churches, and restaurants are considered incompatible land uses according to the 2004 AICUZ Report.

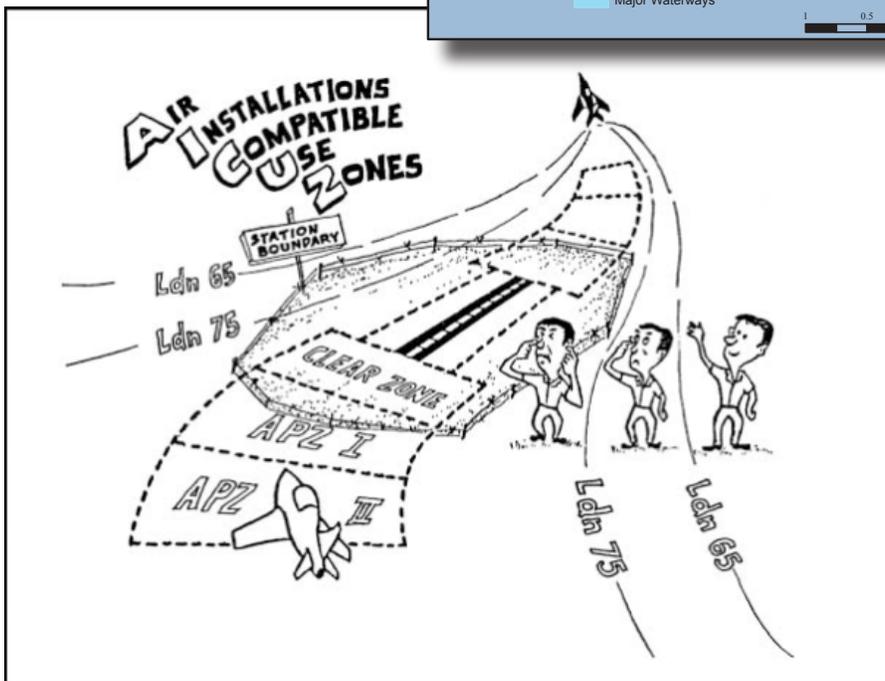
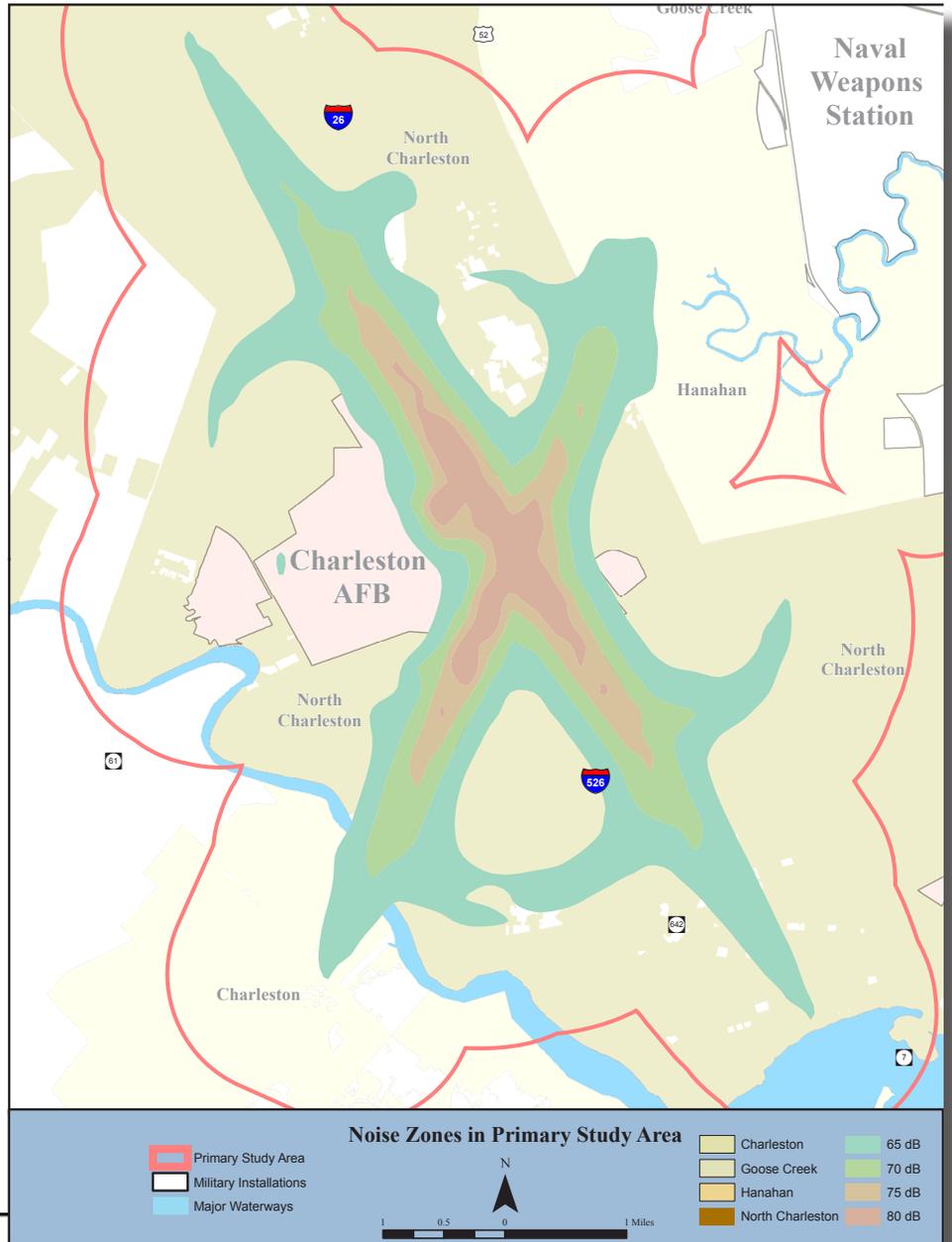


Noise Attenuation Measures

In recommending policy and compatible development strategies the JLUS relies on AICUZ established airfield Clear Zones, Accident Potential Zones, and specific areas of aircraft noise impact. Two priorities have been identified based on review of the AICUZ Study and independent investigation.

One priority is the creation of compatible development plans within the defined airfield Clear Zones and Accident Potential Zones. This priority is related to public safety, and therefore, no exceptions should be considered in adopting the established Air Force compatibility standards.

The other priority involves consideration of aircraft noise impacts affecting surrounding community development. In this regard, comprehensive aircraft noise impact compatibility overlay zones can be established through the implementation of noise impact reduction standards and sound abatement measures for the Charleston area. The overlay should consider the following program elements: Implementation of aircraft noise abatement procedures; and community land use restrictions in high aircraft noise impact areas.



According to the Charleston Air Force Base there were nine noise complaints from January 2006 through April 2007

Flight Tracks & Height Restrictions - Horizontal Surface Flight Area

Section (4) Four of the 2004 Air Installation Compatible Use Zone (AI-CUZ) Report identifies the effects of aircraft operations. This specific section has two purposes, the first is to describe effects of the existing aircraft operations in terms of imaginary surfaces associated with obstruction to air navigation, noise exposure, CZ's and APZ's. The second purpose is to present compatibility guidelines to further the Air Force's participation in the land use planning process.

Obstructions to air navigation are considered to be natural or man-made objects that protrude above the planes or imaginary surfaces or man-made objects that extend more than 500 feet at-grade-level (AGL) at the site of the structure.

The following are definitions of runway airspace imaginary surfaces for Air Force class "B" runways:

A. Primary Surface - An imaginary surface symmetrically centered on the runway, extending 200 feet beyond each runway end, which defines the limits of the obstruction clearance requirements in the vicinity of the landing area. The width of the primary surface is 2,000 feet or 1,000 feet on each side of the runway centerline.

B. Approach-Departure Clearance Surface - This imaginary surface is symmetrically centered on the extended runway centerline, beginning as an inclined plane (glide angle) 200 feet beyond each end of the primary surface, and extending for 50,000 feet. The slope of the approach-departure clearance surface is 50:1 until it reaches an elevation of 500 feet above the established airfield elevation. It then continues horizontally at

this elevation to a point 50,000 feet from the starting point. The width of this surface at the runway end is 2,000 feet, flaring uniformly to a width of 16,000 feet at the end point.

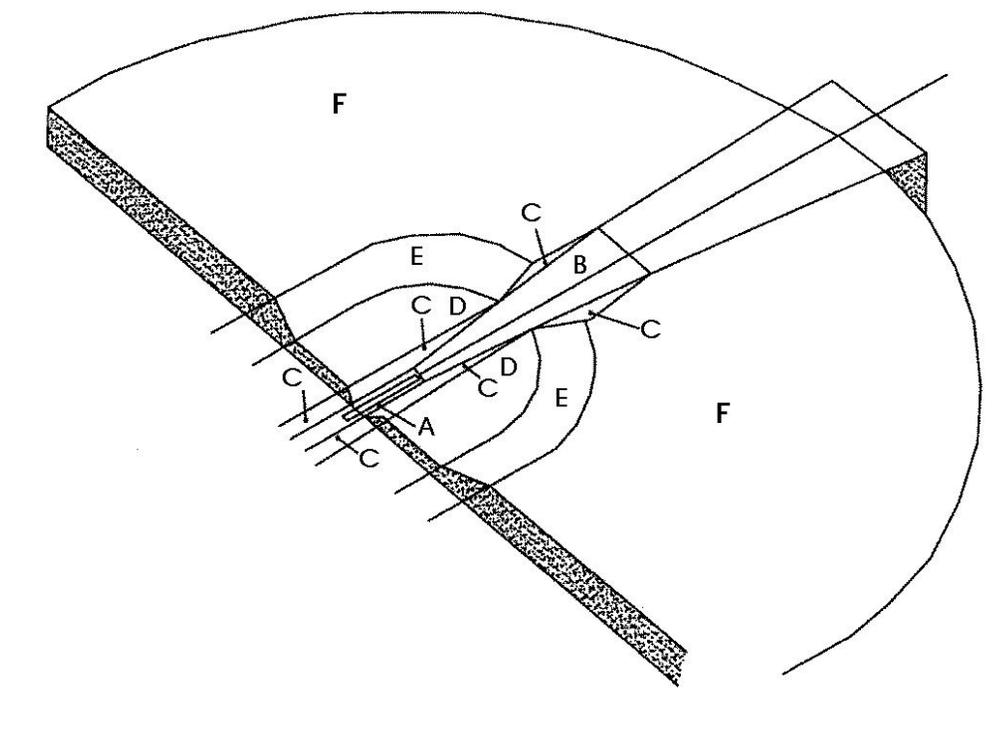
C. Transitional Surface - This imaginary surface extends outward and upward at right angles to the runway centerline and extended runway centerline at a slope of 7:1. The transitional surface connects the primary and the approach-departure clearance surfaces to the inner horizontal, the conical, and the outer horizontal surfaces.

D. Inner Horizontal Surface - This imaginary surface is an oval plane at a height of 150 feet above the established airfield elevation. The inner boundary intersects with the approach-departure clearance surface and the transitional surface. The outer boundary is formed by scribing arcs with a radius 7,500 feet from the centerline of each runway end and interconnecting these arcs with tangents.

E. Conical Surface - This is an inclined imaginary surface extending outward and upward from the outer periphery of the inner horizontal surface for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation. The slope of the conical surface is 20:1. The conical surface connects the inner and outer horizontal surfaces.

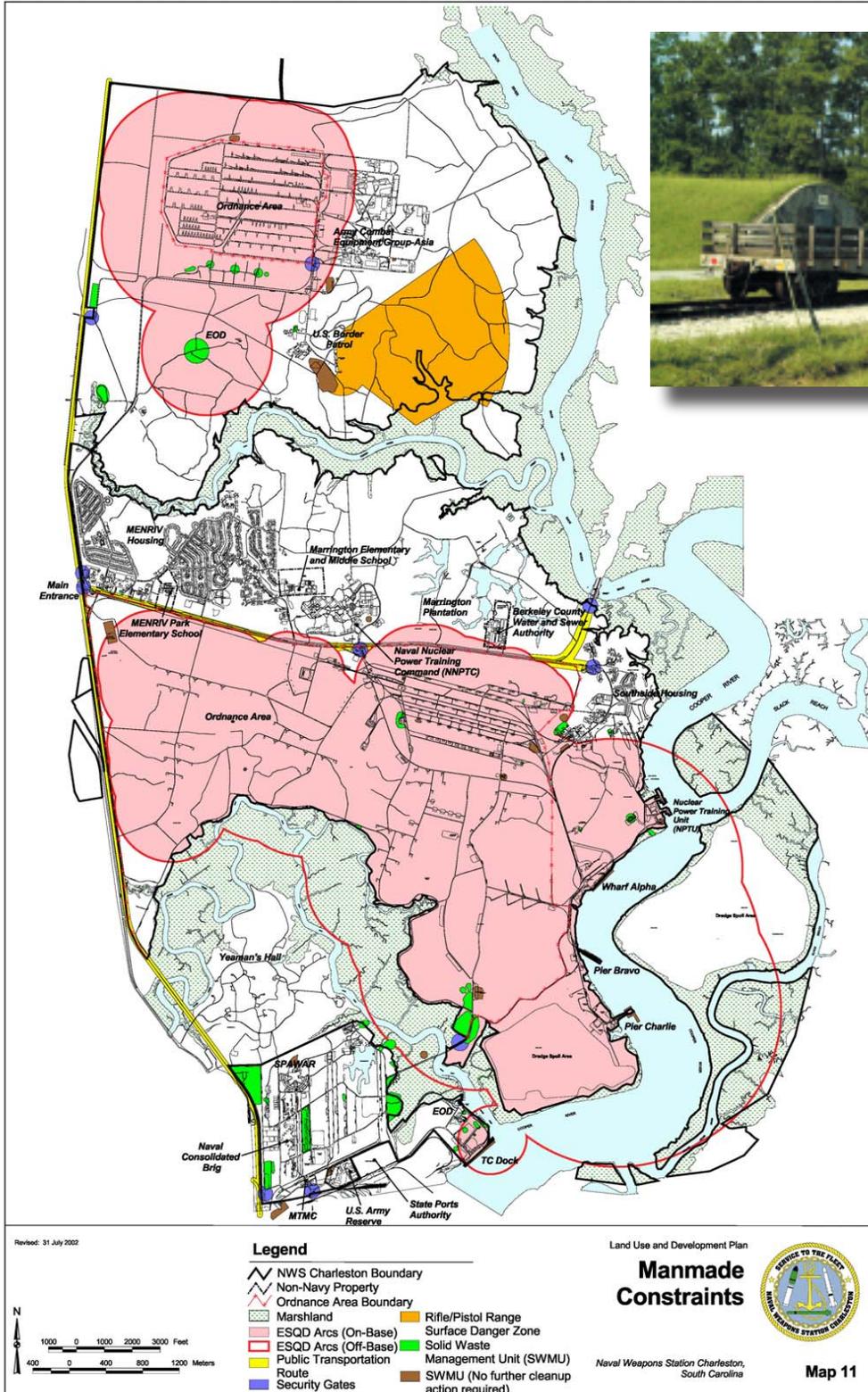
F. Outer Horizontal Surface - This imaginary surface is located 500 feet above the established airfield elevation and extends outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

Horizontal Surface Flight Area



NWS Charleston Explosive Safety Quantity Distance Arcs (ESQD)

Ordinance storage is the predominate land use at the NWS Charleston. Storage methods 1) provide maximum possible protection to personnel and property, inside and outside the station, from the damaging effects of potential accidents. 2) limit the exposure to a minimum number of persons, for a minimum time, to the minimum amount of ammunition and explosives consistent with safe and efficient operations; and 3) comply with ammunition and explosives safety through establishment of ESQD arcs. ESQD arcs are determined by an explosion site and the distance to any inhabited building, public assembly, and/or the installation's boundary. The ESQD arcs located at NWS Charleston include two major areas. The first ESQD area is located on the Northside of the station. The second ESQD area is the majority of the NWS Charleston land South of Red Bank Road and North of the Goose Creek River in the Southside – Ordnance Area. The Northside Ordnance storage area is not currently utilized for storage, but



is designated for potential use and is therefore designated with the ESQD arcs.

These two explosive ordnance storage areas provide NWS Charleston with the capacity to store 50 million pounds of munitions, designating NWS Charleston the only unencumbered explosives arcs in the continental United States, meaning there are no direct environmental or safety impacts on private land surrounding the NWS.

Land Use & Development Plan Naval Weapons Station Charleston August 2002

Joint Basing Initiative

The 2005 Base Closure and Realignment Commission report, Section #146 – Joint Basing as approved by Congress, designates the Charleston AFB and NWS Charleston as one of twelve installations identified for “joint basing.” Under these recommendations, the Charleston AFB and NWS Charleston will share installation management functions, including operation morale, welfare and recreation programs.

The Joint Basing Initiative is designed to consolidate installations employing common functions through support and personnel. The installations recommended for joint basing share common boundaries with minimal distances between major facilities. Opportunities exist to reduce duplication of labors by decreasing manpower and facility operational inefficiencies. A single management authority will increase the overall utilization of facilities and infrastructure.

The Naval Weapons Station Charleston installation management functions will be relocated to the Charleston Air Force Base. Military judgment favored the Charleston AFB as the receiving installation for the management functions because of its mission in support of operational forces in comparison to the primary mission of the NWS Charleston of support training and industrial activities. The Charleston AFB, being adapted to supporting operational forces was designated as the installation best suited to perform those functions for both locations.

The official commission recommendation was to Realign Naval Weapons Station Charleston, SC, by relocating the installation management functions to Charleston, AFB, SC.



DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
2521 South Clark Street, Suite 600
Arlington, VA 22202
Telephone: 703-699-2950

September 8, 2005

George W. Bush
President of the United States
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear Mr. President:

The 2005 Defense Base Closure and Realignment Commission is proud to present its Final Report for your consideration. As required by law, the Commission thoroughly and objectively reviewed the domestic installation closure and realignment recommendations proposed by the Secretary of Defense on May 13, 2005.

In 2005, the Secretary made more recommendations, with more complexity, than all four previous base closure rounds combined. We held ourselves to a high standard of openness and transparency in all our activities and deliberations as we assessed these recommendations. Over the past four months, the Commission conducted 182 site visits, held 20 legislative and deliberative hearings, hosted 20 regional hearings, and received well over 200,000 written and electronic communications from the public. We publicly sought, and received, expert analysis and commentary from a variety of governmental and nongovernmental sources to assist our independent analysis.

We recognize that our final recommendations will have profound effects on many communities and the people who bring them to life as well as on the uniformed men and women embodying our Armed Forces. We are confident that the recommendations contained in our Final Report will positively shape our military for decades to come. The warfighters securing our way of life will depend on the successful implementation of our recommendations to shape the infrastructure supporting their current and future missions.

In addition to the Commission's assessment of the Secretary's recommendations, we have addressed issues relevant to future rounds of base realignment and closure.

Chairman: Anthony J. Principi
Commissioners: The Honorable James H. Bilbray, the Honorable Philip E. Coyle III, Admiral Harold W. Gehman Jr., USN (Ret), the Honorable Jim Hansen, General James T. Hill, USA (Ret), General Lloyd Newton, USAF (Ret), the Honorable Samuel K. Skinner, Brigadier General Sue Ellen Turner, USAF (Ret)
Executive Director: Charles Romagosa

Mr. President, it has been an honor and privilege for us to serve on the 2005 Defense Base Closure and Realignment Commission.

Respectfully Yours,

Anthony J. Principi
Anthony J. Principi
Chairman

James H. Bilbray
James H. Bilbray
Commissioner

Philip E. Coyle III
Philip E. Coyle III
Commissioner

Harold W. Gehman Jr.
ADM Harold W. Gehman Jr., USN (Ret)
Commissioner

James V. Hansen
James V. Hansen
Commissioner

James T. Hill
GEN James T. Hill, USA (Ret)
Commissioner

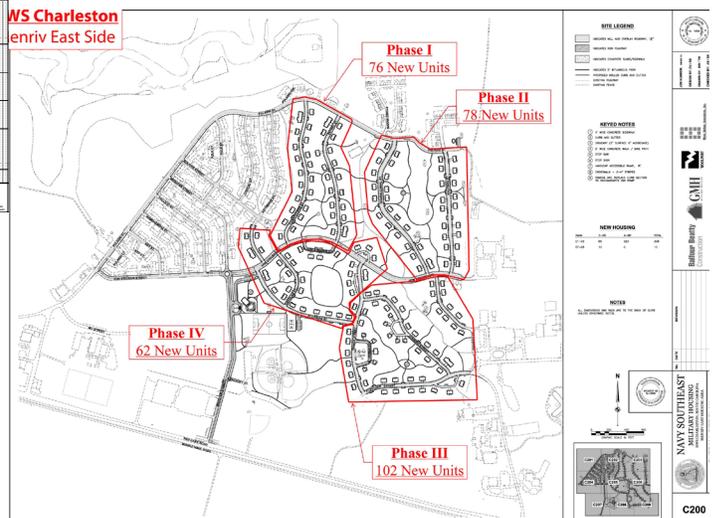
Lloyd W. Newton
Gen. Lloyd W. "Fig" Newton, USAF (Ret)
Commissioner

Samuel K. Skinner
Samuel K. Skinner
Commissioner

Sue Ellen Turner
Brig. Gen. Sue Ellen Turner, USAF (Ret)
Commissioner

2

WS Charleston Envir East Side



Housing Privatization

The Naval Weapons Station has entered into an agreement with Balfour Beatty Construction Company for the demolition, rehabilitation, construction, and management of on-base housing. This initiative will consist of the demolition of approximately 1,300 units and the construction of approximately 433 units in addition to new community amenities.

Charleston AFB AICUZ Report Land Use Recommendations

The following is a summary of land use recommendations provided by the Charleston Air Force Base AICUZ Report for public and private land located with the CZ's, APZ I, and APZ II. These land use recommendations should be considered by municipal governments when reviewing zoning classifications in areas specific to this study.

All land uses are considered incompatible within the Clear Zones. This area is commonly referred to as a "Zero Tolerance Zone."

The AICUZ Report suggests further definition and description are needed to classify specific land use classifications. Generalizations are provided within the compatible land use table and include categories such as residential, manufacturing, transportation/communications/utilities, trade, services, cultural entertainment/recreational, and resource productions/extraction.

Residential land uses to include single-family detached, semi-detached, attached, duplexes, apartments, residential hotel and mobile home parks are considered incompatible in all the AICUZ Zones to include CZ, APZ I, and APZ II. Residential land uses are considered compatible within APZ II only under specific guidelines allowing a maximum residential density of 1-2 dwelling units per acre with maximum lot coverage, not greater than 20 percent.

Certain manufacturing land uses are incompatible within APZ I including food/kindred, textile mill, apparel, chemical, and petroleum product related industries. Compatible manufacturing land uses within APZ I are lumber and wood product manufacturing and furniture manufacturing, and printing, publishing and allied industries. Food/kindred product manufacturing, textile mill products, lumbers and wood manufacturing of fixtures, furniture paper, printing, publishing are all compatible land use within APZ II. Stone, clay and glass manufacturing, metal industries are considered compatible within APZ II.

Transportation, communications, and utility uses are considered compatible land uses within APZ I to include railroads, rapid rail transit, aircraft transportation, highway and street right-of-way, automobile parking, communications and utilities. However passenger terminals and major above ground transmission lines are not considered compatible within APZ I. All previously noted transportation, communalization and utility uses are considered compatible within APZ II without restrictions.

Charelston AFB - Air Installation Compatible Use Zone							
Land Use Compatibility Classifications							
Land Use Classifications	Accident Potential Zones			Noise Zones			
	Clear Zones	APZ I	APZ II	65-69	70-74	75-79	80+
Single-family Residential	Red	Red	Yellow	Yellow	Yellow	Red	Red
Multi-family Residential	Red	Red	Red	Yellow	Yellow	Red	Red
Mobile Home Parks	Red	Red	Red	Red	Red	Red	Red
Cultural Entertainment Centers, Auditoriums, Concert Halls	Red	Red	Red	Red	Red	Red	Red
Retail Trade	Red	Red	Red	Yellow	Yellow	Red	Red
Transient Lodges	Red	Red	Red	Red	Yellow	Yellow	Red
Wholesale Trade	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Manufacturing	Red	Yellow	Green	Green	Green	Yellow	Yellow
Business Services	Red	Yellow	Yellow	Green	Green	Red	Red
Professional Services	Red	Red	Yellow	Green	Green	Yellow	Red
Transportation, Communications	Red	Yellow	Green	Green	Yellow	Yellow	Red
Agriculture, Public ROW	Red	Green	Green	Green	Yellow	Yellow	Yellow
Resources Production, Extraction	Red	Green	Green	Green	Yellow	Yellow	Yellow

AICUZ Compatibility Classifications	
Green	Compatible
Yellow	Compatible with Conditions
Red	Incompatible

Trade land use classifications are considered compatible in APZ I, including wholesale trade, retail trade building materials, hardware and farm equipment, retail trade automotive, marine craft, aircraft and accessories. Certain trade land uses require further definition such as retail trade general merchandise, retail trade-food, retail-trade apparel/accessories, retail trade-furniture, home furnishings and equipment. Retail-trade eating and drinking establishments are considered incompatible within APZ I.

Service oriented land uses with a low intensity such as business services and contract constructions services are compatible in APZ I. Finance, insurance and real estate services, personal/professional services, hospitals, nursing homes, governmental services, and educational services are considered incompatible within APZ I. All previously listed service oriented land uses are considered compatible within APZ II but may require further definition due to the variation of densities of people within each specific land use, except retail trade-eating and drinking establishments which are considered incompatible within APZ II. Only nature exhibits, amusements (with low intensity), golf courses, riding stables, water recreation and parks with low intensity facilities are considered compatible within APZ II.

Cultural, entertainment and recreational land uses such as nature exhibits, golf courses (except clubhouses) and parks are considered compatible within APZ I. These land uses should be low intensity and should not allow the gathering of large amounts of people. Nature exhibits are considered compatible in APZ II along with amusement and park facilities with a low intensity of land use.

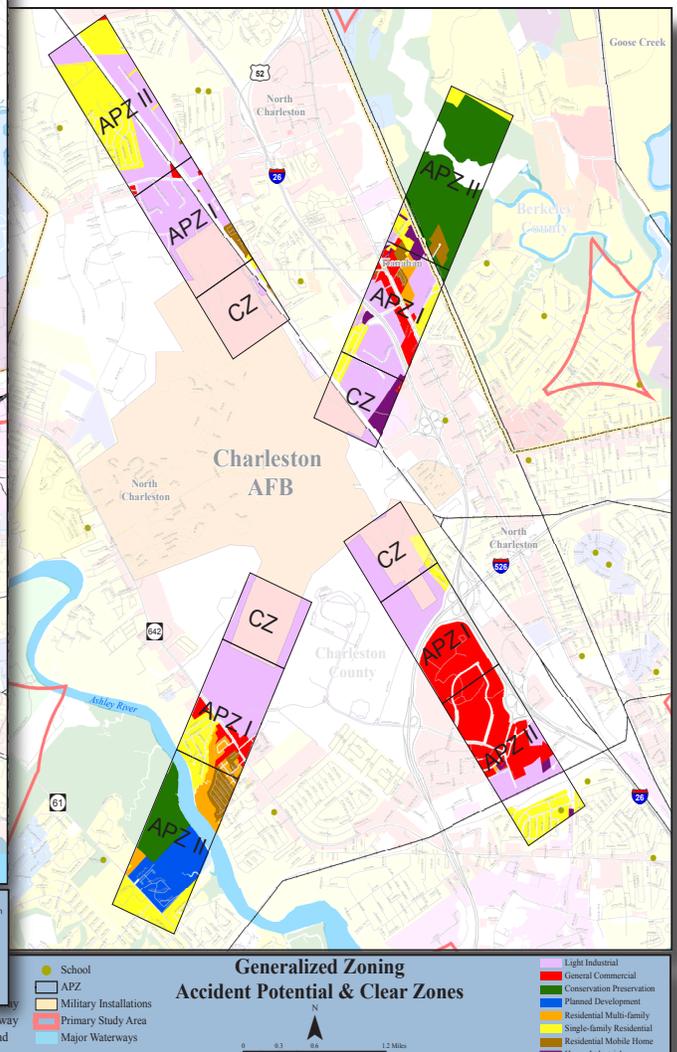
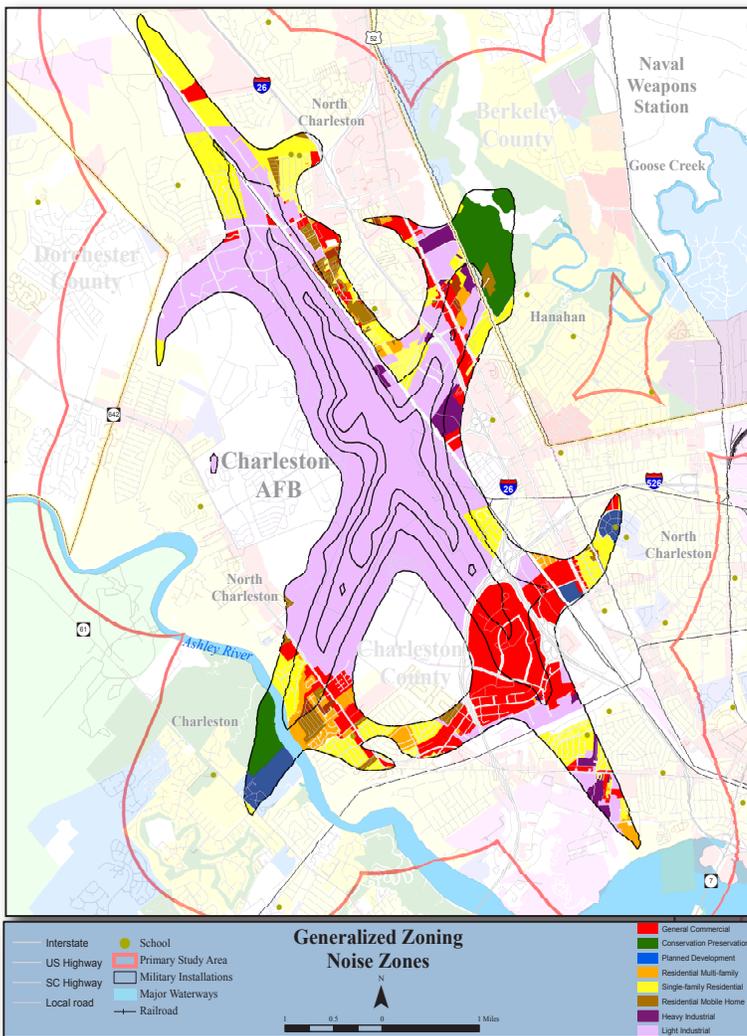
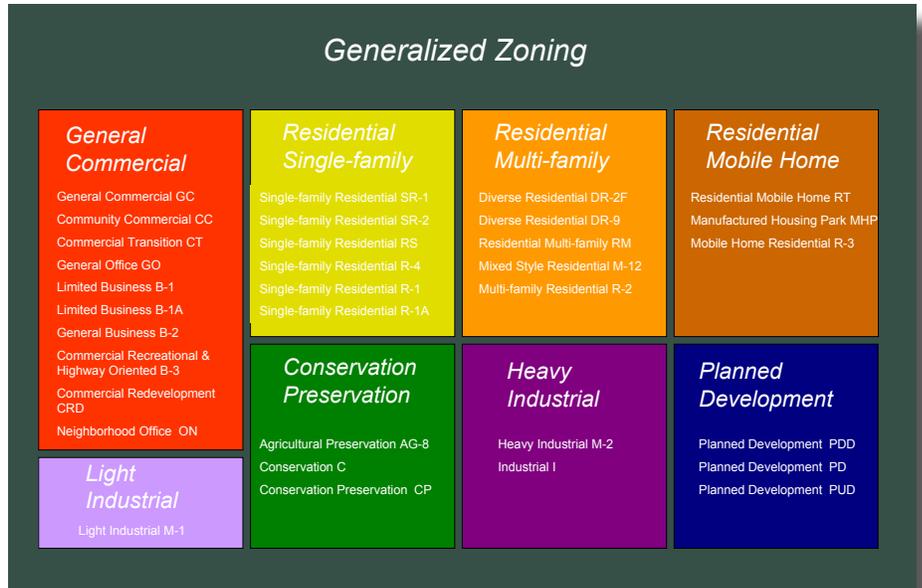
Resource productions and extraction land uses such as agriculture, livestock and animal breeding operations are considered compatible. Forestry and mining operations are considered compatible land uses within APZ I and II, but should consider certain factors such as labor intensity, structural coverage, explosive characteristics, and air pollution.

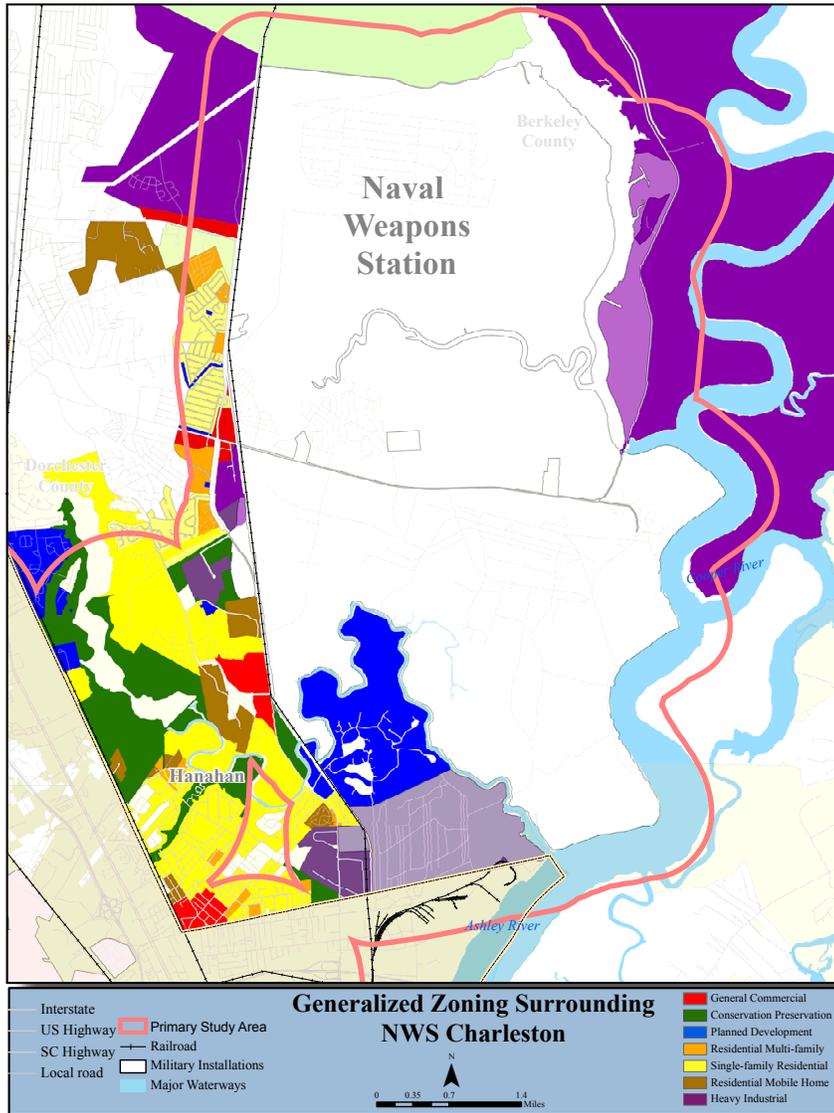


Municipal Zoning Analysis

Zoning Analysis Methodology

To conduct an analysis of the zoning classifications within the AICUZ Zones classified as Clear Zone, Accident Potential Zone I, Accident Potential Zone II and Noise Contour Levels and to provide a cross-comparison of the land use recommendations within the AICUZ Report, the Project Team designated eight (8) generalized zoning district classifications by combining municipal zoning districts with similar regulations.

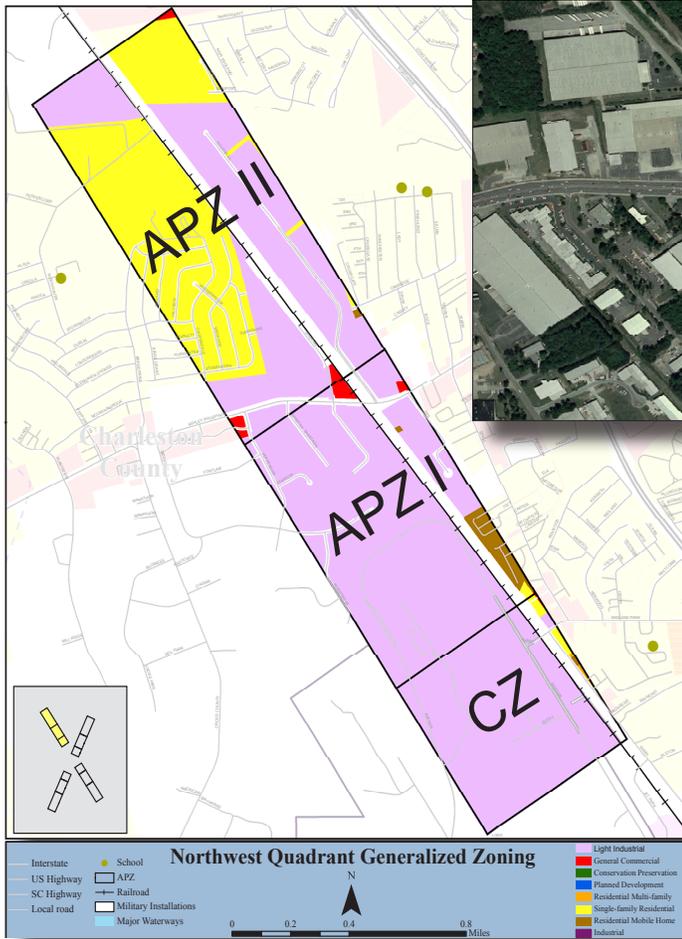




Generalized Zoning Surrounding NWS Charleston

The Naval Weapons Station is bordered entirely by Heavy Industrial to the east, known as Bushy Industrial Park. To the north, the area is zoned Agricultural, including Medway Plantation. To the west, heading south along Perimeter Road is a large tract of Heavy Industrial, followed by Commercial to the north and Agricultural to the south along Liberty Hall Road. To the west of the NWS are several parcels zoned Mobile Home Park, Multi-Family Residential and Single-Family Residential – Willowbrook, Arhat, and Sedgfield neighborhoods. West along Red Bank Road lies Goose Creek High School to the north and Pinebrook Point, zoned Commercial to the south. Pine Harbor Apartments and Poppenheim Crossing, both zoned Multi-Family Residential are on the eastern side of North Rhett Extension, North Rhett Commerce Park is to the west. Northpoint Industrial Park, zoned Heavy Industrial, is to the west of North Rhett Extension, surrounded by Conservation Preservation zoning, to the south and east is primarily Single Family Residential, including St. James Estates and Harbor Lake. There is a large Commercial parcel along North Rhett Extension and to the west along Tanner Ford Boulevard. Along the County line is primarily Single Family Residential, including Belvedere Estates, Belvedere Heights, Charleston Farms, Domino Hills and Spring Valley neighborhoods. Adjacent to the NWS along the southwestern border is split between Planned Development and Heavy Industrial. The Planned Development includes Yeaman’s Hall Country Club.

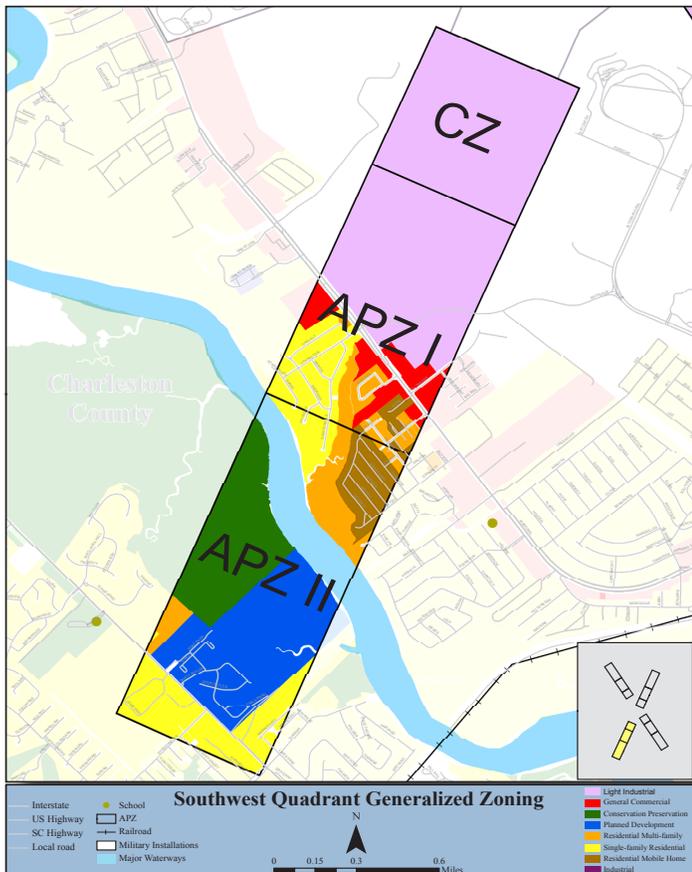




Northwestern

The NW Quadrant extends outward from Runway 15. The Clear Zone is almost completely contained within the Air Force Base. Located to the west of the existing NSX rail line within the City of North Charleston off Midland Park Road, there is a Light Industrial district. East of the NSX rail line there is a mixture of districts including classifications of Mobile Residential District, Multi-family Residential, and Single-family Residential. APZ I west

of the NSX rail line the majority of the zoning classification is Light Industrial located off Ashley Phosphate Road including Industry, Stanton, and Spartan. North of Ashley Phosphate Road, east of the NSX rail line, there is one General Commercial district and a Light Industrial zoned district. West of the NSX rail line and North of Ashley Phosphate Road there is a General Commercial district. APZ II begins South of Ashley Phosphate Road with Light Industrial districts and General Commercial districts located at the intersection of Landmark Road and Pepperdam. All parcels fronting along the North side of Ashley Phosphate Road are Light Industrial. East of the NSX rail line fronting along South Rail Road are Light Industrial. Parcels within the Pepperhill Subdivision are zoned Single-family Residential. North of the Pepperhill Subdivision there is a large Light Industrial district to the west of the NSX rail line that is located partially within APZ II.



Southwestern

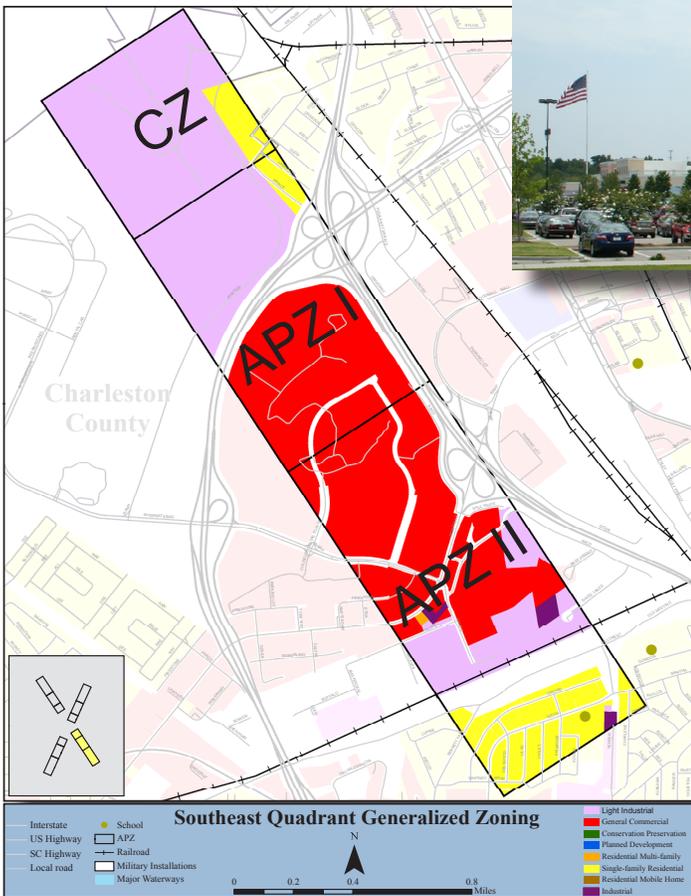
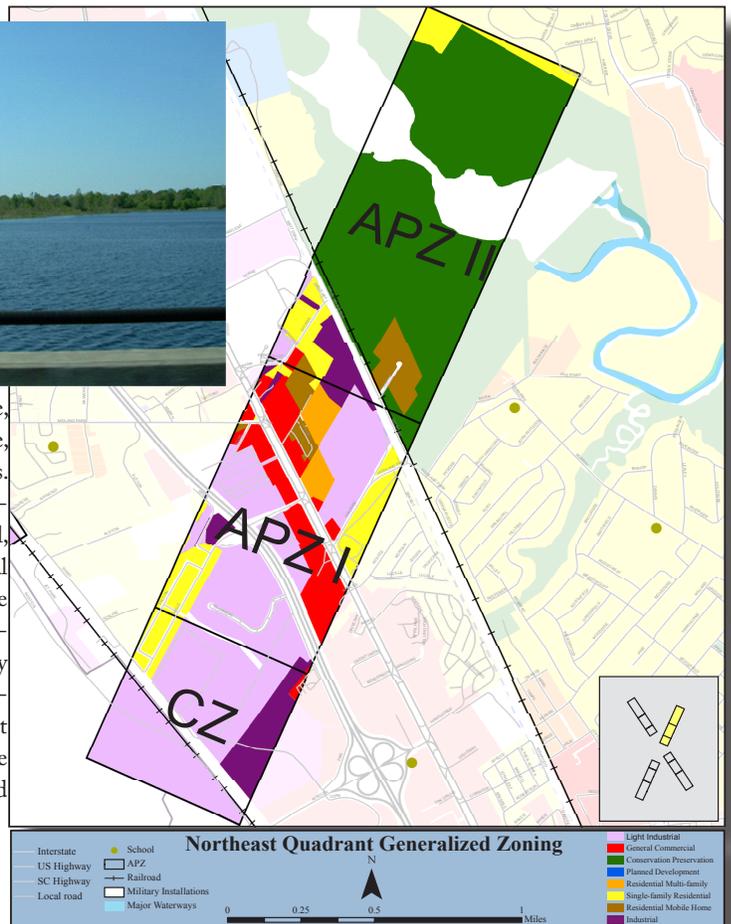
The SW Quadrant extends outward from Runway 3. The Clear Zone is completely contained by Light Industrial zoning. The majority of APZ I is Light Industrial with a small portion of General Commercial fronting along Dorchester Road. A General Commercial district is located along Dorchester Road. Leslie Court has a mixture of Residential Multi-family and Residential Single-family parcels. APZ II contains a Residential Mobile Home district located off Gwinnett Drive. Additional parcels within the Covington Hills subdivision along the Ashley River are located within APZ II and have a mix of zoning designations including Single-family Residential and Multi-family Residential. In the City of Charleston, located west of the Ashley River, off Ashley River Road there is a mixture of Residentially zoned parcels including Planned Unit Development District, Single-family Residential, Conservation Preservation and a small portion of Residential Multi-family. South of Ashley River Road there is a Single-family Residential zoning district.

Northeastern

The NE Quadrant extends outward from Runway 21. The Clear Zone is a mixture of Light Industrial and Heavy Industrial zoning districts mixed with Single-family Residential parcels located within the Eagle Nest Subdivision. APZ I contains a continuation of the Eagles Nest Subdivision



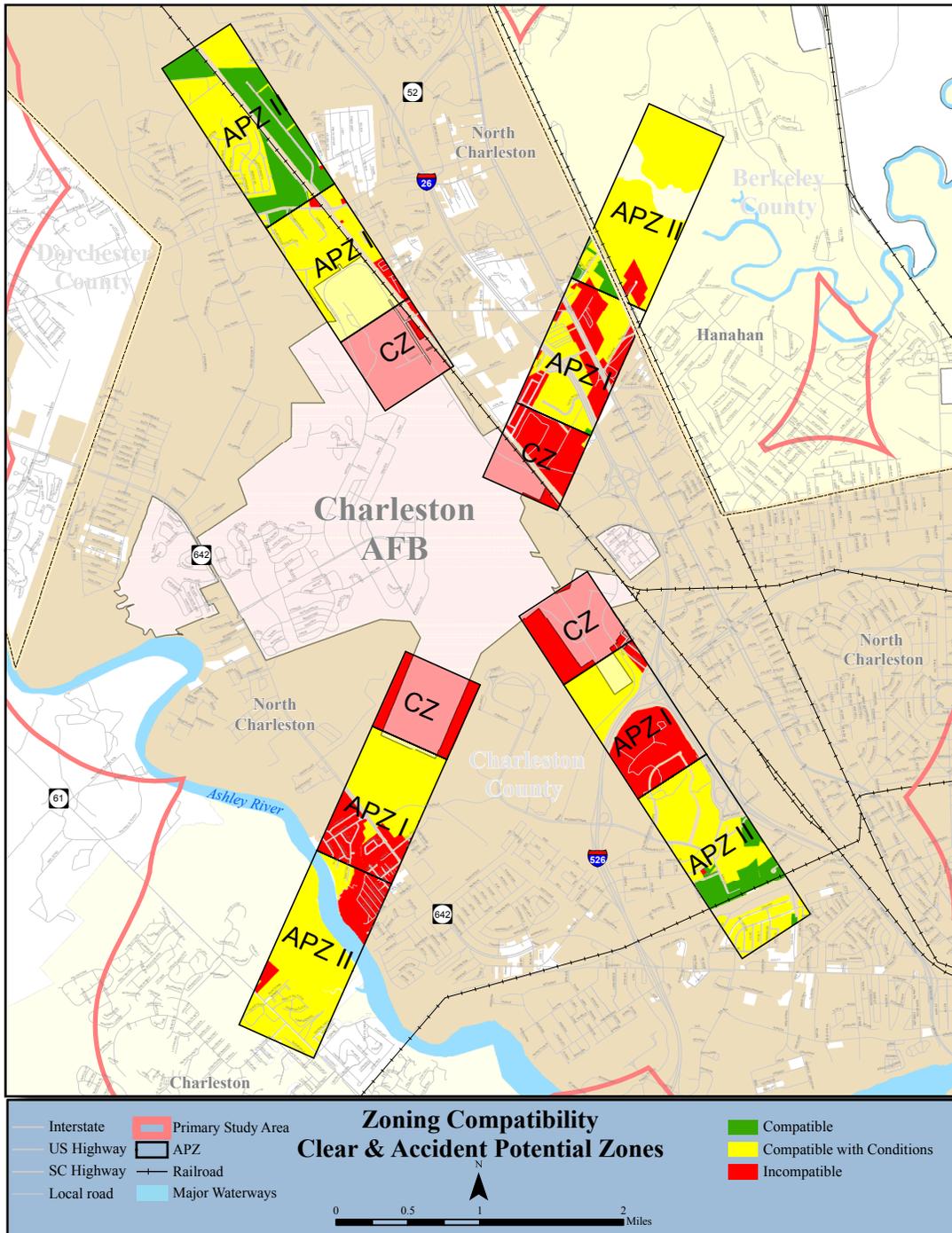
and is zoned Single-family Residential. Located along Technical Drive, West of I-26 is a Light Industrial District. East of I-26 to Rivers Avenue, there is a mixture of Light Industrial and General Commercial districts. All parcels fronting along Rivers Avenue are zoned General Commercial. East of Rivers Avenue there is a mixture of General Commercial, Light Industrial, Heavy Industrial, Residential Mobile Home, Residential Multi-family and Residential Single-family. APZ II contains a mixture of Residential Single-family zoned parcels, and Heavy and Light Industrial zoned parcels. Parcels located off Railroad Avenue within Berkeley County and the City of Hanahan are primarily Conservation Preservation with a Residential Mobile District located off Waring Road. East of the Goose Creek Reservoir located within Tanner Plantation of the City of Hanahan there is a mixture of Residential Single-family units and Conservation Preservation District.



Southeastern

The SE Quadrant extends outward from Runway 33. The subsequent zoning designations for each AICUZ Zone in this quadrant are as follows: Clear Zone has existing zoning in place which is predominately Light Industrial and a small proportion of Single-family Residential (R-1). I is divided by the I-526 corridor and is located to the west of the I-26 corridor. The northern portion of APZ I along the northern side of the I-526 corridor consists of predominately Light Industrial zoning classifications and Single-family residential zoning classifications. The southern portion of APZ I, located below the I-526 corridor is General Commercial. APZ II zoning classifications include a continuation of the General Commercial APZ I. The continuation of the General Commercial classification expands southward throughout the Centre Pointe Development and continues across Montague Avenue. Two parcels fronting Montague Avenue have a mixed zoning designation of General Commercial and Residential Multifamily and are surrounded primarily by General Commercial and Light Industrial. South of Pacific Avenue and west of Banco Drive and along Bennettyard Drive contain Light Industrial zoning designation. A Single-family residential subdivision and a small Light Industrial parcel is the remaining zoning district within APZ II.

Clear and Accident Potential Zone - Zoning Compatibility

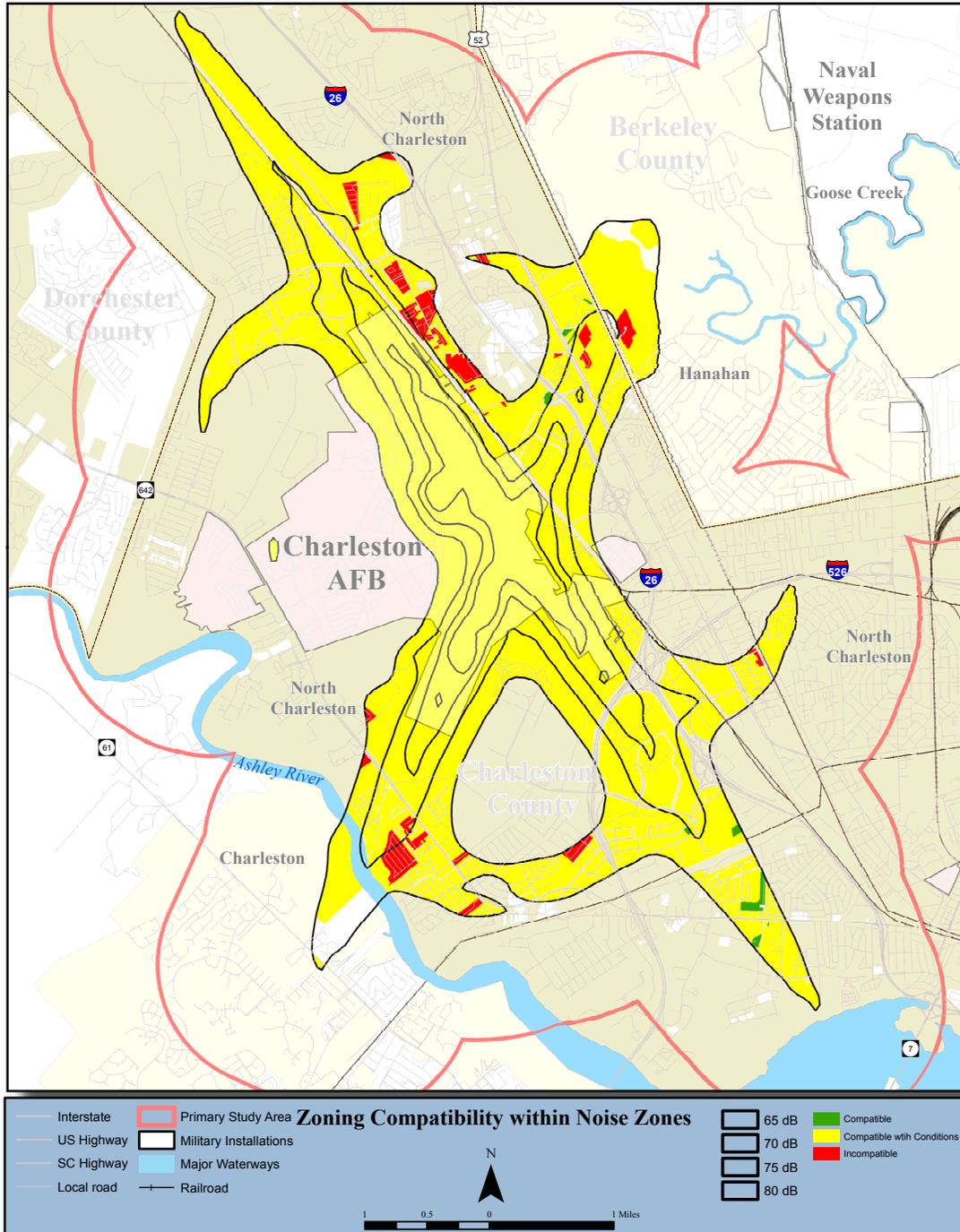


Zoning Classifications	Air Installation Compatible Use Zone (AICUZ) Compatibility *		
	Accident Potential Zones		
	Clear Zones	APZ I	APZ II
Residential Single-family	29.3	92.3	417.7
Residential Multi-family	0.6	41.3	33.5
Residential Mobile Home	0.3	31.7	56.2
Commercial	1.7	246.1	212.4
Light Industrial	726.6	759.6	512.1
Heavy Industrial	27.6	1.2	0.0
Public/Quasi Public/Open Space	0.0	0.0	435.7

AICUZ Compatibility Classifications	
	Compatible
	Compatible with Conditions
	Incompatible

*Total Acres by zone

Noise Contour Zones - Zoning Compatibility



Zoning Classifications	Noise Zones			
	65-69	70-74	75-79	80+
Residential Single-family	1196.1	105.2	0.0	0.0
Residential Multi-family	161.9	50.9	0.0	0.0
Residential Mobile Home	202.0	33.2	0.0	0.0
Commercial	90.1	298.8	54.8	0.0
Light Industrial	1619.5	1059.2	780.7	601.0
Heavy Industrial	92.1	28.6	0.9	0.0
Public/Quasi Public/Open Space	370.8	0.0	0.0	0.0

AICUZ Compatibility Classifications	
	Compatible
	Compatible with Conditions
	Incompatible

*Total Acres by zone

Airport Runway Rehabilitation & Expansion

The Charleston County Aviation Authority (CCAA) and the Charleston AFB mutually benefit in the utilization of the runways located at the Charleston International Airport and Air Force Base. There are two runways at the Charleston AFB/Charleston International Airport. Runway 3/21 is a 7,000 foot runway, built in 1948. Runway 15/33 is a 9,000 foot runway that was built in 1952.

The CCAA has submitted a Description of Proposed Actions and Alternatives (DOPAA) for the runway extension and has currently undertaken an Environmental Assessment for extension of both runways. Completion is scheduled for June 30th, 2008. The CCAA has also commissioned a consultant to gather all necessary information to apply for FAA funding of the runway extension.

Charleston International Airport and Charleston AFB share the two runways and a taxiway system including certain maintenance costs. The Joint Use Agreement for the runways expired February 20, 2008. A new joint use agreement between the CCAA and the Charleston AFB has been completed.

The CCAA submitted an application for federal funding for the extension of 03/21 on February 29th, 2008. The CCAA has contracted with a firm to assist in the preparation of a Benefit Cost Analysis. This includes an analysis of project benefits and alternatives, verification of project costs, and the Benefit Cost Ratio.

A draft estimate of probable cost for the extension of runway 3/21 is \$53.3 million and does not include elimination of power line obstructions. Major cost items include site preparation due to unsuitable soil material, wetlands mitigation and additional runway taxiway lighting. The CCAA has issued a Request For Qualifications (RFQ) for the design of both runways as the next step following submittal of the Letter of Intent (LOI) application to the Federal Aviation Authority (FAA).

Colonel John C. Millander, Commander, 437th Airlift Wing Charleston Air Force Base released a letter of support in the CCAA's efforts to extend the runways within the constraints of the Air Force airfield criteria.

The Berkeley-Charleston-Dorchester Council of Governments signed a resolution in June of 2007 to support Charleston AFB and CCAA in their efforts to secure funding for the extension of runway(s) 3/21 and/or 15/33.



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 437TH AIRLIFT WING (AMC)

MAR 19 2008

Colonel John C. Millander
Commander, 437th Airlift Wing
102 East Hill Blvd, Suite A
Charleston AFB SC 29404-5004

Mr. Rob Caison
Project Manager, Joint Land Use Study Update
BCD Council of Governments
1362 McMillan Avenue, Suite 100
North Charleston SC 29405

Dear Mr. Caison

Although the Air Force owns the runways, we share them with CCAA under a joint use agreement. In keeping with the spirit of joint use, we support the CCAA's efforts to extend the runways as proposed, within the constraints of our airfield criteria. We are currently working with CCAA in scoping this effort and evaluating alternatives.

The Air Force plans to reconstruct both runways at Charleston Air Force Base in their current configurations within the next few years. Although the current lengths meet our operational needs, we are working with Charleston County Aviation Authority and Charleston community leaders on proposed extensions to both runways. The extensions would support the community's current and future economic development. As such, the extensions are a CCAA initiative vice an Air Force initiative. However, if the community is to extend the runways, the work should be coordinated with our projects to minimize disruptions and costs for all. Please let me know if you have any questions regarding this issue.

Sincerely

JOHN C. MILLANDER, Colonel, USAF

cc:
Sue Stevens
Mary Graham

AMC—GLOBAL REACH FOR AMERICA



Resurfacing of Red Bank Road

A meeting was held on October 3rd, 2006 between representatives from the SCDOT, NWS Charleston officials, BCDCOG, Charleston Metro Chamber of Commerce and military consultants to address a number of issues regarding Red Bank Road.

The following is an overview and summary of three specific issues regarding Red Bank Road discussed during the meeting on October 3rd, 2006:

The condition of Red Bank Road is deteriorating. Cracks and potholes are forming along the length of the road. The Navy is requesting that SCDOT resurface the road, under stipulations of a 1962 easement in which the state is responsible for the upkeep and maintenance of the road.

A second issue is the traffic at Red Bank Road and Fletcher Street, the entrance to the Naval Nuclear Power Training Command. Currently traffic turning into this area, primarily coming from outside the base from the west, is causing backups on Red Bank's left turn lane beyond the current extent of the lane. The base is requesting at least a longer left turn lane, but preferably intersection improvements (additional turn lane, traffic light), as the traffic at this intersection may increase when the Naval Medical Clinic locates there in 2008.

It was suggested that a double left turn lane should be constructed at this intersection. Possible funding sources for intersection improvements could be funded through the 'Complete Streets' program or Base Retention funds.

A third issue is the future possibility of expanded operations at the NWS Charleston. The 841st Army Transportation Battalion saves significant amounts of money every time it uses the NWS Charleston port, rather than Port Authority terminals. Because of these savings, they would like to see NWS Charleston become a multi-modal hub for military logistics. If this were to happen, Red Bank Road would need to expand to four lanes along the entire length.

It was estimated by the SCDOT officials that the cost of widening the road would be approximately \$18-20 million, not including right-of-way purchase, easements, etc. The significant additional costs in this case would be due to the crossing of current sewer lines and SCE&G power lines. It was determined that \$25 million would be requested from the SCDOT.

Captain Robert Brennan, Commanding Officer, U.S. Navy provided a letter documenting the Naval Weapons Station's concerns of the deteriorating condition of Red Bank Road. The Naval Weapons Station is requesting long term improvements to the widen Red Bank Road from two to five lanes and short term improvements to repair and resurface the existing facility with the addition of signalized turns at the location of the NNPTC Circle, Webster Street, and Bushy Park Road.



DEPARTMENT OF THE NAVY
NAVAL WEAPONS STATION CHARLESTON
2016 RED BANK ROAD, STE 100
GOOSE CREEK, SC 29405-8901

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5000
PRCH1/014
APR 7 2008

Rob Caison, Project Manager
Joint Land Use Study Update
BCD Council of Governments
1362 McMillan Avenue
Ste 100
North Charleston, SC 29405

Dear Mr. Caison:

SUBJECT: RED BANK ROAD IMPROVEMENTS AT NAVAL WEAPONS STATION CHARLESTON

Request BCD Council of Governments document in the final Joint Land Use Study Naval Weapons Station (WPNSTA) Charleston's concern regarding Red Bank Road as explained below.

Red Bank Road is a major arterial running through WPNSTA Charleston. The approximately four mile stretch from Henry Brown, Jr. Boulevard to WPNSTA Charleston Gate 1 is extremely congested during morning, noon, and evening rush hours. Traffic is also steadily increasing throughout the rest of the day. Significant contributors to this volume of traffic include the Naval Nuclear Power Training Command (NNPTC), the Bushy Park Industrial Complex, and Berkeley County Water and Sanitation Authority (expanding their operation with the addition of acreage from WPNSTA Charleston). Additionally, a 200,000 square foot Navy/Veterans Administration Medical Clinic is under construction adjacent to the NNPTC Complex with a scheduled completion date of June 2009. The WPNSTA Charleston complex is joining with Charleston Air Force Base around FY10 to become one of the Department of Defense's new Joint Bases. This merger is expected to further increase traffic on and visibility of Red Bank Road.

An easement dated 28 May 1962 between the Department of the Navy and the State Highway Department grants the use of Red Bank Road to the State of South Carolina for a period of fifty years. Paragraph 1 of the easement states that all work in connection with the repair of the road shall be done without cost or expense to the Department of the Navy. Renewal of the easement is due in 2012.

Since 2001, WPNSTA Charleston leadership has corresponded numerous times with South Carolina Department of Transportation and the Charleston Area Transportation Study committee to express concerns over the traffic volume and deteriorating condition of Red Bank Road. This communication has addressed the need to widen the road as well as executing an interim resurfacing project. The last road overlay project was completed in 1986. Red Bank Road is in critical need of extensive repair at this time. Currently, the existing wear course is eroding and failing in numerous places resulting in significant patching.



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Existing Legislation



Federal Conservation Agreements

Federal Legislation: § 2684a. Agreements to limit encroachments and other constraints on military training, testing, and operations, granted authority to the Department of Defense to partner with local governments and conservation organizations to assist in acquiring land near military installations from a willing seller when the acquisition can protect both the environment and the military mission. Purchasing development rights would compensate the owner for the assessed market value of development potential lost when the land remains permanently undeveloped. It should be noted that any purchase of development rights as part of this strategy would be strictly voluntary.

The Air Force may enter into an agreement with an eligible entity to address the use or development of real property in the vicinity of, or ecologically related to, of a military installation for the purpose of limiting any development or use of the property that would be incompatible with the mission of the installation; or preserving habitat on the property in a manner that a) is compatible with the environmental requirements; and b) may eliminate or relieve current or anticipated environmental restrictions that would or might otherwise restrict, impede, or otherwise interfere, whether directly or indirectly

Real Estate Disclosures

The state of South Carolina Code of Laws Title 27 Chapter 50 Article I requires that beginning January 1, 2003, an owner of residential real estate shall provide to a purchaser a Property Condition Disclosure Statement, which must be completed prior to signing a contract of sale. The current property condition disclosure statement provides an opportunity for the seller to disclose information regarding Environmental hazards and Nuisances such as noise, odor, and smoke.

Special Land Use/Zoning Districts

Currently, there are no military installation Air Force Base - Air Installation Compatible Use zoning districts for municipalities in the BCD Region.

The City of Hanahan recently adopted a Naval Weapons Station Compatibility Overlay Zone. This zone intends to ensure development of land adjacent to the US Naval Weapons Station (NWS) coexists with its military neighbor, an important employer in the Hanahan area as well as a vital component of national defense. The base commander shall be notified and have the opportunity to comment on rezoning and Major Land Development in this federal military installation overlay zone in accordance with Title 6, Chapter 29, Article 13 of South Carolina Code. The Naval Weapons Station Compatibility Zone applies to all property contiguous with the Naval Weapons Station Charleston including land directly across from a right-of-way. The overlay zone does not alter any zoning standards of the underlying districts. The only additional requirement of this overlay zone is that the City of Hanahan shall notify the commander of the Naval Weapons Station Charleston as identified by the Federal Defense Facilities Utilization Integrity Protection Act. The City of Hanahan will provide notice to the commander thirty (30) days prior to the public hearing along with a written report explaining the subject submittal.

State Legislation Permitting Use of Development Controls

South Carolina permits local governments to undertake planning through the adoption of zoning and land development regulation as granted by the General Assembly. The Local Government Comprehensive Planning Enabling Act of 1994 S.C. Code 6-29 grants local governments the authority to create a Municipal Planning Commission, County Planning Commission or Joint Municipal-County Planning Commission.

In carrying out the responsibilities and intent of the 1994 Planning Enabling Act, local governments have the power to prepare a comprehensive land use plan, implement zoning ordinances, further regulate land development and make infrastructure improvements through additional municipal programs such as a capital improvements plan.

Local governments have the authority to regulate the use of land and size of buildings through the application of zoning. Additional authority has been granted to regulate the density of development, use or occupancy of buildings and areas and dimensions of land, water and air space to be occupied by buildings and structures. Physical and aesthetic regulatory control is also granted. Local governments may regulate parking as well as landscaping, buffers, lighting and curb cuts in addition to other aspects of land development and use of land necessary to achieve the intent of Comprehensive Planning Enabling Act.

The Comprehensive Planning Enabling Act specifically authorizes regulatory land development techniques not previously allowed in past legislation. Specific planning tools such as Overlay Zones and other regulatory techniques are in the recommendations section to provide opportunities for local governments within the Charleston Region to limit incompatible development within the outlying area surrounding military installations.

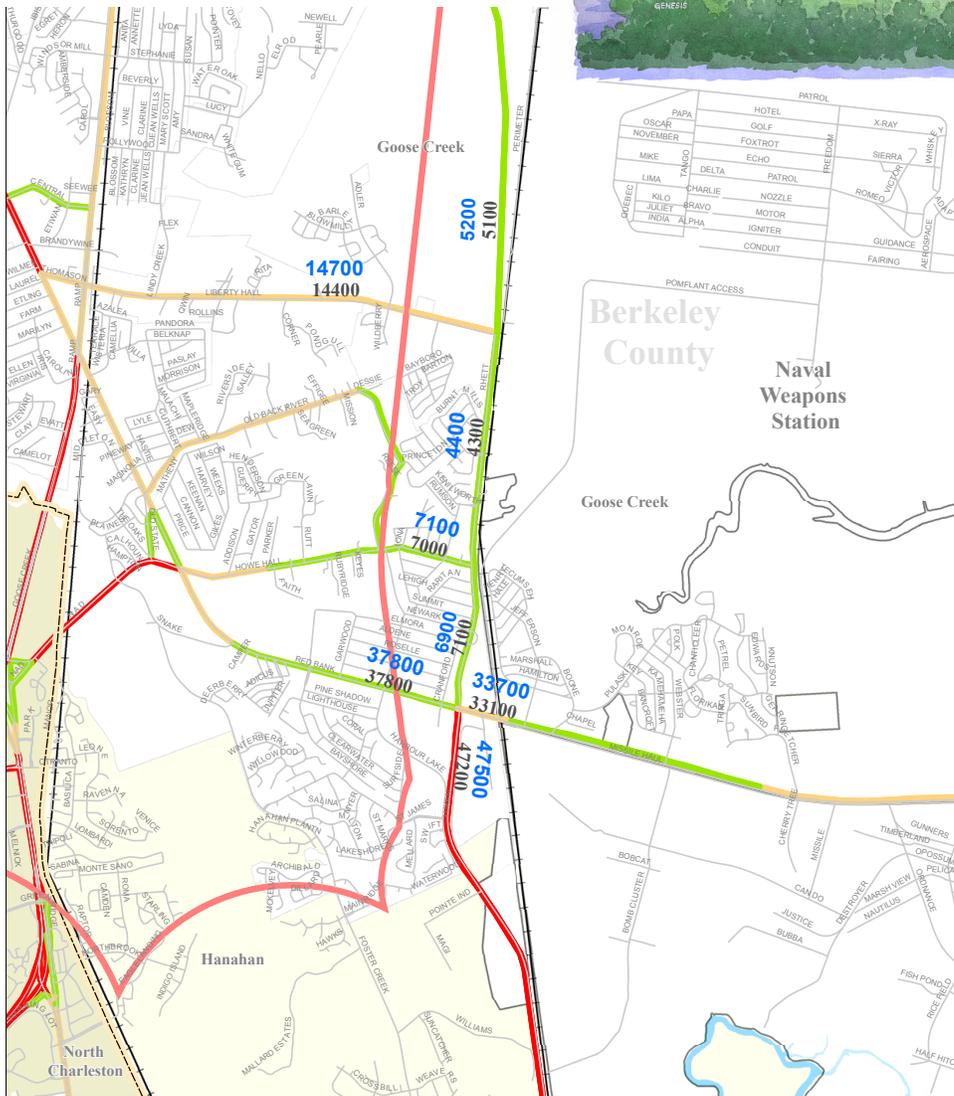


Recommendations - Infrastructure

Red Bank Road Model Runs - Navy/Veterans Administration Medical Clinic

The BCDCOG Travel Demand Model (TDM) was utilized to model the newly constructed Navy/Veterans Administration Medical Clinic on Red Bank Road. Results show about 1,400 new trips for this out-patient facility, most of which are loaded onto Red Bank Road (between Jefferson Ave and North Rhett) and Liberty Hall Road. In terms of level of service, the impact of these new trips is not significant.

The Naval Weapons Station should continue to coordinate with representatives from the SCDOT and surrounding local governments to secure funding for the



Red Bank Road Surrounding Transportation Network 2030 Roadway Level of Congestion

- Interstate
- US Highway
- SC Highway
- Local road
- Primary Study Area
- Railroad
- Military Installations
- Major Waterways
- Little or No Congestion
- Nearing Capacity
- At or Above Capacity
- #### ADT w/o New Clinic
- #### ADT w/ New Clinic

0 0.375 0.75 1.5 Miles

re-surfacing and expansion of the Red Bank Road facilities contingent upon augmentation of NWS Charleston mission objectives and to achieve current mission objectives.

Charleston International Airport Runway Extension

Expansion of the existing facilities located at the Charleston International Airport will provide an opportunity to modernize the Charleston International Airport and provide a vehicle for expansion of the Aviation cluster to promote economic development opportunities in the Charleston Region.

Municipalities within the Charleston Region should provide support and assistance to the Business Community's efforts to secure funding towards the runway extension of the Charleston International Airport. A resolution was passed by the BCDCOG Board of Directors in June of 2007 to support and assist the Charleston AFB and CCAA in their efforts to secure funding for the extension of runway(s) 3/21 and 15/33.

Recommendations - Regulations

Statutory Role of Federal Military Facilities in Zoning & Planning

Statutory role of Federal Military Facilities in Zoning and Planning: The following is an excerpt from the South Carolina Local Government Comprehensive Planning Enabling Act of 1994 – Section 6-29-1620 – Federal Defense Utilization Integrity Protection Act.

A 2004 amendment to the State's Comprehensive Planning Enabling Act, known as the Federal Defense Facilities Utilization Integrity Protection Act gives the federal military a formal voice in local planning and zoning decisions. The Act, effective October 28, 2004, provides a specified process by which the commanders of federal military installations are given the opportunity to make written recommendations to the local government on proposed land use or zoning decisions involving land on a federal military installations, within any federal military installation overlay zone, or (if there is no such established overlay zones) within 3,000 feet of a federal military installation or within the 3,000 foot Clear Zones or Accident Potential Zone of a federal military airfield.

The 2004 Act requires the local government (either through its planning department, planning commission or board of zoning appeals) to first request a written recommendation from the commander of the federal installation. This request is to be communicated at least 30 days prior to any hearing under Section 6-29-530 (adoption of a comprehensive plan or its elements) or Section 6-29-800 (actions by the board of zoning appeals) involving land on (or near, as described in the Act) a federal military installation. The base commander has the option to submit or not submit a written recommendation by the date of the public hearing. If the base commander submits no written recommendation, the presumption is that the land use plan or zoning proposal does not have an adverse impact on the military facility.

Any written recommendation submitted by the base commander concerning a land use plan or zoning proposal is to address certain specified factors, including suitability of the proposed use with the military installation, any adverse effect on existing military use or future usability, reasonable economic use of the affected property, safety concerns, conformity with an adopted land use plan, and other existing or changing conditions affecting the proposed use. Upon receipt by the local government, the base commander's written recommendation becomes a part of the public record. Additionally, the local government planning or zoning entity is required to investigate and make its own recommendations of findings as to each of the statutorily specified factors.

Real Estate Disclosures

Currently, there are no specific requirements for the seller of real property to disclose the property's location within Air Installation Compatible Use Zone (AICUZ) surrounding a military installation in the Charleston Region.

The standard real estate disclosure process often provides non-specific and generalized information regarding real property. Certain negative, unforeseen impacts of a military operation and insufficient notification of these impacts to a perspective buyer of real property should be addressed through adoption of further notification and disclosure procedures. Similar initiatives have been undertaken by surrounding communities located with the AICUZ Zones of the Marine Corps Air Station (MCAS) Beaufort, SC. An "AICUZ Disclosure" statement has been incorporated into all real property transactions for properties located within the AICUZ Zones of the MCAS Beaufort.

These measures have increased a level of awareness regarding the MCAS Beaufort and the operational affects on the surrounding area in terms of Accident Potential Zones and noise contours. This program provides a successful example of public awareness and notification initiatives of military installation within the surrounding communities.

It is recommended local governments surrounding the Charleston Air Force Base and Naval Weapons Station pursue similar programs and focus on opportunities to improve notification standards and requirements of properties located within sensitive areas surrounding regional military installations.

Communities within the Charleston Region should analyze potential funding sources for construction of a Real Property database to identify parcels within the AICUZ Zones of the Charleston AFB. This information will inform real estate professionals and potential homebuyers.

Recommendations - Community

The City of North Charleston, Charleston County, City of Charleston and City of Hanahan should amend their comprehensive land use plans to address opportunities for implementing an AICUZ Overlay District.

The City of North Charleston, Charleston County, City of Charleston and City of Hanahan should adopt an overlay district, to incorporate the recommendations of the AICUZ Report.

Other Federal programs and initiatives should be considered by municipalities to acquire private land and/or development rights to prevent potentially incompatible land development within the high risk AICUZ Zones. The City of North Charleston in coordination with the Charleston County Parks and Recreation Commission in the Spring of 2008 purchased land located off Dorchester Road within the Accident Potential Zones to secure a location for public open space and recreation amenities.

Recommendations - Zoning & Land Use

All jurisdictions located within the Primary Study should provide an annual report to the Community Planning Offices of the Charleston AFB and NWS Charleston with an overall description and summary of development proposals and building permit activity within the general confines of the Air Installations Compatible Use Zones (AICUZ Zones). This report will increase communication between the Charleston Air Force base and neighboring municipalities.

To prevent civilian encroachment and to discourage incompatible development within the AICUZ Zones, affected jurisdictions should enact an AICUZ Overlay District and adopt the land use and zoning recommendations for each specific CZ and APZ Zone as identified in the AICUZ Report. Intensity of land uses which allow gathering of people in a general area should be limited to the greatest extent possible. Residential development is considered an incompatible use in Accident Potential Zone I, the ideal recommended residential density in Accident Potential Zone II is one dwelling unit per acre. Nonresidential land uses should be limited to one story, lot coverage should not exceed 20 percent.

The Charleston Air Force Base and neighboring municipalities should consider opportunities for “joint projects” to pursue funding for acquisition of real property within the AICUZ Zones with special consideration of open space.

Local governments and the Charleston AFB should consider establishing a bank to acquire and assemble parcels within the APZ Zones through a third party intermediary. This effort could be implemented to secure private property within the AICUZ Zones to prevent civilian encroachment. This joint effort will provide a funding mechanism to mutually address opportunities to prevent potentially negative civilian encroachment and to safeguard the military’s mission.

Local governments should participate with the Charleston Air Force Base in a Technical Advisory Committee relative to the surrounding jurisdictions to review and provide feedback regarding land development, zoning permit proposals and/or subdivision applications within the Charleston AFB AICUZ Zones.

Recommendations - Installation

The Charleston AFB should create a revised AICUZ report tailored to their current mission objectives and flight operations. A more installation specific AICUZ report, listing all acceptable land uses within the Clear, Accident Potential and Noise Zones of the outlying area, would achieve coordination goals between the Charleston AFB and surrounding communities.

The Charleston AFB should provide an updated AICUZ Report identifying the mission objectives and land use recommendations for the outlying areas once rehabilitation and construction plans have been finalized for the runways.

The Charleston AFB should provide financial incentives to further encourage its service men and woman to live within closer proximity to the Charleston AFB.

The Charleston AFB should pursue funding sources through existing Federal Government programs of the Department of Defense such as the Encroachment Partnering Program and the Readiness & Environmental Protection Initiative for acquisition of private property within the Clear and Accident Zones. Other Federal programs and initiatives should be considered by the Charleston Air Force Base to identify “joint projects” between surrounding communities and third party intermediaries to acquire private land and/or development rights to prevent potentially incompatible land development within the high risk AICUZ Zones.

The Charleston Air Force Base should take an active role in the regional and community planning processes of the surrounding jurisdictions. The Charleston AFB should identify future land use planning opportunities for areas surrounding the Base that are not located within the AICUZ Overlay Zones. Recommended land uses should compliment the military mission and objectives. The Air Force Base should provide recommendations for supporting service oriented land uses such as industry, housing, commercial and other professional service land uses.

The Charleston AFB should identify alternative routes through coordination with the Charleston Regional Transportation Authority (CARTA) that provide opportunities for enhanced transit service to serve service men and woman of the Charleston AFB. These services will provide an alternative mode of transportation to and from the Charleston AFB and limit vehicle trips on facilities within the outlying area.

The Charleston AFB should examine opportunities for additional access points to the Base in coordination with SCDOT and surrounding municipalities to alleviate congested corridors by dispersing traffic and providing alternative commuting options to and from the Base.

Recommendations - Transfer of Development Rights Program

Summary

A Transfer of Development Rights (TDR) Program should be considered by the City of North Charleston and Charleston County to effectively redirect land development away from AICUZ Zones surrounding the Charleston Air Force Base. This measure will ensure the communities commitment towards long term sustainability of the Charleston AFB mission.

Intent

The purpose of this section is to identify a framework in which a potential Transfer of Development (TDR Program) may be implemented towards mitigating possible incompatible land development within the AICUZ Zones. A TDR Program is a market driven program arranged to guide and redirect land development away from areas where potential conflicts exist in terms of zoning or land use that pose an inconsistency with the AICUZ report. The intent is to briefly outline opportunities where a Transfer of Development Right Program could be implemented.

Background Information

Throughout the course of the Joint Land Use Study, the Project Team through coordination with representatives of the Technical Advisory Committee (TAC) have identified opportunities to pursue an innovative approach in land planning. The objective is to redirect land development away from areas located within the Charleston Air Force Base Air Installation Compatible Use Zones (AICUZ Zones).

The Charleston Air Force Base AICUZ report identifies specific areas within the vicinity of the Air Force Base and provides a series of land use recommendation for these zones. The intent of these AICUZ zones is to limit potentially incompatible development that could pose a conflict with operational objectives of the Charleston Air Force Base and lead to civilian encroachment on the military's operations. The AICUZ Report specifically recommends limiting intense commercial and residential land developments.

The common approach by local governments towards limiting incompatible development within military AICUZ Zones, in the historical sense, was to downzone property. This practice entails a local government providing further zoning restrictions on private property to prohibit land uses posing conflicts with the AICUZ criteria and recommendations. A Transfer of Development Right (TDR Program) provides an opportunity for a landowner to receive a market valued return on their property as an alternative to downzoning of property.

TDR Concept & Framework

A TDR program grants a landowner the ability to sell the development potential of a site to another landowner, while continuing to maintain ownership of their respective property. These purchased "rights" may then be transferred from one site to another outside the AICUZ Zones, as it relates to zoning.

The areas where the development rights are purchased are commonly referred to as "TDR sending areas." The purchaser of these "development rights" is commonly another landowner which in turn is allowed by the local government to increase the density or intensity of land development

in another predetermined location commonly referred to as a "TDR receiving areas." Hence the term, transfer of development rights.

TDR programs are commonly utilized to conserve open space, agriculture lands, historic buildings, or environmentally sensitive areas for purposes of preservation. As a product of this Joint Land Use Study involving areas surrounding the Charleston Air Force Base, a TDR program could be implemented to re-direct land development away from the outlying areas of military installations where development could pose a potential conflict in terms of compatibility.

JLUS TDR Program Recommendations

The Air Installation Compatible Use Zones (AICUZ) surrounding the Charleston Air Force Base may be identified as TDR "sending areas." The "development rights" could be transferred and applied to predetermined locations that were identified by stakeholders through the course of this study.

The Project Team, with the assistance of the Technical Advisory Committee, with specific input from representatives of the City of North Charleston and Charleston County, has identified three areas where the City and County would like to encourage development and, in some areas, the redevelopment of underutilized land. These areas may be considered for designation as "TDR Receiving Areas" as illustrated on the Proposed JLUS TDR Program map.

The three potential TDR Receiving Areas identified include: Rivers Avenue TDR Receiving Area, Intermodal TDR Receiving Area, and Dorchester Road/Cross County Road TDR Receiving Area. These areas hold redevelopment potential considering the location within proximity to existing infrastructure and transit corridors. Significant opportunities exist for the City of North Charleston and Charleston County to apply comprehensive long range planning strategies that promote sustainable infill development and private investment within TDR Receiving Area locations.

The Rivers Avenue TDR Receiving Area is located along the Rivers Avenue and I-26 corridor north of Aviation Avenue including Midland Park and Stall Road south of Northwoods Mall. The Rivers Avenue TDR Receiving Area is well positioned for future transit-oriented-development given the productive CARTA public transit service routes within the Rivers Avenue corridor which are among the highest ridership routes in the region. Revitalization of this district should include increased housing options and development intensity to spur redevelopment and investment in an underutilized portion of the BCD Region. The proposed Rivers Avenue TDR Receiving Area is located within proximity to Trident Technical Community College, which would benefit from such revitalization.

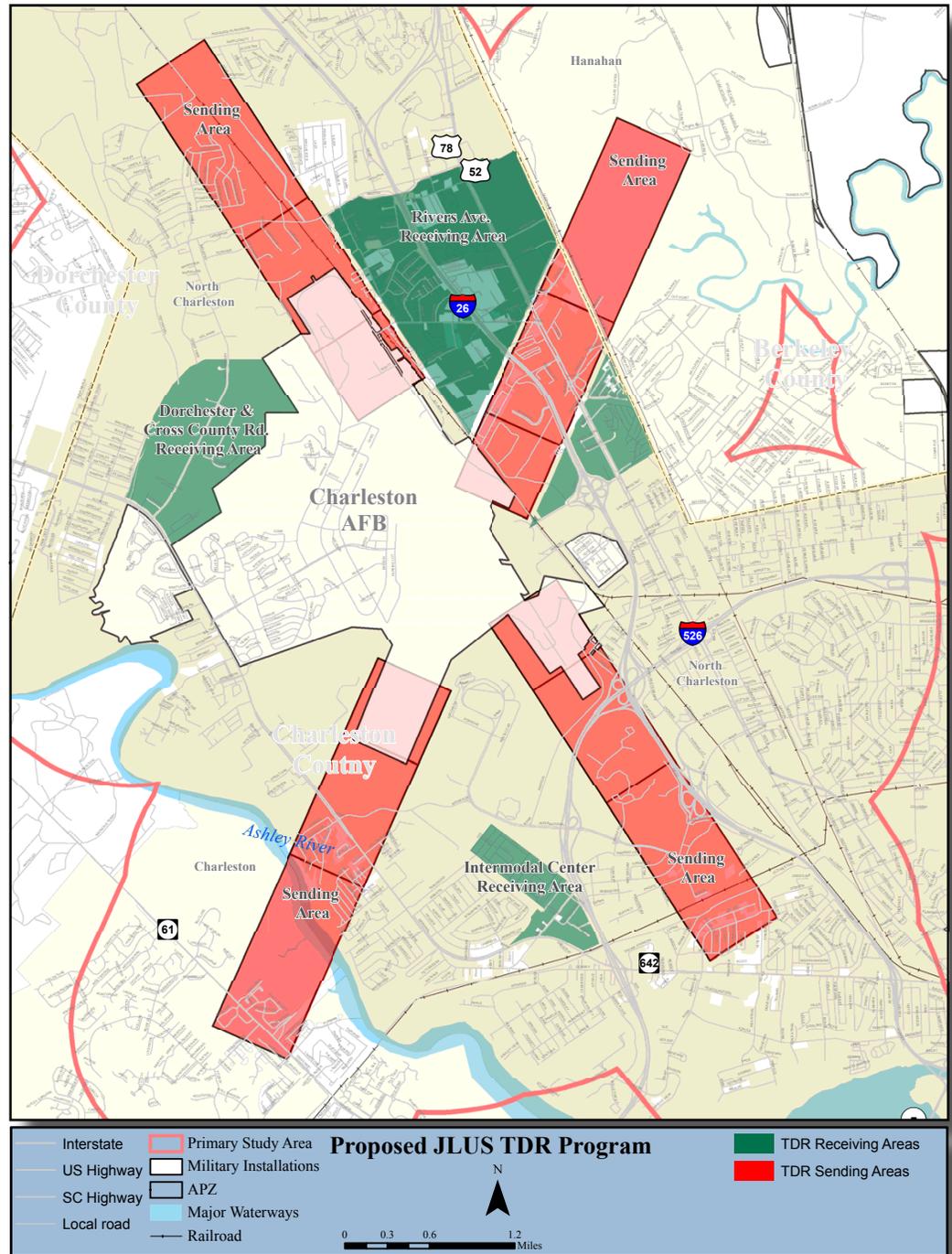
The Intermodal TDR Receiving Area is located within a planned future transportation center surrounding the intersection of Dorchester Road and Montague Avenue. This area is planned for increased public and private investment to provide alternative public transportation options for current and future citizens and visitors of the BCD Region. Enhanced transit service such as express bus service and terminal shuttles from the Charleston International Airport are proposed under the City of North

Charleston Comprehensive Land Use Plan. The proposed Intermodal TDR Receiving Areas is located along an existing rail line which poses an opportunity and practical foundation for advancing support of transit oriented services and development.

The Dorchester/Cross County Road TDR Receiving Area is proposed along the intersection of Cross County and Dorchester Road, located adjacent to the Charleston Air Force Base. This district is well positioned for high density residential development, considering the location to the Charleston Air Force Base and other employment centers within the BCD Region. Housing options and opportunities could be provided for servicemen and woman of the Charleston Air Force Base. Private, non military oriented employment centers along the Dorchester Road/Cross County Road corridor would also benefit from increased housing options.

The JLUS Project Team has worked in close coordination with officials from the City of North Charleston and Charleston County during the comprehensive land use plan updates. The TDR Receiving Areas, as identified on the JLUS TDR Map, align closely with the Redevelopment Priority Areas for the City of North Charleston's Future Land Use map and the Consistency Areas for Charleston County's Future Land Use Map.

Further study and extensive research is recommended prior to implementing a TDR Program. Market research should be undertaken in addition to an in depth analysis of land development trends, zoning regulations and real estate sale activity within the Primary Study Area and the BCD Region. Implementation funding is available through the Office of Economic Adjustment (OEA) to pursue further study of these JLUS recommendations.



Recommendations - Implementation Strategies

Topic	Recommendation	Definition	Intent	Action Steps	Implementation Responsibility
Coordination & Information	Policy Steering Committee	Seven (7) elected officials, two (2) commanders from the military installations, one (1) representative from the CCAA, one (1) representative from the Chamber, one (1) representative from the OEA adjustment	To implement and address the recommended policies of the 2008 JLUS; to encourage communications between regional stakeholder groups, municipal and community officials regarding military operational objectives; to enhance the public education process of the operation and safety standards of the Charleston AFB	Assess current land development controls and implement the recommendations of the 2008 JLUS	Local governments, Charleston AFB and NWS in cooperation with the DOD
	Technical Advisory Committee	Review proposal and provide a vehicle for continued coordination of long term planning objectives for areas within the AICUZ Zones, a subset selection of representatives from the Policy Steering Committee should be utilized to continually monitor existing conditions and address land planning and public policy issues as they arise	To review and provide comment on land development proposals, zoning permit applications, subdivision applications, and general land planning proposals for within the Charleston AFB AICUZ Zones	A committee consisting of representatives from the Charleston AFB, surrounding municipalities, public service authorities and other public agencies to provide comment and feedback as it relates to a specific entity and identify potential funding opportunities for further study	Local governments, Charleston AFB, & Other governments agencies
	Revised AICUZ Report	A revised Charleston AFB Air Installation Compatible Use Zone Study should be compiled addressing revised flight operations and safety impacts on surrounding property.	To provide land use recommendations specific to the flight operations of the Charleston AFB, the accident potential zones should be designated based on accident probabilities of aircraft activity specific to operations of the Charleston AFB	Creation of updated AICUZ document	Charleston AFB
	Web sites	Online resource for public information and material regarding the community and military operations in the Charleston region	Educate and strengthen public knowledge on existing AICUZ policy addressing safety, noise, height, land use and other restrictions surrounding the Charleston AFB	Continue to update and expand website	Local governments
	Information Brochures	Educational material to update the general public of issues surrounding the community regarding military operations	Strengthen community knowledge of the economic benefits of the Charleston AFB and NWS Charleston, Continue to educate and inform the community and citizens of the positive impacts of the Charleston AFB and NWS on the regional economy	Compile public information brochures and newsletters to be distributed through media outlets	Charleston AFB, NWS Charleston, Local governments, Regional Business & Mass Media Groups

Recommendations - Implementation Strategies

Topic	Recommendation	Definition	Intent	Action Steps	Implementation Responsibility
Land Planning & Public Policy	AICUZ Overlay District	A regulatory technique to guide land use, development and construction activity within specific areas along the periphery of the Charleston AFB	To ensure the long term viability and safeguard the operational mission objectives of the Charleston AFB	Further analysis of existing zoning regulations and land use within the AICUZ Zones, analysis of AICUZ land development recommendations, draft submittal of proposed AICUZ Overlay Districts for consideration, presentation of proposed AICUZ Overlay District to Municipal Planning Commissions and City Councils	Local governments
	Transfer of Development Rights	Market driven, voluntary program to redirect land development away from the Charleston AFB AICUZ Zones	To preserve the operational objectives of the Charleston AFB, prevent incompatible land development within the AICUZ Zones and to stimulate growth and development in predetermined locations that do not pose a conflict with the Charleston AFB operational objectives	Identify potential funding sources for further study and implementation towards the composition of a municipal or regional Transfer of Development Rights Program	Local governments, Office of Economic Adjustment
	Comprehensive Land Use Plans	A strategic vision addressing civilian encroachment on military installations	To configure public policy and thoroughly address opportunities to prevent incompatible land development within the AICUZ Zones.	Amendments should be undertaken to municipal comprehensive land use plans addressing strategies to mitigate existing incompatible development and prevent future incompatible development within the AICUZ Zones.	Local governments
	Sound Attenuation and Noise Abatement Measures	Building code standards to insulate homes and other structures in AICUZ noise contour areas	Encourage the construction of homes, dwellings and other structures within the AICUZ noise contours with proper sound insulation	Analyze and assess potential sound abatement and noise attenuation measures to be incorporated within building code standards to insulate homes and other structures in AICUZ noise contour areas; assess funding programs for sound attenuation programs, educate public and local building officials/inspectors, work with construction industry representatives to achieve sound compliance specifications within the AICUZ noise contour zones	Local governments & Building Associations

Recommendations - Implementation Strategies

Topic	Recommendation	Definition	Intent	Action Steps	Implementation Responsibility
Infrastructure Improvements	Runway Rehabilitation	Rehabilitation of existing runway 03/21 and runway 15/33	Rehabilitate existing 7,000 feet of runway 03/21 and 9,000 feet of runway 15/33 including taxiways	Continued coordination of goals and objectives between Charleston AFB, CCAA, and community representatives	Charleston AFB
	Runway Extension	Extension of the existing runway 03/21 and runway 15/33	Extend runway 03/21 7,000 feet to 9,000 feet and runway 15/33 from 9,000 to 10,500 feet including taxiways	Continued coordination of goals and objectives between Charleston AFB, CCAA, and community representatives	CCAA, Regional Business Community and Local Governments
Partnering Opportunities	Encroachment Partnering Program (EPP)	Federal land acquisition programs	To prevent incompatible land development in the high risk AICUZ Zones surrounding military installations through both the purchasing of private property and the placement of easements	Identify opportunities for implementation of program functions and goals, continued coordination and dialogue between the Charleston AFB and surrounding local governments	Local governments, Charleston AFB, Department of Defense
	Readiness and Environmental Protection Initiative (REPI)	Federal land acquisition programs	To prevent incompatible land development in the high risk AICUZ Zones surrounding military installations by placing/purchasing conservation easements on private property	Identification of property owners willing to voluntarily participate in the program, coordination and dialogue between Charleston AFB, local governments and third party intermediary	Local governments, Charleston AFB, Office of Economic Adjustment, Third party intermediary
Real Estate Measures	Early disclosure	Disclosure of property location within AICUZ APZ's or noise zones at the initial advertisement of property (e.g., Multiple Listing Service)	Improve the existing real estate disclosure process and increase public notification of operations of the Charleston AFB and subsequent flight zone criteria and land use recommendations	Provide specific disclosure of real property location with reference to the AICUZ Zones	Local governments, Charleston Trident Association of Realtors, South Carolina Association of Realtors, Charleston AFB



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