

CHARLESTON AFB JOINT LAND USE STUDY II

SCOPE OF WORK

Charleston AFB JLUS II is expected to take one year, from mid-December 2006 to December 2007. Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) is the regional planning agency for Charleston's tri-county MSA. It will act as the sponsor agency for the JLUS, and also provide members of its planning staff to complete the study. Once the JLUS is complete, COG planning staff will continue to oversee and assist the implementation of the study's adopted recommendations.

The main purpose of this year-long process is to ensure long-term land use compatibility in proximity to the Charleston region's two primary military installations, Charleston Air Force Base & Charleston Naval Weapons Station (the two bases will become one joint base under Air Force management in 2007). The outcome of the Joint Land Use Study will be a set of land use and growth management policy recommendations that, if implemented by local governments, will put in place the tools necessary to help rectify existing incompatibilities and at the least prevent future encroachment in the study area (see 'Narrative' for Study Area description).

The Joint Land Use Study will be performed by the BCD Council of Governments' planning staff, which provides a few advantages over hiring a consultant. Because the Council of Governments is the planning agency for the region, there will be little, if any, travel expenses for the study. As a public agency, general charges for completing the task should be significantly lower than that of a private consulting firm. The COG also has the advantage of established relationships with jurisdictions in the region, which should ease the process of data collection and consensus building. Additionally, there is a pre-existing knowledge of the region – it is familiar territory, which certainly provides an advantage over an out-of-town consultant – or even a local consultant that does not exclusively work on projects within the BCD Region.

The Council of Governments tracks a number of local and regional statistics and trends, and it has access to other resources, such as the Charleston Metro Chamber of Commerce and local planning departments, from which to draw additional economic and land development data. The COG staff is highly qualified in zoning, land use, and transportation planning; as well as Geographic Information Systems expertise and land use scenario capabilities. It is expected, and will be requested, that the Technical Committee will provide expertise on the technicalities of military operations that go beyond the knowledge and experience of COG's planning staff. (See 'Budget Justification' for project team experience).

I. Start-up & Organization

This phase includes all the preparatory and organizational work that will be needed to start the JLUS process, including: applying for project funding, organizing committees and work teams, and preparing a kick-off meeting.

Application (*Project Staff*)

- Prepare and submit application to Department of Defense OEA for JLUS funding.

Organization of Project Team & Committees

- Formation of project team from Berkeley Charleston Dorchester Council of Governments planning staff & interns.
- Formation of Policy Committee (POC) from elected officials within the study area, base commanders from the Air Force and whomever the Air Force deems appropriate to represent the military, FAA officials, Aviation Authority administrators, and Council of Governments board members. This committee will set policy direction for the JLUS and adopt recommendations that will be implemented once the study is complete.
- Formation of Technical Advisory Committee (TAC) from planning staff of study area counties and municipalities and base planners. Additionally, the TAC or Policy Committee should include representatives from Chamber of Commerce, Coastal Conservation League, Trident Association of Realtors, SCDOT, Regional Development Alliance, and other relevant entities in the region. The TAC will provide technical information and assist the project team in its data gathering, analyses and formation of recommendations, based on direction from the Policy Committee.
- Set schedules for Kickoff Meeting, Policy Committee Meetings, and TAC meetings. After the kick-off meeting, the TAC will meet once a month and the Policy Committee will meet every other month. Additional meetings will be arranged if necessary.

Kick-off Meeting (*Project Staff*)

The kickoff meeting will officially begin the JLUS process. Presentations will be made by Air Force command, project staff and a guest speaker, to inform local governments and committee members of the goals, schedule, and scope of the Joint Land Use Study.

- Project team prepares for the Kick-off meeting by collecting initial data for a presentation
- Hold kick-off meeting to inform the TAC and POC of the goals, scope of work, process, timeline, etc. for the JLUS project.
- Request help in gathering data from study area jurisdictions
- Confirm committee schedules
- Arrange a guest speaker through OEA, with JLUS experience, to discuss issues and strategies to ensure the effectiveness of the JLUS.

Public Information (*Project Staff*)

- Prepare public information brochures to inform the public of the process, provide schedules of public meetings, and provide contact information for questions. Attached to the public information brochures will be a survey (discussed later).
- Establish a JLUS website to display information, meeting schedules, and announcements, as well as to provide maps, contact information and an e-mail forum for public comments and questions.

****Products –**

- Committee lists & meeting schedules,
- Public information brochures,
- Website

II. Data Collection

In this phase, the project team with the help of the TAC and study area jurisdictions, will collect and organize all relevant data that will be used to inform the JLUS project, and help analyze current and future impacts the military installations and surrounding communities have on each other.

Reports & Studies (*Project Staff w/ help of TAC & Local Resources*)

- Gather comprehensive plans, zoning ordinances, and subdivision codes from all municipalities and counties in the study area. This will help determine current and future land uses, allowable heights and densities, and standards for the subdivision of land parcels for study area land lots.
- Collect information from the AFB and NWS detailing land uses and operations within the confines of the base; as well as any plans for base expansions and/or increases in operations.
- Gather the most current AICUZ and FAA Part 150 reports for flight paths, noise contours and accident potential zones for military and commercial flights.
- Acquire information and maps for ordnance storage, detonation procedures, and explosive arcs at the Naval Weapons Station.
- Acquire information on runway and taxiway coordination, as well as maintenance agreements between the Air Force Base and Charleston International Airport. Determine any upcoming renegotiation dates for these coordination agreements.
- Collect information on local or state laws and procedures regarding real estate disclosure for property within noise and accident zones – from local and state realtor associations.
- Gather building codes (local, state, IRC) regarding standards for noise reduction.
- Acquire information on noise abatement methods (operational changes or physical improvements) that can be used by the AFB or airport to reduce noise impacts on surrounding land parcels. Communities that developed or recommended noise abatement strategies as part of a JLUS could be used a resource for this information.

Study Area Statistical Information (*Project Staff*)

- Compile demographic, economic, housing, and transportation information on the Charleston Region and study areas. BCDCOG tracks a number of economic and demographic trends in-house.
- Gather information on economic impacts of the military on the region/study area. Much of this information can be provided by the Charleston Metro Chamber of Commerce.
- Acquire information on recent development & building permits within the study area, and especially within AICUZ or in close proximity to the Weapons Station. The COG keeps records of building permit activity, and additional development information can be acquired from local jurisdictions.

GIS Data (*Project Staff, GIS Staff, & Interns*)

The availability of GIS technology will be a great asset for this Joint Land Use Study. Having GIS files for land parcels and military impact areas will allow spatial analyses to be performed that were not possible during the first JLUS for Charleston AFB.

- Collect available GIS data from planning and GIS departments of all jurisdictions in the study area, including any parcel files with zoning, future land use, current land use, ownership records, etc.
- Acquire shapefiles for AFB noise and accident zones from AFB planners.
- Acquire shapefiles for NWS explosive arcs from base planners.
- Organize GIS files and create base maps of land use, zoning, infrastructure, accident and noise zones, municipal boundaries, location of military bases, etc.
- Print large-format base maps for use during committee and public meetings

Ground Observations (*Project Staff & Interns*)

Land parcel records are not always up to date, and even when they are, it is only for that one moment in time. Zoning changes and land development often occur faster than parcel databases can keep up with. The project team will perform ground observations for current land uses in the primary study area and update databases accordingly. This is particularly important for unincorporated Berkeley County land parcels, because they do not have information on current land use. These observations will check that the uses on the ground are reflected accurately on maps and parcel data.

Public Input (*Project Staff & Interns*)

- Hold a series of public meetings to solicit input from study area residents, business owners, neighborhood groups, realtors and developers.
- Provide an opportunity for the public to ask questions and provide input on the JLUS website
- Distribute surveys to residents and business owners. The surveys will solicit information such as: 'How much noise do you notice?', 'Are you aware that you are in an accident potential zone?', 'Were you informed of the noise and accident potentials when you bought your home/business?'

****Products –**

- Demographic and economic statistics – charts, graphs, narratives
- GIS base maps (land use, zoning, municipality boundaries)
- Plotted base maps for committee and public meetings
- Inventory of all collected data, organized for easy access and use by project team and TAC.
- Creation, distribution, and collection of surveys
- Q&A page on website
- Windshield survey inventory, data corrections

III. Analysis & Mapping

In this phase, the project team will process all the collected information to analyze and map (where applicable) current conditions, trends, and future issues for the study area. These analyses will provide the basis for recommendations in the final JLUS document. The project team will rely on the Technical Committee to provide assistance in analyzing information that is beyond the knowledge of COG staff – such as technical information on military equipment and operations. Otherwise, the analyses will be performed in-house, using the staff's capabilities in land use and zoning, Geographic Information Systems, economic and demographic data analysis, transportation planning, architecture, and land use modeling.

Study Area Conditions & Trends (Project Staff)

- Evaluation of population, housing, & economic trends in the study area
- Evaluate changes to the study area since the last JLUS was performed.
- Extrapolate current demographic, housing, economic trends into the future for study area projections
- Examine existing infrastructure and public services within the study area, schedules for improvements, and carrying capacities.
- Use GIS to overlay Study Area shapefiles with land parcel information to create parcel lists with appropriate attributes (zoning, land use, acreage, ownership information, density, etc.).

AFB Impacts/ AICUZ Incompatibility (Project Staff & Technical Committee)

- Use GIS to overlay military impact areas (AICUZ zones/explosive arcs) with land parcels to determine information on affected land parcels, and quantify incompatible land uses according to the different standards of clear zones, accident zones, and noise zones.
- Use GIS to create land use compatibility shapefiles, based on AICUZ standards for acceptable, unacceptable, or 'acceptable with conditions'.
- Create GIS maps and parcel inventories of incompatible zoning & existing land use within the AICUZ zones
- Identify and map of incompatible Future land uses (based on local comprehensive plans) within AICUZ zones.
- Work with the AFB and Airport Authority to determine current needs for land, equipment, or expanded operations – and examine the impacts any changes to the AFB or Airport will have on surrounding land parcels.

NWS Issues (Project Staff & Technical Committee)

- Determine possible impacts of NWS explosive arcs and other on-base operations on surrounding development.
- Work with the Weapons Station to determine current needs, including widening or resurfacing Red Bank Road.
- Analyze & report impacts of expanded base operations – strains on infrastructure & public services, impacts on residents, economic impacts – using transportation modeling and economic analysis.
- Use transportation modeling to determine the impacts of the new military medical clinic, opening in 2008 off of Red Bank Road.

Undeveloped Land (Project Staff)

- Inventory undeveloped parcels, and create of a new GIS shapefile for undeveloped parcels within the study area.
- Use GIS and historical land development data to create maps of development trends, showing the conversion of undeveloped land over time in the study area.
- Determine impacts of undeveloped parcels if built out to the extent of current land regulations.
- Identify areas of future encroachment, based on proposed developments expanded infrastructure, and future land use maps.

Land Use Tools (Project Staff)

- Assess the current land use controls in place in the study area that limit height, density, and use in proximity to airfields and military bases.
- Determine if there have been any regulation changes resulting from the previous JLUS, and determine the effectiveness of those changes.
- Identify possible receiving areas for a Transfer of Development Rights program.
- Determine areas with the most critical need for improved land use controls.
- Identify the necessary revisions to land use and zoning regulations in the study area that would achieve AICUZ compatibility standards.
- Research Transfer of Development Rights programs, and other programs & regulations that would limit future incompatible land uses.
- Prepare a TDR review, outlining the advantages & disadvantages of the program, how this program could be set up and administered, and propose possible sending and receiving areas.
- Prepare draft overlay zoning districts and other regulation amendments.
- Create land use scenarios (using land use modeling programs) to compare heights and densities currently allowed vs. those allowed with the implementation of revised land regulations.

Noise Reduction (Technical Committee & Project Staff)

- Assess noise reduction standards in current study area building codes.
- Identify and develop revisions to noise standards in the current building codes that would help lessen noise impacts within residential and commercial buildings.
- Determine financial and operational feasibility for noise abatement methods (both physical and operational) that could be implemented by the Air Force Base and Weapons Station.

Traffic Solutions (Project Staff)

- Analyze traffic impacts for operational increases on the Naval Weapons Station using transportation modeling.

*****Products-***

- Multiple land use scenarios
- Study area projections
- GIS theme maps: incompatible areas, undeveloped lands, development potentials, encroaching development, current and proposed infrastructure
- Transfer of Development Rights (TDR) report
- Draft regulatory changes, including an overlay district
- Maps of land use alternatives
- Draft building code revisions for noise reduction
- Summary report of conclusions from analysis phase

IV. Recommendations Phase

JLUS recommendations will suggest the policies and regulations tools that should be adopted and implemented by local jurisdictions, in order to achieve the study's goals. The project team will make these recommendations based on their findings from the analysis phase, and determinations will be made as to their feasibilities.

Recommended Strategies and Tools (*Project Staff & TAC*)

- Identify and recommend changes to land use and zoning regulations that would encourage land use compatibility, including noise/accident overlay zones.
- Identify possible operational changes within military bases that would reduce noise impacts
- Identify physical/structural changes on bases that would reduce noise, smoke, etc.
- Recommend hiring a consultant to establish an inter-jurisdictional Transfer of Development Rights program that would allow development rights to be purchased within AICUZ zones and used in other areas. This would be further refined in the Implementation Phase.
- Identify alternative opportunities for inter-governmental land use strategies and coordination efforts
- Recommend building codes that could be adopted to reduce noise in homes and commercial structures
- Identify possible economic incentives to dissuade development in AICUZ zones and persuade development in other areas.
- Summarize feedback and recommendations from the public, and identify measures to address them.
- Recommend improvements to the real estate disclosure process
- Recommend preferred scenarios for any runway expansion projects based on Air Force/Airport needs and impacts to surrounding private land.
- Recommend preferred solutions for limiting traffic problems along Red Bank Road at the Naval Weapons Station.
- Recommend the consideration of a conservation partnership.
- Additional recommendations that are thought of or discovered through the JLUS process

Guest Speakers

During the recommendation phase, the project team will arrange through OEA to have guest speakers present to the Policy Committee. These speakers will discuss Transfer of Development rights and other regulation tools, providing experience and insight on these topics to help inform the Committee's decision making.

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- Summary report of analysis phase findings and resulting recommendations
- Create feasibility charts for each recommendation, to assist the Policy Committee in the decision making process.

V. JLUS Document

Once the recommendations are solidified, the Joint Land Use Study will be ready to be put into document form as a draft. This draft will be presented to the public and the Policy Committee for feedback and final direction. This input will be put into a final JLUS document for publication and distribution.

Draft JLUS (Project Staff)

- Complete a draft of the Joint Land Use Study
- Submit the Draft JLUS to the Technical Advisory Committee, Policy Committee.
- Present draft JLUS to the public
- Hold meeting for committees to suggest revisions to the JLUS

Final JLUS (Project Staff)

- Revise draft based on committee and public feedback, to prepare a final JLUS document
- Submit final document to the Policy Committee for final approval and adoption.
- Publish and distribute copies of the final JLUS
- Make an electronic copy available on the JLUS website

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- Final JLUS in hard copies and CD's

VI. Implementation

Without action, the JLUS is simply a document. The project team must continue to work with the local jurisdictions to implement the JLUS recommendations. The project team will oversee the following:

- Organizing of an Implementation Committee, selected from members of Policy Committee, TAC, and Project Team. The task of the Implementation Committee will be to carry out the adopted recommendations of the Joint Land Use Study.
- Scheduling and overseeing Implementation Committee meetings
- BCDCOG Staff will provide technical assistance to local jurisdictions in revising comprehensive plans and/or zoning ordinance(s) to incorporate the adopted recommendations of the JLUS.
- Developing a Work Plan. The Work Plan should establish prioritization of JLUS recommendations, schedule for implementation, estimated costs, and responsible agencies.
- Applying to OEA for implementation funding
- Hiring consultant groups to assist in implementation tasks

Transfer of Development Right Program (Follow-up Action, not part of JLUS Grant)

If the Policy Committee adopts the recommendation to pursue a Transfer of Development Rights program, the Implementation Committee and Project Staff will develop and implement a TDR program, with the help of a consulting firm.

- The Implementation Committee and Project Staff will determine a budget and a project time frame for hiring a consultant.
- The TAC will preside over the request for proposal document and selection of a consulting firm based on the firm's capabilities, budget and completion time.
- Project staff will provide the consulting firm with the needed data and documents, as well as project direction.
- Through TDR and legal expertise, the consultant assists the committee in developing a method for measuring development rights and other administrative instruments such conservation easements, *banks*, fees-in-lieu
- The consultant will use market research expertise to determine where the market would support 'receiving zones.'
- The consultant will provide technical assistance in setting up and administering the TDR program.
- Project staff will provide assistance to jurisdictions for any revisions to their regulations that the TDR program would require.