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**Economic Impact of Military Base Closure:  
A Case Study of Charleston, South Carolina.**

**By**

**Katrena R. Hanks**

**A PLAN B PAPER**

**Submitted to**

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*In Loving Memory of*

Elizabeth V. McKelvey

1949-1988



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### Abstract

The adaptive reuse of United States military bases is a timely issue that must be addressed within the planning profession. Base closure and/or realignment can devastate local economies which are dependent on the presence of the Military. Because these facilities often represents a major employer within the community, planning for their reuse is essential.

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## **I. Introduction**

The end of the Cold War coupled with the nation's stifling deficit is often cited as the reason for the Department of Defense's (DoD) downsizing of the US military. Government projections showed that fewer bases were needed to support our defense mission and recommended the closure and/or realignment of US facilities.<sup>1</sup>

The decision to close the Charleston, South Carolina Naval Base and Shipyard in 1993 by the Base Realignment Advisory Commission altered the economic base in this historic city. At its peak, the base supported thousands of workers and their families, surrounding businesses and was a mainstay in the Charleston regional economy. Since its closure, the Charleston area has succeeded in bringing new businesses onto the naval facility and into the Charleston region in efforts to offset the economic distress caused by the naval closure.

This paper intends to provide information on the process of base closure and/or realignment, examples of successful base reuse with an emphasis on the Charleston, South Carolina metropolitan area and recommendations for communities and planners facing with base closure.

### **Purpose of this Study**

The purpose of this study is to evaluate the new businesses which have relocated on the naval base and within the surrounding metropolitan area to determine if Charleston's economic base has been revitalized since losing the base.

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<sup>1</sup> Gone But Not Forgotten: United States Naval Base. (23 September 97)  
<<http://www.iniders.com/charleston-sc/29military.htm>>.



### **Need for this Study**

The need for this research is to enhance the knowledge of state and local officials when facing the loss of a stable business, industry or government installation.

### **Objective of this Study**

The objective of this study is to evaluate new businesses that have relocated to the navy base and within the metropolitan area to determine if the economic impact on Charleston has increased, decreased or remained the same since the naval pullout.

### **Methodology**

This analysis began with a comprehensive study of the base closure/and or realignment process, communities impacted by base closure/and or realignment and measures taken by communities to ensure economic recovery. The Charleston Metropolitan Statistical Area (Charleston/Berkeley/Dorchester) was established as the main case study of this analysis. Economic indicators were selected and evaluated in efforts to provide an accurate assessment of the Charleston region prior and after base closure. Recommendations, suggestions and strategies for communities facing base closure/and or realignment conclude this report.

## **II. Background**

In 1990, Congress approved the Defense Base Closure and Realignment Act, which provided for an independent commission to hold public hearings on base closure. The task of this commission would be to compile a list of bases recommended for closure with assistance from the Department of Defense. The criteria established by the DoD for selecting bases for closure or realignment included the following:

- The current and future mission requirement and the impact on operational readiness of DOD's total force;
- The availability and condition of land, facilities, and associated airspace at both existing and potential receiving locations;
- The ability to accommodate contingency, mobilization and future total force requirements at both the existing and potential receiving locations;
- The cost and manpower implications;
- The extent and timing of potential costs and savings including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs;
- The economic impact on communities;
- The ability of both the existing and potential communities' infrastructure to support forces, missions, and personnel and
- The environmental impact<sup>2</sup>

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<sup>2</sup> United States Department of Defense. 1990 Recommended Closures and Realignments. Washington: GPO, 1990.

The next step in this process is to present the list to the president. The president is able to accept or reject the list proposed by in its entirety. After the president, Congress receives this list and if it chooses, the president's actions can be vetoed. Because neither Congress nor the president may remove an individual base from the list, the law, in theory, ensures that elected officials are not pressured to save a hometown base.<sup>3</sup>

The overall goals of this base closure and/or realignment process are to:

- Close bases quickly, but in a manner that will preserve valuable assets to support rapid reuse and redevelopment.
- Give high priority to local economic redevelopment when disposing of available real and personal property.
- Put available property to productive use as quickly as possible through leases and conveyances to spur rapid economic recovery and reduce DoD caretaker costs.
- Expedite the "screening" process, which identifies interests in excess and surplus property at closing and realigning bases.
- Fast-track environmental cleanup by removing needless delays while protecting human health and the environment.
- Make every reasonable effort to assist the Local Redevelopment Authority (LRA) in obtaining the available personal property needed to implement its redevelopment plan.

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<sup>3</sup> Base Realignment and Closure. (Visited 23 September 97)  
<<http://infomanage.com/micconversion/brac/bracback.html>>

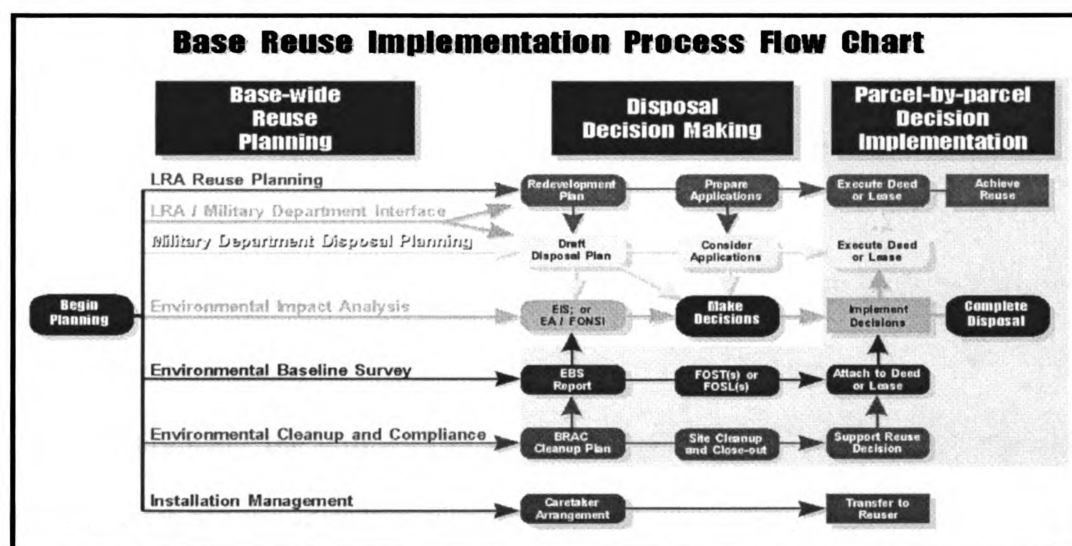


- Support the local redevelopment process through sufficient planning grants and on-site Base Transition Coordinators.
- Coordinate Federal resources to assist community economic recovery.<sup>4</sup>

### **Base Reuse Implementation Process**

The base reuse process is strewn with property rights issues and environmental regulations that begin with the actual closing of the facility. Once a site has been approved for closure, the reuse process begins with the first phase: base-wide reuse planning. Refer to Chart 1.

**Chart 1.** Base Reuse Implementation Process Flow Chart



**Source:** United States Department of Defense

<sup>4</sup> United States Department of Defense. Base Reuse Implementation Manual. Washington: GPO, 1995.

### **Phase One: Base-Wide Reuse Planning**

Phase one, base-wide reuse planning, is the most elaborate and time consuming of the three phases. It begins on the approval date of closure and/or realignment and it ends when the Local Redevelopment Authority's (LRA) redevelopment plan has been prepared and submitted to the military. The LRA must complete a multitude of tasks.

Some include:

- Form[ation], be recognized by the DoD and receive economic adjustment planning assistance.
- Solicit, identify and consider various interests in installation property.
- Conduct outreach activities that focus on community needs, including homeless assistance needs.
- Identify its own interests in available personal property.
- Develop a comprehensive land-use plan.
- Conduct market research and marketing activities to attract prospective property users.
- Prepare a comprehensive redevelopment plan and other essential reuse-related planning documents.<sup>5</sup>

Additionally, the Military Department has tasks it must perform simultaneously with the duties of LRA to ensure accurate and complete information. For a complete listings of the tasks, refer to Appendix A.

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<sup>5</sup> Ibid.

The overall reuse process in phase one can be divided into four primary steps; the first, comprehensive land-use and redevelopment planning. During this step, reuse requirements and timelines are established in accordance to the Redevelopment Acts and a cursory development plan is developed.

An environmental evaluation is conducted in step two of the process. Under the National Environmental Policy Act (NEPA), an environmental impact statement must be completed to address disposal alternatives and recommendations. An in depth account of the NEPA process can be found in Appendix B.

The five-tier BRAC environmental process, which addresses reuse planning, clean up and transfer or lease suitability is the third step in this process. A detailed description of this process can be found in Appendix C.

The final step of phase one reuse planning is installation management. This step addresses the transfer of responsibility, duties, maintenance and procedures. A consensus on these issues should be reached by the LRA and the Military Department prior to beginning phase two.

### **Phase Two: Disposal Decision Making**

Phase two, disposal decision making, consists of decisions made by the Military and the LRA with regards to disposal and reuse decisions. During this phase, the LRA is responsible for submitting its redevelopment plan to the DoD and the Military Department issues its Disposal Record(s) of Decision (RODs). The ROD details disposal

decisions and any required mitigation. This phase also contains requests for property conveyances for public purposes.

**Phase Three: Parcel-By-Parcel Decision Implementation**

Phase three, or the parcel by parcel decision implementation, lasts until the property has been conveyed. Eight property conveyance methods are available for review in Appendix D. However, environmental clean up and disposal must be consistent with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) before property is transferred. Once all these steps are completed, the facility will be officially closed and ready for reuse.

### III. Military Base Reuse

Now that the process of base closure and/or realignment has been detailed, examples of base reuse follows. Successful examples of reuse are plentiful and gives hope to communities “under the gun” of base closure and/or realignment. But, adaptive reuse can only be successful when redevelopment plans are tailor made for each military facility.<sup>6</sup>

The first successful example of base reuse is the former Strategic Air Command Air Force Base in Loring, Maine. An investment of over \$300 million into this facility transformed this base into the 8, 700 acre Loring Commerce Centre. New construction and renovations provided Maine with a low cost incubator for new businesses or an expansion site for relocation. Refer to Figure 2.

The Loring Commerce Centre has 3.1 million square feet of business, commercial, industrial and aviation space. Loring, a fully functional business has an on-site rail system with connections to efficient national and international distribution systems.<sup>7</sup> Some of its new tenants include the Defense Finance and Accounting Service Center, SITEL Corporation, Loring Job Corps Center of Innovation and the Maine Army National Guard Vehicle Refurbishment Center.<sup>8</sup>

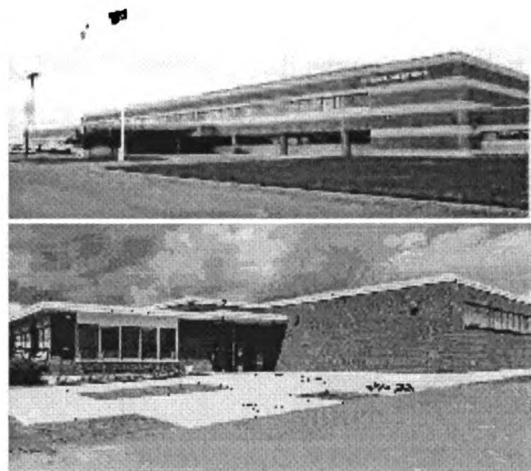


Figure 2. Loring Commerce Centre.  
Courtesy of Loring Commerce Centre.

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<sup>6</sup> United State Department of Defense. Recovery Tools Available to Assist Base Closure Communities. Washington: GPO, 1995.



The second example of a successful reuse base is the Sacramento Army Depot in Sacramento, California. The primary purpose of this 485-acre Army installation was to act as an industrial depot and repair, rebuild, and fabricate electronic communications equipment.<sup>9</sup> Closing this facility in August of 1997 resulted in a loss of 3,164 civilian jobs and more than 3,000 secondary jobs.<sup>10</sup>

But comprehensive reuse plans for this facility have generated new life on this base. Packard Bell, the manufacturer of personal computers, has relocated on the depot and created over 4, 000 new jobs. Long range plans with Packard Bell call for the addition of over 6, 000 light industrial jobs at the base.<sup>11</sup>

Two factors were fundamental to Sacramento's success. First, reuse planners did not experience any jurisdictional problems because the depot is located totally within the city limits. And the second, the Sacramento Army Depot Economic Adjustment Reuse Commission ensured community involvement in the redevelopment process by placing a neighborhood representative on its board and sponsoring community workshops to help identify issues of concern, establish objectives, generate ideas, and provide a medium to keep the public informed.<sup>12</sup>

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<sup>7</sup> Loring Commerce Centre. (18 October 98) < <http://www.loring.maine.com> >

<sup>8</sup> Ibid.

<sup>9</sup> Sacramento County Local Redevelopment Authority. (15 December 98)  
<[http://mtc.sacramento.ca.us/story\\_10.htm](http://mtc.sacramento.ca.us/story_10.htm)>

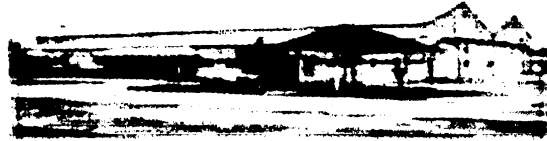
<sup>10</sup> United State Department of Defense. Recovery Tools Available to Assist Base Closure Communities. Washington: GPO, 1995.

<sup>11</sup> Sacramento County Local Redevelopment Authority. (15 December 98)  
<[http://mtc.sacramento.ca.us/story\\_10.htm](http://mtc.sacramento.ca.us/story_10.htm)>

<sup>12</sup> Ibid.

The third example of a successful base reuse is the England Air Force Base in Alexandria, Louisiana. Refer to Figure 3.

This base officially closed at the end of 1992 and by December of 1993 and the England Industrial Airpark and Community was formed. The England Industrial Airpark and Community offers multiple amenities for all types of businesses and industries.



**Figure 3. England Industrial Airpark and Community. Courtesy of England Airpark and Community.**

An inter-modal transportation system contains 500 buildings designed for a variety of uses with approximately 2.5 million square feet of available space for aircraft operations, industrial buildings, office space and community facilities.<sup>13</sup> New properties on this facility include a driving school, magnet elementary school, hospital expansion and maintenance firm.<sup>14</sup>

And the fourth and final example of successful base reuse is the Charleston Naval Base and Shipyard in Charleston, South Carolina.

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<sup>13</sup> England Industrial Airpark and Community: A Brief History. (14 December 98)  
<<http://www.englandairpark.org/history.htm>>

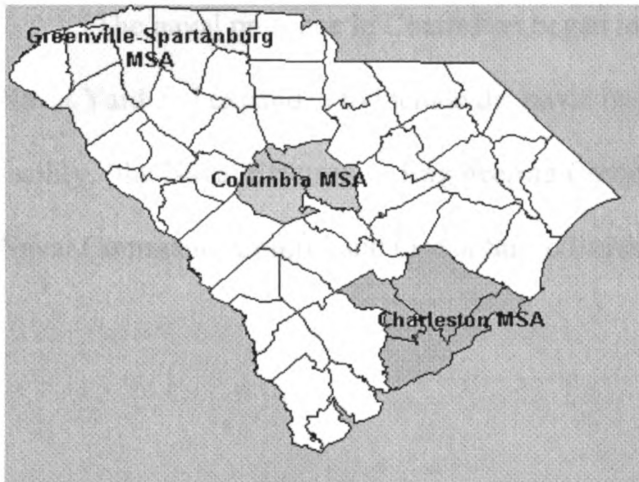
<sup>14</sup> England Air Force Base. (18 October 97)  
<[http://www.dtic.mil/envirodod/derpreport95/vol\\_2/nara056.html](http://www.dtic.mil/envirodod/derpreport95/vol_2/nara056.html)>

### **Charleston, South Carolina**

The City of Charleston, founded in 1783, occupies 87 square miles on the shores of the Atlantic Ocean at the juncture of the Ashley and Cooper Rivers. As of 1998, its total population was just under 100,122 residents.<sup>15</sup>

The Charleston Metropolitan Statistical Area encompasses three counties: Berkeley, Charleston and Dorchester. Refer to Appendix E for detailed population estimates for the Charleston metropolitan region. The region includes over 90 miles of Atlantic coastline and stretches 50 miles inland toward the intersection of Interstates 26 & 95 (Charleston Chamber of Commerce). Refer to Map 1.

**Map 1.** Charleston Metropolitan Statistical Area



**Source:** Charleston SMA 1998.

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<sup>15</sup> City of Charleston. Facts and Figures. (18 June 98)  
<<http://www.charleston.net/charlestoncity/figures.html>>

The charm of this historic city coupled with an abundance of arts, recreational and cultural opportunities make it a haven for tourists. An estimated three million visitors infuse the local economy with over 2.3 billion dollars annually<sup>16</sup>

The Charleston area is also home to the largest containerized cargo port on the South Atlantic and Gulf coasts, one of the Southeast's most impressive medical hubs and a well-established base of national and international manufacturers.<sup>17</sup>

But, by far the leading employer the Charleston area had been the military, which employed over 19% of the area workers and pumped over 4 billion dollars into the local economy.<sup>18</sup>

### **Charleston Area Naval Facility**

The naval presence in Charleston began in 1900 with the establishment of the Naval Yard and expanded to include the naval base, a naval hospital the NAVELEX facility, (the Naval Electronics Engineering Command) the Naval Weapons Station and Naval Command, Control and Ocean Surveillance by 1992. Refer to Map 2.

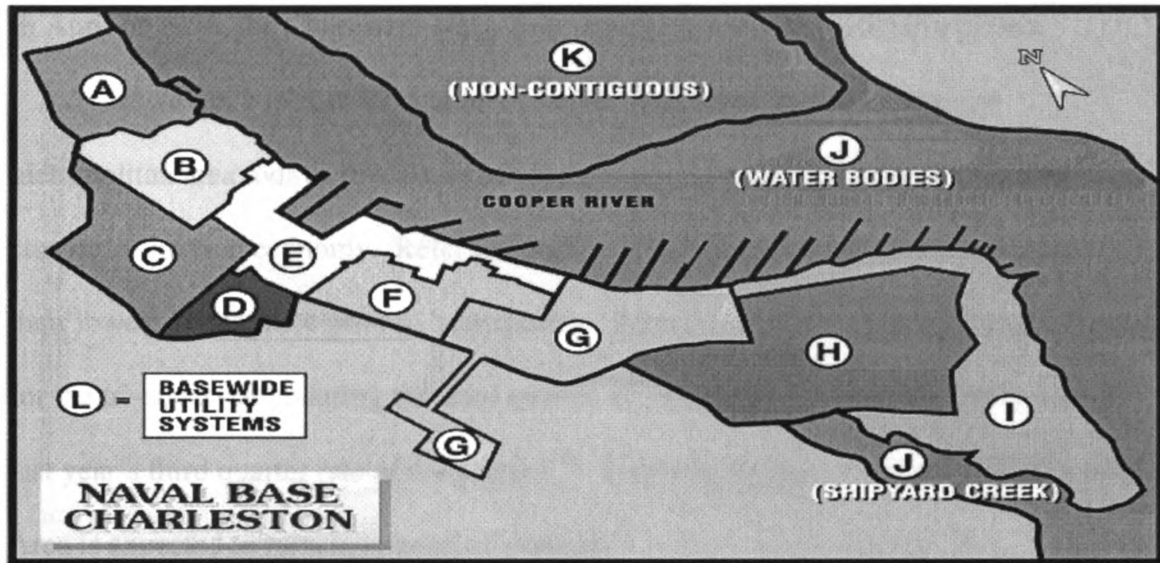
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<sup>16</sup> Charleston Metro Chamber of Commerce. An Introduction to the Charleston Metro Region. (13 September 98). <<http://www.chamber.charleston.net/overview/introduc.htm>>

<sup>17</sup> Ibid.

<sup>18</sup> City of Charleston. Facts and Figures. (8 February 97)  
<<http://www.charleston.net/charlestoncity/fgures.htm>>

**Map 2.** Charleston Naval Base



**Source:** Charleston Naval Base 1997.

During its 93-year history in Charleston, the Navy has played a major role in the military history of this nation. Two prime examples being the establishment of a naval training center at the Charleston Navy Shipyard during World War I and the fact that the Charleston Naval Yard became the major overhaul facility on the East Coast for submarines and the homeport for combatant ships of the Atlantic fleet.<sup>19</sup>

In March of 1993, the Base Closure and Realignment Commission (BRAC) announced that the Navy Base and Shipyard were on the list of bases under consideration for closure and/or realignment. Over the next two months, Charleston raised over one

<sup>19</sup> History of Charleston' AFB, S.C. (23 September 97)  
<<http://www.charleston.af.mil/chas/facts/history.htm>>

million dollars and campaigned against the closure of its naval facilities, but to no avail.<sup>20</sup>

In April of 1996, the Charleston Navy Base and Shipyard were officially closed.

However, a look at the annual economic indicators for the Charleston metropolitan area today, reveals an encouraging sign for communities facing base closure; a thriving economy. Refer to Chart 1. Charleston's employment rates are at their lowest levels since prior to base closure. Forecasters predict unemployment figures for the tri-county area during the third quarter of 1998 to be 2.2 percent, nearly half of last year's third quarter rate of 4.4 percent.<sup>21</sup> Total employment for the Charleston Metro Area is expected to remain at nearly 5 percent.

A slight increase in port tonnage is expected in Charleston for the third quarter of 1998, nearly an increase 25 percent increase from 1991 figures.

Economic forecasts for gross retail sales for the third quarter of 1998 total just under \$3 billion for the third quarter, an increase of nearly 11 percent from the third quarter of 1997.<sup>22</sup>

Charleston's residential real estate market is expected to remain strong with an increase in residential permits issued over 1997 third quarter numbers.<sup>23</sup>

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<sup>20</sup> Palmer, Elizabeth A. "Fighting on the Homefront: Charleston Defends Itself." *Congressional Quarterly Weekly* 8 (May 1993): 1172.

<sup>21</sup> McDermott, John. "Charleston's Economy Pumping". *Charleston Post and Courier Business Review*, 6 July 98.

<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

**Chart 1. Annual Economic Indicators 1991-1997 Charleston Metro Area**

	1991	1992	1993	1994	1995	1996	1997
<b>EMPLOYMENT</b>							
Civilian Labor Force	243,660	247,480	247,080	243,440	245,380	243,960	250,360
Total Employment	233,220	233,970	230,830	228,480	232,990	231,340	239,840
Unemployed (#)	10,440	13,510	16,250	14,960	12,390	12,620	10,520
Unemployed (%)	4.3	5.5	6.6	6.1	5.0	5.2	4.2
<b>EMPLOYMENT BY SECTOR</b>							
Construction	13,800	12,100	11,900	11,900	12,600	13,300	14,300
Manufacturing	20,900	20,600	20,700	20,000	20,600	20,850	20,700
Transp/Comm/Public Util.	10,900	10,600	10,600	10,900	11,000	11,300	11,000
Retail & Wholesale Trade	49,900	49,800	50,600	51,400	53,100	54,700	55,200
Finance/Insur/Real Estate	7,900	7,900	8,100	8,300	8,200	8,300	8,600
Services	47,500	48,700	50,100	52,300	54,600	56,300	57,700
Government	54,700	55,000	54,800	52,200	49,400	47,500	49,400
Total Nonag. Employ.	205,600	204,700	206,800	206,800	209,600	212,000	216,900
<b>TRANSPORTATION</b>							
S.C. Port Tonnage	8,294,356	8,506,114	8,443,345	9,520,600	10,476,877	11,108,981	12,577,932
Air Enplanements	622,543	639,825	666,217	899,127	693,718	734,647	795,579
Air Displanements	657,445	667,313	688,884	911,747	702,720	738,196	804,960
<b>RETAIL TRADE</b>							
Gross Retail Sales (\$000)							
Berkeley	1,539,014	1,494,323	1,654,531	1,796,525	1,845,347	1,895,843	2,044,147
Charleston	5,796,392	5,833,656	6,133,484	6,212,098	6,642,949	7,180,577	7,552,551
Dorchester	665,576	694,418	728,552	757,716	826,052	860,712	898,683
Metro area	8,000,982	8,022,397	8,516,567	8,766,339	9,314,348	9,937,132	10,495,381
New Car Sales**	16,284	18,463	23,194**	33,636	31,746	28,253	28,970
<b>ELECTRIC HOOK-UPS</b>							
	167,261	169,856	171,502	172,953	172,885	175,148	178,529
<b>TOURISM***</b>							
Hotel Occupancy (%)	64.8	63.1	66.69	70.89	70.97	68.76	70.13
Avg. Daily Rate(\$)	\$58.98	\$63.45	\$66.54	\$67.24	\$71.74	\$81.29	\$88.65
<b>PERMITS</b>							
Single Family	2742	2841	2699	2565	2171	2536	2886
Multi Family	93	557	122	107	91	256	438
Total New Residential	2835	3398	2821	2672	2262	2792	3324
New Non Residential	686	668	605	580	529	631	878
<b>VALUE OF CONSTRUCTION (\$000)</b>							
Single Family	236,421	266,612	263,487	273,759	251,617	305,913	368,796
Multi Family	1,835	15,369	2,982	3,682	3,243	15,224	25,000
Total New Residential	238,256	281,981	266,469	277,441	254,860	321,137	393,796
New Non Residential	150,993	91,306	107,522	107,159	636,239	204,889	337,953
Total \$ Value*	479,914	455,230	457,399	458,312	969,767	612,613	871,311

Source: Center for Business Research 1998.

New developments are expected to begin construction during the third quarter, which should keep the non-residential construction market thriving. The total value of commercial building permits is expected to reach more than \$120 million dollars.

For the naval base, these positive numbers translate into more than forty new companies. The Border Patrol, Americorps volunteers, a magnet school, utility companies and a shipbuilding firm are now operating in 4.4 million of 5 million square feet of the former Navy Yard. More than 70% of all of the piers and dry-docks are in operation and a total of 4, 300 jobs were created in Charleston, with over 1, 100 going to former base employees. An additional six thousand new jobs in the region have been attributed to the new operations at the base.<sup>24</sup> Appendix F has a list of all the new business that have relocated to Charleston, their investment and number new jobs credited to their presence.

### **The Keys to Charleston's Success**

The Charleston region's ability to market itself as a city of opportunities, rather than liabilities helped the region's quick recovery. A solid infrastructure was the first of these opportunities. The Charleston region offers lower-than-average costs for most basic services, including power, water, labor and transportation.<sup>25</sup> Electrical service is provided by South Carolina Electric and Gas Company (SCE&G), Santee Cooper and

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<sup>24</sup> Smyser, Dick. "The Charleston Experience: Lessons to Learn, Reasons for Hope". Oak Ridger, 12 August 97.

<sup>25</sup> Charleston Region Development Alliance. Infrastructure. (15 June 98)  
< <http://www.crda.org/istructure/idxinfrastructure.html>>



two electric cooperatives -- Berkeley Electric and Edisto Electric. The Charleston region has the lowest electrical rates in the Southeast, on average, 20% lower than the national average.<sup>26</sup>

Advanced telecommunication systems are another reason for the success of the Charleston region. Over 21,000 miles of fiberoptic cable run throughout the Charleston Region and keeps the area wired with the latest in technology.<sup>27</sup>

Charleston was able to attract scores of import/export companies and distribution centers largely on the strength of its road and rail system combined with the port. The region is served by three Interstate highways, three major U.S. highways and seven major state highways. Approximately 100 motor carriers serve the area, and have just-in-time access to the center of the nation's consumer market. Additionally, the region is served by three major rail systems, and air cargo is available.<sup>28</sup> Refer to Appendix G for a list of additional amenities that make Charleston an optimal location for business expansion or relocation.

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<sup>26</sup> Ibid.

<sup>27</sup> Ibid.

<sup>28</sup> City of Charleston. Facts and Figures. 18 June 98  
<<http://www.charleston.net/charlestoncity/figures.html>>

#### IV. Planning for Reuse

In the wake of base closure, the Department of Defense (DoD) has implemented recovery tools to assist communities affected by base closure.<sup>29</sup> The first of which is the *Base Reuse Implementation Manual*. This manual provides supplemental information on existing, laws, policies and regulations that must be implemented during base reuse, but does not supply information on how to proceed with the process of reuse. The manual offers valuable technical information to communities in the form of guidelines that must be performed by the Military prior to closure.

A second tool offered by the DoD is funding for planning grants and technical assistance. Funds average one million dollars over a three to five year period and are designed to underwrite part of the local planning organization's costs.

In Charleston, the Charleston Naval Complex reemployment grant was established to employ federal civilian workers displaced by the closure of the naval facility. Grants provided services including special workshops, retraining and job search assistance.<sup>30</sup>

The Office of Economic Adjustments (OEA) also provided technical assistance. OEA provides on-site coordinators trained in base closure and/or realignment to assist communities through the conversion process. They assist with creating a plan for

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<sup>29</sup> United State Department of Defense. Recovery Tools Available to Assist Base Closure Communities. Washington: GPO, 1995.

<sup>30</sup> Job Service. Charleston Naval Complex Reemployment Grant (15 September 97)  
<<http://www.jobservice.org>>

redevelopment, keeping environmental clean up on a fast track and pushing for the rapid redevelopment of property and job creation.<sup>31</sup>

Federal assistance is the third tool offered to assist communities. Displaced workers are given priority placement for other DoD jobs and health insurance benefits are extended to unemployed workers. Additional services include outplacement referral services, establishment of transition assistance centers and early retraining.<sup>32</sup>

Charleston's displaced naval workers were given several options during base closure. The first option was the transfer to another military facilities. Naval facilities throughout the country accepted workers and their families from Charleston. Due to proximity considerations, a large majority of Charleston's naval workers relocated to military installations in St. Mary's, Georgia and Jacksonville, Florida.

The second option was job retraining. The region's technical and community colleges, including Trident Technical College and Johnson and Wales, provided educational opportunities to displaced workers. Programs such as paralegal training and food service management saw an increase in enrollees after the naval pullout.

The third option available for displaced workers was the early retirement option. Employees who wanted to collect the retirement benefits were given the option and used the funds to remain in Charleston or relocate throughout the country.

Finally, the Community Guide to Reuse is a publication that provides communities with information on economic recovery. It summarizes the lessons learned

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<sup>31</sup> United States Department of Defense. Base Reuse Implementation Manual. Washington: GPO, 1995.

<sup>32</sup> Ibid.

and mistakes made by other communities during the reuse process and serves as a guide for base reuse.

### **Recommendations for Communities Facing Base Closure and/or Realignment**

The role of the community as a whole is very important in dealing with base reuse. Effective decision making rests with those most impacted by closure; the residents in the community. Communities must band together and assume many responsibilities to ensure the economic recovery of their area.<sup>33</sup> And the first responsibility is awareness.

Awareness is key to understanding base closure. Communities must study the potential impact of base closure on their area. They must know how many businesses are dependent (directly and indirectly) on activity at the base and what base closure means to their city.

For Charleston, awareness meant the formation of several base closure commissions that addressed the regional importance of reindustrialization. The South Carolina legislature appointed the Charleston Redevelopment Authority (CRA), which voiced the concerns of Charleston, North Charleston and Berkeley counties residents, as well adjacent areas of Mount Pleasant and Summerville.

The goal of the CRA was three-fold: job creation, interim leasing and “hot turnover”, making facilities suitable for leasing in the shortest period of time as possible.<sup>34</sup>

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<sup>33</sup> United States Department of Defense. Community Guide to Reuse. Washington: GPO, 1995.

<sup>34</sup> Smyser, Dick. “The Charleston Experience: Lessons to Learn, Reasons for Hope”. Oak Ridger, 12 August 97.

Another goal of base closure communities is to find new opportunities for economic growth. And one way of accomplishing this task would be to seek investment from local and regional political and financial resources in the community. By building alliances across the entire spectrum of the community, the overall adjustment effort should go easier. In Charleston, this meant the formation of the Charleston Region Development Alliance (CRDA). The CRDA is a public-private partnership charged with recruiting new and competitive business investment, with an emphasis on new manufacturing, distribution, back office and headquarter operations, to the tri-county region.<sup>35</sup>

Also instrumental in the Charleston region's success was the formation of the Berkeley-Charleston-Dorchester Council of Governments. This Economic Development Administration funded district served three counties and under the Title IX Defense Adjustment funding, applied and received almost \$15 million for 11 projects including water and sewer projects, the construction of a state aquarium and the renovation and expansion of downtown Charleston.<sup>36</sup>

Leadership is also key in the base reuse process. Communities must become catalysts for the area's recovery effort. They must learn about all aspects of reuse and give clear direction to their elected and appointed officials on how to proceed. Charleston's area community and political leaders became coordinators of Charleston's

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<sup>35</sup> Charleston Regional Development Alliance. (15 September 98) < <http://www.crda.org> >

<sup>36</sup> Defense Conversion Pays Off in South Carolina. Economic Development Digest, 9 (1998): 10.

redevelopment efforts. Involving residents within the planning process assured equitable redevelopment process.

### **Responsibilities of Planners in the Base Reuse Process**

The role of planners in the base reuse is to ensure the best possible outcome for communities affected by base closure. And the best way to accomplish this is by working cooperatively with the LDR to reach agreements regarding reuse. Making concessions regarding reuse plans early in the process will save valuable money and time.

Next, planners must consider the needs of those in the community in which they are planning. Showing consideration for the needs of the communities will ensure that redevelopment plans are site-specific rather than “cookie cutter” solutions that will not benefit the community. Since Charleston relies heavily on tourism as a major industry, care was given to revitalize the downtown and bolster its image as a world class city. A redeveloped downtown and convention center in North Charleston, adjacent to the North Charleston Coliseum, attracts large-scale events into the Charleston Metro Area.

Another way planners can assist communities is by motivating community organizations into action and providing them with technical assistance on base reuse. Having an informed constituency is vital for economic recovery. Charleston’s Community Based Organizations (CBOs) relied heavily upon non-profits such as the

N. E. W. Fund, to provide technical assistance to those residents affected by base closure.

<sup>37</sup> In addition to CBOs, religious institutions and educational facilities served as networks for assistance and information on base closure.

Additionally, planners must seek to be innovative and flexible in this reuse process. This is a fairly new aspect of redevelopment and reuse plans are expected to be new, different and innovative; creativity is essential.<sup>38</sup> Charleston's use of an industrial brownfield as the site of its new aquarium and the use of government funds to address city improvements, was an effective approach to redevelopment. By maintaining and upgrading current issues within the city, future development has a stronger foundation to build upon.

But by far, the most important strategy planners must address in base reuse is the encouragement of local jurisdictions to work together. Because the Military played such a large role in the economy of not only Charleston, but neighboring cities as well, pooling resources with surrounding communities to attract new businesses proved to be the best option for Charleston Metro Area. Today, their efforts have paid off with the Charleston Metro Area seeing growth and prosperity unthinkable during the wake of base closure. The revitalization of the economy of Charleston, South Carolina serves as a great example of how a regional planning approach to reindustrialization ensures a successful base reuse process.

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<sup>37</sup> The N. E. W. Fund is a non-profit organization that provides grants, leadership training and assistance with community organizing in Charleston, South Carolina.

<sup>38</sup> United State Department of Defense. Recovery Tools Available to Assist Base Closure Communities. Washington: GPO, 1995.

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## **Appendix A**

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### **Military Department Tasks for Base Reuse:**

- Identify installation property, which is excess to DoD's needs and surplus to the Federal Government's needs, that will be made available for reuse.
- Inventory personal property and consult with the LRA to identify the personal property that will be made available to the LRA for reuse.
- Determine and analyze environmental impacts that may occur on the property as a result of its disposal actions.
- Identify potentially impacted natural or cultural resources on the property and any mitigation measures that may have to be taken.
- Conduct an environmental baseline survey to identify the environmental condition of installation property, including property that is uncontaminated and can be made available for reuse without further environmental actions.
- Refocus current environmental cleanup, compliance, and natural and cultural resources strategies and schedules in light of the LRA's land-use plan and redevelopment priorities.
- Relocate active mission elements (mission drawdown).
- Plan for and carry out protection and maintenance (caretaking) of installation property and facilities not immediately reused at the time of active mission departure/base closure.

**Source:** United States Department of Defense. Base Reuse Implementation Manual. Washington: GPO, 1995.

## **Appendix B**

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### **Requirements of the National Environmental Policy Act (NEPA)**

The NEPA process is intended to help the Military Department make informed and environmentally responsible disposal decisions. The NEPA process requires the Military Department to conduct environmental analysis concerning:

- The environmental impact of the proposed disposal action, including reasonably anticipated reuse activities.
- Alternatives to the proposed disposal and reuse action, including the "no-action" alternative.
- Adverse impacts.
- Any appropriate environmental impact mitigation actions.

For disposal of closing or realigning installations, the NEPA process (described in 40 CFR Parts 1500-1508) is typically completed in one of three ways:

- Categorical Exclusion. If applicable, a categorical exclusion may be used by the Military Department when a parcel is to be transferred to another Military Department or Federal Agency.

A categorical exclusion may also be used by the Military Department for interim leases where there is no substantial change in land use.

- Environmental Assessment (EA)/Finding of No Significant Impact (FONSI). The EA provides the Military Department with sufficient evidence and analysis for determining

## **Appendix B**

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whether a FONSI or an EIS should be prepared. A FONSI is a determination that, based on the EA, the disposal action will not significantly affect the environment and a full EIS is not necessary. The Military Department may receive public comments on the EA and the applicability of a FONSI. After a FONSI, the Military Department can issue a formal disposal decision for the property.

- EIS/Disposal Record of Decision (ROD). Preparation of an EIS involves a more formal public involvement process, which can be summarized as follows:

- The Military Department publishes a Notice of Intent in the Federal Register that a property disposal action may be undertaken and that an EIS will be prepared and considered.

- A public scoping meeting will be held in the geographical area to obtain public comments about the possible environmental impacts of the proposed disposal action and likely reuses, as well as the reasonable alternatives that should be considered in the analysis. It is therefore important for the LRA and other interested community leaders to participate in the scoping meeting.

- Data are collected and analyzed by experts in different fields, and the results are published in a Draft EIS (DEIS). The DEIS will be made available for public review and comment. Interested agencies, organizations, and individuals normally have 45 days to review and comment. Also during this time, a public hearing is held in the community to explain DEIS findings and to receive oral comments.

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## **Appendix B**

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- The Final EIS (FEIS) is completed no later than 12 months after the submittal of the LRA's redevelopment plan. The FEIS will address public and other comments received on the DEIS. A Notice of Availability (NOA) of the FEIS will be published in the Federal Register.

At least 30 days after publication of the FEIS, a disposal ROD is issued. The disposal ROD indicates the disposal actions that have been selected, the alternatives considered, the potential environmental impacts of each alternative, and any specific mitigation activity to support the decision. After the ROD is signed and issued, the availability of the disposal ROD is announced in the Federal Register. Then, the Military Department may dispose of the property if other actions are complete.

It is DoD policy (DoD Guidance on Accelerating the NEPA Process for Base Disposal Decisions, Deputy Secretary of Defense Memorandum "Fast Track Cleanup at Closing Installations," September 1993--see Appendix F) that the Military Department will generally use the LRA's redevelopment plan, if available, practicable, and not in conflict with statutory or regulatory requirements, as the basis for the proposed action and alternatives in complying with NEPA. If the elements of the redevelopment plan do not constitute a reasonable alternative for disposal and reuse of the base, the Military Department will identify the problematic elements of the plan and work with the LRA to devise mutually acceptable plan modifications. Designation of the LRA's redevelopment plan as the proposed action does not affect the Military Department's obligation under NEPA to consider reasonable alternatives for the disposal and reuse of installation property. In the event that the LRA does not reach a consensus or fails to prepare an

## **Appendix B**

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acceptable or timely redevelopment plan, the Military Department will prepare the NEPA analysis using reasonable assumptions as to the likely reuse scenarios and their reasonable alternatives.

**Source:** United States Department of Defense. Base Reuse Implementation Manual. Washington: GPO, 1995.

## **Appendix C**

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### **The BRAC Environmental Process**

The Military Departments have had ongoing environmental cleanup programs for many years as part of the Department of Defense Environmental Restoration Program. Environmental programs are emphasized and expedited at closure bases through the BRAC Environmental Process, which includes environmental cleanup actions and other environmental issues that may impact property reuse. Many environmental activities will occur during the reuse planning phase. Therefore, it will be important for the Military Department to be aware of the LRA's reuse concepts as soon as they are formulated. It is also important for the Military Department to communicate environmental issues to the LRA early in the process, to ensure reuse planning is compatible with environmental conditions. This way, environmental priorities can be reconciled with community reuse priorities, and appropriate cleanup levels can be established to reflect anticipated future land uses.

### **BRAC ENVIRONMENTAL PLANNING**

The BRAC environmental planning process consists of five principal steps, which can be described as follows:

- A BRAC Cleanup Team (BCT), an important source of information for reuse planning, is designated for each base where property will be made available to the local community for reuse. The BCT will include a BRAC Environmental Coordinator (or BEC--a Military



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Department employee), and representatives from the State environmental agency and the U.S. Environmental Protection Agency's (EPA's) regional office. The BCT should work closely with the environmental subcommittee of the LRA. The LRA should receive cleanup information from the BCT and should, in turn, provide the BCT with input on reuse priorities and decisions.

- The BCT reviews the status of all environmental programs (including cleanup, compliance, and natural and cultural resources programs) at the base, as well as the LRA's redevelopment plan, unless it is not yet available. In the latter case, the BCT should consider anticipated community needs.
- The BCT identifies action items requiring further effort, and develops a strategy for base environmental programs to incorporate both reuse and environmental priorities.
- A BRAC Cleanup Plan (BCP) is prepared, describing the status of base environmental programs, and identifying strategies and schedules for integrating the environmental cleanup with the community reuse plan.
- As contamination is remediated, the BCP is updated to reflect cleanup and site close-out actions that have been taken, as well as any changes in community redevelopment needs.

**Source:** United States Department of Defense. Base Reuse Implementation Manual. Washington: GPO, 1995.

## **Appendix D**

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### **Property conveyance methods:**

- Federal agency transfers of excess base property to non-DoD organizations within the Federal Government. These transfers require reimbursement to the Military Department of the full fair market value of the property, unless:
  - The Secretary of the Military Department and the Office of Management and Budget grant a waiver; or
  - A law specifically exempts the transfer from reimbursement.
- Public purpose conveyances for such public uses as airports, education, health, historic monuments, ports, parks and recreation, and wildlife conservation. Generally, a Federal agency with specific expertise in a conveyance category (e.g., the National Park Service for park land and recreation conveyances) is authorized to serve as a sponsoring or approving agency. Approved recipients may receive these conveyances at a substantial discount (up to 100 percent of fair market value), following DoD consultation with the appropriate agency.
- Homeless assistance conveyances (under the Redevelopment Act) at no cost, either to the LRA or directly to the representatives of the homeless. Any deeds prepared by the Military Department for conveyance of property directly to representatives of the homeless should provide for transfer of the property to the LRA if no longer required for homeless needs. Personal property may be conveyed to the local redevelopment authority

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for use by the homeless assistance provider. The LRA will be responsible for monitoring implementation of the homeless assistance provisions of its redevelopment plan.

- Negotiated sales to public bodies or other qualified entities require payment of not less than the fair market value, although payment terms are negotiable. Terms of negotiated sales are subject to review by Congress.

- Advertised public sales may be made to the party that submits the highest bid, provided it is not less than the fair market value. Sales to private parties for amounts over \$3 million are subject to Attorney General review.

- EDCs to an LRA, for creating jobs and economic revitalization of the community, are approved by the Military Department and may be sold at or below the estimated present fair market value with flexible payment terms and conditions.

- Conveyances for the cost of environmental remediation may be made to those parties who enter into an agreement to pay the costs of environmental remediation on the property, provided that the total cost to the recipient is no less than the property's fair market value. Implementing regulations for this conveyance authority, required by Section 2908 of Title XXIX, have been promulgated as a proposed rule and are being revised.

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- Depository institution facilities may be conveyed to the operating depository institution, by sale at fair market value, when the institution constructed or substantially improved the facilities.

For property with ongoing cleanup efforts, leases may be used to achieve prompt reuse. However, the Military Department must ensure that all environmental actions necessary to protect human health and the environment have been taken before any transfer by deed can take place. This means that all remedial actions necessary for any remaining contamination have been put in place and are operating properly and successfully, to EPA's satisfaction. In any such case, the Military Department will remain responsible for completing the cleanup.

**Source:** United States Department of Defense. Base Reuse Implementation Manual. Washington: GPO, 1995.

## Appendix E

### Population of the Metropolitan Region

	<i>1980 Census</i>	<i>1990 Census</i>	<i>Annual Ave. % of Change</i>	<i>1994 Estimate</i>	<i>Annual Avg. % Change 1990 - 1994</i>
<b>Berkeley County</b>	94,727	128,776	3.6	138,839	2.0
Bonneau	401	374	-0.7	417	2.9
Goose Creek	17,899	24,692	3.8	27,454	2.8
Hanahan	13,224	13,176	-.04	12,886	-0.6
Jamestown	193	84	-5.7	86	0.6
Moncks Corner	4,179	5,607	3.4	6,103	2.2
St. Stephen	1,850	1,697	-0.8	1,825	1.9
<b>Charleston County</b>	276,556	295,039	0.7	293,550	-0.1
Awendaw*		324		NA	NA
Charleston	73,757	80,414	0.9	76,854	-1.1
Folly Beach	1,478	1,398	-0.5	1,606	3.7
Hollywood	2,365	2,094	-1.2	2,614	6.2
Isle of Palms	3,421	3,680	-0.8	4,123	3.0
Kiawah Island	266	718	17	896	6.2
Lincolnton	808	716	-1.1	725	0.3
McClellanville	436	333	-2.4	325	-0.6
Meggett	249	787	21.6	813	0.8
Mt. Pleasant	17,735	30,108	7	34,425	3.6
N. Charleston	65,681	70,218	0.7	67,720	-0.9
Ravenel	1,655	2,165	3.1	2,567	4.6
Scabrook	233	948	30.7	889	-1.6
Sullivan's Island	1,867	1,623	-1.3	1,810	2.9

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<b>Dorchester County</b>	<b>58,761</b>	<b>83,060</b>	<b>4.1</b>	<b>89,887</b>	<b>2.1</b>
Harleyville	606	633	0.5	663	1.2
Reevesville	241	244	0.1	249	0.5
Ridgeville	603	1,625	17	1,807	2.8
St. George	2,134	2,077	-0.3	2,635	6.7
Summerville	11,985	22,519	8.8	21,842	-0.8
<b>Charleston Metro</b>	<b>430,346</b>	<b>506,875</b>	<b>1.8</b>	<b>522,276</b>	<b>0.8</b>

**Source:** Charleston Facts and Figures. (8 February 97)  
<<http://www.charleston.net/charlestoncity/figures.htm>>

## Appendix F

### **\$ New and Expanded Capital Investment \$**

<b>Date</b>	<b>Company</b>	<b>Industry</b>	<b>Investment</b>	<b>Announced Direct Jobs</b>
9/25/98	Dein Stamping and Machine (DSM)	Manufacturing - Durable Goods	\$ .25 million	25
9/21/98	Strand-Tech Martin, Inc.	Manufacturing - Durable Goods	\$11.8 million	55
8/28/98	Vickers Aerospace Marine Defense (AMD) Group	Manufacturing - Durable Goods	\$18.0 million	135
6/11/98	Euromart, Inc.	Wholesale Distribution- Nondurable Goods	\$ .25 million	5
6/10/98	Tull Metal Processing	Manufacturing- Durable Goods		25
5/22/98	Jacobs Applied Technologies, Inc.	Manufacturing- Durable Goods	\$18.0 million	500
5/13/98	Sydney Harbour, Inc.	Wholesale Distribution- Nondurable Goods	\$10.0 million	50
5/6/98	Airformed Composites, Inc.	Manufacturing and Distribution- Durable Goods	\$15.0 million	45
5/4/98	Simplified Employment Services Southeast	Employee Administration and Human Resources	\$2.0 million	75
4/8/98	National Service Direct, Inc.	Services- Call Center	\$1.0 million	100
3/23/98	Terranova Forest Products, Inc.	Manufacturing and Distribution- Durable Goods	\$10.0 million	50
3/6/98	Chrome Deposit Corporation	Manufacturing- Durable Goods	\$5.0 million	20
2/25/98	Benecol, Ltd.,	Chemicals-	\$22 million	20

## Appendix F

	Raisio Group	Non-Durable Goods		
2/23/98	F.C.P., Inc.	Manufacturing-Durable Goods	\$24 million	600
12/15/97	Omega One Corp.	Manufacturing-Durable Goods	\$5.0 million	50
12/12/97	Advanced International Building Systems (A.I.B.S.)	Manufacturing-Durable Goods	\$7.0 million	75
12/9/97	LATI USA	Plastics Manufacturing	\$35.0 million	100
11/19/97	Union Corp.	Corporate Headquarters	\$ .25 million	12
11/10/97	Santee River Rubber Company	Tire and rubber recycling	\$32.0 million	110
11/5/97	Namasco	Steel processing and distribution	\$7.2 million	30
10/16/97	Engineering Friction Materials, Inc. (EFM)	warehouse/distribution	\$1.5 million	21
9/29/97	DialAmerica Marketing, Inc.	Services-Call Center	\$5.5 million	50
9/4/97	Corning Incorporated	Manufacturing-Durable Goods	\$75 million	150
8/28/97	Bayer Corporation	Manufacturing-Nondurable Goods	\$60 million	45
8/13/97	Citation TeleServices, Inc.	Services-Call Center	\$3 million	400
7/10/97	R. Stahl Inc.	Manufacturing - Durable Goods	\$2 million	15
4/15/97	LINQ Industrial Fabrics	Distribution	\$8 million	40
4/22/97	Nucor	Manufacturing - Durable Goods	\$150 million	200
4/3/97	Fortifiber, Corp.	Manufacturing - Nondurable Goods	\$5 million	50
3/13/97	Nucor	Manufacturing - Durable Goods	\$50 million	50
3/7/97	DuPont Cooper River Plant	Manufacturing - Nondurable Goods	\$161 million	60
2/10/97	LATI USA, Inc.	Services -	\$1 million	10



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2/6/97	Holiday Inn Worldwide	Services - Reservations Center	\$ 7.6 million	500
12/19/96	ENRJ, Inc.	Manufacturing - Durable Goods	\$1 million	20
12/18/96	Division Five, Inc.	Manufacturing - Durable Goods	\$0.77 million	25
12/13/96	K-Cast Pattern Ltd.	Manufacturing - Durable Goods	\$1.4 million	30
11/19/96	MG Industries, Inc.	Manufacturing - Nondurable Goods	\$37 million	55
11/19/96	Charleston Mill Service, Inc.	Manufacturing - Durable Goods	\$6 million	30
11/19/96	Marine Terminals of SC, Inc.	Distribution	\$5 million	30
11/7/96	Leader Pumps, Inc.	Manufacturing - Durable Goods	\$3 million	100
10/21/96	AVEBE South Carolina, Inc.	Manufacturing - Nondurable Goods	\$3 million	30
10/11/96	Baucom's Nursery	Agriculture	\$10 million	100
9/27/96	Chemical Lime Co.	Manufacturing - Nondurable Goods	\$3 million	5
9/26/96	Sea Containers America, Inc.	Manufacturing - Durable Goods	\$5 million	140
8/22/96	WABCO Compressor Mfg. Co.	Manufacturing - Durable Goods	\$20 million	50
8/7/96	DonnKenny Apparel, Inc.	Distribution	\$6 million	100
7/10/96	Beneteau USA	Services - Corporate Headquarters	\$0.6 million	12
6/25/96	Philips Consumer Electronics	Distribution	\$1.3 million	60
4/23/96	Rapid Granulator, Inc.	Manufacturing - Durable Goods	\$2 million	40
4/10/96	American Paint Paddle Co.	Manufacturing - Durable Goods	\$1.2 million	20
3/19/96	London Pantry	Manufacturing - Nondurable Goods	\$1.25 million	25

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3/12/96	Mikasa, Inc.	Distribution	\$60 million	250
2/27/96	Interactive Performance, Inc.	Services - Processing Center	\$4.2 million	500
2/27/96	APG Lime Corp.	Manufacturing - Nondurable Goods	\$25 million	25
1/5/96	National Car Rental System, Inc.	Services - Reservation Center	\$10 million	400
12/5/95	Belk Charleston Regional Office	Services - Corporate Headquarters	\$12 million	200
11/30/95	Fibron International Corp.	Manufacturing - Durable Goods	\$18 million	100
11/1/95	BoatLife Inc.	Manufacturing - Nondurable Goods	\$ 1 million	28
11/1/95	IndChem Inc.	Distribution	\$0.5 million	15
10/26/95	Huntco Steel	Manufacturing - Durable Goods	\$8 million	30
10/10/95	Heartland Industries, Inc.	Manufacturing - Durable Goods	\$2 million	50
10/5/95	Datatronic, Inc.	Manufacturing - Durable Goods	\$0.15 million	75
8/15/95	Quoizel, Inc.	Manufacturing - Durable Goods	\$10 million	300
8/11/95	Hubner Rubber and Plastic	Manufacturing - Durable Goods	\$5 million	30
7/20/95	American Precision Steel	Manufacturing - Durable Goods	\$30 million	120
7/13/95	Maxcess Technologies, Inc.	Manufacturing - Durable Goods	\$3 million	50
5/17/95	Westinghouse Energy Services Div.	Manufacturing - Durable Goods	\$2 million	10
5/16/95	Medaphis Physician Services	Services - Office Processing	\$10 million	400
5/5/95	Global Manufacturing	Manufacturing - Durable Goods	\$1.5 million	150
5/1/95	US Postal Encoding Center	Distribution	\$1 million	450
4/26/95	Amoco Chemical	Manufacturing - Nondurable Goods	\$200-300 million	100
4/20/95	Auto Safety Glass	Distribution	\$5 million	50
3/17/95	Scientific Research Corp.	Services - Electronic	\$1 million	200

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		Systems Design		
3/9/95	Nucor Steel	Manufacturing - Durable Goods	\$500 million	600
2/8/95	Charleston Polymers	Manufacturing - Nondurable Goods	\$4.5 million	50

**Source:** Charleston Regional Development Alliance. (15 September 98)  
<<http://www.crda.org>>

## **Appendix G**

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### Amenities for Charleston, South Carolina

- One of the fastest growing non-residential construction markets in the U.S.
- Construction costs 22.2 points below national average.
- One of the highest productivity rates, complemented by the lowest work-stoppage rates in the U.S.
- One of the most aggressive incentive packages in the U.S.
- Ideal location at the intersection of Interstates 26 and 95
- Over 120 motor carriers.
- Five commercial airlines offer 75 flights per day.
- Six private airports accommodate both corporate and private aircraft.

### Quality of Life Factors

- 91 miles of beaches
- 27 golf courses, including 5 championship courses
- Freshwater lakes cover over 171,000 acres
- Over 120 parks with more than 8,000 acres
- More than 320,000 acres of national forests and wildlife refuges
- 3 museums, 6 theaters, 4 arts festivals, 2 dance companies and a symphony orchestra
- Professional baseball, soccer and hockey teams
- Average annual temperature - 65.6 degrees Fahrenheit
- Sunny days - 63% of the year
- Average annual snowfall - 0 inches

**Source:** Charleston Regional Development Alliance. (15 September 98)  
< <http://www.crda.org> >



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