

# HORRY COUNTY, South Carolina

# COMPREHENSIVE PLAN



April 2008

# TABLE OF CONTENTS

TABLE OF CONTENTS	11
TABLE OF GRAPHS, MAPS, PICTURES AND TABLES	_IX
ACKNOWLEDGEMENTS	_1
INTRODUCTION Reevaluating and Updating of the <i>Envision 2025</i> Comprehensive Plan THE COMPREHENSIVE PLANNING PROCESS Initial Community Outreach <i>ENVISION 2025</i> COMPREHENSIVE PLAN UPDATE – 2007 COMMUNITY INPUT MEETINGS	.4 .4 .4
EXECUTIVE SUMMARY	7
POPULATION ELEMENT POPULATION GROWTH POPULATION PROJECTIONS SEASONAL POPULATION POPULATION COMPOSITION RACE AND ETHNICITY AGE HOUSEHOLDS EDUCATION INCOME AND POVERTY SUMMARY	12 14 15 16 16 16 17 17
STATEMENT OF NEEDS AND GOALS	_21
IMPLEMENTATION STRATEGIES POPULATION DATA	21 21
CULTURAL RESOURCES ELEMENT CULTURAL FACILITIES MUSEUMS ART GALLERIES & MUSEUMS VENUES Theatre of the Republic Wheelwright Auditorium/Long Bay Symphony BB&T Coastal Field OUTDOOR FACILITIES SPECIAL EVENTS AND FESTIVALS HISTORIC PLACES Conway Myrtle Beach Galivants Ferry Historic District Socastee Historic District	22 22 23 24 24 24 24 25 25 25 26 27 29 30

Bucks Township	31
Little River	32
Green Sea	32
Kings Highway	
Waccamaw River	
CULTURAL GROUPS, SOCIETIES, AND ORGANIZATIONS	33
Native-American Organizations	
Historical Societies	
Performing Arts	
Visual Arts	
Other interesting organizations	
CONCLUSION	34
STATEMENT OF NEEDS AND GOALS	36
FACILITIES AND VENUES	
HISTORIC AND ARCHEOLOGICAL SITES PROMOTION	
HISTORIC AND ARCHEOLOGICAL EDUCATION	
SPECIAL EVENTS AND FESTIVALS	
CULTURAL ORGANIZATIONS	
CULTURAL TOURISM	37
IMPLEMENTATION STRATEGIES	38
FACILITIES AND VENUES	
HISTORIC AND ARCHEOLOGICAL SITES PROMOTION	
HISTORIC AND ARCHEOLOGICAL EDUCATION	
SPECIAL EVENTS AND FESTIVALS	
CULTURAL ORGANIZATIONS	
CULTURAL TOURISM	
APPENDIX	43
Appendix A: South Carolina Hall of Fame Inductees	
Appendix B: Overview of regular festivals and events	
Appendix C: National Register of Historic Places in Horry County	
Appendix D: Recognized Historic Places in Horry County (Board of Ar	
Review)	
NATURAL RESOURCES ELEMENT	50
WATERSHEDS	
ECOSYSTEM BIODIVERSITY	
NATURAL RESOURCES INVENTORY	
Water Resources	
Coastal Resources	
Wetlands	
Floodplains	
LAND RESOURCES	
Slopes and Soils	
Forestry	
Urban and Suburban Tree Conservation	
SPECIES HABITAT	
South Carolina Heritage Trust Program	

Waccamaw National Wildlife Refuge	74
Scenic River Program	
NATIVE SPECIES	
PRIME AGRICULTURAL LAND	
OPEN SPACE PLANNING	
PARKS AND RECREATION	
AIR RESOURCES	
Air Quality	
Air Emissions	
THREATS TO NATURAL RESOURCES	
Water Quantity	
Water Quality	
Air Emissions	
Fragmentation and Habitat Loss	
CONCLUSION	
STATEMENT OF NEEDS AND GOALS	88
WATER RESOURCES	00
LAND RESOURCES	
AIR RESOURCES	
IMPLEMENTATION STRATEGIES	90
WATER RESOURCES	
LAND RESOURCES	92
AIR RESOURCES:	
APPENDIX	96
APPENDIX	cies Inventory 96
	98
ECONOMIC ELEMENT BASIC AND NON-BASIC INDUSTRY	<b>90</b>
ECONOMIC PROFILE	
EMPLOYMENT	
WAGES AND EARNINGS	
PER CAPITA INCOME	
COST OF LIVING	
OCCUPATION	109
EMPLOYMENT STATUS	
UNEMPLOYMENT RATES	
COMMUTING PATTERNS	
TOURISM	
TRANSPORTATION	
HEALTHCARE	
CONSTRUCTION	
FINANCE, INSURANCE AND REAL ESTATE ("FIRE")	
AGRICULTURE	
STATEMENT OF NEEDS AND GOALS	124
IMPLEMENTATION STRATEGIES	125

COMPREHENSIVE ECONOMIC DEVELOPMENT PROGRAM	125
ECONOMIC GROWTH PROGRAMS	
PROMOTION OF HIGHLY QUALIFIED WORKFORCE	125
DIVERSE MIX OF BUSINESS AND INDUSTRY	126
COMMUNITY FACILITIES & SERVICES ELEMENT	12
PUBLIC TRANSPORTATION	128
Fixed Route Service	128
Demand Response Service	129
Emergency Evacuation Service	
UPCOMING PROJECTS FOR COAST RTA	130
Park and Ride	130
North Myrtle Beach Trolley Circulator	130
Airport Shuttle	
Myrtle Beach Public Market	130
Bus Stop Signage and Shelters	130
Intermodal Center	130
EXISTING AND PLANNED BIKEWAYS AND SIDEWALKS	
RAIL SERVICE	131
AIRPORTS	
AVIATION PROJECTIONS	
PORTS	
WATER AND WASTEWATER SUPPLY AND TREATMENT SYSTEMS	
SOLID WASTE COLLECTION AND DISPOSAL	
Collection System	
Transfer Stations	
Disposal Facilities	
Disaster Related Debris Sites	
Waste Reduction/Reuse/Recycling	
STORMWATER MANAGEMENT	
Inventory	
ONGOING PROJECTS.	
NPDES Phase II Compliance Measures	
Beach Monitoring Program	
Water Quality Monitoring	
Stormwater Permitting	
Capital Improvement Plan	
Strategic Planning	
PUBLIC SAFETY	
Emergency 9-1-1 Center	
Police	
Fire Protection	
Emergency Medical Services	
Emergency Management	
Natural Hazards	
Technological Hazards	
Training GENERAL GOVERNMENT FACILITIES	140 1 1 5
EDUCATIONAL FACILITIES	
PK-12 Education	145

Coastal Carolina University       147         Horry-Georgetown Technical College       147         Horry-Georgetown Technical College       147         LIBRARY FACILITIES       147         PARKS AND RECREATION FACILITIES       148         Capital projects that were accomplished in the 2007 Fiscal Year       149         STATEMENT OF NEEDS AND GOALS       150         PUBLIC TRANSPORTATION FACILITIES       150         SOLID WASTE MANAGEMENT       150         SOLID WASTE MANAGEMENT       151         PUBLIC SAFETY       151         EDUCATION K-12       152         IBRARY FACILITIES       151         EDUCATION K-12       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         WATER AND WASTE MANAGEMENT       155         SOLD WASTE MANAGEMENT       155         SOLD WASTE MANAGEMENT       156         SOLD WASTE MANAGEMENT       154         WATER AND WASTEWATER FACILITIES       154         WATER AND WASTE MANAGEMENT       155         SOLD WASTE MANAGEMENT       155         SOLD WASTE MANAGEMENT       155         SOLD WASTE MANAGEMENT       156         SOLD WASTE MANAGEMENT	HIGHER EDUCATION	147
Horry-Georgetown Technical College       147         Webster University       147         LIBRARY FACILITIES       147         PARKS AND RECREATION FACILITIES       148         Capital projects that were accomplished in the 2007 Fiscal Year       149         STATEMENT OF NEEDS AND GOALS       150         PUBLIC TRANSPORTATION FACILITIES       150         WATER AND WASTEWATER FACILITIES       150         SOLID WASTE MANAGEMENT       151         PUBLIC SAFETY       151         GENERAL GOVERNMENT FACILITIES       152         IBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       152         IMPLEMENTATION STRATEGIES       154         WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         PUBLIC SAFETY       154         WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       154         SOLID WASTE MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         UBIRG MARK AND RECREATI	Coastal Carolina University	147
Webster University       147         LIBRARY FACILITIES       147         PARKS AND RECREATION FACILITIES       148         Capital projects that were accomplished in the 2007 Fiscal Year       149         STATEMENT OF NEEDS AND GOALS       150         PUBLIC TRANSPORTATION FACILITIES       150         SOLID WASTE MANAGEMENT       150         SOLID WASTE MANAGEMENT       151         GENERAL GOVERNMENT FACILITIES       151         GENERAL GOVERNMENT FACILITIES       151         IBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTEWATER FACILITIES       154         WATER AND WASTEWATER FACILITIES       155         STORWWATER MANAGEMENT       155         STORWWATER MANAGEMENT       155         PUBLIC SAFETY       157         PUBLIC SAFETY       157         PUBLIC SAFETY       158         EDUCATION K-12       158         EDUCATION K-12       158         EDUCATION K-12       158         PUBLIC SAFETY       157		
LIBRARY FACILITIES       147         PARKS AND RECREATION FACILITIES       148         Capital projects that were accomplished in the 2007 Fiscal Year       149         STATEMENT OF NEEDS AND GOALS       150         PUBLIC TRANSPORTATION FACILITIES       150         SOLID WASTE MANAGEMENT       150         STORMWATER MANAGEMENT       151         PUBLIC SAFETY       151         EDUCATION K-12       152         LIBRARY FACILITIES       151         EDUCATION K-12       152         LIBRARY FACILITIES       151         PUBLIC SAFETY       151         EDUCATION K-12       152         LIBRARY FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND RECREATION FACILITIES       154         VATER AND WASTEWATER FACILITIES       155         STORMWATER MANAGEMENT       155         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTEWATER FACILITIES       155         PUBLIC SAFETY       155         PUBLIC SAFETY       155         PUBLIC SAFETY       155         PUBLIC SAFETY       158         LIBARAY FACILITIES<	Webster University	147
Capital projects that were accomplished in the 2007 Fiscal Year       149         STATEMENT OF NEEDS AND GOALS       150         PUBLIC TRANSPORTATION FACILITIES       150         WATER AND WASTE WATER FACILITIES       150         SOLID WASTE MANAGEMENT       151         PUBLIC SAFETY       151         PUBLIC SAFETY       151         GENERAL GOVERNMENT FACILITIES       152         LIBRARY FACILITIES       152         UNASTE MANAGEMENT       152         UNASTE MANAGEMENT       152         UNASTE MANAGEMENT       152         UNPLEMENTATION K-12       152         UNPLEMENTATION STRATEGIES       154         WATER AND WASTEWATER FACILITIES       154         SOLD WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         EDUCATION K-12       158         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILIT	LIBRARY FACILITIES	147
STATEMENT OF NEEDS AND GOALS	PARKS AND RECREATION FACILITIES	
STATEMENT OF NEEDS AND GOALS	Capital projects that were accomplished in the 2007 Fiscal Year	149
PUBLIC TRANSPORTATION FACILITIES       150         WATER AND WASTE WATER FACILITIES       150         SOLID WASTE MANAGEMENT       151         PUBLIC SAFETY       151         GENERAL GOVERNMENT FACILITIES       151         EDUCATION K-12       152         LIBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTE MANAGEMENT       155         SOLID WASTE MANAGEMENT       155         SOLID WASTE MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       162 <t< td=""><td></td><td></td></t<>		
WATER AND WASTEWATER FACILITIES       150         SOLID WASTE MANAGEMENT       150         STORMWATER MANAGEMENT       151         PUBLIC SAFETY       151         GENERAL GOVERNMENT FACILITIES       151         EDUCATION K-12       152         LIBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTE WATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       154         WOASTE MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         EDUCATION K-12       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       158         PARKS AND RECREATION FACILITIES       158         POUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units	STATEMENT OF NEEDS AND GOALS	150
SOLID WASTE MANAGEMENT         150           STORMWATER MANAGEMENT         151           PUBLIC SAFETY         151           GENERAL GOVERNMENT FACILITIES         151           EDUCATION K-12         152           LIBRARY FACILITIES         152           PARKS AND RECREATION FACILITIES         152           IMPLEMENTATION STRATEGIES         154           PUBLIC TRANSPORTATION FACILITIES         154           WATER AND WASTEWATER FACILITIES         154           WATER AND WASTEWATER FACILITIES         154           SOLID WASTE MANAGEMENT         155           STORMWATER MANAGEMENT         155           PUBLIC SAFETY         157           GENERAL GOVERNMENT FACILITIES         158           EDUCATION K-12         158           EDUCATION K-12         158           LIBRARY FACILITIES         158           PARKS AND RECREATION FACILITIES         158           PARKS AND RECREATION FACILITIES         158           PARKS AND RECREATION FACILITIES         159           HOUSING INVENTORY AND TRENDS         162           Number of Housing Units         162           HOUSING INVENTORY AND TRENDS         162           Number of HOUSING         166 <tr< td=""><td></td><td></td></tr<>		
STORMWATER MANAGEMENT       151         PUBLIC SAFETY       151         GENERAL GOVERNMENT FACILITIES       151         EDUCATION K-12       152         LIBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       162         Number of Housing Units       162         Number of HOUSING       162         Number of HOUSING       164         AGE OF HOUSING       166         OCCUPANCY       166         NEOME       169         HOUSING MIX       164         A		
PUBLIC SAFETY       151         GENERAL GOVERNMENT FACILITIES       151         EDUCATION K-12       152         LIBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         VATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       158         PARKS AND RECREATION FACILITIES       158         UBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       158         PARKS AND RECREATION FACILITIES       158         PARKS AND RECREATION FACILITIES       162         Number of Housing Units       162         Number of Housing Units       162         Number of Housing Units       162         Number of HOUSING       166         OCCUPANCY       166         NETR RAFFORDABIL HOUSING       166         NCOME		
GENERAL GOVERNMENT FACILITIES       151         EDUCATION K-12       152         LIBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         EDUCATION K-12       158         EDUCATION K-12       158         IBRARY FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         HOUSING MIX       164         AGE OF HOUSING       166         OCCUPANCY       166         MCOME       166         OCCUPANCY       166         NURBE       169         HOME VALUE       169         NORE       169         HOUSING MIX       164         AGE OF HOUSING       166         NCOME       166         NCURE       169		
EDUCATION K-12       152         LIBRARY FACILITIES       152         PARKS AND RECREATION FACILITIES       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         HOUSING INVENTORY AND TRENDS       162         NUMBER of HOUSING       166         TENURE       166         TENURE       166         NCOME       169         RENTER AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         Community Development Block Grants       174         Community Development Block Grants       174         South Carolina State Hous		
LIBRARY FACILITIES.       152         PARKS AND RECREATION FACILITIES.       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES.       154         WATER AND WASTEWATER FACILITIES.       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES.       158         PARKS AND RECREATION FACILITIES.       159         HOUSING INVENTORY AND TRENDS.       162         Number of Housing Units       162         HOUSING MIX       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       169         HOME VALUE       169         NENTER AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         Waccamaw Regional Council of Governments       175         Waccamaw Regional Council of Governments       175		
PARKS AND RECREATION FACILITIES.       152         IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES.       154         WATER AND WASTEWATER FACILITIES.       154         SOLID WASTE MANAGEMENT.       155         STORMWATER MANAGEMENT.       155         PUBLIC SAFETY.       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       159 <b>HOUSING ELEMENT</b> 162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         HOUSING MIX       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOUSING PROGRAMS       170         BARRIERS TO AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         Waccamaw Regional Council of Governments       175         Wacca		
IMPLEMENTATION STRATEGIES       154         PUBLIC TRANSPORTATION FACILITIES       154         WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOWSING PROGRAMS       170         BARRIERS TO AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         Community Development Block Grants       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         Waccamaw Regional Council of Governments       175 <td>LIBRARY FACILITIES</td> <td></td>	LIBRARY FACILITIES	
WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         Number of Housing Units       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOME VALUE       169         HOME VALUE       169         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development.       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       176	PARKS AND RECREATION FACILITIES	152
WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         Number of Housing Units       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOME VALUE       169         HOME VALUE       169         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development.       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       176	IMPLEMENTATION STRATEGIES	154
WATER AND WASTEWATER FACILITIES       154         SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         Number of Housing Units       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOME VALUE       169         HOME VALUE       169         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development.       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       176	PUBLIC TRANSPORTATION FACILITIES	
SOLID WASTE MANAGEMENT       155         STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING ELEMENT       162         Number of Housing Units       162         Number of Housing Units       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       166         NCOME       169         HOME VALUE       169         RENTER AFFORDABILITY       170         BARRIERS TO AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       176		
STORMWATER MANAGEMENT       155         PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         HOUSING MIX       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOME VALUE       169         RENTER AFFORDABILITY       170         BARRIERS TO AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         Waccamaw Regional Council of Governments       175         Waccamaw Regional Council of Governments       175         FAIR HOUSING       176		
PUBLIC SAFETY       157         GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         HOUSING MIX       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development       175         Waccamaw HOME Investment Partnership Consortium       175         FAIR HOUSING       175	STORMWATER MANAGEMENT	
GENERAL GOVERNMENT FACILITIES       158         EDUCATION K-12       158         LIBRARY FACILITIES       158         PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         HOUSING MIX       164         AGE OF HOUSING       166         TENURE       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOME VALUE       169         RENTER AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       175         FAIR HOUSING       176		
EDUCATION K-12158LIBRARY FACILITIES158PARKS AND RECREATION FACILITIES159HOUSING ELEMENT162HOUSING INVENTORY AND TRENDS162Number of Housing Units162HOUSING MIX164AGE OF HOUSING166OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175Waccamaw Regional Council of Governments175Waccamaw HOME Investment Partnership Consortium175FAIR HOUSING176	GENERAL GOVERNMENT FACILITIES	
LIBRARY FACILITIES158PARKS AND RECREATION FACILITIES159HOUSING ELEMENT162HOUSING INVENTORY AND TRENDS162Number of Housing Units162HOUSING MIX164AGE OF HOUSING166OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175Waccamaw Regional Council of Governments175Waccamaw HOME Investment Partnership Consortium176		
PARKS AND RECREATION FACILITIES       159         HOUSING ELEMENT       162         HOUSING INVENTORY AND TRENDS       162         Number of Housing Units       162         HOUSING MIX       164         AGE OF HOUSING       166         OCCUPANCY       166         TENURE       167         AFFORDABLE HOUSING       168         INCOME       169         HOME VALUE       169         RENTER AFFORDABILITY       170         BARRIERS TO AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       175         FAIR HOUSING       176		
HOUSING INVENTORY AND TRENDS162Number of Housing Units162HOUSING MIX164AGE OF HOUSING166OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175FAIR HOUSING176		
HOUSING INVENTORY AND TRENDS162Number of Housing Units162HOUSING MIX164AGE OF HOUSING166OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175FAIR HOUSING176	HOUSING ELEMENT	160
Number of Housing Units162HOUSING MIX164AGE OF HOUSING166OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175Waccamaw HOME Investment Partnership Consortium175FAIR HOUSING176		162
HOUSING MIX164AGE OF HOUSING166OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABLITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175Waccamaw HOME Investment Partnership Consortium176		
AGE OF HOUSING166OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175FAIR HOUSING176		
OCCUPANCY166TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175FAIR HOUSING176		
TENURE167AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175FAIR HOUSING176		
AFFORDABLE HOUSING168INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175FAIR HOUSING176		
INCOME169HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175FAIR HOUSING176		
HOME VALUE169RENTER AFFORDABILITY170BARRIERS TO AFFORDABLE HOUSING173HOUSING PROGRAMS174Community Development Block Grants174South Carolina State Housing Finance and Development Authority175United States Department of Agriculture, Rural Development175Waccamaw Regional Council of Governments175Waccamaw HOME Investment Partnership Consortium175FAIR HOUSING176		
RENTER AFFORDABILITY       170         BARRIERS TO AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       175         FAIR HOUSING       176		
BARRIERS TO AFFORDABLE HOUSING       173         HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       175         FAIR HOUSING       176		
HOUSING PROGRAMS       174         Community Development Block Grants       174         South Carolina State Housing Finance and Development Authority       175         United States Department of Agriculture, Rural Development       175         Waccamaw Regional Council of Governments       175         Waccamaw HOME Investment Partnership Consortium       175         FAIR HOUSING       176		
Community Development Block Grants		-
South Carolina State Housing Finance and Development Authority		
United States Department of Agriculture, Rural Development		
Waccamaw Regional Council of Governments		
Waccamaw HOME Investment Partnership Consortium		
FAIR HOUSING		

THE SOUTH CAROLINA CENTERS FOR EQUAL JUSTICE SPECIAL NEEDS HOUSING	177
Homelessness CONCLUSION	
STATEMENT OF NEEDS AND GOALS	179
AFFORDABLE HOUSING	
HOUSING DIVERSITY AND CONDITION	
SPECIAL NEEDS HOUSING	
FAIR HOUSING	
CREATING RESOURCES	180
IMPLEMENTATION STRATEGIES	181
AFFORDABLE HOUSING	181
HOUSING DIVERSITY AND CONDITION	
SPECIAL NEEDS HOUSING	
FAIR HOUSING	
CREATING RESOURCES	184
LAND USE ELEMENT	186
LAND USE HISTORY	189
LAND USE INVENTORY	192
WATER	
SOILS	195
ZONING	
CURRENT LAND USE	
Conservation/Preservation	
Rural Conservation	
Rural Residential	
Suburban Residential	
Urban Residential	
Mixed	
Sales and Service	
Recreation and Entertainment	
Industrial	
Public and Government	
Utilities Institutional	
LAND USE ANALYSIS	
Residential Land Uses	
Employment Related Land Uses	
Public and Institutional Land Uses	
FUTURE LAND USE OBJECTIVES	
FUTURE LAND USE STRATEGY	
FUTURE LAND USE DEFINITIONS	
Scenic Landscape and Conservation Areas	
Rural Areas	
Rural Corridors	
Crossroads Communities	
Suburban Corridors	

Economic Activity Centers	215
Urban Corridors.	
Transitional Growth Area	216
Cities	217
FUTURE LAND USE MAP	

# STATEMENT OF NEEDS AND GOALS \_\_\_\_\_\_220

IMPLEMENTATION STRATEGIES	221
GROWTH THROUGH REINVESTMENT AND NEW DEVELOPMENT	
PROMOTION OF SUSTAINABLE DEVELOPMENT PATTERNS	221
RURAL AREAS	222
EVALUATION OF POPULATION GROWTH AND LAND DEVELOPMENT	223

#### APPENDIX

224

Appendix F: Ten (10) Principles of Sustainable Development	224
Appendix G: Model Green Home Building Guidelines	225
Appendix H: Horry County Wetlands Inventory Map	227
Appendix I: Agricultural soils map of Horry County	229
Appendix J: Suitability analysis of soil types in Horry County	230
Appendix K: Horry County road network	249
Appendix L: Potential Natural Resources Acquisition Sites	251
Appendix M: Horry County Corridor Expansion Map	253
Appendix N: Map of existing overlays and area plans in Horry County	255
Appendix O: Description of existing overlays and area plans in Horry County	256
Appendix P: City of Conway Future Land Use Map (1997)	267
Appendix Q: Garden City Future Land Use Plan	269
Appendix R: Little River Future Land Use Plan	271
Appendix S: City of Myrtle Beach Proposed Land Use Plan (2006)	273
Appendix T: City of North Myrtle Beach Proposed Land Use Plan (2006)	275

### BIBLIOGRAPHY \_\_\_\_\_\_276

# TABLE OF GRAPHS, MAPS, PICTURES AND TABLES

Graph 1: Horry County Urban and Rural Population Growth	14
Graph 2: Tourist Population for the Grand Strand	15
Graph 3: Number of Beach Advisory Days in Horry County, 2000 - 2006	67
Graph 4: Relationship between impervious land coverage and water quality	82
Graph 5: Grainger Power Plant Emissions of Mercury	85
Graph 6: Horry County's interdependencies	87
Graph 7: Horry County Accommodations & Admissions Tax Collected, 2001 - 2006	113
Graph 8: Gross Sales: 1999 - 2005	114
Graph 9: Comparison of County Sales Tax Paid by Visitors and Residents	115
Graph 10: Myrtle Beach International Deplanements, 2003 - 2006	
Graph 11: Horry County Home Sales: 2001 - 2006	
Graph 12: Horry County Median Home Values: 1990 - 2006	120
Graph 13: Crop Production Acreage, 1975 - 2005	121
Graph 14: Coastal Carolina Student Enrollment: 1993 - 2005	122
Graph 15: Solid Waste Quantity Projections in Horry County, FY 2007 - FY 2026	
Graph 16: Horry County Police Department Call Volumes, 2003-2007	
Graph 17: Revenue from Parks and Recreation from 2002 - 2007 fiscal year	
Graph 18: Total Housing Units in Horry County	
Graph 19: Housing Units by Structure Type, 2005	
Graph 20: Housing Units Authorized by Horry County, 2000 - 2006	
Graph 21: Age of Housing 1940-2005	
Graph 22: Total acreage of rezoned land 2002 - 2006	
Graph 23: Estimated Population (in Thousands) for Horry County, 2002 - 2006	
Graph 24: Number of potential new housing units created through rezoning, 2002 - 2	2006
	201
Graph 25: Permitted Land Development Acres by 5-Year Increments, 1990 - 2004	
Graph 26: Population Growth in Horry County, 1990 - 2004	
Graph 27: Building Permits by Land Use Category, 2000 - 2006	
Graph 28: Building Permit Increases 2000 - 2006	
Graph 29: Employment by Sector, 2006	210
Map 1: South Carolina Watershed Management Basins	51
Map 2: Pee Dee River Basins	
Map 3: Map of wetlands in Horry County, 2002	
Map 4: The natural water cycle	
Map 5: Impacts of Development on the water cycle	81
Map 6: Levels of Impervious Surface Coverage in Horry County, 1995	
Map 7: Potential Levels of Imperviousness Assuming Build-out in Horry County	
Map 8: Existing Coast RTA Fixed Routes	
Map 9: Recycling Centers in Horry County	
Map 10: Horry County Census Divisions, 2000	
Map 11: Estimated Median Home Values in Horry County, 2005	
Map 12: Horry County Current Land Use, April 2007	
Map 13: Horry County Future Land Use Map	
	400
Picture 1: 19th century logging crew	
Picture 2: Train service on Main Street in Conway	190

Picture 3: Tobacco barn Picture 4: Burroughs shipyard in Bucksport Picture 5: The early "Seaside Inn"	
Table 1: Total Population of Horry County and South Carolina, 1950-2006 estimate	
Table 2: Population by County, 1990-2005 (Estimated)	
Table 3: Horry County Incorporated and Unincorporated Population Growth	
Table 4: Population in the Municipalities from 1970 to 2000	
Table 5: Population Projections through 2025	
Table 6: Gender Distribution of Horry County from 1970 to 2005	
Table 7: Racial Composition of Horry County from 1980 to 2005	
Table 8: Ethnicity of Horry County from 1980 to 2005	
Table 9: Age Distribution of Horry County from 1990 to 2005	
Table 10: Household Composition of Horry County from 1970 to 2005	
Table 11: Educational Attainment for Persons 18 Years and Over of Horry County, 2	
Table 12: Regional Median Household Income	18
Table 14: Distribution of Median Household Income in Horry County	
Table 15: Regional Income below Poverty Level	
Table 16: Percentage of land uses within main Horry County Watershed Basins	53
Table 17: 303(d) list of waters and sediment in Horry County, 2006	59
Table 18: Common water quality indicators	60
Table 19: Long-term trends in water quality, 1989-2003	61
Table 20: Waters of Concern in Horry County based on Enterococcus Measuremen	nts in
the Surf Zone	
Table 21: Sites on the 2006 303(d) List for Mercury Contamination in Fish	63
Table 22: 2007 Fish Consumption Advisories	
Table 23: Continuous Gaging Stations in the Waccamaw River, Little Pee River and	
AIWW measuring water height and discharge	65
Table 24: Proposed Parks in Horry County, 1999 - 2009	77
Table 25: Air Quality in Horry County, 2000 - 2005	78
Table 26: Assessed air pollutants by emission sources in Horry County, 2006	
Table 27: Beach Advisories	82
Table 28: Employment by Sector	
Table 29: Employment by Sector as in percent (%)	
Table 30: Percentage of State Employment in Horry County, 2005	
Table 31: Location Quotient for 2005 Occupations	
Table 32: Future Employment by Sector	
Table 33: Historic Earnings for Horry County	
Table 34: Historic Earnings for South Carolina	
Table 35: Average Annual State and County Earnings Compared, 2005	
Table 36: Per Capita Income, 1989, 1999, and 2005 for selected Counties	
Table 37: Per Capita Personal Income by Metropolitan Area, 2005	
Table 38: Cost of Living Index for selected U.S. Cities, 2 <sup>nd</sup> quarter 2006	
Table 39: Percent of Workforce Employment by Occupation, 2005	
Table 40: Employment Status, 2005	
Table 41: Unemployment Rates, 2000 through 2007	110
Table 42: Commuting Patterns, 2000 & 2005 for Horry County and selected Countie	
Table 43: Horry County tourism analysis, 2006	
Table 44: Resident and Visitor Populations, 2002	
Table 45: Hotel and Motel Statistics for Myrtle Beach, 2003 - 2005	

Table 46: Horry County Annual Estimated Economic Impact	.115
Table 47: Economic Impact of Tourism in Horry County, 2005	
Table 48: Emergency Room discharges by age category, 2004	
Table 49: Inpatient discharges by age categories, 2004	
Table 50: Economic indicators of area hospitals, 2005	
Table 51: Total Building Permits Issued in Horry County	
Table 52: Annual Total Housing Unit Permits Issued by Horry County	
Table 53: "FIRE" Employment and Earnings (\$ millions) for State and County, 2005	
2025	
Table 54: Annual Agricultural Revenue, 2005	120
Table 55: Annual Residency Enrollment at Coastal Carolina University	.122
Table 56: Total Annual Revenues for Coastal Carolina University, 1998 - 2005	.122
Table 57: HGTC Annual Fall Enrollment, 1999 - 2006	123
Table 58: Wastewater Treatment Facilities and Capacities, 2005	133
Table 59: Emergency 9-1-1 Facilities and Yearly Call Numbers for FY 2007	
Table 60: Horry County Fire Department and Murrells Inlet - Garden City District	.142
Table 61: Horry County EMS Facilities	
Table 62: Student Enrollment Projections and Capacity Needs, 2020	
Table 63: Horry County Memorial Library Staffing Levels	. 148
Table 64: Horry County Census Divisions, 2000	. 163
Table 65: Horry County Housing Census, 2000	. 165
Table 66: Vacant Housing Units by Horry County Census Divisions, 2000	. 167
Table 67: Vacancy Status in Horry County, 2000	
Table 68: Housing Units by Tenure, 1980 - 2000	.168
Table 69: Residence in 1995 of Horry County and Census Divisions, 2000	.168
Table 70: Average Family Income in Horry County and South Carolina, 2005	. 169
Table 71: Horry County Specified Owner-occupied Median Home Value, 1990 - 2009	5170
Table 72: Fair Market Rents (FMR) by number of bedrooms, 2005	. 171
Table 73: Necessary Income to afford FMR by bedrooms, 2005	. 171
Table 74: Household Incomes and Renter Wages in 2005	.172
Table 75: Minimal Wages needed for Housing, 2005	
Table 76: Necessary hours of work per week to afford Housing, 2005	. 173
Table 77: Necessary amount of full time jobs at minimum wage to afford Housing, 2	.005
	173
Table 78: Community Development Grant Projects completed by Horry County	
Table 79: Fair Housing Complaints fled 1997 - 2003	
Table 80: Street Hierarchy System (Example)	
Table 81: Existing Traffic Conditions on Principal Highways in Horry County, 2005	.197
Table 82: Permitted Land Development Acres by Land Use, 1988 - 2006	203
Table 83: Land Uses in Horry County, 2007	
Table 84: Residential Acreage Comparisons	.208

# **ACKNOWLEDGEMENTS**

Horry County Planning & Zoning staff would like to thank the following persons, who have generously committed their time, knowledge and dedication to the people of Horry County, for which this Comprehensive Plan serves as a guideline for the future. The following listed persons have been involved with the Comprehensive Plan Steering Committee, and/or are members of Planning Commission and County Councilmen:

#### Comprehensive Plan Steering Committee

Comprehensive Plan Steerin	g Committee Chairman - Mr.	Fred Richardson
<ul> <li>Mr. Ibrahim Aborsey Ashie</li> </ul>	<ul> <li>Ms. Tamera J. Bergstrom</li> </ul>	Mr. Charlie Brindel
<ul> <li>Mr. Mark Causey</li> </ul>	<ul> <li>Mr. Tony Cox</li> </ul>	<ul> <li>Ms. Pam Creech</li> </ul>
<ul> <li>Mr. Charles Dawsey</li> </ul>	<ul> <li>Ms. Sandy Doyle</li> </ul>	<ul> <li>Mr. Paul R. Dusenbury</li> </ul>
<ul> <li>Mr. George Edwards</li> </ul>	<ul> <li>Mr. Marty Ekster</li> </ul>	<ul> <li>Mr. Mitchell Flannery</li> </ul>
<ul> <li>Mr. John Gandy</li> </ul>	<ul> <li>Ms. Peggy Graham</li> </ul>	<ul> <li>Ms. Julie Harbin</li> </ul>
<ul> <li>Mr. Carroll Hardwick</li> </ul>	<ul> <li>Mr. Scott Harrelson</li> </ul>	<ul> <li>Mr. Harold N. Hawley</li> </ul>
<ul> <li>Ms. Russell and Ms. Christie Holliday</li> </ul>	<ul> <li>Ms. Kitty Howell</li> </ul>	<ul> <li>Mr. W. Greg Hyman</li> </ul>
<ul> <li>Ms. Carolyn Jebaily</li> </ul>	<ul> <li>Ms. Katherine Jenerette</li> </ul>	<ul> <li>Mr. Sammy Johnson</li> </ul>
<ul> <li>Ms. Holly Kaufmann</li> </ul>	<ul> <li>Mr. Lawrence Langdale</li> </ul>	<ul> <li>Mr. Pat Lebiedz</li> </ul>
<ul> <li>Ms. Pauline Levesque</li> </ul>	<ul> <li>Ms. Susan Libes</li> </ul>	<ul> <li>Mr. Greg Lipscomb</li> </ul>
<ul> <li>Ms. Shirley Martin</li> </ul>	<ul> <li>Mr. Steven Neeves</li> </ul>	<ul> <li>Mr. George Parness</li> </ul>
Mr. Felix Pitts	<ul> <li>Mr. Eddie Rodelsperger</li> </ul>	<ul> <li>Mr. Jay H. Sharp</li> </ul>
<ul> <li>Mr. Johnny Skipper</li> </ul>	<ul> <li>Mr. Marshall Smith</li> </ul>	<ul> <li>Mr. J. David Utterback</li> </ul>

#### **Planning Commission**

Planning Commission Chair	Planning Commission Chairman - Mr. Adam Parness (District 8)							
<ul> <li>Mr. R. Phil Hucks – Planning Commission Vice Chairman (District 7)</li> </ul>	<ul> <li>Ms. Holly Kaufmann - District 1</li> </ul>	<ul> <li>Mr. Rob Wilfong – District 2</li> </ul>						
<ul> <li>Mr. Herbert J. Riley – District 3</li> </ul>	<ul> <li>Ms. Pamela B. Hobeika – District 4</li> </ul>	<ul> <li>Mr. Ed Buffum – District 5</li> </ul>						
<ul> <li>Mr. Mike Arrington – District 6</li> </ul>	<ul> <li>Ms. Shirley Martin – District 9</li> </ul>	<ul> <li>Mr. K. D. Todd – District 10</li> </ul>						
<ul> <li>Ms. Peggy Graham – District 11</li> </ul>								

#### **County Council**

County Council Chairman - M	County Council Chairman - Ms. Liz Gilland							
<ul> <li>Mr. Harold G. Worley –</li> </ul>	<ul> <li>Mr. Brent Schulz –</li> </ul>	<ul> <li>Mr. Marion Foxworth III -</li> </ul>						
District 1	District 2	District 3						
<ul> <li>Mr. Michael L. Ryan -</li> </ul>	<ul> <li>Mr. Howard D. Barnard</li> </ul>	<ul> <li>Mr. Bob Grabowski -</li> </ul>						
District 4	III - District 5	District 6						
<ul> <li>Mr. James R. Frazier -</li> </ul>	<ul> <li>Mr. Carl Schwartzkopf</li> </ul>	<ul> <li>Mr. W. Paul Prince –</li> </ul>						
District 7	– District 8	District 9						
<ul> <li>Mr. Kevin J. Hardee –</li> </ul>	<ul> <li>Mr. Al Allen – District</li> </ul>							
District 10	11							

# **INTRODUCTION**

The Horry County Comprehensive Plan, *Envision 2025,* is a tool to help guide investors, developers, as well as political decision-makers and the general public in determining the future composition of Horry County. Furthermore, it is important to note that the Comprehensive Plan as a non-binding guideline document is legally required under South Carolina's Local Government Comprehensive Planning Enabling Act of 1994. The act established the framework of the planning process to prepare and periodically revise the comprehensive plan.

The *Envision 2025* Comprehensive Plan is a seven-element rewrite and update of Horry County's previously adopted twenty-year 1999 Comprehensive Plan (designed to a year 2020 horizon), which has evolved into a new comprehensive plan.

The development of the *Envision 2025* Comprehensive Plan required the compilation, examination, and analysis of seven elements, prepared together or separately, through an involved public planning process. If there is a determination of need in Horry County, other elements may be prepared for inclusion into the overall plan. Together, all elements of *Envision 2025* Comprehensive Plan will represent the planning commission's recommendations to the Horry County Council with regard to wise and efficient use of public funds, future growth, development, redevelopment and the fiscal impact of the elements on property owners (S.C. Code § 6-29-510(E)).

The planning process for each required element of *Envision 2025* Comprehensive Plan must include, but is not limited to, the following:

#### 1. Inventory of existing conditions.

The inventory entails a description, or assessment of conditions that exist relating to the particular planning element.

#### 2. A statement of needs and goals.

Identifying those needs that are lacking and setting short – long-range goals to correct or adjust conditions for the betterment of the community.

#### 3. Implementation strategies with time frames.

Specific objectives, steps, and strategies to accomplish addressing community needs, to include time frames for actions, and persons or organizations responsible for actions.

The Horry County *Envision 2025* Comprehensive Plan includes the following elements:

- 1. **Population Element.** The population element includes information relevant to a clear understanding of how the population affects the existing conditions and the future potential of Horry County. The population element analyzes:
  - Historic trends and projections;
  - The number, size and characteristics of households;
  - Educational levels and trends;
  - Income characteristics and trends;
  - Race and ethnicity; and
  - Sex; and age distribution.
- 2. Cultural Resources Element. The cultural resources element includes an inventory of the heritage, events, and special places that define the land and its people, making Horry County unique. This element explores a wide range of

local activity from the celebration, discovery, and sharing of Horry County's history to modern-day entertainment. The cultural presence within the Horry County community includes:

- Cultural and outdoor facilities;
- Special events, venues, and festivals;
- Historic places and buildings;
- Cultural groups, societies and organizations;
- Unique areas of natural, scenic or archeological value; and,
- Various educational, religious or entertainment offerings.
- **3. Natural Resources Element.** The natural resources element examines the physical environment of Horry County. This element also discusses the need to balance development and ecosystem concerns that will provide healthy and functional landscapes and water features for future generations. The following informational topics are analyzed:
  - Soil types;
  - Wetlands;
  - Coastal resources;
  - Agriculture and forest land;
  - Plant and animal habitats;
  - Floodplains;
  - Scenic areas; and,
  - Air and water quality.
- 4. Economic Development Element. The economic development element examines the economic base of Horry County. It also gives appropriate consideration to the economic impact of the tourism industry that is unique to Horry County. The economic development element includes analyses of:
  - Historic trends and projections regarding the numbers and characteristics of the labor force;
  - Where the people who live in the community work;
  - Where people who work in the community reside;
  - Employment sectors and trends; and,
  - The manufacturing/industrial base and future potential.
- **5. Community Facilities Element.** The community facilities element includes the many activities essential to the growth, development, or redevelopment of Horry County. The facilities and services provided to the community include:
  - Public transit;
  - Surface transportation network;
  - Airports;
  - Public safety resources such as fire and police protection and emergency medical services;
  - Water supply, treatment and distribution;
  - Sewage system and wastewater treatment;
  - Solid waste collection and disposal;
  - Educational facilities and libraries; and
  - Parks and recreation facilities.
- 6. Housing Element. The housing element examines existing housing by age and condition; owner and renter occupancy; location; type; affordability; market

absorption and vacancy rates. Construction trends and projections about housing needs to accommodate existing and future populations are also considered.

7. Land Use Element. The land use element represents a synthesis of all *Envision 2025* Comprehensive Plan elements. It examines existing land use by categories, including residential, commercial, industrial, institutional, recreational, and open space. This element also includes a conceptualized future land use map, a plan showing the most appropriate arrangement of land uses based on existing development patterns, environmental constraints, and other preferences identified throughout the planning process. Since land use is influenced by all previously described plan elements, the findings, projections and conclusions from each of those elements influences the amount and location of land needed for various uses.

#### Reevaluating and Updating of the *Envision 2025* Comprehensive Plan

When conditions warrant, particular elements of the *Envision 2025* Comprehensive Plan, or the overall plan itself, must be subject to review to maintain the validity of the plan. Changes in the growth or direction of development taking place in the community may indicate a review is necessary. Re-evaluation of the comprehensive plan may be triggered by any substantial physical, environmental, social, or economic changes that occur, oftentimes changes that are unanticipated or unforeseeable. As revisions to the plan are considered, it is important to make necessary amendments to the capital improvements plan and any other ordinances based on the plan to insure conformity to the plan.

It is required that Horry County re-evaluates the comprehensive plan elements at least every five years. The entire comprehensive plan must be updated at least every ten years. Prepared by the Horry County Planning Commission and held to public hearing and comments, this ten-year updated plan is forwarded to the Horry County Council for final public hearing and adoption.

#### The Comprehensive Planning Process

#### Initial Community Outreach

The **Envision 2025** Comprehensive Plan Steering Committee was formed by Horry County Council in February 2005, serving until June 2007 and consisted of Councilappointed members and stakeholders representing a wide range of interests. Many committee members were individuals with special knowledge, skills, and interests that are invaluable in the development stages of a comprehensive plan. Individuals with primary interests in land development, education, natural environment, economic development, and emerging social or cultural issues assembled to accomplish this undertaking. Committee members represented various institutions, corporations, industries, agencies, and local governments. The members brought to the planning process a wide array of disciplines (social, scientific, technical, and professional) that assisted the planning staff to produce the **Envision 2025** Comprehensive Plan.

Public input is vital to the comprehensive planning process because it gives those tasked with preparing the plan an understanding of what residents feel is important. Additionally, garnering public input helps pave the way for acceptance of the plan when

it is finished. In order to better understand the needs and desires of the residents of Horry County, one of the initial steps of the comprehensive planning process was to hold a series of public meetings. Staff held eight public meetings throughout Horry County, beginning in March 2005, inviting the public to come and share their ideas about the future of Horry County. In addition to the meetings, survey forms were placed in all county libraries.

One hundred and eighty-seven (187) people attended the public meetings and offered their input through the survey form, a visual preference survey, treasures and issues, and open discussion. A total of 250 surveys were collected, both at the public meetings and through the libraries.

Community meetings for public input were conducted at the locations and on dates as follows:

1. March 8, 2005: Loris 2. March 10, 2005: Aynor 3. March 17, 2005: North Myrtle Beach 4. March 22, 2005: Bucksport 5. March 29, 2005: Carolina Forest 6. April 12, 2005: Socastee 7. April 21, 2005: Garden Citv 8. April 26, 2005: Conway

#### <u>Envision 2025 Comprehensive Plan Update – 2007 Community Input</u> <u>Meetings</u>

Beginning in January 2007, another series of public meetings were scheduled and conducted to inform interested parties of the results of the work of the *Envision 2025* Comprehensive Plan Steering Committee. At the time these meetings were scheduled, preliminary work on all plan elements except the land use element had been completed and adopted by the *Envision 2025* Comprehensive Plan Steering Committee. The purpose of scheduling further public meetings was to inform citizens and stakeholders of the results and statistical findings of six of the seven plan elements. They were also held to give more opportunity for staff to reach out to citizens that may not have had the opportunity to participate nearly two years before in this process. Although the land use element had not been completed at the time these eight public meetings were conducted from January to March 2007, work on that element was underway and information available was presented to the public during these forums.

Sixty-two (62) people attended the public meetings to hear of the work accomplished, offer more opinion and input, and state their concerns regarding the development of the final element of land use.

Early and on-going dialogue with stakeholders, intergovernmental coordination between local and regional planning agencies and utility service providers, and the broader community input brought different perspectives and common interests together. In many instances, workable compromises were achieved to benefit the entire community. Through the *Envision 2025* Comprehensive Plan Steering Committee, issues and needs were identified and addressed, allowing the planning staff to prepare this final document to guide the policymakers of Horry County.

Public outreach and informational meetings were scheduled for the dates and locations listed below:

- 1. January 8, 2007: North Myrtle Beach High School
- 2. January 25, 2007: Socastee High School
- 3. February 13, 2007: Aynor High School
- 4. February 15, 2007: Loris High School
- 5. February 22, 2007: Seaside Elementary School (Rescheduled from January 18, 2007)
- 6. March 6, 2007: Carolina Forest High School
- 7. March 12, 2007: Bucksport Senior Center (Rescheduled from March 8, 2007)
- 8. March 15, 2007: Horry County Government and Justice Building

# EXECUTIVE SUMMARY

The Horry County Envision 2025 Comprehensive Plan is a tool to help guide toward overall community betterment. This plan examines the benchmarks of progress of six of the seven elements that are within the realm of possibility to effect change to conditions, presumably to make the community better in some way. It is the responsibility of the local governments within Horry County to recognize conditions as they change, analyze the cause, and beneficially adjust to change. The Population Element is difficult to accurately predict and impossible to control because there is so much cause and effect that attracts or deters population. Throughout this plan and the individual elements within, the success of Horry County is reflected throughout the document. The experience of nearly thirty years of unprecedented growth presents both issues and challenges for Horry County.

Horry County, South Carolina is a place of rich cultural heritage, distinct natural landscapes, and a growing and diverse population. A thriving and rapidly expanding local economy based primarily on tourism and entertainment has made Horry County an attractive location to live and work, and is equally attractive to many people that choose to retire here. The surge in the economy of Horry County is greatly due to the overall population increase that has occurred over the past thirty years. Since 1980, the population of Horry County has nearly tripled and is estimated to reach over 300,000 by the year 2010. Sixty miles of beaches and the temperate climate have been the main draw to Horry County, which contains the major share of hotel and motel rooms as well as second homes in the State of South Carolina. Throughout the United States, South Carolina ranks high for the number of people older than age 60 moving into the State. Horry County is ranked among the top five regions in the State where retirees are locating. The amenities found in Horry County have made it the sixth most populated county in South Carolina and the fastest growing county as well.

The strong economy, a maturing market place, and a fast-growing tourist base combine to contribute to Horry County's healthy and substantial growth. The benefits of growth must be carefully weighed in balance with the essential services and facilities required to sustain the needs of the county's current and future population. Through Horry County's commitment to excellence, the **Horry County Envision 2025 Comprehensive Plan** seeks to provide a blueprint to guide policy-makers toward making informed decisions that result in a positive influence within this changing community. The vision is to support responsible and sustainable growth by conserving natural resources, enhancing cultural and historic assets through preservation, and providing adequate public infrastructure and community facilities. In addition, Horry County strives to ensure public safety, supply an array of housing options, and stimulate diverse economic opportunities. In so doing, Horry County will remain a desirable place to live and visit for future generations, and a strong economic competitor on all levels: regional, national, and global.

The fabric of the Horry County community is interwoven through its people, resources and assets. Each of the seven elements of the **Horry County** *Envision 2025* **Comprehensive Plan**, although addressed separately, is inter-reliant and relative to the other elements to formulate a well-balanced comprehensive plan. These required seven elements as prescribed by State law are:

- Population Element
- Cultural Resources Element
- Natural Resources Element
- Economic Element
- Community Facilities Element
- Housing Element
- Land Use Element

The integration of these elements is most evident within the Land Use Element. The finite availability of land, even in a county as large as Horry County, must be acknowledged and considered in prudent and responsible planning for future generations.

The facts, findings and statistical data stated and tabulated throughout the elements of the **Horry County** *Envision 2025* **Comprehensive Plan** are certainly unlike findings of previous comprehensive plans. However, there are striking similarities in conclusions drawn regarding conditions that exist throughout the community and issues that emerge as a result of the growth experienced in Horry County. During a span of ten, twenty, and thirty years, Horry County has grown rapidly in its resident, seasonal tourism, and student populations. Guiding principles of previous plans have been directed toward fostering and encouraging development, but doing so through proper and planned growth management practices.

Throughout the planning process that included citizen participation; federal, State, and local agency guidance; plans and studies; public and private institutional input; and concerns of the development community, there were compromises made and consensus achieved. The general agreement is that growth and development is positive and natural for Horry County, but continued growth without proper management and accountability erodes the County's ability to sustain itself in terms of human, economic, physical, natural and cultural resource preservation. The overall goal of the **Horry County Envision 2025 Comprehensive Plan** is to strive for sustainability on several levels that ultimately affect the quality of life in Horry County. The sustainability necessary to secure the future of a large and dynamic county consists of a balanced blending of the public infrastructure, a multi-faceted economy, a preserved environment, and the most advantageous use of the most limited resource of land.

The population of Horry County is increasing and growing more mature. Although the urban population has been continually on the rise, the majority of people still live in the unincorporated parts of Horry County. The seasonal population of tourists and students continues to increase, partly due to an expanded ten-month tourist season and higher enrollments in various learning institutions. There have been marked differences in the makeup of the Horry County population, such as the decline of family households. The needs regarding income, age, and ethnicity are changing, presenting distinct challenges that will need to be considered by Horry County government.

There is a wide array of cultural resources available in Horry County from physical facilities to events and festivals that occur throughout the year. Horry County possesses many museums, galleries, outdoor facilities, entertainment venues and historic places for residents and visitors to enjoy. There are also many societies, clubs, organizations, etc. that contribute to the frequent celebration of Horry County's history and heritage.

The cultural resources element details a higher quality of life available in Horry County and is a major contributing factor in people choosing to live here. Horry County is very unique in its abundance of natural resources. With 30 miles of frontage along the Atlantic Ocean, as well as a multitude of rivers, such as the Waccamaw River, Lumber River, Little Pee Dee River and the Atlantic Intracoastal Waterway offer residents and visitors a large amount of recreational opportunities, beauty and other benefits for people and the wildlife alike. The protection of Horry County's natural resources is very important for the future, as it contributes most strongly to the local tourism and service related industries. Therefore, it is a primary role of the *Envision 2025 Comprehensive Plan* to ensure that sensitive natural areas are being preserved and protected from further encroachment through new development.

Approximately 14 million tourists visit Horry County each year. With outstanding cultural, natural, retail and other family-friendly amusement options, tourism has become the largest "basic" industry in the County. Also, retail, finance, healthcare, and construction contribute largely to the area's economy. With below average unemployment in comparison to State and federal averages, as well as beneficial infrastructure, climatic conditions and educational institutions, such as Coastal Carolina University and Horry Georgetown Technical College, the economy of Horry County is poised to further thrive in future. Yet, it is an essential goal of the *Envision 2025 Comprehensive Plan* to monitor and safeguard a positive and more diversified economic development to create more and better jobs for a growing population.

As outlined above, good community facilities and services are just as important for the local attractiveness for residents and businesses as are good schools, roads, and the warm climate. The Community Facilities Element of the *Envision 2025 Comprehensive Plan* addresses all day-to-day needs, such as water, sewer, schools, and public safety. Most importantly the Plan evaluates current and desired levels of service and anticipated demand to guide future decision-making and public investments.

With the vast growth Horry County has experienced in the last three decades, construction of new housing has boomed and constitutes one of the most important local economic drivers in the area. Between the years 2000 and 2005 the housing stock in the county has increased by over 20% alone, attributing to the area's already overall young housing age, with 75% of houses in Horry County being less than 25 years old. Yet, with the increase of the area's median home values, many local and new families are being left out, and cannot afford to buy their own home. Hence, it is one of the primary goals of the *Envision 2025 Comprehensive Plan* to ensure that enough and equitable housing is provided for all income groups of our growing population. This also includes diversity and better aesthetics in housing types.

Finally, the Land Use Element of the *Envision 2025 Comprehensive Plan* ties all previous Elements together to analyze current land use and future principles that are most sensible and sustainable in a fast growing area such as Horry County. As the county becomes more urbanized, still over the half of the area will remain rural. Demands for further development are plentiful and difficult to control for the - benefit of all. Hence, the *Envision 2025 Comprehensive Plan* pursues the principles of Sustainable Development, promoting a balance between economic, social, and environmental demands and needs on the land. As the County prepares for an additional 110,000 people by 2025, it is one of the primary goals of the Land Use Element and the Comprehensive Plan to promote a land development pattern that strengthens existing communities and protects specific lifestyles, therefore being integrative with current land uses and the lay of the land.

Every interested citizen of Horry County is now invited to study the contents of this *Envision 2025 Comprehensive Plan*. Not only does this document contain interesting facts and figures about this place more people call home, but also presents a helpful guide in deciding and crafting the future of Horry County as a whole.

Page left intentionally blank

# POPULATION ELEMENT

The population element examines the total population, projects future growth, and describes the composition of Horry County. Population influences land use decisions, determines housing needs and impacts the local economy. As Horry County continues to grow and evolve as a community, population—its number and its composition—will influence decisions concerning adequate public and community facilities, use and preservation of cultural resources as well as shape the need to conserve and protect natural resources. Studying a community's population is fundamental to any comprehensive plan. The continual monitoring of the permanent and seasonal population of Horry County is necessary to plan the infrastructure required to best serve the population.

#### Population Growth

In 2000, the total population for Horry County was 196,629 persons. This reflects a 36.5% increase in population from 1990, when the population was 144,053 persons. During this same decade, South Carolina experienced a 15.1 percent population growth rate. The table below compares the total population and population growth rate of Horry County and South Carolina from 1950 to 2000. From the table, it is evident that Horry County has been growing at double the rate of South Carolina for the last twenty years. **Table 1** also includes estimates for the 2006 population. It is estimated that Horry County's population for 2006 was 238,493.

	Horry Coun	ty				
Year	Population	Increase	% Change	Population	Increase	% Change
1950	59,820	***	***	2,117,027	***	***
1960	68,247	8,427	14.1	2,382,594	265,567	12.5
1970	69,992	1,745	2.5	2,590,516	207,922	8.7
1980	101,419	31,427	44.9	3,121,820	531,304	20.5
1990	144,053	42,634	42.0	3,486,703	364,883	11.7
2000	196,629	52,576	36.5	4,012,012	525,309	15.1
2005	226,992	30,363	15.4	4,246,933	234,921	5.9
2006 est.	238,493	11,501	5.1	4,321,249	74,316	1.8

#### Table 1: Total Population of Horry County and South Carolina, 1950-2006 estimated

Source: US Census Bureau; SC Budget and Control Board, Office of Statistics and Research

Horry County is the sixth most populated county in the state. Its 57.5 percent growth rate between the years 1990 and 2005 makes it the fastest growing county in South Carolina. **Table 2**, on the next page, lists the population rank of the largest ten counties.

Populatio		Geographic area	Population		1990-200 Populati Change	
2005	1990	by County	2005 (est.)	1990	Number	Percent
1	1	Greenville	407,383	320,167	87,216	27.2
2	3	Richland	340,078	285,720	54,358	19.0
3	2	Charleston	330,368	295,039	35,329	11.9
4	4	Spartanburg	266,809	226,800	40,009	17.6
5	5	Lexington	235,272	167,611	67,661	40.3
6	7	Horry	226,992	144,053	82,939	57.5
7	8	York	190,097	131,497	58,600	44.5
8	6	Anderson	175,514	145,196	30,318	20.8
9	9	Berkeley	151,673	128,776	22,897	17.7
10	10	Aiken	150,181	120,940	29,241	24.1
Source: US	Census Bur	eau; SC Budget and C	ontrol Board, Of	fice of Stat	istics and F	Research

Table 2 <sup>.</sup>	Population by	County	1990-2005	(Estimated)
TUDIC L.	i opulation by	obuilty,	1000 2000	

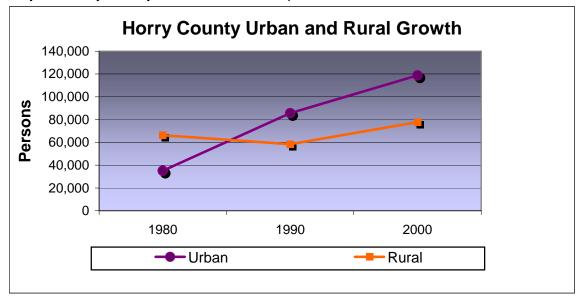
The following tables and charts examine where Horry County residents live. **Table 3** depicts the population living within incorporated areas versus those living in the unincorporated areas of the County. Over the last thirty years, the number of residents living in unincorporated areas of the County has increased to 72.8% of the population. For those living in incorporated areas, **Table 4** shows the population for each municipality. Between 1990 and 2000 Conway, North Myrtle Beach, Surfside Beach, Aynor, and Loris saw increases in population while Myrtle Beach, Atlantic Beach and Briarcliff Acres experienced a decrease in population.

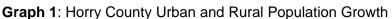
	19	70	19	1980 1		1990		00
Area	Population	% of Total	Population	% of Total	Population	% of Total	Population	% of Total
Incorporated	23,113	33.0	39,887	39.3	50,683	35.2	53,433	27.2
Unincorporated	46,879	67.0	61,542	61.7	93,370	64.8	143,196	72.8
TOTAL	69,992		101,419		144,053		196,629	
Source: US	Source: US Census Bureau; SC Budget and Control Board, Office of Statistics and Research							

**Table 4**: Population in the Municipalities from 1970 to 2000

		Y	'ear	
Municipalities	1970	1980	1990	2000
Atlantic Beach	215	289	446	351
Aynor	536	643	470	587
Briarcliff Acres	152	338	552	470
Conway	8,150	10,240	9,819	11,788
Loris	1,741	2,193	2,067	2,079
Myrtle Beach	9,035	19,702	24,848	22,759
North Myrtle Beach	1,955	3,960	8,636	10,974
Surfside	1,329	2,522	3,845	4,425
TOTAL	23,113	39,887	50,683	53,433
Horry County	69,992	101,419	144,053	196,629
% of Incorporated Population	33.0%	39.3%	35.2%	27.2%
Source: US Census Bureau; S	C Budget and (	Control Board, Off	fice of Statistics a	nd Research

The US Census defines *urban* as any area of over 2,500 people. *Urban* includes incorporated areas as well as unincorporated areas with populations over 2,500 people. Most of the urban areas in Horry County are east of the Intracoastal Waterway, e.g. Myrtle Beach, North Myrtle Beach, Surfside Beach. From **Graph 1** below, in 1980 Horry County was considered rural. A turnaround in population to predominantly urban was documented in 1990, and since the 1990's the divide between rural and urban continues to grow.





Source: US Census Bureau

#### Population Projections

Horry County has experienced rapid growth in the last twenty-five years. As a result, the Horry County Planning Department and School District Office worked together to develop a model that would more accurately project future population growth. Based on that model, the projected population for 2025 is 336,908. This will represent a 71.3% increase from 2000 and an increase of 41.3% from the 2006 estimated population.

Interstate 73, which once completed will run from Michigan to the Grand Strand, will also create an important interstate connection from Interstate 95 to SC Highway 22, and will likely have an impact on future population numbers in Horry County. As of mid 2007, the ultimate alignment for the entire route has been chosen from several identified route alternatives. Once funding for the new Interstate Highway has been secured, and a time frame for the construction phase has been determined, the County then must reconsider the population projections for the areas affected by the new road.

	Horry Co	unty Popu	lation Fo	recast				
C	urrent	Projected						
2000	2006 (est.)	2010	2015	2020	2025			
196,629	238,493	251,088	279,694	308,301	336,908			

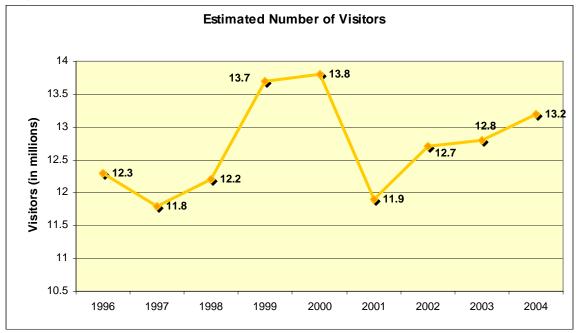
#### **Table 5**: Population Projections through 2025

Source: SC Budget and Control Board, Office of Statistics and Research,
Horry County Planning Department, Horry County School District

#### Seasonal Population

The Myrtle Beach Area Chamber of Commerce estimates that there were approximately 13.2 million visitors to the Grand Strand area in 2004. From surveys taken in 2002, twenty-two (22) percent came from North Carolina, thirty-six (36) percent of visitors came from New York, Pennsylvania, Ohio or New Jersey. **Graph 2** portrays the visitor trend for the Myrtle Beach area from 1996 to 2004.

Graph 2: Tourist Population for the Grand Strand



Source: Statistical Abstract for the Myrtle Beach Area of South Carolina, Myrtle Beach Chamber of Commerce, Editions 15-17

In addition to the tourists that visit the area each year, Coastal Carolina University's influence on Horry County's population is increasing significantly year by year. The traditional academic year starts at the end of August and continues until the beginning of May. In the summer of 2007, the University's total enrollment was approximately 8,600 students. Typically, students from out-of-state, foreign countries and other areas of South Carolina would reside in Horry County during the academic year. It is estimated that around 6,400 students occupy off-campus housing, since the University provides on-campus housing for around 2,200 students.

Coastal Carolina University will continue to have an impact on Horry County. In their Master Plan, the University anticipates a 5 percent (%) growth rate over the next eight years resulting in an expected 10,000-12,000 students by 2013.

#### Population Composition

#### Gender

The gender distribution for Horry County is evenly divided between males and females. In 2000, the male population comprised 49.1 percent (%) of the population and the female population, the remaining 50.9 percent (%). This trend has been consistent for the last thirty years and mirrors the national gender distribution.

Gender		Year								
	1970	%	1980	%	1990	%	2000	%	2005	%
Male	34,417	49.2	49,382	48.7	70,516	48.9	96,534	49.1	112,134	49.4
Female	35,575	50.8	52,037	51.3	73,537	51.1	100,095	50.9	114,858	50.6
TOTAL	69,992		101,419		144,053		196,629		226,992	
0 110	<u> </u>							•		

Table 6: Gender	Distribution	of Horry	County fro	om 1970 to 2005
	Distribution	OFFICITY	Obdinty in	1010102000

Source: U.S. Census Bureau

#### Race and Ethnicity

The racial composition of Horry County has not changed significantly in the last twentyfive (25) years. In 2005, 81 percent (%) of the population was white; 14.9 percent (%) was black and 4.1 percent (%) was another race. Although the total population in each racial category is increasing, the percentage of the black population is decreasing while those that classify themselves as other is increasing. Furthermore, 3.6 percent (%) of Horry County's population was identified as Hispanic in 2005.

Table 7. Racial Composition of Horry County from 1980 to 2005												
Race	Year											
	1980	%	1990	%	2000	%	2005	%				
White	77,685	77.3	117,098	81.3	159,363	81.0	181,834	81.0				
Black	22,443	22.0	25,160	17.5	30,468	15.5	33,536	14.9				
Other Race	1,291	0.7	1,795	1.2	6,798	3.5	9,117	4.1				
TOTAL	101,419		144,053		196,629		224,487					
Source: U	S Census B	ureau										

#### **Table 7**: Racial Composition of Horry County from 1980 to 2005

Source: US Census Bureau

#### **Table 8**: Ethnicity of Horry County from 1980 to 2005

Ethnicity	Year										
	1980	%	1990	%	2000	%	2005	%			
Hispanic Origin	1,138	1.2	1,259	0.9	5,057	2.6	8,155	3.6			
Non-Hispanic											
Origin	100,281	98.8	142,794	99.1	191,572	97.4	216,332	96.4			
TOTAL	101,419		144,053		196,629		224,487				
Source: US Censu	is Bureau										

## <u>Age</u>

Congruent with the national trend, the population of Horry County is growing older. The cohort of ages 25-34 dropped 3.6 percent from 1990 to 2000 while cohorts over the age of 35 continued to increase. In 2000, the largest percentage of the population (15.1%) was between the ages of 35-44 years. However, individuals over the age of 65 followed

closely behind at 15 percent. From 1990 to 2000, retired individuals (ages 55 and older) increased by 3.3 percent of the total population from 23 percent to 26.3 percent while dependent children decreased by 2.7 percent of the total population from 26.6 percent to 23.9 percent during the same 10-year period.

Age	1990	%	2000	%	2005	%
0-4	9,534	6.6	11,298	5.7	13,392	5.9
5-9	9,324	6.5	11,808	6.0	12,711	5.6
10-14	9,805	6.8	11,819	6.0	13,392	5.9
15-19	9,607	6.7	12,080	6.2	12,257	5.4
20-24	11,032	7.6	13,345	6.8	15,663	6.9
25-34	25,654	17.8	27,958	14.2	33,141	14.6
35-44	21,185	14.7	29,665	15.1	33,368	14.7
45-54	14,838	10.3	26,996	13.7	30,644	13.5
55-64	14,845	10.3	22,190	11.3	27,013	11.9
65+	18,229	12.7	29,470	15	35,411	15.6
TOTAL	144,053	100	196,629	100	226,992	100
Source: US	Census Bureau					

**Table 9**: Age Distribution of Horry County from 1990 to 2005

#### Households

Family households have been decreasing by approximately 7% every ten years. Married couple households have also been declining at a parallel rate. In contrast, the percentage of non-family household has been increasing by about 7% every ten years for the last thirty years. In 2005, 61.3% of Horry County residents were living within family households, while an increasing 38.7% were living in non-family households either alone or with partners of any unmarried relationship. Also in 2005, only 14.6% of family households had children under the age of 18, while the percentage of single mothers with children under 18 increased to 8.3%.

Table 10: Household	Composition of Horry	ry County from 1970 to 2005
---------------------	----------------------	-----------------------------

Frends in Household Composition												
	1970	%	1980	%	1990	%	2000	%	2005	%		
Family Households	17,349	88.6	27,574	79.2	40,405	72.5	54,515	66.6	60,785	61.3		
Married Couples	14,700	73.3	22,809	65.5	32,537	58.3	42,027	51.4	43,977	44.5		
With children under 18	8,679	43.3	12,006	34.5	13,315	23.9	14,498	17.7	14,466	14.6		
Female Householder with												
children under 18	2,130	10.6	2,207	6.3	3,524	6.3	5,431	6.6	8,188	8.3		
Non-family Households	2,692	13.4	7,224	20.8	15,314	27.5	27,285	33.4	38,353	38.7		
TOTAL HOUSEHOLDS	20,041		34,798		55,719		81,800		99,138			

Source: US Census Bureau

#### **Education**

**Table 11** describes the educational attainment of Horry County, which shows that over eighty-five percent (86.8%) of Horry County residents 25 years and older, have received at least a high school diploma or its equivalent. Further, over a fifth of the population

(20.2%) possessed a bachelor's degree or higher in 2005. These attainment rates are similar to the national average.

	Number of	
Educational Attainment	Residents	Percentage
Less than 9th grade	8,205	5.3
9th to 12th grade (no diploma)	22,483	14.5
High school graduate (includes equivalency)	49,638	32.1
Some College (no degree)	37,393	24.2
Associate Degree	10,237	6.6
Bachelor's Degree	18,601	12.0
Graduate or Professional Degree	8,140	5.3
Percentage of high school graduate or higher	N/A	86.8
Percentage of bachelor's degree or higher	N/A	20.2
Source: US Census Bureau; SC Budget and Contro	I Board, Office of Stati	stics and Research

Table 11: Educational Attainment for Persons 18 Years and Over of Horry County, 2005

#### **Income and Poverty**

This section analyzes income and poverty on a regional level. The region expands over state boundaries to include Brunswick and Columbus counties in North Carolina. Income levels in Horry County increased substantially from 1989 to 1999, and again between 1999 and 2005. The numbers in **Table 12** below show that Horry County was not the only county in the region to experience significant median household income growth, but with an increase of 55.4% Horry County did experience the largest percentage change between 1989 and 2005. The median household income is slightly lower than the state average, but with \$38,789 in 2005 remains the highest in the region.

County	1989	1999	2005	% Change
Dillon	18,365	26,630	N/A	<b>45.0</b> (1989-1999)
Florence	24,264	35,144	37,066	<b>52.7</b> (1989-2005)
Georgetown	23,981	35,312	N/A	<b>47.2</b> (1989-1999)
Horry	24,959	36,470	38,789	<b>55.4</b> (1989-2005)
Marion	17,825	26,526	N/A	<b>48.8</b> (1989-1999)
Williamsburg	18,409	24,214	N/A	<b>31.5</b> (1989-1999)
Brunswick Co., NC	23,480	35,880	35,888	<b>52.8</b> (1989-2005)
Columbus Co., NC	18,468	26,805	N/A	<b>45.1</b> (1989-1999)
South Carolina	26,256	37,082	39,316	<b>49.7</b> (1989-1999)

#### Table 12: Regional Median Household Income

Another way to analyze income is on a per capita basis. In both 1989 and 1999 Horry County had the highest per capita income in the region. Yet, in 2005 Florence County exceeded Horry County in Per capita income for the first time.

County	1989	1999	2005	% Change
Dillon	8,077	13,272	N/A	64.3 (1989-1999)
Florence	11,007	17,876	23,820	116.4 (1989-2005)
Georgetown	11,084	19,805	N/A	78.6 (1989-1999)
Horry	12,385	19,949	21,691	75.1 (1989-2005)
Marion	8,185	13,878	N/A	69.5 (1989-1999)
Williamsburg	7,632	12,794	N/A	67.6 (1989 -1999)
Brunswick Co., NC	11,688	19,857	20,280	73.5 (1989-2005)
Columbus Co., NC	9,134	14,415	N/A	57.8 (1989-1999)
South Carolina	11,897	18,795	24,532	106.2 (1989-2005)

#### Table 13: Regional Per Capita Income

The income distribution is reflected in **Table 14**. Nineteen (19) percent (%) of Horry County households have incomes between \$50,000 and \$74,999. Close to ten (10) percent (%) of households have income less than \$10,000 per capita income in Horry County was surpassed by Florence County for the first time in 2005.

Median Household Income (2005)								
Households	99,138	100%						
Less than \$10,000	9,715	9.8						
\$10,000 to \$14,999	7,138	7.2						
\$15,000 to \$24,999	13,582	13.7						
\$25,000 to \$34,999	14,375	14.5						
\$35,000 to \$49,999	18,538	18.7						
\$50,000 to \$74,999	19,133	19.3						
\$75,000 to \$99,999	8,526	8.6						
\$100,000 to \$149,999	5,155	5.2						
\$150,000 to \$199,999	1,288	1.3						
\$200,000 or more	1,883	1.9						
Median household income (dollars)	38,789	(X)						

<b>Table 14</b> : Distribution of Median Household Income in Horry County
---

Source: US Census Bureau; SC Budget and Control Board, Office of Statistics and Research

With the exception of Dillon County, the percentage of total population in poverty throughout the region decreased between 1989 and 1999. Because Horry County has the largest population in the region, the actual number of people in poverty in Horry County is among the highest for all three years (1989, 1999, and 2005). Hence, Horry County's poverty rate has increased to 15.7% of its population, and also has slightly surpassed the State in this matter as shown in **Table 15**.

	Income Below the Poverty Level											
		1989			1999			2005				
County	Рор.	Below Poverty Level	%	Рор.	Below Poverty Level	%	Pop.	Below Poverty Level	%			
Dillon	29,114	12,043	41.4	30,722	13,426	43.7	N/A	N/A	N/A			
Florence	114,344	22,500	19.7	125,761	20,063	16.0	126,964	20,797	16.4			
Georgetown	46,302	9,307	20.1	55,797	9,439	16.9	N/A	N/A	N/A			
Horry	144,053	21,358	14.8	196,629	23,356	11.9	223,929	35,059	15.7			
Marion	33,899	9,613	28.4	35,466	8,117	22.9	N/A	N/A	N/A			
Williamsburg	36,815	10,487	28.5	37,217	10,294	27.7	N/A	N/A	N/A			
Columbus Co., NC	49,587	11,699	23.6	54,749	12,200	22.3	N/A	N/A	N/A			
Brunswick Co., NC	50,985	7,775	15.2	73,143	9,095	12.4	87,701	12,401	14.1			
South Carolina		3517,793		4,012,012		13.7	4,101,201		15.6			
Source: US C	ensus Bui	reau; SC E	Budget	and Cont	rol Board,	Office	of Statistic	s and Res	earch			

 Table 15: Regional Income below Poverty Level

#### Summary

The population of Horry County has been growing at a rate double the growth rate of the State of South Carolina and faster than any of the top ten largest counties in the State. Population projections anticipate that growth at this high rate is expected to continue into the next several decades. As a result of this growth, all age cohorts are growing in number, but it is significant to note that the senior citizen population (55+) makes up a greater portion of the population than dependant children (0-19). The opposite was true in 1990. Also changing is the composition of households in the County. The proportion of family households has been steadily declining in the County since 1970 while the number of non-family households has steadily risen. Decisions made by county government will need to reflect the changing needs of this diverse and growing population, particularly those needs regarding income, age and ethnicity.

# STATEMENT OF NEEDS AND GOALS

#### Need:

Understand the composition and implications of a diverse, growing, and changing population.

#### <u>Goals:</u>

• Continue to update and maintain the population element as new data becomes available.

# **IMPLEMENTATION STRATEGIES**

It is recommended that Horry County implements following strategies within either a short term (1-2 years), intermediate term (2-5 years) or long term (5 and more years) time frame in order to fulfill the previously identified Needs and Goals.

#### Population data

Collaborate with the U.S. Census Bureau, the South Carolina Budget and Control Board, Office of Statistics and Research and other sources in receiving and analyzing the most up-to-date demographic data (continuously).

Work with the GIS department to maintain an accurate digital depiction of both current population and population forecasts (continuously).

Coordinate with local governments, the Chambers of Commerce, state agencies and other infrastructure providers to better understand the numbers, composition, and influences of the seasonal tourist population in Horry County **(short term)**.

As new major road projects are built out within Horry County, revisit population projections to accurately reflect the changing environment in different areas of the County (continuously).

# CULTURAL RESOURCES ELEMENT

Cultural resources define the character of Horry County through its history and the heritage of its people and places. Aside from historic sites, structures, and archeological artifacts, Horry County celebrates its culture in many different ways. In addition to museums, galleries, and other venues, the calendar is filled with events and festivals year-round. Horry County possesses a unique cultural atmosphere and offers an abundance to share with residents and visitors and these offerings are not limited by jurisdictional or political boundaries. The quality of life is enhanced by those cultural offerings found in Horry County.

This Element of the Comprehensive Plan catalogues various cultural resources of Horry County: cultural facilities, special events and festivals, historic places and cultural groups. As the population continues to grow, it will become necessary to protect and promote the irreplaceable heritage of Horry County and its people, as well as sustain the functions provided by the various cultural facilities and organizations that exist in Horry County.

#### **Cultural Facilities**

Cultural facilities are places where people experience some aspect of life in Horry County whether it is enjoying a play or musical event, taking in a baseball game or visiting a museum. Horry County contains a wide variety of cultural facilities. Several of the cultural facilities in Horry County are tied to its history, embedding further the spirit the community has toward preserving its heritage.

#### MUSEUMS

#### Horry County Museum

The Horry County Museum was established in 1979. Its mission is to preserve the materials and objects relating to the history, prehistory and natural history of Horry County. The museum serves over 31,000 visitors each year and accomplishes its mission through permanent exhibits, special events and a myriad of educational programs for school children. Currently, the museum is located in a 6,500 sq ft. building on Main Street in Conway. There are plans to move the museum to the historic "Burroughs School" at 801 Main Street. The new location contains 28,000 square feet and will allow for additional permanent exhibits. The site includes a 400-seat auditorium. Furthermore, the auditorium will allow the museum to host educational programs geared for larger audiences, and will provide the community with an additional gathering place for cultural and social events. Adjacent to the museum is the new Conway Branch of the Horry County Library system.

The County provides funding for personnel and operation of the museum, and supports the expansion efforts of the museum. Horry County Grants Administration has been actively exploring additional funding sources for the museum and its exhibits.

#### The "Burroughs School"

The Old "Burroughs School" building at 801 Main Street in Conway is listed on the National Register of Historic Places. The Burroughs School is significant to the early

history of education in Horry County and as a community center and local landmark in Conway. The Burroughs School was constructed in three phases between 1905 and 1923 and is the oldest remaining public school building in Horry County.

#### Children's Museum of South Carolina

The Children's Museum provides an interactive learning experience for children that stimulate self-discovery of concepts to accomplish a better understanding of the global environment. Last year over 31,000 visitors explored nature and science through exhibits in fossil digging, gem mining, medical and dental care and classes on animals and insects. The Children's Museum has seen many expansions based on the popularity of the exhibits. In 1994 the museum opened inside a retail space in a local mall and in 1996 they moved into their own building. The museum plans to relocate to its permanent location at *Broadway at the Beach* in the near future.

#### South Carolina Hall of Fame

This museum, dedicated in 1973, was created by the State Legislature to recognize and honor past and present South Carolinians who have made a substantial impact on the State's progress and heritage. Nominations are taken from the State's ten districts. Each district nominates one contemporary and one deceased nominee. Recipients have a variety of backgrounds from artists to athletes; preservationists to statesmen; educators to scientists. The Myrtle Beach Convention Center, which provides meeting space for large groups and hosts several community related events throughout the year, is the home of the Hall of Fame. A full list on inductees is provided in **Appendix A** (pages 42 - 43).

#### ART GALLERIES & MUSEUMS

#### Franklin G. Burroughs and Simeon B. Chapin Art Museum

The museum opened its doors in 1997 as a contemporary art museum emphasizing the works of living artists. Housed in Springmaid Villa, the museum provides a full array of educational opportunities in the visual arts such as classes for children and adults, gallery talks, and other activities.

Because of Springmaid Villa's historical significance, efforts to preserve the home led to the creation of the art museum. The home was built in 1924 and was used as a vacation home until 1975. After changing ownership the house was left abandoned until 1984 when the house was moved to its current location at Springmaid Beach. Those who sought to preserve the house envisioned a place in the Myrtle Beach area where the visual arts could be explored and showcased.

#### Rebecca Randall Bryan Art Gallery

Located in the Thomas W. and Robin W. Edwards Humanities and Fine Arts Building at Coastal Carolina University, the Rebecca Randall Bryan Art Gallery is a public center for the visual arts in northeastern South Carolina. The gallery opened in 2001 and holds 6-8 exhibits each year. The exhibits are open to the public and the gallery is committed to its mission of researching, exhibiting and interpreting objects, activities and documents for the purpose of study, education and enjoyment.

#### Coastal Carolina University

In addition to providing an array of sporting events, lecture series, and classroom opportunities, the University plays a pivotal role in the arts for Horry County. The

College of Humanities and the Fine Arts offer several programs for students. CCU faculty and staff create opportunities for their students to produce and experience cultural arts. In turn, the Horry County community benefits from student performances, art shows, theater productions and special cultural events on campus.

#### <u>Venues</u>

There are several venues in Horry County where live performances of the arts can be seen. The Grand Stand area has many commercial facilities that entertain visitors and residents alike including The Palace Theatre, The Carolina Opry, The House of Blues, Alabama Theatre, The Dixie Land Stampede and the Medieval Times Dinner Theatre. Two venues of local significance are the Theatre of the Republic in Conway and the Wheelright Auditorium at Coastal Carolina University.

#### Theatre of the Republic

The Theatre of the Republic has been performing in the area for 35 years. It is a community theatre housed in a restored movie theater in Conway's Historic District. In 1975, it was named the official theatre of Horry County.

#### Wheelwright Auditorium/Long Bay Symphony

The 750-seat auditorium is located on the campus of Coastal Carolina University. It was built in 1981 with funding from mostly private sources. Both the theater and music departments of Coastal Carolina use the building throughout the year for student productions and performances. In addition, Wheelwright hosts many University and community events, and houses events from the Long Bay Symphony.

The Long Bay Symphony offers diverse and comprehensive programming to the eastern Carolinas region through various entertainment and education opportunities. During the 2006-07 season, the professional orchestra, Youth Orchestra and various ensembles will perform 25-30 concerts for over 20,000 people. The Symphony and its education programs serve a diverse audience including minority populations and the disabled. A large portion of the total 20,000 served during the year, approximately one-third, are young people, ages pre-school through high school.

#### **BB&T Coastal Field**

BB&T Coastal Field located at Robert M. Grissom Parkway and 21<sup>st</sup> Avenue North, Myrtle Beach is home to the Myrtle Beach Pelicans (Class A affiliate of the Atlanta Braves). Groundbreaking on the stadium began on March 11, 1998. The first pitch was thrown on April 12, 1999 as the Pelicans faced the Potomac Cannons (St. Louis Cardinals affiliate). The stadium itself has the seating capacity of 4,364 seats and can seat up to 6,000 with general admission seating.

The County entered into a Baseball Management Agreement with the City of Myrtle Beach in September of 1998. The Agreement established the Baseball Stadium Enterprise Fund where the County has 30% undivided ownership interest in the Stadium and subsequently undertakes 30% of the debt.

#### **Outdoor Facilities**

Cultural Facilities are not limited to structures. Several sites in Horry County are devoted to cultural activities in the outdoors. Again, the Grand Strand Offers many commercial facilities devoted to outdoor activities such as Myrtle Waves Waterpark, The Nascar Speedpark and Hard Rock Park, which is currently being constructed. Additionaly, Horry County hosts the Vereen Memorial Gardens, Myrtle Beach State Park and the Freewoods Farm.

#### Vereen Memorial Gardens

The gardens contain over 100 acres of pristine marshlands, islands, and mainland for locals and visitors to enjoy. It is a place for civic group meetings and fundraisers, as well as, a choice location for several community events in the Little River area such as the Taste of Little River in April. Visitors to the gardens can walk the nature trails or boardwalks to view a variety of plant life and animals that are unique to the Carolina bays. Remnants of the original, unpaved Old Kings Highway and the Vereen Family Cemetery are also located on the grounds. Some burial plots in this cemetery date back to the Revolutionary War.

#### Myrtle Beach State Park

The Civilian Conservation Corp built the State Park in the 1930's making it the first state park in South Carolina. The park is 312 acres and includes a campground, cabins, a mile of beach, picnic areas, fishing pier and nature center. Park rangers use the nature center and park grounds as an interactive learning environment to provide a variety of curriculum-based programs for students throughout the year as well as extra programs for locals and tourists during the summer months. As a South Carolina Heritage Trust site, the park's nature trail showcases the last stands of maritime forests existing along the northern coast of the State.

#### Freewoods Farm

The Freewoods Farm is a unique heritage tourism opportunity in Horry County located about 10 miles southwest of Myrtle Beach in the Burgess Community. The farm is a 40-acre living farm museum. Visitors to the farm can view life as it occurred on small southern family farms owned and operated by African Americans between 1865 and the 1900s. The farm and its foundation, Freewoods Farm Foundation, are committed to providing hands on educational programs stressing the importance of African-Americans in the economic development of the United States.

#### **Special Events and Festivals**

There is always something to celebrate in Horry County. As the weather starts to warm, many people take pleasure in spending time outdoors and Horry County's climate and natural amenities combine to offer a great location for such activities. Several municipalities and artist guilds organize art walks and craft festivals. Live music can be found across several locations in the Grand Strand area. The County is home to two blue grass festivals - Blue Grass on the Waccamaw and South Carolina State Blue Grass Festival. La Belle Amie Vineyards invites guests regularly for live music and wine tastings.

In Myrtle Beach, the Sun Fun Festival in early June offers a plethora of special events for attendees like sand castle displays, live entertainment, pageants and contests. The festival has been entertaining children and adults since 1951. The weekend before the Fourth of July, Conway invites the local residents and visitors to celebrate their patriotism during the Round the Fourth Festival. Some of the activities at the festival include live entertainment, tennis and fishing tournaments, and fireworks.

In the spring, the Grand Strand is also to two motorcycle rally weeks. Each event attracts more than 250,000 visitors to the area. Carolina Harley Davidson Dealers Association Bike Week began approximately sixty-five years ago as a road trip destination for several Harley-Davidson dealers in North Carolina. The 10-day event attracts motorcycle enthusiasts from up and down the east coast. Atlantic Beach Bike Fest began in 1980 by the Charlotte Knight Riders, a motorcycle club. Events for this week are held centrally around Atlantic Beach but have now expanded into North Myrtle Beach and Myrtle Beach.

Festivals are not limited to simply enjoying the outdoors; Horry County has several events dedicated to regional epicurean delights. Little River hosts a Blue Crab Festival in May and the Loris Bog-Off Festival is held each year in September and contestants compete for the honor of serving up the best chicken bog. The agricultural roots of Horry County are not forgotten. Started in 1979, the Hoe Down Harvest Fest in Aynor marks the end of the summer growing season with a parade, arts and crafts as well as nighttime street dancing.

Only a few of the many events and festivals that take place in Horry County have been discussed above. A more complete overview of other events is available in the **Appendix B** (page 44).

#### Historic Places

Horry County has a long and rich heritage. Evidence of the past can be found throughout the County and the post-European history of the County is well documented. This section highlights several important areas whose history has had a substantial impact on the development of what is present day Horry County.

Before Europeans arrived on the coast of South Carolina, Native Americans were the sole residents, living off of the bounty of the land and local waters. The Waccamaw and Winyah Indians called the area "Chicora," which means "the land." Although documented history of these tribes, which also are referred to as the Chicora, is scarce, evidence of their existence continues to be discovered. Arrowheads have been found on the beach, riverbanks, and in farmers' fields. Burial mounds were discovered in the Little River area, as well remnants of an Indian village near Murrells Inlet, including pottery shards, tools, and other artifacts. At the Horry County Museum in Conway, several exhibits shed light on what life was like for these early residents. (Myrtle Beach Area Convention and Visitor's Bureau; URL: <a href="http://www.myrtlebeachinfo.com/">http://www.myrtlebeachinfo.com/</a>)

Before colonialism, Chicora are believed to be among the first residents of Horry County. "The Chicora tribe was a small Native American tribe of the Pee Dee area in northeastern South Carolina ranging to the Cape Fear River in North Carolina. Remnants of the tribe are located between Aynor and Conway in Horry County of South Carolina, and are seeking official recognition by the State. The tribe lends its name to the confederate ironclad ship CSS Chicora, and a regional council of the Boy Scouts of America" (Wikipedia Encyclopedia, URL: <u>http://en.wikipedia.org/wiki/Chicora\_tribe</u>). The Native Americans that inhabited the area spoke Siouan, which is a Native American language spoken in many parts of North America.

Horry County was originally part of the colonial Craven County. The area became part of the Georgetown District in 1769. The boundaries of Horry County were established in 1785 when the area was known as Kingston County (Horry County Historical Society). The County was incorporated in 1801 with an estimated population of 550. Since the County was almost completely surrounded by water and its inhabitants were forced to survive virtually without any assistance from the "outside world", they became an extremely independent populace and named their County "The Independent Republic of Horry". The County was named after Peter Horry who was a descendent of Huguenot settlers and a member of a family that owned several large plantations in the area. He served as Brigadier General of the Militia and a member of the South Carolina General Assembly during the American Revolution under General Francis Marion, who was also known as "The Swamp Fox."

Substantial development pressure threatens historically significant properties and makes efforts to preserve them more imperative. Progress has been made in this endeavor through the work of the National Register of Historic Places, State Historic Preservation Office (SHPO), Horry County Board of Architectural Review (BAR), the Horry County Historical Society and other assorted preservation societies as well as individual citizens. A list of the National Register of Historic Places in Horry County as well as the Horry County Board of Architectural Review's list of eligible sites can be found at the end of this element in **Appendix C and D** (pages 45 - 48).

Established in 1976, the Board of Architectural Review (BAR) prioritizes and oversees the historic preservation efforts in Horry County. Each year the County provides a budget for the BAR. With these allocations the BAR has been able to publish several brochures about the different historic districts in the County as well as a County wide brochure of historic sites. Horry County was the first county in the state to become a certified local government through the South Carolina Department of Archives.

The National Register of Historic Places is a list of properties that have had a significant impact on American History. A majority of the properties listed on the National Register are within the city limits of Conway and each property on the list, as well as those catalogued in the BAR's Survey of Historical Places, played an important role in the development of the County. A few of the sites are highlighted in the following paragraphs. Historic districts listed with the National Register include Conway, Waccamaw River Warehouse, Myrtle Heights-Oak Park, Galivants Ferry and Socastee. Although not on the National Register, the Bucks Township, Little River and Green Sea areas are also historically important communities.

#### Conway

Horry County has five historic districts listed on the National Register of Historic Places; two of which are located in Conway, the county seat. The National Register roughly bounds the Conway Historic District by Fourth Avenue, Kingston Street, Third Avenue and Laurel Street. The Waccamaw River Warehouse Historic District is in the region of Main Street between the Waccamaw River and Laurel Street. For Horry County, industrialization began with timber, transportation on the Waccamaw River and commercial activity in Conway. Because of this, both districts are historically significant.

Conway was established by a land grant from King George II of England. The city developed as a wharfing community known at the time as Kingston. In 1801 the town petitioned to have the name changed to Conwayborough after Robert Conway, a Revolutionary War soldier an-d large landowner in town. The *-borough* was dropped from the town's name in 1881. Conway experienced the most growth during the 1850's due to Burroughs and Collins launching a large Naval Store and timbering industry. With this new production came the need for transportation and commerce. Burroughs and Collins established a line of steamships that traveled the Waccamaw River from Conway to Georgetown, making several stops along the way to deposit and pick up passengers and to deliver and transport freight. From Georgetown, connections could be made for Charleston, New York, and other ports. This company was also instrumental in establishing the railroad and a bank.

The Old Horry County Courthouse was built in 1825 and designed by Robert Mills, the architect of the Washington Monument and U.S. Treasury Building in Washington D.C. The Old Courthouse has been serving local government for 180 years and continues to do so as the current location of Conway City Hall. The building served as Horry County's Courthouse until 1908 when it was sold to the City of Conway for \$4,000. There is a small park adjacent to City Hall that is home to "The Horse Trough", a fountain purchased from the City of Charleston in 1916. Horry County built its second courthouse in 1908 between Elm and Beatty Streets and 2<sup>nd</sup> and 3<sup>rd</sup> Avenues. This building still operates as a courthouse for the Conway Magistrates office and central traffic court. In 2002, Horry County completed its third courthouse and administrative building behind the second courthouse on 2<sup>nd</sup> Avenue.

The small chapel on the southwest corner of 5<sup>th</sup> Avenue and Main Street has served the Methodist Community of Conway since 1847. The original building was wooden and was replaced in1898 with the small brick chapel that stands today. Worship services were held here until the church outgrew the facility in 1910. Subsequently, the building was used for Sunday school classes and in 1938 the Hut Bible Class started meeting here. The building is still used for small meetings and services although The First United Methodist Church has grown to encompass the 5<sup>th</sup> Avenue block from Main Street to Laurel Street. Other churches in Conway of historical significance include Kingston Presbyterian Church and Bethel African Methodist Episcopal Church.

The "Burroughs School" building at 801 Main Street is the future home of the Horry County Museum. This building is one of the oldest remaining public school buildings in Horry County. The school was built in three phases between 1905 and 1923 for elementary education. In 1908 the high school moved to the location and in 1917 an 11<sup>th</sup> grade year was added to the curriculum. The last addition to the school site was the McCowan Auditorium, constructed in 1923. The auditorium was used for community gatherings, church services, lectures, spelling bees and tonsil clinics. Use of the building ceased from 1979 to 1987. Renovations allowed the building to be used for County offices from 1987 until 2001. Additional renovations currently underway will allow the building to reopen for educational purposes as the Horry County Museum (Horry County Historical Society).

Originally located in the 600 block of Main Street, the Burroughs School educated students from 1879 to 1903. Upon completion of the new structure, the school relocated. The original school building burned in 1912. Upon the site of the original school is the Bryan House that currently serves as the offices of the Horry County Historical Society.

In December of 1887, Conway celebrated the arrival of the first train to their depot, Atlantic Coast Line Conway Train Depot, at the end of Main Street by the Waccamaw River. The Chadburn family of Wilmington, North Carolina built the railroad, as an extension of their logging railroad, in order for the Conway line to be capable of transporting freight and passengers. In 1890, the line (called the Conway Seashore Railroad) was extended from the eastern banks of the Waccamaw River to "New Town" (known presently as Myrtle Beach). Initially, passengers were ferried across the Waccamaw River until 1904 when a drawbridge was built by Burroughs and Collins. Also in 1904, the line connected to Aynor. Originally, tracks for the railroad in Conway ran down the middle of Main Street and were moved to their present location in 1928 by court order due to the community's concern about traffic and public safety (Horry County Historical Society).

#### Myrtle Beach

Myrtle Beach rests between the Atlantic Ocean and the Atlantic Intracoastal Waterway. The City of Myrtle Beach was named in 1900 after the plethora of wax myrtle shrubs that grew along the shore. Although this portion of Horry County was inhabited in the late 1800's (a post office was established in 1888 and two churches were established during this time), development of what is considered today's resort community began in the early 1900's. F.G. Burroughs envisioned Myrtle Beach as a premier resort community. Completion of the railroad from Conway to Myrtle Beach was achieved in 1900 to 1901. In the beginning, ocean front lots in Myrtle Beach were sold for \$25 and it is said that anyone who built a house of \$500 value received a free lot.

Before the stock market crash of 1929, the Woodside Brothers shared F.G. Burroughs' vision of building a resort community in northeastern South Carolina. They began a development in 1926 known as the Ocean Forest Country Club. The club contained golf course, beach access and large hotel. The club was later renamed to Pine Lakes International Club. This golf course (although it has been redesigned) was the first golf course in Myrtle Beach and is locally known as the "Granddaddy" of golf courses. The club is also known as the birthplace of the "Sports Illustrated" magazine. In 1954 a group of Time-Life executives visited the Country Club to play the well-known course and while there, conceived a new weekly sports magazine.

By 1925, Myrtle Beach was home to some 200 residents. After the construction of water and sewer facilities, the city incorporated in 1938. Most residences built during the 1930s through the 1950s were used as summer homes or vacation rentals. The only historic district in Myrtle Beach, Myrtle Heights—Oak Park Historic District, began as a summer destination. Development of this area mainly occurred between 1933 and 1954.

Small family-owned motels and boarding houses were dominant along this beach landscape in the 1930s, 1940s and 1950s. Such establishments included the Chesterfield Inn, Rainbow Court, the Pleasant Inn and the Periscope. The lodging industry in Myrtle Beach has transformed into large high-rise hotels and resorts and this

change can be attributed to two main factors—Hurricane Hazel in 1954 that destroyed a vast majority of Myrtle Beach and developments in the insurance industry in the early 1970's.

Beach attractions have also made their mark in Horry County. The Pavilion Amusement Park formerly located at Ocean Boulevard and 9<sup>th</sup> Avenue in Myrtle Beach was built in 1948 and remained one of the major attractions until its closure. At the turn of the 20<sup>th</sup> Century, this site was the location of the Myrtle Beach Hotel, Pavilion and Annex—one of the first ocean resorts along the Grand Strand. After 58 years the Pavilion was closed at the end of 2006 to make room for a mixed-use redevelopment project at this prime downtown location. Meanwhile, the historic Herschel-Spillman Carousel dated from 1912, has been relocated to the new Pavilion Nostalgia Park at "Broadway at the Beach". The new park also houses the historic German Band Pipe Organ that shared the former Pavilion site.

#### Galivants Ferry Historic District

Galivants Ferry sits on the east side of the Little Pee Dee River along US Hwy 501. In 1792, the community was known as Elirsee's Landing and Richard Gallevan obtained ferry rights from the state legislature to operate a ferry across the Little Pee Dee River. Today, US Hwy 501 follows the same course as the original ferry line.

Other commercial interests became profitable as the community grew. Joseph William Holliday found the area suitable to open a mercantile store in 1869. At the time, agricultural was extremely important in Western Horry County. Because of the terrain, Horry County was not conducive for popular large plantation crops. Thus, many farmers turned to tobacco as a productive cash crop. Mr. Holliday began purchasing large tracts of land in the area. In order to make his land more productive for the lucrative tobacco crop, J.W. Holliday turned to a tenant farming system. By the 1900's Galivants Ferry became the center of this large tenant farming community.

The district contains many buildings related to farming including tenant houses, barns, tobacco barns, pack houses, a gristmill, and a potato and fertilizer house. Two of the Holliday family homes are also in the district. The Holliday Brothers Main Barn is a prominent feature along US Hwy 501. The barn was built in 1920 and the original lightening rod system is still intact. A marvel of its days, the barn consists of three floors with an elevator and inclined ramp to provide access to all floors. In 1970, the South Carolina Department of Transportation moved the projected roadway for US Hwy 501 in order to preserve the barn.

Across the highway from the Main Barn, sits the Galivants Ferry Convenience Store and Service Station. The convenience store was built in the early 1980's to look like the general store of the 1860's. Just behind the convenience store are the hardware store and the offices which were built in the 1940's. The service station was originally built in 1922 although it has gone through several alterations.

Galivants Ferry Baptist Church was founded in 1880. The grounds contain a cemetery and worship services are held twice a month. Baptisms are held in the Little Pee Dee River at the Galivants Ferry Landing.

From local office seekers to presidential hopefuls, candidates have made biennial stops to Galivants Ferry for the "Stump" since the late 1800's. The Stump gets its name from

the four-foot pine stump that was used as a platform for candidates. One of the first "stumps" in Galivants Ferry was for General Wade Hampton in 1876. General Hampton visited Galivants Ferry on his campaign trail for Governor. The Democratic Party continues the tradition and meets here every two years to eat, politic, and get energized for the upcoming campaigns by getting hands-on with local voters. In 2000, the Library of Congress recognized the site as a "Local Legacy".

#### Socastee Historic District

The Socastee Historic District, as defined by the National Register of Historic Places, is located around the Socastee Atlantic Intracoastal Waterway Swing Bridge. Socastee experienced an economic boom in the 1800's attracting mercantile and turpentine distillery industries. The structures that remain are exceptional examples of post Civil War development.

The T.B. Cooper Store was built in 1905 to provide goods for the area. In addition, the store also housed the local post office where Mr. Cooper was the first postmaster. The Thomas Cooper House located adjacent to the store housed the first bridge operator for the Socastee Intracoastal Waterway Swing Bridge.

The Socastee Intracoastal Waterway Swing Bridge opened in 1936. It is 217 feet in length and 24 feet wide. Originally, the bridge had to be turned by hand and the gatekeeper worked from the house at the top of the bridge. Today, the bridge still operates and sees on average 40 boats a day and 26,100 vehicles per day (2005).

Other sites in the historic district include the Sarvis-Ammons House (c. 1881), the Old Socastee Methodist Church and its cemetery and the pecan grove at the Thomas Cooper House. The Socastee Methodist Church was first organized in 1818. The structure was built in 1875.

#### Bucks Township

Bucks Township experienced a substantial amount of growth attributed to the lumber industry. Three lumber camps along the Waccamaw River grew to be small towns and flourished for over a hundred years. Henry Buck, a shipbuilder from Bucksport, Maine, founded the milling villages. The red brick chimneys of the first two mills are the only physical remnants left behind from the once prosperous mill.

The first lumber camp was the Upper Mill, which began operation in the 1830's. At the Upper Mill, the Buck House and Upper Mill Farm, also known as Bucksville Plantation were built. Historians have documented a slave burial site on the grounds. The Middle Mill (Bucksville) was the principal shipping center for Horry County in the last half of the 19<sup>th</sup> century. In this time of prosperity, Bucksville had three churches, two hotels, several saw mills, a bank and had the largest population in the County. A church still in use in Bucksville is the Hebron Methodist Church. The current church was built in 1848 and succeeds an earlier structure built in 1760. Hebron Methodist was built in a simple Greek revival architecture. Several New England seamen helped construct the building and a sea captain who ported in Bucksville donated architectural features such as the windows and doors. The Lower Mill, known today as Bucksport, was a successful lumber-milling village until the 1930's. The US Coast Guard used their docks during World War II. Although the mills do not exist, commercial activity continues in Bucksport.

#### Little River

Throughout Little River's history, people have made a profit from the sheltered and fertile inlet as well as the timber from the once abundant forests. Evidence of Native Americans predates that of European settlement. Little River is believed to be the first European settlement in Horry County dating back to the late 17<sup>th</sup> century and early 18<sup>th</sup> century. Tilghman Point located between the marsh and the river, served as an ideal location for Fort Randall. Farmers and fishermen who settled the area found the shores and water very fertile. The protection of the inlet enticed pirates and smugglers in the 18<sup>th</sup> century and later bootleggers during prohibition. Pirates that are rumored to have used Little River to hide out include William Kidd, Edward "Blackbeard" Teach, and Anne Bonney.

The Little River Atlantic Intracoastal Waterway Swing Bridge, located on Sea Mountain Highway, opened in 1936. The bridge is 272 feet long and was the first bridge in the nation to use a single pivot wheel system. In 2005, an average of 12,500 cars crossed the bridge per day. During the peak of the tourist season, the Little River Swing Bridge opens for over 2,000 boats per month.

Many of Little River's historic structures from previous centuries have seen a rebirth. For instance, the Essie McCorsley house built in 1910 is now the home of Brentwood Restaurant. The McCorsley family owned a general store in the early 1900's that now is the home of a restaurant. Another general store constructed in 1913 continues as a gift shop, Toby's Old World Gifts. The Little River Methodist Church built in 1885 became a community center in the mid 1950's. Relocated to its current site, the former church building continues to be used as the Parson's Table Restaurant.

The Vereen Memorial Historical Gardens, now managed by the Horry County Parks and Recreation Department, is a 110-acre park devoted to nature and wildlife. Within the park are two historical sites: the Vereen family cemetery with graves dating back to the Revolutionary War era, and a portion of the Old Kings Highway. Further archeological sites have been found within the boundaries of the park that pre-date English settlement. Also noteworthy are the boardwalk, nature trails, as well as the scenery and wildlife within the park.

Little River has many cemeteries. One cemetery that has a particularly long history in the area is the Cedar Creek Cemetery which is located near Nixon Crossroads. At one time, both the Little River Methodist Church and later the Cedar Creek Church had a chapel on this site. Before the Revolutionary War and pre-dating both churches, the grounds housed a meetinghouse and tavern.

#### Green Sea

The Derham House was recently nominated by the Board of Architectural Review to be added to the National Register of Historic Places. The home was built in 1899 by John Pickens Derham. Mr. Derham was a member of both the State House and Senate and a delegate to the assembly that created the South Carolina Constitution. He also made significant contributions to the tobacco industry of Horry County. He, along with a couple of other farmers, brought agricultural experts to the area to teach local farmers how to best grow tobacco. Local legend has it that Mr. Derham named the Green Sea area. His farm was known as Loughrea, supposedly named after a community in the County of Galway, Ireland which means "inland sea". Records indicate that the name Green Sea appeared in some of John Derham's documents around 1875. Before, the area had been known as Blanton's Crossroads and Powellville (The Sun News, 8-8-05).

#### Kings Highway

Early settlers followed an old Native American path to transport goods. In colonial times, the road followed the Atlantic Coast and extended from Boston to Frederica, Georgia. Referred to as the King's Highway, remnants of the original King's Highway can be seen at the **Vereen Memorial Historical Gardens**. On April 26, 1791 George Washington entered South Carolina using the highway on his first presidential tour. Bishop Francis Asbury used the route to introduce Methodism to this predominantly Anglican region. Paved in 1941, U.S. Highway 17 follows or closely aligns with the King's Highway.

#### Waccamaw River

The Waccamaw River played a vital role in the development of Horry County. The Waccamaw River is 140 miles from its headwaters in North Carolina to the Atlantic Ocean. It is a black water river due to its heavy concentration of organic soils. The riverbanks have been home to Native American settlements and rice plantations, witnessed Revolutionary battles and have been integral to the creation of the Intracoastal Waterway. Communities in Horry County such as Conway and Bucksport thrived due to the commercial trading that stemmed from river port activity. Although the commercial function of the Waccamaw has waned, the river is a critical component to Horry County's ecological health and provides many recreational opportunities for residents and visitors alike.

#### Cultural Groups, Societies, and Organizations

Cultural resources can also be found on a personal level. Individuals play an important role in promoting, preserving, and enhancing the many types of cultural resources in Horry County.

#### **Native-American Organizations**

The Chicora Indians were one of the aboriginal dwellers of South Carolina. In the early 1520's the Chicora gathered in large numbers on the beach near what is now Pawleys Island to observe Spaniards coming ashore.

#### **Historical Societies**

Since 1966 the Horry County Historical Society has been pursuing its mission of preserving the history of Horry County. One of the primary means of accomplishing this mission is through their publication, *Independent Republic Quarterly*, a journal that details the different historical aspects of Horry County. The group meets quarterly.

The main goal of Atlantic Beach Historical Society is to preserve and promote the African-American history of coastal Carolina. The group incorporated as a non-profit organization in 2001 and has focused on three main objectives: preserving the oral history of Atlantic Beach, acquiring historic properties and promoting African-American history through hosting year-round festivities such as the Gullah-Geechee Festival.

Cultural groups such as the Ancient Order of Hibernians and the Irish Catholic Historic Preservation Club support preservation of historic places, as well as, promote cultural identity.

#### Performing Arts

The Long Bay Symphony was founded in 1987 with 36 original members. The Long Bay Symphony serves the entire Grand Strand and took its name from the geography of the area that it serves. Today the Symphony has around 200 musicians and hosts 25-30 concerts throughout the year. In addition to their performances, they offer many educational opportunities in music through their youth programs.

Other groups in Horry County that center their creative outlet on music include the Carolina Master Chorale, the Lowcountry Barbershop Chorus and The Sweet Adeline Group (a barbershop choral group comprised of all women) as well as the Myrtle Beach Regional Pipe Band.

#### Visual Arts

Waccamaw Arts and Craft Guild consists of artists, craftsmen and those who possess a serious interest in the arts. The group has been active in the Horry County community since 1969. They produce two annual shows—one in the fall and the spring, sponsor several "Art in the Park" events throughout the summer, hold regular meetings with talks from a variety of artists and craftsmen and publish a newsletter. The Guild has had a profound impact on the arts of Horry County. Their memberships instrumental efforts helped establish an art museum in Myrtle Beach—Franklin G. Burroughs and Simeon B. Chapin Art Museum at Springmaid Beach.

#### Other interesting organizations

The Shag is the official dance of South Carolina. It began in the 1930's in the Ocean Drive area of North Myrtle Beach. The dance is associated with beach music, warm weather and carefree times. The Society of Stranders is an organization of over 12,000 members comprised of local residents and visitors that share an interest in the promotion of and love for shag dancing. The group was founded in 1980 and each year the society holds two parties in North Myrtle Beach—the Spring Safari and the Fall Migration.

A group of culturally minded individuals in Horry County have begun working on creating a new Arts Council that is designed to promote the cultural arts throughout the entire county called Horry County Arts and Cultural Events (HCACE). Currently the group is working on establishing an executive board and building a membership base. The group will be receiving funds from the Accommodations tax for one year as they begin their search for an Executive Director. Horry County Grants Administration is also searching for grant opportunities for the group.

#### **Conclusion**

History and heritage are important ingredients in establishing a sense of place and community identity as these resources enhance a community's quality of life. Cultural resources provide a link for citizens to the places where they live (Beatly, 2004). Residents of Horry County state that the quality of life is a major contributing factor to the reasons that they choose to live here.

It is important to recognize that the sense of community pride stems from the cultural heritage and resources of Horry County. This sense of community identity and pride has

long-term effects the economic health of the County. For instance, residents that identify themselves with an area are less likely to move from it as quickly. Connecting to an area makes people feel more responsible for its overall well-being and subsequently become more involved (Beatly, 2004)

Horry County has made commitments towards promoting cultural resources within the "Independent Republic" although funding is usually limited. Even with limited County resources it is clearly apparent that residents are interested in the arts and history of Horry County.

#### STATEMENT OF NEEDS AND GOALS

#### Facilities and Venues

#### Need:

Develop cultural opportunities by encouraging a diverse mix of facilities and venues.

#### Goals:

- Support the Horry County Museum in their relocation and expansion to the Burroughs School.
- Encourage cooperation between the Horry County Museum and other jurisdictions and organizations to coordinate archeological, historic and heritage preservation efforts.
- Cooperate with other County departments and municipalities to incorporate cultural facilities and venues into planning and capital improvement project processes.
- Encourage the reuse and redevelopment of existing structures over new construction.

#### Historic and archeological sites promotion

#### Need:

Support efforts to identify, protect and promote the historic and archeological sites of Horry County.

#### Goals:

- Continue to update the survey of historically and archeologically significant places.
- Make the Horry County Planning Department a clearinghouse of information for historic resources in the County.
- Promote historic preservation activities of private property owners.

#### Historic and archeological education

#### Need:

Promote educational opportunities about historic and archeological attributes of Horry County.

#### <u>Goals:</u>

- Cultivate a "sense of place" through historic preservation by providing opportunities to connect residents with the history of the area.
- Incorporate historic preservation and protection of archeologically significant sites in County ordinances.

#### **Special Events and Festivals**

#### Need:

Support for special events and festivals countywide.

#### Goals:

- Support calendar coordination and promotional efforts for events and festivals.
- Continue to support funding for special events and festivals.

#### **Cultural Organizations**

#### Need:

Provide assistance organizations whose objectives include promoting cultural arts and historic preservation in Horry County.

#### Goals:

- Support the creation of Horry County Arts and Cultural Events (HCACE), an organization created to promote all arts within the County.
- Continue to support the historic preservation efforts of the Board of Architectural Review.
- Support local artists, craftsmen and creative sector businesses.

#### Cultural Tourism

#### Need:

Stimulate tourism diversity by capitalizing on cultural arts opportunities.

#### <u>Goals:</u>

• Encourage opportunities for visitors to experience heritage and cultural tourism opportunities throughout the entire County.

• Establish relationships with area Chambers of Commerce and Visitor's Bureau to promote cultural facilities as enhancements to the traditional tourist activities.

#### **IMPLEMENTATION STRATEGIES**

It is recommended that Horry County implements following strategies within either a short term (1-2 years), intermediate term (2-5 years) or long term (5 and more years) time frame in order to fulfill the previously identified Needs and Goals.

#### Facilities and Venues

Seek federal, state and foundation grants to diversify exhibit collections and expand educational opportunities (short term to intermediate).

Assist in the creation of localized museums that have a unique history or heritage for municipalities or communities within Horry County (short term to intermediate).

Coordinate with the Parks and Open Space Committee to ensure connectivity between cultural and recreational sites and population centers (short term to intermediate).

Encourage the Parks and Recreation Department to provide programming for the cultural arts as well as facility space for events **(short term to intermediate)**.

Seek federal, state and foundation grants for the construction of facilities and venues (short term).

Foster relationships with private investors, educational institutions and non-profit organizations and partner with them on projects for additional auditorium and theater space as need arises in the County **(short term)**.

Allow appropriate community cultural facilities and venues to be considered amenities within major subdivision developments and planned development districts (short term).

Assess the facility capacity for festivals and events as need arises (short term).

Construct sites for community venues both small and large where the arts can be performed and enjoyed either indoors or outdoors as well as places to enjoy the special events and festivals (short term to intermediate, dependent on funding).

Seek opportunities to locate cultural facilities in existing structures and provide incentives to encourage such redevelopment (continuously).

#### Historic and Archeological sites promotion

Adopt by ordinance a list of historic properties to be known as the Horry County register of Historic Places (short term).

Develop a sophisticated GIS layer for historic properties (short term).

Develop a categorizing system so that historic properties can be queried for particular attributes (short term to intermediate).

Support research efforts and archeological activities to expand the knowledge base of Native American inhabitants of the region **(short term)**.

Emphasize the importance of role that African Americans played in the development of Horry County (continuously).

Maintain Certified Local Government status with the State of South (continuously).

Keep a list of all agencies, non-profit organizations, historical societies, history museums, libraries with history collections, and other entities and organizations involved in archaeology and/or historic preservation (continuously).

Maintain records of all properties within the County, including incorporated areas that have submitted applications to the National Register of Historic Places (continuously).

Develop a maintenance program for historic structures in order to prevent demolition due to negligence (short term to intermediate).

Provide information about state and federal financial incentive programs and support grant and tax credit requests by owners of historically significant properties (short term).

Continue to identify and document historic resources in the County (continuously).

Participate in the nomination and designation of state and national historically significant properties (intermediate).

Investigate the feasibility of local incentive program for historic preservation, including a revolving loan fund, bonus density for the preservation of significant archaeological sites or historic structures, or a local tax-credit program **(short term to intermediate)**.

Consider variations from the building code requirements for historic properties when modern codes may compromise the historic character of the site. Variations should not endanger public health or welfare **(short term)**.

Create an awards program to recognize citizens by nominating outstanding preservation efforts (short term; and continuously after establishment).

#### Historic and Archeological Education

Promote programs for school children that would expand their understanding in history and culture of the community in which they live **(short term)**.

Continue to sponsor Learning with Historic Places, lesson plans designed to educate students on historic sites (intermediate).

Update existing and develop new brochures about the historic areas of the County (intermediate).

For new brochures as well as reproduction of current publications, create a route that is conducive for use by automobiles, bicycles, and pedestrians (short term to intermediate).

Produce the historic brochures in Spanish and other languages as need arises (short term).

Seek federal, state and foundation grant opportunities for BAR programs (short term).

Continue to seek full district representation on the Board and encourage a diverse range of preservation efforts (short term).

Work with Planning Staff to establish of County Historic Districts (short term).

Encourage continuing education on creative historic preservation techniques (short term).

Support conservation and preservation efforts to acquire historically and archeologically significant property (short term to intermediate).

Develop a website for Horry County Historic Preservation and provide links to other preservation sites such as the Horry County Historical Society and the South Carolina Department of Archives and History **(short term)**.

Encourage County departments and agencies to utilize the redevelopment and reuse of structures of historic or architectural interest **(short term)**.

Support initiatives to honor Horry County residents, past and present, which have had a positive impact on the development of the County through public art displays and inclusion in any brochure information **(short term)**.

Amend the Planned Development District to include and provide incentives to preserve historically significant properties and promote redevelopment of historic properties (short term).

Give incentives to preserve historic properties and promote redevelopment in commercial site plan review (short term).

Prohibit development on archeological sites identified by federal, state or local criteria as significant **(short term)**.

In the acquisition criteria of the Horry County Open Space Plan, include the protection of historically and archeologically significant sites **(short term)**.

#### Special Events and Festivals

Maintain a comprehensive calendar of festivals and events available on the Horry County website (short term)

Support the promotion of festivals and events by providing website links on the County's web page **(short term)**.

Encourage new festivals and special events that highlight the diverse cultural backgrounds of Horry County residents (continuously).

Support event and festival coordinators in searching for federal, state and foundation grants (short term).

Encourage festival and event organizers to pursue funding through County and municipality accommodation tax allocations **(short term)**.

#### Cultural Organizations

Seek federal, state and foundation grant opportunities for the *Horry County Arts and Cultural Events* (HCACE) (short term).

Encourage the group to be an advocate for the arts within the County (short term).

Support efforts to institute HCACE as a clearinghouse publication and promotional information for all arts and cultural events (intermediate).

Provide display space in County buildings for local artists and craftsmen (short term).

Urge local business to showcase local artists in their buildings (short term).

When feasible, use local artists, craftsmen and creative sector businesses for County projects (short term).

#### Cultural Tourism

Cooperate with area Chambers of Commerce, agricultural, cultural and heritage organizations to coordinate promotional and advertising efforts (continuously).

Develop website information that lists all cultural and heritage tourism sites within the County (short term).

Create a brochure for heritage and cultural tourism, including developing multi-modal routes (car, pedestrian or bicycling) and links to parks, wildlife reserves or the East Coast Greenway (intermediate)

Support any state initiative that would synthesize a coordinated tourism campaign for heritage tourism and eco-tourism (continuously).

Update website links for cultural facilities on the Horry County website (continuously).

List or provide links to current Horry County cultural facilities on all Chambers of Commerce's and Visitor Bureau's Website **(short term)**.

Provide opportunities for and encourage cultural facilities to advertise their services to the visiting public **(short term)**.

### **APPENDIX**

Appendix A:	South Carolina Hall of Fame Inducte				
	South Carolina Hall of Fame Inductees				
	Italics indicate the contemporary inductee				
Year	Inductee				
1973	Col. Charles M. Duke Jr., Astronaut				
1974	Will Lou Gray, Educator				
	John C. Calhoun, U.S. Vice President				
1975	William S. Hall, MD, Mental Health				
	Gen. Francis Marion, Revolutionary W				
1976	Signers of the Declaration of	Signers of the U.S. Constitution			
	Independence	Pierce Butler			
	Thomas Heyward Jr.	Charles Pinckney			
	Thomas Lynch Jr.	Charles Cotesworth Pinckney			
	Arthur Middleton	John Rutledge			
1977	Edward Rutledge, Brig. Gen. Andrew Pickens, Revolution	pory Mor			
1977	Charles H. Townes, Scientist				
1970	Gen. Thomas Sumter, Revolutionary V	Mar			
1979	John R. Heller, Scientist	, vai			
1979	Maj. Gen. Andrew Jackson, U.S. Pres	ident			
1980	Dr. Robert D. Bass, Author/Historian				
1000	Gen. Wade Hampton III, Civil War				
1981	Anne Austin Young, Physician				
	Robert Mills, Architect				
1982	J. Strom Thurmond, Senator				
	James F. Byrnes, Governor				
1983	Mary C. Simms Oliphant, Author				
	Mary McLeod Bethune, Educator				
1984	Benjamin E. Mays, Educator				
	Archibald Rutledge, Poet Laureate				
1985	John Birks "Dizzy" Gillespie, Musician				
4000	Anne Pamela Cunningham, Preservat				
1986	Gen. William C. Westmoreland, Militar	ry Leader			
1987	Anna Hyatt Huntington, Sculptor Donald Stuart Russell, Senator /Judge				
1907	James Louis Petigru, Statesman	7			
1988	Joseph Cardinal Bernadin, Archbishor	o of Chicago			
1000	Thomas Green Clemson, Diplomat	0			
1989	Jasper Johns, Artist				
	Joel Roberts Poinsett, Diplomat				
1990	Maude Callen, Nurse/Midwife				
	Bernard Mannes Baruch, Statesman				
1991	Anne Worsham Richardson, Artist				
	Henry Laurens, Diplomat				
1992					
	William Gilmore Simms, Novelist				
1993	Roger Milliken, Industrialist				
	James Marion Sims, MD, Physician				
1994	Philip Simmons, Blacksmith				
4005	Julia Mood Peterkin, Novelist				
1995	William Jennings Bryan Dorn, U.S. Representative				
	William Gregg, Manufacturer				

1996	Bobby Richardson, Baseball Hero		
	Walker Gil Wylie, MD Physician		
1997	James Burrows Edwards, Governor		
	Ronald Erwin McNair, Scientist/Astronaut		
1998	Frances Ravenel Smythe Edmunds, Preservationist		
	Elisabeth O'Neill Verner, Artist		
1999	Maj. Gen. Charles F. Bolden Jr., Astronaut		
	Mary Boykin Chesnut, Diarist		
2000	Hugh McColl Jr., Banker		
	Brig. Gen William Moultrie, Soldier/Statesman		
	Sgt. William Jasper, Soldier		
2001	Robert E. Marvin, Landscape Architect		
	Lt. Col. William Barret Travis, Lt. James Butler Bonham, Soldiers of the		
	Alamo		
2002	John West, Governor/Ambassador		
	James Lide Coker, Agriculturist/Manufacturer		
2003	Gen. Jacob Edward Smart, Military Leader		
	Maj. Thomas Dry Howie, Military Leader		
2004	Robert E. McNair, Governor		
	Thomas Pinckney, Governor		
2005	John McKissick, Football Coach/Athletic Director		
	Lucile Godbold, Athlete, Educator		
(www.myrtlet	peachinfo.com/chamber/aboutarea/balloffame/default.html 2005)		

(www.myrtlebeachinfo.com/chamber/aboutarea/halloffame/default.html, 2005)

Table of Festivals and Events			
Festival/ Event	Location	Time of Year	
First Saturday Art Walks	Conway	Year Round	
Red Hatters Beach Party Weekend	Myrtle Beach	January	
Horry County Museum Quilt Gala	Conway	February-March	
Canadian/American Days	Myrtle Beach	March	
Arts in the Park		April-October	
Grand Strand Fishing Rodeo	Myrtle Beach	April-October	
Society of Stranders Spring Safari	North Myrtle Beach	April	
Bike Week		May & September	
Waccamaw Arts and Craft Guild Art Show	Myrtle Beach	May & October	
Atlantic Beach Bikefest	Atlantic Beach	Мау	
Bluegrass on the Waccamaw	Conway	Мау	
Little River Blue Crab Festival	Little River	Мау	
Rivertown Jazz & Blues Festival	Conway	Мау	
Sun Fun Festival	Myrtle Beach	June	
Around the 4th	Conway	July	
Horry County Museum Tobacco Heritage Festival	Conway	August	
Hoe Down Harvest Festival	Aynor	September	
Myrtle Beach Greek Festival	Myrtle Beach	September	
Society of Stranders Fall Migration	North Myrtle Beach	September	
Sons of Italy Italian Fest	Myrtle Beach	September	
S.C.'s Largest Garage Sale	Myrtle Beach	September	
Long Board Classic (Surfing)	Myrtle Beach	September	
Endless Summer Festival	North Myrtle Beach	October	
Gospel Festival	North Myrtle Beach	October	
Irish/Italian/International Festival	North Myrtle Beach	October	
Little River Shrimp and Jazz Festival	Little River	October	
Loris Bog-Off Festival	Loris	October	
Live Oak Art Festival	Conway	October	
Broadway's Annual Arts and Fall Festival	Myrtle Beach	October	
Taste of the Town	Myrtle Beach	October	
Oktoberfest	Myrtle Beach	October	
Surfside Beach Annual Family Festival	Surfside	October	
South Carolina State Bluegrass Festival	Myrtle Beach	November	
Dickens Christmas Show and Festival	Myrtle Beach	November	
Broadway's Tree Lighting and Parade		November	
Intracoastal Christmas Regatta		November	
Surfside Beach Tree Lighting and Parade	Surfside	December	
Springmaid Beach Resort's Winter Arts & Crafts Show		December	
Rivertown Christmas		December	
North Myrtle Beach Christmas Parade & Tree Lighting			
Light up the Night	North Myrtle Beach		

#### Appendix B: Overview of regular festivals and events

National Re	gister of Historic Places for	Horry County
Name	Location	City
Ambrose, H.W. House (aka		
Dunmeade)	1503 Elm St.	Conway
Atlantic Coast Line Railroad (aka		
Conway Depot)	N side of US 701	Conway
Beaty-Little House	507 Main St	Conway
Beaty-Spivey House	428 Kingston St.	Conway
Buck's Upper Mill Farm	N of Bucksville	Bucksville
Burroughs School	801 Main St.	Conway
Burroughs, Arthur M. House	500 Lakeside Dr.	Conway
Chesterfield Inn	700 N. Ocean Blvd	Myrtle Beach
Conway Downtown Historic District	Roughly bounded by Fourth Ave., Kingston St., Third Ave., and Laurel St.	l Conway
Conway Methodist Church, 1898 and 1910 Sanctuaries (aka First		
United Methodist Church)	Fifth Ave	Conway
	Jct. Of US 501, Pee Dee Rd., and	
Galivants Ferry Historic District	Galivants Ferry Rd.	Galivants Ferry
Hebron Church	10 mi. S of Conway off US 701	Bucksville
Holliday, J.W., Jr. House	701 Laurel St.	Conway
Kingston Presbyterian Church		
Cemetery	800 Third Ave	Conway
Myrtle Beach Atlantic Coast Line Railroad Station	Jct. of Oak St and Broadway, between Jackson St. and 8th Ave	Myrtle Beach
Myrtle HeightsOak Park Historic District	Roughly, N. Ocean Blvd. Between 32nd Ave N. and 46th Ave	N. Myrtle Beach
Ocean Forest Country Club	5609 Woodside Dr.	Myrtle Beach
Old Horry County Courthouse		
(Conway City Hall)	Main St.	Conway
Pleasant Inn	200 Broadway	Myrtle Beach
Quattlebaum, C.P., House	219 Kingston St.	Conway
Quattlebaum, C.P., Office	903 Third Ave	Conway
Quattlebaum, Paul House	225 Kingston St	Conway
Rainbow Court	405 Flagg St.	Myrtle Beach
Socastee Historic District	SC 544, o.5 mi N of Intracoastal Waterway	Socastee
Waccamaw River Memorial Bridge	Main St. (US 501) over the Waccamaw River	Conway
Waccamaw River Warehouse		
Historic District (aka Burroughs	Roughly Main St. between the	
and Collins Warehouses)	Waccamaw River and Laurel St.	Conway
Windborne, W.H., House	1300 Sixth Ave	Conway

#### Appendix C: National Register of Historic Places in Horry County

# Appendix D: Recognized Historic Places in Horry County (Board of Architectural Review)

The	ne Board of Architectural Review's Survey of Historic Places				
	Site	Date	<ul> <li>Tax Map Number (if known &amp; applicable)</li> </ul>		
1	A. Bell House	C.1918	056-00-01-086		
2	Allsbrook House	NA	058-00-01-123		
3	Aubrey/Steve Jackson House	C.1928	029-00-01-112		
4	Bailey Homestead	C.1915	005-00-01-037		
-	Bakers Chapel Missionary Baptist Church	C.1911	083-00-01-040		
6	Ben F. Jordan House	C.1880	120-00-02-005		
7	Beulah School	NA	086-00-01-011		
8	Beverly Homestead	C.1885	159-00-02-009		
9	Beverly House	C.1915	NA		
10	Billie Smith Home	C.1920	021-00-01-096		
11	Boyd Graham	C.1859	150-00-02-087		
	Boyd Home	C.1890	099-00-04-028		
13	Brownway Elementary School (Martin's Grocery)	C.1910	NA		
	Bryan Cemetery	NA	NA		
	Bucks Barn	NA	183-00-04-071		
16	Bucksport Landing	NA	NA		
17	Bucksville Plantation	NA	183-00-04-071		
18	Butler Cemetery	C.1850	NA		
20	Calhoun Butler House	C.1880	NA		
21	Charlie Doyle Station/Laverne and Shelvy Jean Carroll	NA	081-00-02-047 & -151		
22	Chester Floyd House	C.1900	NA		
23	Cleo Stevenson House	NA	103-00-03-008		
24	Conway Railroad Station	NA	102-00-01-053		
25	Cox Homestead	NA	040-00-01-006		
26	Cox House	C.1880	089-00-03-026		
27	Dew Cemetery	C.1900	NA		
28	Don Holes Home	NA	NA		
29	E.C. Strickland Home	C.1928	036-00-01-032		
30	Ebenezer Church	NA	102-00-02-027		
31	Eliza Jane Moore Smart House	C.1887	158-00-01-115		
32	Floyd Home	C.1890	027-00-01-124		
33	Floyd Home	C.1920	NA		
34	Floyd Methodist Church	C.1930	014-00-01-022		
35	Floyd Worley Homestead	C.1890	036-00-01-024		
36	Floyd/Battle House	C.1910	014-00-01-087		
37	Floyds School	C.1935	NA		
38	G.L. Strickland House	C.1893	045-00-01-009		
39	Gallivants Ferry Baptist Church	C.1885	041-00-01-015		
40	Gaskin Homestead	NA	041-00-01-021		
41	George and Edna May Skipper	C.1910	135-00-38-146		
42	Glenn Woodward	C.1900	181-03-05-048		

43	Gore Homestead	C.1875	061-00-01-001
	Gore House	C.1890	085-00-01-065
_	Gore/Barnette House	C.1919	102-00-01-053
_	Green Sea Baptist Church Cemetery	C.1870	NA
	Green Sea Elementary School Teaherage	C.1940	NA
	Green Sea -Floyds Elementary School	NA	NA
	Green Sea High School	C.1928	028-00-01-051
	Hammond Home	C.1910	005-00-01-002
	Hammonds Homestead	C.1868	009-00-01-002
	Hardee Butler House	C.1880	NA
	Hardee Homestead	C.1890	097-00-03-085
_	Hardee House	C.1908	102-00-01-054
_	Hebron Church and Buck Cemetery	C.1848	170-00-04-004
	Hezeheah Hinson Mercantile Store	NA	018-00-01-113
_	Hinson Store	NA	NA
_	Holliday Brothers Farms	C.1920	041-00-01-012
	Holliday House	C.1890	NA
	Holliday House/ Robert Peavy House	C.1910	053-00-01-004
	Holliday/Barfield House	NA	066-00-01-014
	Hughes House	C.1914	086-00-03-031
	Intracoastal Waterway Swing Bridge (Socastee)	C.1934	179-00-03-067
_	Irma Causey House	NA	179-00-05-020
	J.C. Hyman	C.1915	109-00-04-029
	J.C.Bridger	C.1850	131-03-01-013
	J.P. and Bertha Dunn	NA	150-00-02-049
	J.P. Derham House	C.1890	028-00-01-053
_	James Alva Smith House	C.1900	136-00-02-022
_	James Alvie Smith House	C.1890	135-00-03-055
71	James Ellis House	NA	131-03-04-001
72	Jenny Hill (Benjamin Lee House)	C.1827	NA
_	Jim Floyd House	NA	027-00-01-067
	Joe Dixon Cox Home	C.1890	092-00-05-008
-	Johnson House	C.1910	043-00-01-017
77	Johnson House	C.1935	NA
76	Johnston House	C.1910	134-00-01-131
	Kings Highway	C.1730	NA
	Klondike School	C.1935	NA
_	Labon House	C.1890	137-00-02-030
	Lewis Home	C.1900	113-00-02-035
	Little River Bridges	NA	NA
	Little River United Methodist Church	C.1894	118-15-07-013
	Long-Brown Tenant House	C.1920	NA
	Mary Juel House	C.1848	131-03-12-008
	McCorsley House/Abbey Green Restaurant	C.1910	NA
	McDaniel House	C.1925	035-00-01-009
	McDowell Old House	C.1830	194-00-02-012
	McDowell Place	C.1880	190-00-03-059
00		0.1000	

91 McGaug	an/Lovett House	C.1890	028-00-01-062
92 Mill Swa	mp School	C.1928	054-00-01-110
93 Myrtle M	loore Home	C.1914	110-00-01-009
94 Oak Gro	ve Elementary School	C.1933	010-00-01-016
95 Oak Gro	ve School/Everett Hyman	C.1910	120-00-03-023
96 Old Bucl	k House	C.1870	183-00-04-071
97 Old Holli	iday House	C.1910	NA
	Hooks/Cooper House	NA	014-00-01-128
99 Old Pee	Dee School	C.1920	134-00-01-035
100 Old Wad	ccamaw Pottery Bridge	NA	135-00-04-002
	mmond Home	C.1910	006-00-01-004
102 Parker F	arm	C.1905	158-00-01-045
103 Parker H	louse/Collins Home	NA	126-00-01-011
	Swamp Missionary Baptist Church	NA	158-00-01-042
105 Pee Dee		C.1910	NA
106 Plantatio	-	C.1888	183-00-03-040
107 Powell/F		C.1898	009-00-01-055
108 Price Ho		NA	125-00-02-056
109 Prince H		C.1911	049-00-01-003
	Graham Homestead	C.1890	028-00-01-066
	/oodward Home	C.1905	160-00-03-070
112 Ray Fau		C.1860	178-00-01-048
113 Robert S		C.1905	179-00-03-040
	arvis/Ike and Jane Ammons Home	C.1880	179-00-01-024
	rie Small Ham House	C.1927	034-00-01-015
116S.C.Mor		NA	169-00-03-016
	.M.E Church	NA	NA
118 Sam Ra		C.1923	097-00-03-029
119 Santee (		NA	137-00-01-016
	Thompson House	C.1880	169-00-03-052
	e Methodist Episcopal Church South	C.1894	179-00-05-012
122 Springm		NA	186-08-04-001
	House/Baskerville Hall	C.1900	NA
124 Stevens		NA	098-00-01-005
125 Stricklan		C.1890	036-00-01-029
	nd/Perritt Home	C.1870	NA
	oper Company Store	C.1905	179-00-01-044
	Beaty Home	C.1910	NA
129 U.T. Flov	•	NA	036-00-01-016
130 Upper M		C.1828	170-00-04-012
131 W.B. Hu		C.1820	160-00-04-025
132 Waites Is		C.1888	132-00-01-001
133 Walter B		C.1888 C.1905	118-15-07-008
	Reaves House	C.1905 C.1898	126-00-01-002
135 Willie Tir		C.1898 C.1910	136-12-06-069
	Strickland Lewis	NA	045-00-01-014
1301 VOITINE	JUICHAIU LEWIS	INA	040-00-01-014

#### NATURAL RESOURCES ELEMENT

At the commencement of the Horry County Comprehensive Planning process, residents were asked to give their opinion about the current issues facing the County as well as their vision for the future of Horry County through a series of public meetings and surveys. Horry County residents repeatedly emphasized the importance of natural resources. They listed Horry County's abundant and unique natural heritage as a reason that they chose to reside here as well as a reason to remain in the area. Residents also made it clear that protecting and conserving natural resources should be a top priority for the County so that future generations can benefit from the many rewards that a healthy ecosystem can provide.

Horry County is the home to truly unique natural resources. From the black waters of the Waccamaw and the clear waters of the Atlantic Ocean to the unique Carolina Bays and rare and endangered species habitat, it is readily apparent the reasons so many people visit and live here. When asked what the major issues facing the County are, many people responded, "the reason I moved here is disappearing". Many times, the broad notion of natural resources, their effect on our surroundings and our well being, is difficult to express. One of the most difficult parts of attempting to conserve environmental resources is the understanding that they must be viewed holistically.

Conserving natural resources and maintaining a healthy environment is not just about water quality or tree preservation, it is about understanding the interconnectedness of our ecosystem and using natural resource based planning to ensure that future development respects the characteristics that make Horry County so unique. Natural resource based planning starts with conducting a natural resources inventory so a community can see its assets. It then requires that resources be prioritized while recognizing that not all natural resources can be protected. Then, plans and regulations direct development to the areas most suited for it, ensuring minimal impact on priority natural resources through the location, design and engineering of new development (NEMO, Sustainable: Attainable?).

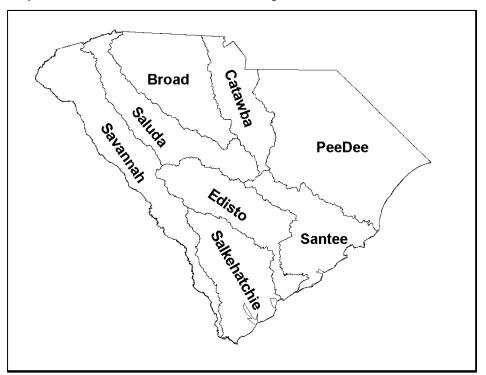
The conservation of our natural environment is not just to ensure that the protection of attractive surroundings. Humans, animals, plants, and water all share an ecosystem; the overall health and biologic diversity of which is not just a measure of natural resources but also the health of all of its varied inhabitants. Horry County and its residents and visitors share responsibility for this delicate ecosystem and doing their part to ensure that its health is maintained.

#### Watersheds

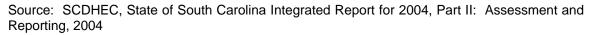
A watershed is the land that water flows across or through on its way to a common stream, river, or lake. Water flows across land are usually the result of rainfall, which generates stormwater runoff. Areas with high water tables also support sustained dry weather flows into low-lying areas, such as ditches and creeks. Flows are also supported by groundwater emissions, including artesian springs.

Depending on the specific management need, a watershed can be defined broadly, such as the drainage for an entire river or lake, or very narrowly, such as the drainage feeding

just a small creek or pond. The broadest spatial scale is termed a "basin" and the smallest, a "catchment". In South Carolina, eight basins have been defined (**Map 1**). Horry County lies wholly within the Pee Dee basin.



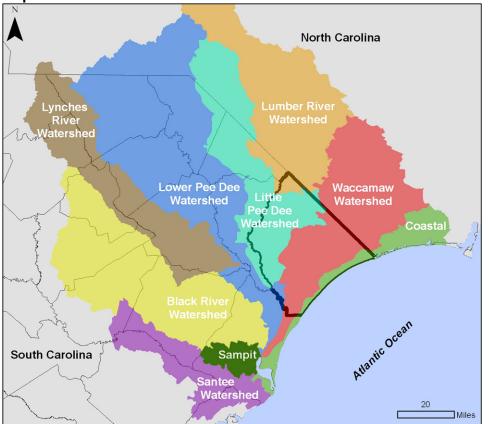




As depicted in **Map 2**, the Pee Dee Basin incorporates 74 watersheds and 4.8 million acres within the State of South Carolina (a portion of the basin resides in North Carolina). The following sub-basins lie within the Pee Dee Basin: Upper, Middle and Lower Pee Dee, Lynches, Lumber, Little Pee Dee, Black, Waccamaw and Coastal Carolina. Within the Pee Dee Basin are the Lynches River Basin, the Black River Basin, the Pee Dee River Basin, and the Waccamaw / Atlantic Intracoastal Waterway Basin. There are a total of 8,075 stream miles, 15,984 acres of lake waters, and 25,195 acres of estuarine areas in the basin (SCDHEC, Watershed Water Quality Report, Pee Dee Basin, 2000).

Within Horry County, all the lands to the east of the Atlantic Intracoastal Waterway (AIWW) lie in the Coastal Carolina sub-basin. Water from this sub-basin flows into the coastal waters of the Atlantic Ocean or into the AIWW. The lands to the west of the AIWW drain into either the Pee Dee River or the Waccamaw River. Both of these rivers have their headwaters in North Carolina. They flow through Horry County into Georgetown County where they converge with the AIWW. The merged waters flow past the City of Georgetown into Winyah Bay and then discharge into the Atlantic Ocean. The natural resources of Horry County are largely defined by these major waterways, their tributary creeks and associated floodplains.





Source: Waccamaw Watershed Academy, Coastal Carolina University

The Upper, Lower and Middle Pee Dee Sub-basins encompass the flows of the Great Pee Dee River. These sub-basins are located in Marlboro, Chesterfield, Darlington, Florence, Dillon, Marion, Williamsburg, Horry, and Georgetown Counties, and encompass twenty-two (22) watersheds and 4.029 square miles within South Carolina (see Table 16). Of the approximately 2.5 million acres, 33.4% is agricultural land, 25.7% is forested land, 27.9% is forested wetland, 6.3% is urban land, 2.7% is scrub/shrub land, 2.6% is water, 1.2% is non-forested wetland, and 0.2% is barren land. The urban land percentage is comprised chiefly of the Cities of Florence. Darlington. Bennettsville, and Dillon. There are approximately 4,669 stream miles, 10,864 acres of lake waters, and 17,676 acres of estuarine areas. The Great Pee Dee River flows across the North Carolina / South Carolina state line and accepts drainage from Thompson Creek, Crooked Creek, Cedar Creek, Three Creeks, and Black Creek. The river then accepts drainage from Jeffries Creek, Catfish Creek, the Lynches River Basin, the Little Pee Dee River, the Black River Basin and the Waccamaw River Basin before draining into Winyah Bay (SC DHEC Watershed Water Quality Assessment, Pee Dee River Basin, 2005 (in press)).

The Waccamaw River Basin is located in Horry and Georgetown Counties, and encompasses five (5) watersheds and 765 square miles. The Waccamaw River Basin includes the AIWW flows. As indicated in **Table 16**, of the almost half million acres, 36.9% is forested wetland (swamp), 26.5% is agricultural land, 19.2% is forested land, 10.5% is urban land, 2.8% is scrub/shrub land, 2.2% is non-forested wetland (marsh),

1.7% is water, and 0.2% is barren land. The urban land percentage is comprised chiefly of the Cities of Conway, Georgetown, Myrtle Beach, and North Myrtle Beach. There are approximately 784 stream miles, 2,373 acres of lake waters, and 22,910 acres of estuarine areas in this watershed. The Waccamaw River flows across the South Carolina state line from North Carolina and accepts drainage from Kingston Lake and the AIWW via Socastee Creek. The Waccamaw River then drains into the Pee Dee River as it forms Winyah Bay and drains into the Atlantic Ocean (SC DHEC Watershed Water Quality Assessment, Pee Dee River Basin, 2005 (in press)).

The Pee Dee Coastal Frontage Basin is located in Horry and Georgetown Counties, and encompasses 2 watersheds and 358 square miles. This fragmented coastal basin drains directly into the Atlantic Ocean. Of the 228,914 acres, 59.2% is water, 14.7% is urban land, 8.8% is forested wetland (swamp), 6.7% is forested land, 5.2% is non-forested wetland (marsh), 3.5% is agricultural land, 1.2% is barren land, and 0.7% is scrub/shrub land (**Table 16**). The urban land percentage is comprised chiefly of the Cities of Myrtle Beach and North Myrtle Beach. There are approximately 92 stream miles in this basin, 155 acres of lake waters, and 3,521 acres of estuarine areas. The Little River flows back and forth across the SC/NC state line forming a portion of the AIWW and draining to the Atlantic Ocean through the Little River Inlet. The Grand Strand Beaches and their swashes all drain to the Atlantic in this watershed, as does Murrells Inlet, Pawleys Inlet, and North Inlet and their tributaries (SC DHEC Watershed Water Quality Assessment, Pee Dee River Basin, 2005 (in press)).

	Waccamaw River/AIWW Basin	Great Pee Dee River Basin (Upper, Middle, Lower)	Pee Dee Coastal Frontage Basin
Sub-watersheds	5	22	2
Total Acres	765 square miles	4,029 square miles	358 square miles
% Forested	19.2%	25.7%	6.7%
% Swamp	36.9%	23.0%	8.8%
% Scrub land	2.8%	2.7%	0.7%
% Urban land	10.5%	6.3%	14.7%
% Marsh	2.2%	1.2%	5.2%
% Water	1.7%	2.6%	59.2%
% Agriculture	26.5%	33.4%	3.5%
% Barren	0.2%	0.2%	1.2%
Stream Miles	784 miles	4,669 miles	92 miles
Lake Waters	2,373 acres	10,864 acres	155 acres
Estuarine areas	22,910 acres	17,676 acres	3,521 acres

Source: SCDHEC, Watershed Water Quality Report, Pee Dee Basin, 2005

Man-made changes to a watershed may be feasible, but this means taking on costly and constant maintenance of those changes and, despite all the maintenance, communities remain vulnerable to floods and other disasters. In contrast, a community that makes sensible decisions on activities near the river can avoid a costly maintenance burden while sustaining their community's use and safe enjoyment of a healthy river system (EPA, Principles of Watershed Management). This consideration also pertains to unintentional alterations to flows that can result from bridging, construction in the

floodplain, and installation of impervious cover and ditching in uplands. Without careful planning, the cumulative effects of these unintentional alterations can lead to or worsen flooding.

#### Ecosystem Biodiversity

The structure and functions of ecosystems are also tightly linked to the watersheds of which they are a part. Water flowing through the landscape links upstream to downstream, stream channels to floodplains and riparian wetlands, and surface waters to ground water. As the water flows, it picks up pollutants deposited on the land. This causes pollution generated across the landscape to ultimately make its way into rivers, lakes, and other ecosystems. Since pollution is a consequence of human land use, development has the potential to lead to significant environmental degradation (Ecological Society of America, Sustaining Healthy Freshwater Ecosystems, 2003).

The consequences that arise when ecosystems are deprived of adequate water, proper timing of flows, and suitable water quality often become apparent to people only after the degradation begins to interfere with their personal use of water. For example, greater attention is paid when beaches are closed, drinking water is contaminated, or fishing advisories are issued. Achieving ecological sustainability requires recognizing the interdependence of people and the environments of which they are a part (Ecological Society of America, Sustaining Healthy Freshwater Ecosystems, 2003).

People derive many tangible goods from natural ecosystems including seafood, game animals, and timber that are important and familiar parts of the economy. What is less appreciated is the natural ecosystems' performance of intangible life-support services, which are often taken for granted. Without these systems human civilizations would cease to thrive. They include: 1) the purification of air and water, 2) detoxification and decomposition of wastes, 3) regulation of climate, 4) regeneration of soil fertility, and 5) production and maintenance of biodiversity.

Because most of the benefits of a healthy environment carry no price tags and cannot be bought and sold, changes in their supply may or may not be readily apparent. As development and resource consumption continues to increase, it is essential for local and global ecosystem services to be identified and monitored and that their value incorporated into the decision-making processes (Ecological Society of America, Ecosystem Services: Benefits Supplied to Human Societies by Natural Ecosystems, 1997).

Based on available scientific evidence, it is clear that ecosystem functions are essential to healthy communities. Ecosystems operate on such a grand scale and in such intricate and little-explored ways that most could not be replaced by modern technology. The built environment is already impairing the flow of ecosystem services on a large scale. If current trends continue, human involvement may dramatically alter virtually all of Horry County's remaining natural ecosystems within a few decades (Ibid.).

Human forces interact with the natural environment to directly shape the condition of land and the quality of water. For example, increasing impervious surfaces in the urban areas leads to increased and contaminated runoff. Removing vegetation along drainage areas increases stormwater flow, leading to the erosion of soils, thus increasing the velocity of the water. The contaminants this water contains can be lethal to living things or it can create health hazards, reducing the quality of life (Ibid).

In addition, based on current scientific evidence, many of the human activities that modify or destroy natural ecosystems may cause deterioration of ecological services whose value, in the long term, far outweighs the short-term economic benefits society gains from those activities. Considered globally, very large numbers of species and populations are required to sustain ecosystem services. The decisions affecting overall ecosystem health are the ones made every day, locally, all over the world (lbid).

It is essential the decision makers for Horry County see the decisions made on the local level have very far-reaching effects and consequences. Land use and development policies should strive to achieve a balance between sustaining vital ecosystem services and pursuing the worthy goals of economic development. Watershed ecology is essential because it teaches us watersheds have structural and functional characteristics that can influence how human and natural communities coexist within them. The watershed's ability to naturally process rainfall runoff, recharge groundwater, transport sediment, perpetuate plant and animal succession, etc. are absolutely necessary for the health and safety of a community and its residents. The small headwaters streams are recognized to play an especially important role in this regard. (Meyer, J. L, et al. 2003. *Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands*. American Rivers and Sierra Club). It is crucial to ensure decisions regarding land use and development take into account the effects they will have on watershed structure and functional characteristics (ibid.).

When discussing natural resources, it is essential to take a holistic approach to conservation. The effects of one individual action or development may not be clearly visible, but the cumulative effect of many actions and many developments, which leads to widespread ecosystem dysfunction, is becoming clear. A healthy, functioning watershed ecosystem is much greater that the sum of its individual parts, but it is the break down of the individual part which leads to a failing ecosystem. Natural resource based planning will help guide development in such a manner the function of watershed ecosystems are sustained. These planning techniques are crucial for the health and safety as well as the long-term economic viability of the County.

#### Natural Resources Inventory

#### Water Resources

#### **Public Water and Sewer Services**

The Grand Strand Water and Sewer Authority (GSWSA) is the major supplier of potable water for Horry County. The Bull Creek Regional Water Treatment Plant, the main water treatment facility used by GSWSA, can treat up to 45 million gallons of water each day. Untreated surface water is pulled from the Bull Creek, which is a tributary of the Great Pee Dee and Little Pee Dee Rivers. The Bull Creek Regional Water System provides high quality drinking water to GSWSA customers throughout Horry County, including the City of Conway, the Town of Aynor, the Town of Loris, as well as the City of North Myrtle Beach, Myrtle Beach, and Surfside Beach, and the Little River, Garden City and Socastee and Carolina Forest areas. GSWSA has over 1,000 miles of water lines in service with an additional 25 planned annually. GSWSA owns about 8,000 acres of land at and around the treatment plant to buffer and preserve water quality and deal with

sewer disposal. Some is also used for permitted land application of treated sewage effluent, thereby reducing the need for discharge into the rivers. The Water Treatment Plant meets or exceeds all state and federal requirements for water quality and safety (Grand Strand Water and Sewer, Water Quality Report, 2005).

The Bucksport Water System supplies the southeastern part of the County with drinking water. The water is provided through four production wells drilled over 600 feet deep into the Black Creek Aquifer. This system also has a connection to GSWSA for emergency situations. The Bucksport Water System worked with SC DHEC, the County, and the Waccamaw Regional Council of Governments to develop a Wellhead Protection Program to help prevent contamination of the drinking water in the area. The fluoride concentration level of the Bucksport Water System exceeds the limits set by DHEC but not that set by EPA. The elevated fluoride levels are due to the unique soil mixture in the area of the wells (Bucksport Water System, Water Quality Report, 2005).

The GSWSA also operates a Surface Water Treatment Facility located in Myrtle Beach. It withdraws and treats water from the Atlantic Intracoastal Waterway. The facility is permitted to treat up to 40 million gallons of water daily. This water is used by the cities of Myrtle Beach and North Myrtle Beach. The Water Treatment Plant meets or exceeds all state and federal requirements for water quality and safety (Myrtle Beach Surface Water Treatment Facility, Water Quality Report, 2005).

Sewage treatment is conducted at eight wastewater treatment plants (WWTPs) operated by GSWSA. The treated effluents are either discharged into the rivers or onto land. Federal permitting of these discharges is coordinated by the Waccamaw Council of Governments under the Clean Water Act's Section 208 program. The WWTPs are:

- The J.L. Schwartz South Strand Regional Wastewater treatment plant is located in the Burgess Community. This plant is permitted to treat up to 14.35 Million Gallons per day (MGD) of wastewaster and discharge the treated effluent to either the Intracoastal Waterway / Waccamaw River near the Georgetown County line, onto the land at Grand Strand Water & Sewer Authority's 1,600 acre Tip Top Tree Farm, onto three privately owned golf courses, or onto the land at one of our three turf farm sites. The plant is scheduled to be upgraded to a 19.35 MGD capacity in 2007;
- The George R. Vereen North Strand Regional Wastewater Treatment Plant (Vereen Plant) is located in the Wampee community south of Little River. It is permitted to discharge 7 MGD of highly treated effluent into selected Carolina Bays and the Intracoastal Waterway;
- The Myrtle Beach WWTP plant is permitted to treat 17 MGD. Treated effluent is discharged into the Intracoastal Waterway/Waccamaw River near the Georgetown City line. The plant is scheduled for expansion to 22.4 MGD in 2007;
- The Conway WWTP is capable of treating 4.0 MGD. The treated effluents are discharged into a swampland on the Waccamaw River;

- The Longs Wastewater Treatment Plant is a small 200,000 gallons per day lagoon plant serving the Longs community. This plant is scheduled to be placed in standby in 2007. Wastewater from the service area will be piped to the Vereen WWTP;
- The Bucksport Wastewater Treatment Plant is a small 200,000 gallons per day lagoon plant serving the Bucksport community. This plant is scheduled for an upgrade by 2010 to accommodate additional growth in the area;
- The Loris Wastewater Treatment Plant treats 700,000 gallons per day and discharges to Pleasant Meadow Swamp outside the town of Loris. The plant is scheduled to be expanded to 1 MGD to accommodate growth in the area;
- The Green Sea/Floyds Wastewater Treatment Plant is a small treatment plant that serves the 2 schools and several businesses in the area.

#### Surface Water Quality

In 1972 Congress enacted the Clean Water Act ("CWA" or "the Act") "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" so as to support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water." SC DHEC has been delegated authority to implement the provisions of the CWA through S.C. Regulation 61-68, *Water Classifications and Standards* and S.C. Regulation 61-69, *Classified Waters*. Regulation 61-68 establishes water classifications based on designated uses (DUs) tied to water quality standards and criteria.

By federal law, the waters classified for regulation under the Clean Water Act are those defined as all the "waters of the United States" (33 CFR Part 328). These generally include all natural surface waters including some wetlands. A complete list of water bodies and their specific classification can be found in S.C. Regulation 61-69, *Classified Waters*.

The types of classified waters in Horry County are listed below along with their designated uses (DU). Examples of the most important DUs are: (1) supports recreational activity, (2) supports aquatic life, (3) supports fish or shellfish consumption, (4) drinking water source. For each classification, a set of water quality standards and criteria exist. Failure to maintain these standards is taken as evidence of lack of attainment of designated use. SC DHEC is charged with monitoring compliance with the water quality standards. It is the intent and purpose of the regulations that waters, which meet the standards shall be maintained and waters, which do not meet standards shall be improved (SCDHEC, State of South Carolina Integrated Report for 2004, Part II: Assessment and Reporting, 2004).

- **Class ORW**, or "outstanding resource waters", is freshwater or saltwater which constitute an outstanding recreational or ecological resource, or those freshwaters suitable as a source for drinking water supply purposes, with treatment levels specified by the Department.
- **Class FW**, or "freshwater", is water suitable for primary and secondary contact recreation and as a source for drinking water supply, after conventional treatment. These waters are also suitable for fishing, and the survival and propagation of a

balanced indigenous aquatic community of fauna and flora. This class is also suitable for industrial and agricultural uses.

- **Class SFH**, or "shellfish harvesting" water, is tidal saltwater protected for shellfish harvesting, and is suitable also for uses listed in Class FW.
- **Class SA** comprises "tidal saltwater" suitable for primary and secondary contact recreation, crabbing and fishing. These waters are not protected for harvesting of clams, mussels, or oysters for market purposes or human consumption. The waters are suitable for the survival and propagation of a balanced indigenous aquatic community of marine fauna and flora.
- **Class SB** is "tidal saltwater" suitable for the same uses listed in SA. The difference between the Class SA and SB saltwater concerns the Dissolved Oxygen (DO) limitations. Class SA waters must maintain a certain daily DO average.

The majority of freshwater bodies in Horry County fall within the freshwaters (FW) class, which should support recreational activity, aquatic life and fish consumption. Several sections of the coastal waters have been designated as Class SFH due to the presence of potentially harvestable shellfish. SCDHEC has signaled the intent to add a recreational DU to coastal salt waters.

Every two years, SCDHEC is required to report, which waterbodies fail to meet water quality standards and hence are not attaining their designated uses. This is referred to as the 303(d) list of impaired waterbodies. The 2004 and 2006 lists for waters and sediment in Horry County is provided in **Table 17**. It is based on samples collected between 2000 and 2004. Sites are listed by water or sediment quality criteria that have been violated, such as adequate dissolved oxygen, or excessively high turbidity, fecal coliform, heavy metals or pesticides. One site, Bear Swamp, is 303(d) listed for failure to demonstrate an adequate diversity of macrobenthic invertebrates (animals without a backbone).

It is important to note that both the 2004 and 2006 sampling periods, 1998-2002 and 2000 – 2004 both included years during which Horry County was in a period of severe drought, i.e., 1999 – 2002. Higher rainfall would be expected to result in lower water quality due to pollution from stormwater runoff.

## **Table 17**: 303(d) list of waters and sediment in Horry County, 2006 (AL = Aquatic Life DU; REC = recreational DU)

(AL = Aquatic Life DU; REC = recreational DU)				
Locations	Dissolved Oxygen (AL)	Fecal Coliform (REC)	Heavy Metals in Sediments (AL)	Macrobenthic invertebrates (AL)
Waccamaw Rive	er			
Buck Creek	2004: DO		2004 and 2006: Copper and Nickel	
Hwy 9 Boat Landing			2004 and 2006: Copper	
Simpson Creek			2004 and 2006: Zinc and Nickel	
Bear Swamp				Х
Lower Waccamaw River	TMDL approved 1999			
Kingston Lake	Watershed		1	
Crabtree Swamp @ Hwy 501		X (site sampled only 1 year)		
Crabtree Swamp @ Long Ave	TMDL approved 1999	X		
Kingston Lake	TMDL approved 1999	X		
Atlantic Intracoa	astal Waterway			
Little River			2004 and 2006: Copper	
53 <sup>rd</sup> Ave NMB			2004 and 2006: Copper	
Hwy 501			2004 and 2006: Copper	
Socastee		2006: FC		
Atlantic Intracoastal Waterway	TMDL approved 1999			
Pee Dee Rivers				
Cedar Creek Little Pee Dee	2004: DO		2004: Copper	
River Chinners Swamp		2004: FC		

X = listed for this parameter since inception of 303(d) program in 1996.

(Source: SCDHEC 303(d), List of Impaired Waterbodies, 1994-2006; URL: <u>http://www.scdhec.net/environment/water/tmdl/index.htm#303d</u>)

Section 303 of the Clean Water Act established the principle of the total maximum daily load (TMDL) as a means of reducing water pollution in impaired waters. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. In other words, it is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources and includes a margin of safety and consideration of seasonal variations (SCDHEC).

Further detail on the water quality parameters used in Tables 17 and 19 are provided below:

Parameter	Abbreviation	Water Quality Effect
Dissolved Oxygen	DO	Essential for the survival of aquatic organisms. If the amount of oxygen dissolved in waterfalls below the minimum requirements for survival, aquatic organisms may die. Pollution also can cause declines in DO. Decreasing DO is a negative water quality indicator of aquatic life.
Turbidity	TURB	Turbidity is an expression of the scattering and absorption of light through water. The presence of clay, silt, fine organic and inorganic matter, soluble colored organic compounds, and plankton and other microscopic organisms increases turbidity. Increasing turbidity can be an indication of increased runoff from land. Increasing turbidity is a negative water quality indicator.
Heavy Metals	CU, ZN, NI	These metals are toxic is aquatic life. They are not soluble in water and hence are present primarily in the sediments. They are introduced into natural waters by runoff from roads as they metals are common components of automobiles and gasoline.
Macrobenthic Invertebrates		The abundance and diversity of the native macrobenthic invertebrates is used as a biotic indicator of ecosystem health. High abundance and diversity indicate water quality and habitat are in excellent condition. The use of this indicator requires knowledge of "natural" abundance and diversity. This is not known for the Pee Dee Basin making the 303(d) listing of Bear Swamp suspect.
Fecal Coliform Bacteria	BACT	Coliform bacteria are present in the digestive tract and feces of all warm-blooded animals. This type of bacteria is generally not harmful, but their presence indicates that surface waters may contain pathogenic microbes. Diseases that can be transmitted to humans through water contaminated by improperly treated human or animal wastes are the

 Table 18: Common water quality indicators

primary concern. Correlations have been shown between fecal coliform numbers in recreational and drinking waters and the risk of adverse health effects. Increasing bacteria levels is a negative water
quality indicator for recreational use.

Source: SCDHEC, Watershed Water Quality Report, Pee Dee Basin, 2000

SCDHEC also uses their monitoring data to evaluate trends in water quality over time. The table below illustrates trends in water quality at monitoring stations throughout Horry County from 1989-2003. "Increasing" indicates a statistically significant increasing trend in the presence of the testing parameter, "Decreasing" a statistically decreasing trend in the presence of the testing parameter, "\*" indicates no statistical trend, and "N/A" indicates insufficient data available to assess trends. The next trend analysis is scheduled to be performed in 2008 with results available to the public in 2010.

Station	Waterbody	Dissolved	Turbidity	Bacteria
Number		Oxygen		
PD-038	Lumber River @ US 76	Decreasing	*	Decreasing
PD-042	Little Pee Dee River @ US501	Decreasing	Increasing	*
PD-189	Little Pee Dee River @ US 378	*	*	*
PD-350	Little Pee Dee River @ Punchbowl	*	N/A	*
	Landing			
PD-351	Cedar Creek	*	Decreasing	*
PD-176	Lake Swamp	*	*	*
PD-177	Chinners Swamp @Aynor	*	*	Decreasing
PD-352	Chinners Swamp @ Gunters Island Rd	*	*	*
PD-158	Crab Tree Swamp @ Long St Conway	Increasing	*	*
PD-107	Kingston Lake @ Lakeside Dr Conway	*	Decreasing	Increasing
PD-362	Buck Creek @ SC 905	*	*	Increasing
MD-124	Waccamaw River @ SC 9	*	Increasing	*
PD-363	Simpson Creek @ SC 905	*	*	*
PD-369	Waccamaw River @ Reeves Ferry Rd	Decreasing	*	*
MD-085		Increasing	Increasing	Decreasing
MD-087	ICWW @ 501 bridge	*	Increasing	Decreasing
MD-088	ICWW @ 1 mile S of 501 bridge	*	Increasing	Decreasing
MD-089	ICWW @ 2 miles S of 501 bridge	*	*	*
MD-127	ICWW @ SC 544	*	Increasing	Increasing
MD-110	Waccamaw River @ US501 Bypass	*	*	*
MD-111	Waccamaw River @ Cox Ferry Rd	Decreasing	*	*
MD-145	Waccamaw River@1 mile S Bucksville Landing	Decreasing	Decreasing	*
MD-136	Waccamaw River@¼ mile N -ICWW	Decreasing	*	*
MD-146	Waccamaw River @ ICWW	Decreasing	*	*
MD-137	Waccamaw River @ mouth-Bull Creek	Decreasing	*	*
MD-162	Little River - Southern end	*	*	Decreasing
MD-125	ICWW @ SC 9 – Little River	*	*	Decreasing
MD-091	ICWW @ 4 miles N of US 501 bridge	*	Increasing	Decreasing

#### **Table 19**: Long-term trends in water quality, 1989-2003

Source: SCDHEC, Bureau of Water, Watersheds and Planning, 2005

**Table 19** shows that out of 28 total sampling areas, 18 had at least one water quality indicator showing a statistically significant decline in water quality. Note that a decreasing trend in DO is evidence of a decline in water quality whereas an increasing trend in fecal coliform is evidence of declining water quality. Thirteen (13) sites showed at least one water quality indicator as having a statistically improving trend in water quality.

As part of its 2006 303(d) report, SCDHEC also published a list of Waters of Concern. These are sites that contravened the Enterococcus water quality standards used to establish beach swimming advisories (**Table 20**). This signals the intent of the U.S. Environmental Protection Agency (USEPA), to require South Carolina to identify these sites as impaired waters.

WAC-005A	Myrtle Beach at 7th Ave S	North Myrtle
		Beach
WAC-009A	Myrtle Beach at Whitepoint Swash	Myrtle
		Beach
WAC-015	Myrtle Beach at Singleton Swash Arcadia	Myrtle
		Beach
WAC-016A	Myrtle Beach at Cane Patch Swash	Myrtle
		Beach
WAC-017A	Myrtle Beach at Deep Head Swash	Myrtle
		Beach
WAC-020	Myrtle Beach at 24th Ave North	Myrtle
		Beach
WAC-022A	Myrtle Beach at Withers Swash	Myrtle
		Beach
WAC-025A	Myrtle Beach at Midway Swash	Myrtle
		Beach
WAC-028	Myrtle Beach at Pirateland Swash	Myrtle
		Beach
WAC-029A	Myrtle Beach at Discharge S-Ocean Lakes	Myrtle
	Campground	Beach
WAC-031A	Myrtle Beach at Swash at 5th Ave. N	Surfside
		Beach

**Table 20**: Waters of Concern in Horry County based on Enterococcus Measurements in the Surf Zone

Source: SCDHEC

Since 1976, SC DHEC has been monitoring fish for pollutants (http://www.scdhec.gov/environment/water/fish/index.htm). Most of the fish sampling sites in Horry County have been continuously 303(d)-listed for mercury contamination. This has lead to the posting of fish consumption advisories (**Table 21**). For reasons not understood, the mercury concentrations in fish from the Waccamaw and Pee Dee Rivers are the highest in the state (SCDHEC, 303(d) List of Impaired Waterbodies, 2004).

TMDL TARGET DATE	LOCATION	STATION
2019	LUMBER RIVER @ RICEFIELD COVE	PD-038
2017	LUMBER RIVER @ CAUSEY LANDING	PD-664
2017	LITTLE PEE DEE RIVER @ SANDY BLUFF	PD-054
2017	LITTLE PEE DEE RIVER @ GUNTER'S LAKE	PD-657
2017	LITTLE PEE DEE @ HUGHES LANDING	PD-691
2019	LITTLE PEE DEE RIVER @ PUNCHBOWL LAND	PD-350
2017	LITTLE PEE DEE RIVER @ HWY 378	PD-620
2019	WACCAMAW RIVER @ SC HWY 9	MD-124
2017	WACCAMAW RIVER @ SC 31	CSTL-553

Table 21:	Sites on the 2006 303	(ď	) List for Mercur	y Contamination in Fish
		<b>ν</b> .		

SCDHEC protects public health by issuing fish consumption advisories based on their 303(d) list. The 2007 Fish Consumption Advisories are provided in **Table 22**.

WATERBODY	LOCATION	SPECIES OF FISH	ADVISORY
Little Pee Dee River		All Other Fish	1 meal a month
	From NC/SC State	Bowfin (Mudfish)	DO NOT EAT ANY
	Line to the Great Pee Dee River	Chain Pickerel	DO NOT EAT ANY
		Flathead Catfish	DO NOT EAT ANY
		Largemouth Bass	DO NOT EAT ANY
Waccamaw River		Black Crappie	1 meal a week
	From the NC/SC	Blue Catfish	1 meal a week
	State Line to U.S. Hwy 17	Bluegill	1 meal a week
	,	Channel Catfish	1 meal a week
		Redear Sunfish	1 meal a week
		Warmouth	1 meal a week
	From the NC/SC State Line to U.S.	Chain Pickerel	1 meal a month
	Hwy 17	Bowfin (Mudfish)	DO NOT EAT ANY
		Largemouth Bass	DO NOT EAT ANY
Atlantic Ocean	Atlantic Ocean off the SC Coast	King Mackerel less than 33 inches	No Restrictions **
	**EPA and FDA advise women who	King Mackerel 33-39 inches	1 meal a week **
	are or may become pregnant,	King Mackerel over 39 inches	DO NOT EAT ANY **

 Table 22:
 2007 Fish Consumption Advisories

nursing mothers, and children	Swordfish	1 meal a month **
under 14 not to eat any king mackerel,	Shark	DO NOT EAT ANY **
shark, swordfish or tilefish.	Tilefish	DO NOT EAT ANY **

Source: SCDHEC (http://www.scdhec.net/environment/water/fish/advisories.htm)

Sites on the 303(d) list are required by the CWA to develop a Total Maximum Daily Load (TMDL). This is a pollution source budget that identifies the loading reductions required to enable the receiving waters to attain water quality standards. A TMDL for dissolved oxygen was approved in 1999 for the Waccamaw River and AIWW. This was required for approval of NPDES discharge permits for the sewage treatment plants. Fecal colform TMDLs were approved for Murrells Inlet and Pawleys Island in 2005, but have not yet been implemented. As shown in the preceding tables, SC DHEC has set target dates for development of the remaining TMDLs. At this time, implementation of the TMDLs is strictly voluntary with financial incentives available through US EPA 319 grant funding. This voluntary status is subject to change as a new regulatory program is expected to increase local responsibilities for insuring improved water quality in stormwater runoff (National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Program for Small Municipal Separate Storm Sewer Systems (SMS4s)).

Regulatory monitoring associated with the CWA has been conducted by SCDHEC. This monitoring is done on a watershed basis. Due to financial limitations, sampling efforts are concentrated on a rotating basis amongst the eight basins in South Carolina such that each basin is studied at least once every five (5) years (SCDHEC, URL: http://www.scdhec.net/environment/water/shed/prog.htm).

The last intensive study of the Pee Dee and Coastal basins was conducted in 2003 and the next is scheduled for 2008. During the off years, only two sites are sampled once a month in the main stem of the Waccamaw River along with several sites in the larger tributaries. Detailed watershed water quality assessment reports summarizing the monitoring data are issued every five (5) years (SCDHEC, URL: http://www.scdhec.net/eqc/admin/html/eqcpubs.html#watershed).

The last was published in 2000. The 2005 report is still pending due to a switch over in data organization and computer hardware. Upstream, North Carolina's Department of Natural Resources conducts a similar monitoring program.

Other monitoring efforts include continuous water quality and quantity sensors maintained by the USGS with funding through the Waccamaw COG. This data collection supported the development of the DO TMDL. As indicated in **Table 19**, at least five (5) sites covered by this TMDL continue to experience declining DO with no sites showing an improvement. Since severe cuts were made to permitted discharges from the sewage treatment plants, the continuing decline in water quality is attributed to an increase in stormwater runoff of oxygen-demanding substances, such as eroded soils and organic refuse. This source of oxygen demand was not explicitly included in the DO TMDL and hence is not currently being monitored or controlled.

To support the increased demands of the new NPDES Phase II Stormwater Program, Horry County is now directly funding to the U.S. Geological Survey (USGS) to maintain continuous water quality and quantity sensors in the Little Pee Dee and upper Waccamaw River. The data from these sensors is made available in realtime to the public through the USGS website (http://waterdata.usgs.gov/sc/nwis/rt). The locations of these sensors are provided in the following **Table 23**:

**Table 23**: Continuous Gaging Stations in the Waccamaw River, Little Pee River and

 AIWW measuring water height and discharge

Station Number	Location Description	Paramet ers
02109500	WACCAMAW RIVER AT FREELAND, NC	1,2
02110400	BUCK CREEK NEAR LONGS, SC	1,2,3,4,5, 6,7,8
02110500	WACCAMAW RIVER NEAR LONGS, SC	1,2,4,5,6, 7
02110701	CRABTREE SWAMP AT CONWAY,SC	1,2,3,4,5, 6,7,8
02110704	WACCAMAW RIVER AT CONWAY MARINA AT CONWAY, SC	1,2,3,4,5, 6,7
02110725	AIW AT HIGHWAY 544 AT SOCASTEE, SC	1,4,5
02110729	TRIB. TO AIW AT HWY 707 AT SOCASTEE, SC	1,3
02110760	AIW @ MYRTLEWOOD GOLF COURSE @ MYRTLE BEACH, SC	1,2,3,5,6
02110777	AIW AT HIGHWAY 9 AT NIXONS CROSSROADS, SC	1,4,5,6
02110802	WACCAMAW RIVER AT BUCKSPORT, SC	1,4,5
021108125	WACCAMAW RIVER NEAR PAWLEYS ISLAND, SC	1,5,6
02110815	WACCAMAW R @ HAGLEY LAND. NR PAWLEYS ISLAND, SC	1,4,5,6
02135060	CHINNERS SWAMP NEAR AYNOR, SC	1,2,3,4,5, 6,7,8

1: water height; 2: discharge; 3: velocity; 4: dissolved oxygen; 5: temperature; 6: specific conductance, 7: turbidity and pH, 8: rainfall

#### Source: USGS

There are also several other programs operating within the County to assist with surface water quality issues, including Coastal Carolina University's Waccamaw Watershed Academy (http://www.coastal.edu/wwa/) and the Waccamaw Riverkeeper Program (http://www.winyahrivers.org/). Coastal Carolina University's Waccamaw Watershed Academy (WWA) operates under the aegis of the Burroughs and Chapin Center for Marine and Wetland Studies. Its mission is to meet local needs for expertise in the areas of watershed and wetland science and management through education, research, and public outreach. The WWA maintains a regulatory environmental quality laboratory that performs research and monitoring work throughout the Horry-Georgetown region. The WWA is currently working in collaboration with the City of Conway, Horry County and the US EPA to develop a watershed management plan for the Kingston Lake Watershed.

The Waccamaw Riverkeeper program is licensed by the Waterkeeper Alliance, which is headquartered in New York. The Waccamaw Riverkeeper is a paid, full-time position responsible for advocating compliance with environmental laws, identifying problems which affect the Waccamaw River, responding to citizen complaints, devising appropriate remedies for problems associate with the River, educating the public, and advocating for the public's right to protect and defend the environment (Winyah Rivers Foundation, Waterkeepers). The WWA, in partnership with the Waccamaw Riverkeeper, run a volunteer monitoring program in the Waccamaw River. The data are available at their website (http://gis.coastal.edu/volunteermonitoring/). This program is partially funded by Horry County as it helps meet part of the NPDES Phase II Stormwater Program requirements for public education, public involvement and illicit discharge detection.

#### **Coastal Resources**

The most recognizable and popular of all the natural resources in Horry County is the beach. All tidal saltwater within South Carolina is classified as suitable for primary and secondary contact recreation. The County is fortunate to have over 30 miles of sandy beaches and more than 24,000 acres of estuarine areas. These resources support wildlife habitat, recreation and serve as the primary draw for tourists from throughout the country. These tourists and the money they spend in Horry County are essential to the economic future of the County. Most other economic development along the beach would not be viable without the most significant natural resource in the County, the Atlantic Ocean and adjoining beaches. Therefore, maintaining high water quality to ensure safe swimming conditions is essential for the County's future.

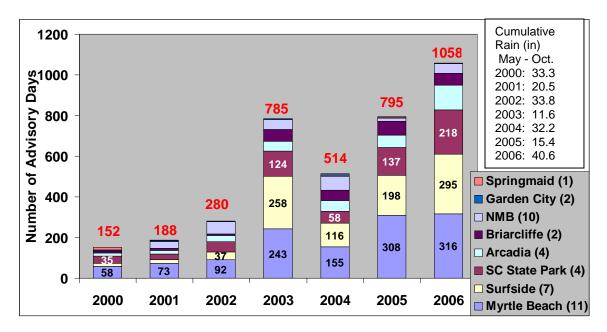
Since the beginning of the Beach Water Quality monitoring program in 1997, SCDHEC routinely collects water samples at over 40 locations on Horry County's beaches. Sampling occurs once per week in Horry County between May 15-October 15. These water samples are only tested for an indicator organism, the bacteria *Enterococci*. High enterococcus counts mean there is a greater chance of disease-causing organisms (pathogens) being present in the water. If high numbers of bacteria are found, a swimming advisory is issued for that portion of the beach (SCDHEC, Beach Monitoring Program, Quality Assurance Project Plan, 2004).

The results of the beach testing are available online at the US EPA's Beach Advisory and Closing On-line Notification website

(http://oaspub.epa.gov/beacon/beacon\_national\_page.main), and at Earth 911

(http://www.earth911.org/WaterQuality/index.asp).

The National Resources Defense Council also publishes an annual report (http://www.nrdc.org/water/oceans/ttw/ttw2006.pdf). A compilation of the data from Beacon website is provided below (**Graph 3**), suggesting an increase in swimming advisories over time. Another concern is likely contamination of beach sands by bacteria as described in the 2005 State of the Beach Report: Bacteria and Sand (http://www.nrdc.org/water/oceans/ttw/ttw2006.pdf) published by the Clean Beaches Council. Research is currently being conducted by Coastal Carolina University's WWA into a related problem of low dissolved oxygen in the surf zone (http://nautilus.baruch.sc.edu/longbay/index.html).



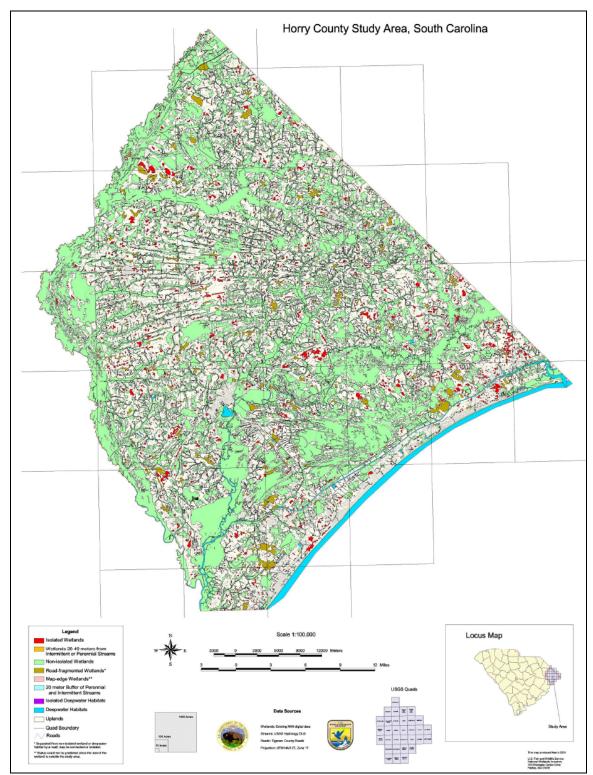
Graph 3: Number of Beach Advisory Days in Horry County, 2000 - 2006

#### Wetlands

Wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils (EPA-ACOE, Wetland Definition). Wetlands are essential components of the landscape of Horry County. Their functions are multiple and diverse and include:

- Critical breeding, nesting, and feeding habitats for many species of waterfowl, mammals, and reptiles
- Water quality protection and enhancement by moderating surface runoff, recharging groundwater supplies, and trapping and removing sediments, nutrients, and chemical pollutants
- Spawning and nursery grounds for many commercial fish and shellfish species
- Flood hazard reduction by reducing the velocity of flowing water, absorbing and slowly releasing floodwaters, thereby lowering flood peaks
- Recreational opportunities for bird watchers, hunters, canoeists, anglers, and others.

There are about 4.5 million acres of wetlands in South Carolina, about 23.4 percent of the state's land surface. Only four states – Alaska, Florida, Louisiana and Maine have a higher percentage of wetlands than South Carolina (SCDHEC, The Facts on Wetlands). Horry County is approximately 44% wetlands (Tiner et al, 2002). As shown in **Map 3**, wetlands are a major feature of the landscape in our county. Historically, the value of wetlands has been misunderstood, resulting in the destruction of more than 50 percent of the United States' naturally occurring wetlands. In the past two decades, 84 percent of wetland losses have occurred in the southeastern United States.



Map 3: Map of wetlands in Horry County, 2002

Source: Tiner, R.W., H. C. Bergquist, G. P. DeAlessio, and M. J. Starr. 2002. Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Selected Areas of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Northeast Region, Hadley, MA.

Since the enactment of the Federal Clean Water Act, the U.S. Army Corps of Engineers has issued permits to discharge material into waters of the United States, which includes wetlands (404 Certification). As the lead agency permitting activities in wetlands, the Corps determines what areas are wetlands and subject to federal regulations. Many states have a wetland permission program to augment the Federal program. South Carolina does not. This leaves several types of activities in wetlands unregulated including: discharge of untreated stormwater into wetlands, ditching to drain wetlands, and exempted activities such as silviculture (fisheries). As of 2007, Horry County has no wetland mitigation banks. As a result of incomplete regulatory coverage and lack of mitigation opportunities, 8% of the wetlands in Horry and Georgetown counties were lost between 1992 and 2001 (Jeff Allen, Clemson University's Storm Thurmond Institute).

In South Carolina several state programs that regulate activities in wetlands areas are tied to the Federal permitting program. The SCDHEC's Bureau of Water must issue a water quality certification for every federal permit that allows a discharge to state waters, including wetlands (401 Certification). SCDHEC's Office of Ocean and Coastal Resource Management (OCRM) must certify that any federal action in the coastal zone is consistent with state's coastal zone management plan. Activities in tidal wetlands require a permit from OCRM (Wetlands and Their Importance, DHEC).

Early in 2001, the U.S. Supreme Court made a ruling stating that isolated wetlands that have no channel connecting it to a larger body of water are not protected under the permitting requirements, explained above, of the Clean Water Act. The result of this ruling is that more than 400,000 acres of wetlands in South Carolina (10% of the state's total) may have had their protection removed. Isolated wetlands consist of many valuable and unique resources including Carolina bays.

Carolina Bays are isolated wetlands in natural shallow, elliptical, depressions that are largely fed by rain and shallow groundwater. Researchers believe Carolina bays are 30,000 to 100,000 years old, yet scientists are not certain of their origins. They are found primarily in North and South Carolina and Georgia but range from Florida to Delaware. They fill with rainwater during winter and spring and dry during summer months. When left in an unaltered condition, these bays are generally considered to be an isolated, freshwater wetland. The bays provide many of the values associated with wetlands including stormwater storage, water quality enhancement, and habitat for many wildlife species. Each bay may range in size of less than one acre to more than 1,000 acres. Only 10% of the original bays remain. (NRCS, Unique Wetlands Make a Comeback in Horry County). More than 97% of the Carolina bays once found in South Carolina have been destroyed or severely altered (University of Georgia, Carolina Bays Fact Sheet).

There have been successful wetland restoration programs in Horry County. The Natural Resource Conservation Services (NRCS) Wetland Reserve Program (WRP) provides cost-share to landowners to protect these wetland areas. For example, a severely altered 447 acre wetland area was restored to its original hydrology, and two Carolina bays brought back to life under the direction of NRCS. The impact of this successful project was doubled when two areas immediately adjacent to the Carolina bay were also restored. Two restorations were completed, one under WRP and one through a mitigation bank. The WRP site included 200 acres of a Carolina bay, and the mitigation bank consisted of 54 acres of another Carolina bay that was previously converted to

pastureland. The Horry County Conservation Foundation purchased the 54 acres of converted bay and restored the hydrology and vegetation. As a result, a total of 700 acres of converted Carolina Bay area was restored back to its original hydrology. (NRCS, Unique Wetlands Make a Comeback in Horry County).

#### Floodplains

Floodplains perform important natural functions. These functions include:

- Temporary storage of floodwaters
- Moderation of peak flows
- Maintenance of water quality
- Groundwater recharge
- Erosion prevention
- Wildlife habitat
- Recreational opportunities.

In Horry County, and nationally, the term floodplain has come to mean the land area that will be inundated by the overflow of water resulting from a 100-year flood, a flood which has a 1% chance of occurring any given year (SCDNR, Regulations for Floodplain Management).

Horry County has both non-tidal and tidal floodplains, as well as coastal high hazard areas and coastal barrier resource areas.

- Non-tidal floodplains
   Areas consisting of the floodway and the floodway fringe along rivers and streams. The floodway carries the high velocity water, while the floodway fringe is subject to shallow flooding from the low velocity water. These areas are designated as AE or A1-30 zones on the Flood Insurance Rate Map (FIRM).
- Tidal floodplains Areas subject to coastal tidal flooding by high tides, hurricanes, tropical storms, and steady onshore winds. Tidal floodplains are also designated as AE or A1-30 zones on the FIRM.
- Coastal high hazard areas Areas consisting of coastal shorelines subject to high velocity wind and wave action in addition to tidal flooding. They are designated as VE or V1-30 zones on the FIRM. Buildings in these zones must meet stringent standards because of forces they must withstand.
- Coastal Barrier Resource Areas Areas situated along environmentally sensitive coastal barriers. Federal flood insurance is not available for structures in these areas. (Horry County Comprehensive Plan, 1999)

Approximately 177,070 acres, or 24 percent, of Horry County's total land area is composed of 100-year non-tidal and tidal floodplains. Approximately 3,090 acres, or 0.4 percent, of Horry County's total land area is composed of 100-year coastal high hazard area floodplains, and 2,520 acres of this is classified as Coastal Barrier Resources Act areas (Horry County Comprehensive Plan, 1999).

The National Flood Insurance Program (NFIP) requires participating counties and towns, of which Horry County is one, to issue permits for all development in the 100-year floodplain. Development is broadly defined to include any man made change to the land including grading, filling, dredging, extraction, storage, subdivision of land, and the construction or improvement of structures. If state and federal permits are required, development may not begin until all necessary permits are issued. Proposed

development must not increase flooding or create a dangerous situation during flooding, especially for adjacent or nearby property owners. Structures must be built to minimize damage during flooding (SCDNR, Regulations for Floodplain Management).

Horry County has stricter standards than the NFIP minimums when it comes to building in the flood zones. The Horry County Flood Damage Prevention and Control Ordinance establishes provisions for residential and non-residential construction in all areas of special flood hazard where base flood elevation data have been provided. New construction or substantial improvement of all buildings (or manufactured homes) shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation. In addition, subdivisions shall be designed to minimize flood damage (Horry County Comprehensive Plan, 1999). For further Stormwater related information, as of obtaining copies of the Stormwater Ordinance and Design Manuals, please go to the Horry County Government website at http://www.horrycounty.org/ or call the Horry County Road and Drainage Hotline at (843) 381-8000.

## Land Resources

#### Slopes and Soils

The topography of Horry County is generally level to gently sloping, with elevations ranging from sea level to over 100 feet. According to the soil survey, the majority of soils in Horry County range between 0 to 6 percent in slope. As such, slopes greater than 15 percent are not a prevalent development constraint in Horry County. The elliptical or oval depressions characteristic of South Carolina's Carolina Bays are perhaps the only areas in Horry County where slopes exceed 6 percent. Most of the bays are aligned along a northwest-southeast axis parallel to one another in the central western portion of the county, as well as in a north to south axis east of S.C. Highway 90.

The majority of soils in Horry County are composed of clay, loam, and sand with generally poor drainage characteristics. Along the coast is a thin strip of soils with thick beds of level or dune sand, which provide better drainage. Poor soil drainage capacity and the lack of suitable land for septic tank absorption fields pose a potential threat to land development in rural Horry County. Avoiding intensive development in these areas may reduce stormwater drainage costs, soil erosion, water quality degradation, and public health concerns for groundwater.

The drainage capacity of soils is determined according to the intake of water when soils are thoroughly wet and receive precipitation from long-duration storms. Approximately 314,890 acres, or 43 percent, of the soil groups in Horry County have either high or medium to high run-off potential and, thus, poor drainage capacity and a slow infiltration rate. These areas are found throughout the County but are concentrated near major rivers and streams. Areas of low run-off potential, which account for approximately 71,240 acres, or 10 percent, occur in soils adjacent to the Atlantic Ocean and in an area near the southeastern border of Georgetown County. These soils have a higher infiltration rate and better drainage capacity.

Approximately 651,620 acres, or 88 percent, of Horry County soils have severe limitations for septic tank absorption fields. Soil type is important to septic tank suitability because the soil absorption field provides the final treatment and distribution of the wastewater of a septic system. To treat wastewater, a septic system relies heavily on the soil, where microorganisms help remove the organic matter, solids and nutrients left

in the water. (Lesikar, B., Septic Tank Soil Absorption Fields). Areas less suitable for septic tanks usually require special design, significant increases in construction costs, and increased maintenance. Approximately 50,810 acres, or 7 percent, of Horry County's total land area has moderate septic tank limitations, found mostly in the central and western portions of the County. Approximately 25,580 acres, or 4 percent, of the soils have slight septic tank limitations, and the majority of these soils are within incorporated areas paralleling the Atlantic Ocean. An area near the southeastern border of Georgetown County also has a concentration of soils with slight limitations.

#### Forestry

Forestry is a major land use in South Carolina, and the soil groups characteristic of Horry County are considered prime for forestland development. Forestlands provide one of the most varied and valuable natural resources and, if properly managed, provide an excellent sample of sustainable development practices. Some of the values forestlands provide are:

- Protection of both the quantity and quality of water supplies
- Outdoor recreational opportunities such as camping, hiking, picnicking, hunting, and bird watching
- Multiple uses while still supplying more than 5,000 products made from trees
- Habitat for a variety of wildlife, including both game and non-game species
- Environmental quality by controlling noise, abating winds, preventing soil erosion, and providing scenic beauty.

In 2001, Horry County ranked 6<sup>th</sup> in the state in cash receipts from timber harvests with a total delivered value of \$31,379,566 from 426,871 acres of private forests, which represents 98% of total forested land in the County (Clemson University, Department of Forestry and Natural Resources, 2001).

Unmanaged and unregulated forestry operations can accelerate soil erosion and decrease the water quality in streams and rivers. The South Carolina Forestry Commission has published Best Management Practices (BMP) for Forestry to give forest landowners and the professional forestry community guidelines to follow in practicing good stewardship on forestland. Most of the BMP's in the manual, address the protection of water quality or the requirements of Section 404 (dredge and fill) of the Clean Water Act. Additional BMP's are included as recommendations to landowners to conserve site productivity and manage wildlife (SC Forestry Commission, BMP's).

In South Carolina, the SC Forestry Commission fights more than 4,000 wildfires a year. Until relatively recently, rural and urban areas in South Carolina had discrete boundaries. Increased development in the state, including Horry County, has caused many new developments to be side by side with large forested tracts of land. Wildfires in these areas are difficult to control. SCFC employees work with local fire departments to assess the potential for wildfire damage to communities and individual homes. As part of the National Fire Plan effort Forestry Commission personnel also have been conducting workshops to educate community leaders and homeowners in high fire risk communities throughout the state (SC Forestry Commission, Wildland-Urban Interface Fire Prevention). There are steps that the County can take to reduce wildfire risks to homeowners, including requiring developers to include defensible space into developments bordering a dense forested tract. Defensible space is an area around a

structure where fuels and vegetation are treated, cleared or reduced to slow the spread of wildfire towards the structure. It also reduces the chance of a structure fire moving from the building to the surrounding forest (Dennis, F.C., Creating Wildfire Defense Zones, 2004).

#### Urban and Suburban Tree Conservation

Urban and suburban green spaces, or community forests, within neighborhoods and commercial areas provide benefits vital to enriching the quality of life. Community forests and urban trees and landscaping provide:

- Habitat for urban wildlife
- Reduced heating and cooling costs
- Interception and storage of rainwater
- Improved air quality
- Increased property values.

Trees also release water to the atmosphere providing an important pathway for removal of stormwater from the land. Due to the many benefits of trees, urban forestry management plans are now in use in many municipalities.

Mature trees in Horry County are not easily replaced. Current environmental conditions in developed areas makes it difficult for a tree started today to reach the same status as an existing mature tree. This makes the care of our mature, native trees very important (Ontario Cooperative Extension, Extension Notes, The Importance of Urban Trees). Horry County has a tree preservation ordinance in place. When adhered to, the result is typically a new development with the specimen trees preserved and incorporated into the new site plan, complimented by new landscaping.

#### Species Habitat

Horry County has been recognized as a biodiversity hot spot for plants and fish and mussel species (A. P. Dobson, J. P. Rodriguez, W. M. Roberts, D. S. Wilcove (1997) Geographic Distribution of Endangered Species in the United States, Science, V. 275, p. 550-554 and Master, Lawrence L., Stephanie R. Flack and Bruce A. Stein, eds. 1998. Rivers of Life: Critical Watersheds for Protecting Freshwater Biodiversity. The Nature Conservancy, Arlington, Virginia). Some of these unique species include: Venus Flytraps, red cockaded wood peckers, and sea turtles. Habitat preservation for these species has been actively pursued by the S.C. Heritage Trust Program and the U.S. Fish and Wildlife Service's Waccamaw National Wildlife Refuge. The South Carolina Department of Natural Resources (SCDNR) also maintains a Scenic Rivers Program.

#### South Carolina Heritage Trust Program

The South Carolina Department of Natural Resources' Heritage Trust Program was created in 1976, the first such program in the nation. It was established to preserve those natural features and cultural remains, which are quickly disappearing as the state's population increases in size. The program's purpose is to identify, evaluate, and protect the elements considered the most outstanding representatives of the state's heritage. There are currently four heritage preserves in Horry County (SCDNR, Protecting South Carolina's Natural and Cultural Heritage).

*Waccamaw River Heritage Preserve* – This preserve is 5,387 acres, which includes 30 miles of protected river wetlands and bottomland hardwood forests. The property contains the best examples of the endangered plant species, dwarf fimbry. It also supports habitats for four other threatened plant species and contains mature hardwood forest.

*Cartwheel Bay Heritage Preserve* – This 568 acre preserve protects one of the few known Carolina bay-longleaf pine savannah complexes in South Carolina. The longleaf pine savannahs contain white fringed, yellow fringed and rosebud orchids, venus' fly traps, pitcher plants and a diverse array of wildflowers.

*Lewis Ocean Bay Heritage Preserve* – This 9,393 acres preserve contains a group of 23 undisturbed Carolina Bays. This preserve includes habitats for black bear, the endangered red-cockaded woodpecker, the threatened Venus flytrap and a pond pine pocosin plant community.

*Little Pee Dee Heritage Preserve* – This 9,000 acre tract is in both Georgetown and Horry Counties. This property protects the rare sarvis holly, a mature floodplain forest, and scenic frontage along the Little Pee Dee River. The preserve includes Knife Island and four scenic oxbow lakes (SCDNR, Heritage Preserves).

#### Waccamaw National Wildlife Refuge

The U.S. Fish and Wildlife Service (USFWS) established the Waccamaw National Wildlife Refuge (NWR) in December 1997. The refuge was established to protect and manage diverse habitat components within an important coastal river ecosystem for the benefit of endangered and threatened species, freshwater and other fish species that migrate up the river from the sea to breed in fresh water, as well as migratory birds, and forest wildlife. The Refuge includes a wide array of plants and animals associated with bottomland hardwood habitats, and provides compatible wildlife- dependent recreational activities. These activities include hunting, fishing, wildlife observation, photography, and environmental education and interpretation. Located in portions of Horry, Georgetown, and Marion County, the Waccamaw NWR acquisition boundary spans over 55,000 acres and includes large sections of the Waccamaw and Great Pee Dee Rivers and a small section of the Little Pee Dee River. The USFWS is actively acquiring lands within this acquisition boundary from willing sellers and presently refuge lands purchased total over 9,700 acres (3,832 acres in Horry County; USFW, Overview, Waccamaw National Wildlife Refuge).

#### Scenic River Program

The South Carolina Rivers Act of 1989 established the South Carolina Scenic Rivers Program to protect "unique or outstanding scenic, recreational, geologic, botanical, fish, wildlife, historic or cultural values" of selected rivers or river segments in the state. The goal of the program is the conservation of South Carolina's river heritage through the proper management of the natural and cultural character of the state's river corridor.

The basic method of river corridor protection is a cooperative, voluntary management program created by landowners, community interests, and the South Carolina Department of Natural Resources. The intent of the program is to bring landowners together to study the river and key river issues and to address these issues and management practices on lands bordering the river. Together, landowners and other interested parties in the community develop a scenic river management plan that recommends long term management strategies oriented toward preserving traditional uses of the river and the preservation of the scenic beauty of the river corridor.

Horry County has two designated scenic rivers. Fourteen (14) miles of the Little Pee Dee River from Highway 378 to the confluence with the Great Pee Dee River was designated as a State Scenic River in March of 1990 by the Legislature. The 5-mile section of the Great Pee Dee immediately downstream from its confluence with the Little Pee Dee is also part of a 70-mile scenic river corridor. The Little Pee Dee is one of the best remaining examples of a coastal plain blackwater river in South Carolina. The river is bordered by extensive cypress and tupelo swamplands, particularly below Highway 378 where the floodplain widens. Both of these river corridors were identified as exceptional resources, providing for public enjoyment and preserving South Carolina's rich natural heritage.

# Native Species

Native species are plants, animals and insects that inhabit a given area or region and are vital to an ecosystem. Native species are threatened when non-native species are introduced into an ecosystem. Non-native species can be invasive and often take over an area, eradicating native species, especially if introduced someplace where they have no natural predators. This applies to mammals, fish, insects and plants. Native plant species are always a better option as they typically thrive without a lot of attention and use considerably less water and chemical pesticides (Greentreks Network, Inc., Native Species, 2005). Horry County provides a list of acceptable and unacceptable landscape materials, which can be used in developments to ensure that invasive species are not further introduced into the County.

Horry County is the home to many rare, threatened and endangered plant and animal species. A complete list of these species is provided in **Appendix E** (pages 73-74). Through a unique partnership with the US Fish and Wildlife Service, the South Carolina Department of Natural Resources has been charged with writing a Comprehensive Wildlife Conservation Plan for the citizens of South Carolina. This document was expected to being published by the fall of 2005. The purpose of this plan is to assist biologists, governments, and landowners to protect and manage species and habitats of special concern (SCDNR, Comprehensive Wildlife Conservation Plan).

# Prime Agricultural Land

Agriculture lands are a key component in natural resource protection and conservation. Productive soils provide:

- Nutritional and economical benefits to society
- Habitat and connection corridors for wildlife
- Flood control
- Groundwater recharge
- Air purification
- Open space and scenic pastoral views along roadways.

In 2002 there were 988 farms in Horry County. This number has decreased by ten percent from 1997 when there were 1,101 farms. Land in farming has also decreased. In 2002 there were 188,311 acres in farming compared to 197,053 acres in 1997, which

represents a four percent decrease in acreage. Roughly 25 percent of the total land area in Horry County is used for agriculture production. Land in agricultural production includes land used for crops, pasture, or grazing. It also includes woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it was part of the farm operator's total operation (USDA, Agricultural Census, 2002).

Often, lands that are most at risk for development are farmlands and timberlands. As farming becomes less economically viable, farmers are opting to sell their land for development rather than continuing to farm. When this happens, social benefits such as flood control, groundwater recharge and wildlife habitat are replaced by the social costs of infrastructure such as schools, police and emergency services.

Farmers can participate in several state and federal programs to assist them in protecting the heritage of farming and the ecological benefits derived from working the land. One of the programs is the Farm and Ranch Lands Protection Program, which purchases conservation easements on productive farm and ranch land. Farmers receive financial assistance in exchange for protecting habitat, wetlands and streams while utilizing best management practices to achieve both personal economic gains and improved environmental quality. In Horry County, the Farm and Ranch Land Protection Program has six farms enrolled and two farms pending, permanently conserving over 500 acres of land (NRCS, Horry County Field Office).

# Open Space Planning

In 2000, the Horry County Council established the Horry County Open Space Board by Ordinance 159-00, which was reinstated in 2004 as the Horry County Parks and Open Space Board by Ordinance 115-04. According to the Code of Ordinances, the purposes and objectives of the Board are to:

- Promote the preservation of open space, scenic areas and vistas greenways, squares and village greens;
- To promote the protection and conservation of environmental or natural resources;
- To promote the expansion of quality open space for a wide range of recreational opportunities including playgrounds, playfields, plazas, parks, mini-parks, picnic areas, bicycle or hiking trails, or golf courses for all county residents;
- To promote tourism emphasizing open space, recreational sites, and natural resources of Horry County;
- To promote education, awareness, and research relating to environmental and natural resources;
- To assist in coordinating activities of volunteers, organizations, businesses and governmental agencies interested in the preservation of open space, recreational sites, and natural resources;
- To prepare and submit to the Horry County Council for consideration a proposed list of areas of open space, significant environmental and natural resources, and recreational sites to be acquired, leased, preserved, protected, maintained, or developed through a new Horry County Open Space Fund (Section 15-124 H.C. Code of Ordinances).

Under the direction of above stated criteria, the Parks and Open Space Board has started to develop an Open Space Plan for the County. This plan will prioritize lands for acquisition and donation so that the County will have an interconnected network of usable open spaces and viable natural resources conservation lands.

# Parks and Recreation

The Parks and Recreation Department in Horry County was created in November 1997 to meet the immediate and long-term recreation needs of County residents. The Department's activities are funded through the County General Fund, and the Maintenance Department currently dedicates staff people for park upkeep. A special tax district in Socastee finances a separate community recreation fund.

In 1999, the Department hired a consultant to complete a recreation needs assessment for 1999-2009. The study found the development of the County's active and passive recreational facilities has not caught up with the rapid growth of the region. The plan divides the County in four subdistricts and proposes park prototype facilities within them, including models for community parks, district recreation complexes, civic parks and regional parks.

Park Type	Park Size	Recreation Standard	Characteristics	Number Proposed 1999- 2009
Community Park	4 acres	people	Easily accessible by foot or bike, in neighborhoods or at schools, 1 playground, 1 multipurpose field, 1 ball field, 3 picnic tables and shelter	
District Recreation Complex	35 acres	people	Located centrally within park service area, community center, gymnasium, areas for active sports, swimming pool, and areas for passive uses	
Civic Park	20 acres	40,000 people	Near land features such as lakes, hills, rivers, predominately passive, with limited active facilities including bike trails, playgrounds, tennis courts. Also used for public exhibitions or gatherings	
Regional Park	300 acres	1 park/ 30,000 people	Located in area with unusual natural value, large areas of passive recreation including walking trails, picnicking, boating, fishing, areas for active sports	

**Table 24**: Proposed Parks in Horry County, 1999 - 2009

Source: LS3P Associates Ltd, Horry County Recreation Needs Assessment 1999-2009

Even if all parks were built according to schedule, using current population projections, the park facilities would still fall short of the goals set by the needs assessment. The goal set by the assessment for local parks is 6.25 acres per 1,000 persons; the build out of the above scenario would provide 4.19 acres per 1000 people. The County currently has 1.15 acres of local parks per 1,000 residents. A goal of 10 acres of regional parks per 1,000 people was set, the build out of the above scenario results in 5.49 acres per 1,000 people. The County currently has no regional parks. (Source: LS3P Associates Ltd, Horry County Recreation Needs Assessment 1999-2009). Please refer to the

Community Facilities Element for further information on recreational facilities in Horry County.

# AIR RESOURCES

#### Air Quality

The SC Department of Health and Environmental Control is responsible for air quality monitoring. Air monitors are operated throughout the state to measure the concentrations of pollutants in the air. Through the Clean Air Act, the U.S. Environmental Protection Agency (EPA) set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment.

The Air Quality Index (AQI) is an index for reporting daily air quality. It reports on how clean or polluted the air is, and what associated health effects might be a concern for citizens. The AQI focuses on health effects that may be experienced within a few hours or days after breathing polluted air. EPA calculates the AQI for five major air pollutants regulated by the Clean Air Act. The AQI runs from 0 to 500, the higher the AQI value, the greater the level of air pollution and the greater the health concern. For example, an AQI value of 50 represents good air quality with little potential to affect public health, while an AQI value over 300 represents hazardous air quality. An AQI value of 100 generally corresponds to the national air quality standard for the pollutant, which is the level EPA has set to protect public health. AQI values below 100 are generally thought of as satisfactory. When AQI values are above 100 on the index, air quality is considered to be unhealthy at first for certain sensitive groups of people, then for everyone as AQI values get higher (Source: EPA, Air Data, Air Quality Index, 2005). As the table shows on the next page, Horry County has good air quality. Over the past few years, the percentage of days meeting the standards for good air quality has slightly decreased.

Year	Number of Days Monitored	Quality		for Sensitive	Unhealthy	Maximum	Median
2005	60	48 (80%)	12 (20%)	0	0	86	40
2004	118	86 (72%)	32 (28%)	0	0	82	37
2003	114	89 (78%)	25 (22%)	0	0	79	36
2002	116	93 (80%)	21 (18%)	0	1 (1%)	158	34
2001	119	100 (84%)	19 (16%)	0	0	76	34
2000	5	5 (100%	) 0 (0%)	0	0	39	31

Source: EPA, Air Data, Air Quality Index, 2005

#### **Air Emissions**

The air quality in Horry County can be divided into several types of air pollution sources. Point sources are large, fixed sources, such as industrial sites that emit pollutants from activities at the site. Area sources are also fixed sources, but they are generally small and widespread. Common examples of area sources are dry cleaners and gasoline refueling stations. The mobile source category of air pollution is broken into on-road sources and non-road sources. On-road sources refer to highway vehicles, and non-road sources refer to vehicles or equipment, such as construction equipment and recreational boats, not suitable for highway use.

Based on the latest information available from the Environmental Protection Agency and the South Carolina Department of Health and Environmental Control (SCDHEC), the largest source category of pollution in Horry County is area sources. Point sources are the second largest contributor of pollutants, followed by on-road and non-road sources, respectively.

On-road sources contribute nearly 50% of the total nitrogen dioxide (NO2) in the county, and the second largest category of nitrogen dioxide emissions is point sources (32%). Area sources are the main contributor of particulate matter (PM). In fact, 90% of total PM10 and 75% of total PM2.5 are from area sources. Sulfur dioxide (SO2) emissions are predominately from point sources while about half of the volatile organic compounds (VOC) in the county are attributable to area sources. The remaining VOCs are mostly emitted from on-road and non-road sources (SC DHEC, Bureau of Air Quality, Emissions Inventory, 2006).

	NO2 (tons/	PM10 (tons/	PM2_5 (tons/	SO2 (tons/	VOC (tons/
Horry County	year)	year)	year)	year)	year)
Point Sources	3390	783	616	9593	293
Area Sources	977	10455	2673	1079	6816
Non-road Sources	1363	215	195	141	2856
On-road Sources	5016	138	99	202	3667
Total	10746	11590	3584	11016	13632
Horry County	NO2	PM10	PM2_5	SO2	VOC
Point Sources	32%	7%	17%	87%	2%
Area Sources	9%	90%	75%	10%	50%
Non-road Sources	13%	2%	5%	1%	21%
On-road Sources	47%	1%	3%	2%	27%
SC DHEC, Bureau of Air Quality, 2006					
The point source information is based on the i-steps database (July, 2006).					
The area and mobile source information is based on Version 2 of the 2002 NEI.					

Table 26.	Accessed air	nollutante h	/ omission	sources in Horry		2006
i able zo.	Assessed all	polititants by		Sources in non	/ County,	2000

# Threats to natural resources

#### Water Quantity

Intra-basin water withdrawals are currently not regulated by the state. This is an area of emerging concerns giving more often drought conditions, such as in 2007. A bill is now under consideration at the state legislature to give SCDHEC the authority to regulate these withdrawals.

A capacity use program for groundwater withdrawals is currently in place, but covers only large volume users (SCDHEC, URL: http://www.scdhec.net/environment/water/capuse.htm). The Waccamaw Capacity Use Area was designated in 1979 in recognition of the depletion of local aquifers. At this point, a large-scale switch was match to use of treated surface water as the primary drinking water source for Horry County.

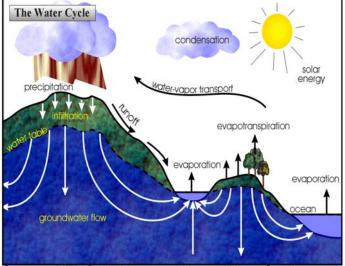
In 1996, various amendments to the federal Safe Drinking Water Act (SDWA) provide for a greater focus on pollution prevention as an approach to protecting surface water and groundwater supplies from pollution. The amendments require SCDHEC to provide Source Water Assessments to federally defined public water supply systems. SCDHEC has now generated assessment reports for all federally defined public water supply systems (SCDHEC, URL: http://www.scdhec.net/environment/water/srcewtr.htm).

#### Water Quality

The primary threat to water quality in Horry County is from stormwater runoff and loss of natural filtration as a result of reduction of vegetated riparian buffers and wetlands. Over the past several years, Horry County has experienced unprecedented growth. This increased development alters the surface of the land by replacing natural cover with rooftops, roads, parking lots, driveways and sidewalks. These hard surfaces are impermeable to rainfall and are collectively known as impervious cover (Center for Watershed Protection).

Over 200 watershed studies have shown that impervious cover and the polluted run off from that impervious cover can have a negative impact on the quality of our nation's aquatic resources. Non-point source pollution (NPS) is the technical term for polluted runoff. It occurs when water flowing over the land picks up an array of contaminants, which find their way into our waterways, either directly or through storm drain collection systems. The term non-point is used to distinguish this type of pollution from point source pollution, which comes from specific sources such as industrial facilities or sewage treatment plants. The Environmental Protection Agency has estimated that NPS is the single largest cause of the deterioration of our nation's water quality. Polluted runoff is largely the result of the way we develop, use and maintain our land (SCNEMO, What is Non-point Source Pollution?).

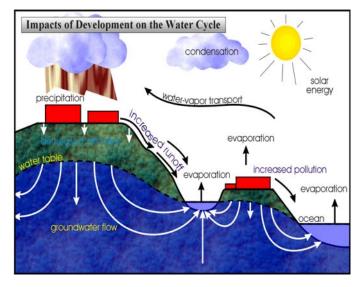
When development occurs, the resultant alterations to the land can lead to dramatic changes to the hydrology, or the way water is transported and stored. Impervious manmade surfaces (roads, driveways, rooftops) and compacted earth associated with development create a barrier to the seepage of rainfall into the soil, thus increasing surface runoff and decreasing groundwater infiltration. This disruption of the natural water cycle leads to a number of changes, including: 1) increased volume and velocity of runoff 2) increased frequency and severity of flooding 3) peak (storm) flows many times greater than in undisturbed eco-systems 4) loss of natural runoff storage capacity in vegetation, wetlands and soil 5) reduced groundwater recharge 6) decreased base flow, the groundwater contribution to stream flow. (Impacts of Development on Waterways, NEMO).



Map 4: The natural water cycle

Source: NEMO, Linking Land Use to Water Quality





Source: NEMO, Linking Land Use to Water Quality

With development comes more intensive land use and a related increase in the generation of pollutants. Increased runoff serves to transport these pollutants directly into waterways, creating nonpoint source pollution, or polluted runoff, which is widely recognized by environmental scientists and regulators as the single largest threat to water quality in the United States (Impacts of Development on Waterways, Nonpoint Education for Municipal Officials (NEMO)). Stormwater discharges from roads,

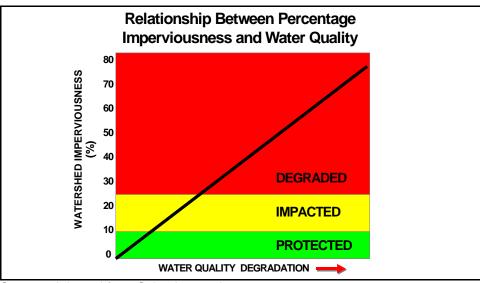
buildings, construction activities, and other impervious surfaces are the largest known cause of beach closures and advisories (The Natural Resources Defense Council (NRDC), Testing the Waters, 2005). In fact, in the year 2004, 95% of beach closings in Horry County were directly attributed to elevated bacteria levels due to polluted stormwater run off. The Natural Resources Defense Council issues an annual guide to water quality at vacation beaches. The following table shows the number of advisories issued per year in Horry County.

	Deach Advisories
Year	Number of beach closings/advisories
2004	395 - lower number attributed to lighter rainfall and less stormwater runoff
2003	593
2002	226
2001	129
2000	118
1999	89

Table 27: Beach Advisories

Source: NRDC, Testing the Waters, 2005

The hydrologic, physical and ecological changes caused by development can have a dramatic impact on the natural function of our waterways. When increased pollution is added, the combination can be devastating. In fact, many studies are finding a direct relationship between the intensity of development in an area - as indicated by the amount of impervious surfaces - and the degree of degradation of its waterways. These studies suggest that water quality begins to degrade at impervious levels of 12% to 15%, or at even lower levels for particularly sensitive waters (Impacts of Development on Waterways, NEMO).

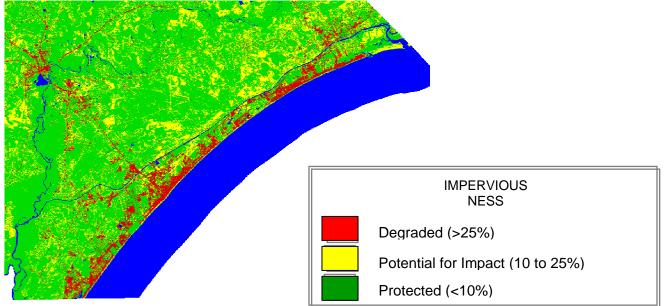


Graph 4: Relationship between impervious land coverage and water quality

As the percentage of imperviousness climbs, water quality degradation tends to increase accordingly. The end result is a system changed for the worse. Properly working water

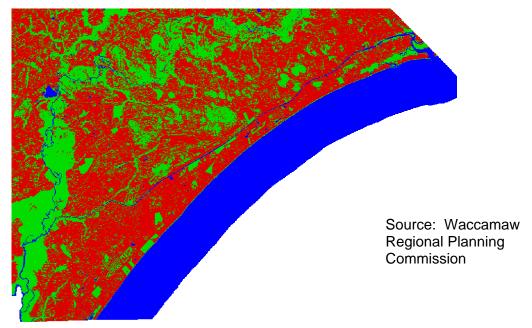
Source: Adapted from Schueler, et al, 1992

systems provide drainage, aquatic habitat, and a degree of pollutant removal through natural processing (Impacts of Development on Waterways, NEMO). The two maps below show how local zoning laws can affect impervious surface. The top picture depicts the amount of impervious coverage in 1995. The second graph projects the impacts of development if the property were completely built out. It should be noted that Horry County in its entirety was completely zoned only since the end of 2001.



Map 6: Levels of Impervious Surface Coverage in Horry County, 1995

Map 7: Potential Levels of Imperviousness Assuming Build-out in Horry County



Flood and erosion control have long been part of the municipal land use regulatory process and are usually addressed with engineered systems designed to pipe drainage off-site as quickly and efficiently as possible. Flooding and erosion, however, are only two of the more easily recognized components of the overall impact of development on waterways. Standard drainage "solutions" address neither the root cause of these symptoms, increased runoff due to the way we develop land, nor the resultant environmental effects. There are several widely accepted methods to accommodate development in a way that addresses stormwater runoff and its environmental effect including low impact development techniques.

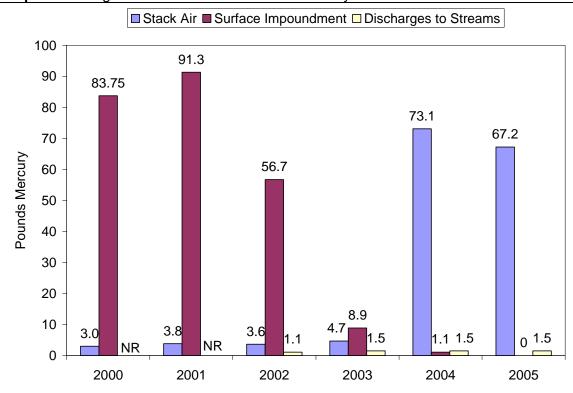
Low Impact Development (LID) techniques provide ways to simultaneously incorporate economic and environmental considerations into the land development process in order to keep the perviousness of the land as close to pre-construction levels as possible. This approach uses various planning and design practices and technologies to simultaneously conserve and protect natural resource systems while reducing infrastructure costs. LID still allows land to be developed, but in a cost-effective manner that helps mitigate potential environmental impacts. LID is best suited for new, suburban development. Developers who have used LID practices and technologies have indicated that one of the keys to a successful project is to invest additional time and money in the initial planning stages of development. While this idea may be unpopular because of increased up-front costs, the expenditures are often recouped in the form of rapid home sales, enhanced community marketability, and higher lot yields (National Association of Home Builders, The Practice of Low Impact Development, 2003).

Low Impact Development deals mainly in three major development topics: stormwater management, wastewater management and circulation design. Low impact development storm water management systems can reduce development costs through the reduction or elimination of conventional storm water conveyance and collection systems. LID systems can reduce the need for paving, curb and gutter, piping, inlet structures, and storm water ponds by treating water at its source instead of at the end of the pipe. However, developers are not the only parties to benefit from the use of LID storm water management techniques. Municipalities also benefit in the long term through reduced maintenance costs. When dealing with wastewater, the LID approach gives developers a variety of on-site wastewater treatment system options either as alternatives or enhancements to conventional septic systems. LID designs for streets, sidewalks, and driveways can maintain the functions of circulation while helping to reduce expanses of impervious surfaces that can alter local hydrology and degrade water quality. In turn, new street designs can influence the layout of lots and help to increase the volume of open space in new residential developments. When coupled with narrower, open-section streets, a well-designed street layout can eliminate hundreds of square feet of impervious surface. Depending on the density, location, and type of subdivision, different types of street layouts may easily lend themselves to a cluster arrangement, conserving natural features, maintaining open space, and protecting water quality (National Association of Home Builders, The Practice of Low Impact Development, 2003).

#### Air Emissions

The largest threats to air quality in Horry County are emissions from automobiles and coal-fired power plants. The Dolphus Grainger powerplant is located on the banks of the

Waccamaw River immediately adjacent to the City of Conway. Its mercury emission history is given in the following figure. Note that records are not available for stream discharges for the first two reporting periods (see **Graph 5**).



Graph 5: Grainger Power Plant Emissions of Mercury

Mercury is of concern because airborne particles fall to the ground and are washed in natural waters. This mercury is passed up the food chain to fish. Noteworthy is the fact that mercury levels in fish of the Pee Dee Basin are higher than anywhere else in the state.

#### **Fragmentation and Habitat Loss**

The rise of suburban sprawl as the prevalent development pattern in America has resulted in extensive disruption, or fragmentation, of the landscape. Fragmentation reduces the diversity of wildlife, contributes to the degradation of water resources, and impacts community character. Retaining the environmental, social and economic benefits of unfragmented open land requires a strategy that combines natural resource-based community planning and design, land conservation, and wise management of both developed and natural areas (NEMO, Carving Up the Landscape).

As development occurs, elements like roads, houses, railways, parking lots and utility lines divide the natural landscape into ever-smaller pieces, or fragments. Natural habitat areas are reduced in size and quality, and native populations of plants and animals decline. Some of the more sensitive species disappear. Compared to the obvious damage of a filled wetland or a clear-cut forest, the effects of fragmentation are subtle (ibid.).

Source: EPA Envirofacts Data Warehouse, URL: http://www.epa.gov/enviro/

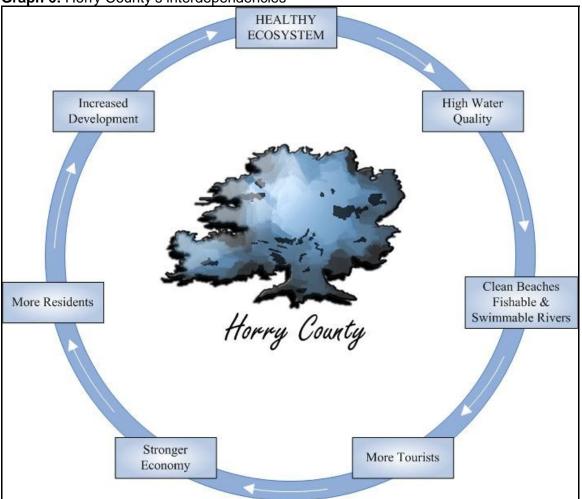
Every type of animal or plant has certain requirements for survival, including such key elements as food, water, and shelter. The minimum required area to provide for these needs and the amount of human disturbance that can be tolerated within this area varies widely by species, and is subject to much scientific scrutiny. As research continues, it is becoming clear that for many types of wildlife, it's not the total acreage of habitat that counts, but how much of that habitat exists in large, undisturbed tracts (ibid.).

For biodiversity, bigger is better. According to ecologists, large areas of continuous, unfragmented natural lands with a diversity of habitat types are needed. Experts also suggest that scattering moderate sized, 125 - 500 acre natural areas are also necessary. These smaller preserves can support species that do not require large forests in which to breed, and may even support small populations of the more sensitive species. Ideally, these smaller tracts should be as close as possible to larger tracts, contain a diversity of habitat/landscape types, and be connected to other natural areas. Isolated pockets of natural lands are of value to the community, but to maximize ecological value it is important to connect open space wherever possible. Parcels contiguous to existing large and medium-sized tracts should be given high priority for conservation. Stream valleys should be targeted as these areas serve as both critical habitat and wildlife corridors. Riparian (streamside) corridors, for example, are used by almost 70% of all vertebrate species. Protected land in riparian corridors should include the banks and floodplain areas, as well as contiguous upland forest on at least one side (ibid.).

Fragmentation impoverishes both the natural and human landscapes. Researchers still have much to learn about the effects of habitat fragmentation, but the basic concept is simple. A parking lot cannot support a black bear, and a suburban lawn cannot accommodate grassland bird species. Whenever a streamside forest is replaced by manicured lawn, a wildlife corridor is severed and fish habitat is degraded. When forest understory plants are removed to create a park-like appearance, certain plant and animal species may lose their last foothold for miles around. When a large forest is fragmented into house lots, rare songbirds and other deep woods species lose another place to reproduce and thrive. As discussed throughout the Natural Resources Element, as habitat goes, so does water quality, quality of life (ibid.).

# **Conclusion**

A road system, water system or utility system is not built piece by piece, without any advanced planning or coordination between different system components and jurisdictions. These built infrastructure systems are planned, designed and invested in far in advance of their actual use. The same principles and approaches that are used for built infrastructure should be followed when looking at our natural resources, *our green infrastructure*. Green Infrastructure is the interconnected network of protected land and water that supports native species, maintains natural ecological processes, sustains air and water resources and contributes to the health and quality of life for Horry County residents. This green infrastructure (USDA Forest Service and The Conservation Fund, Green Infrastructure).



Graph 6: Horry County's interdependencies

The above diagram illustrates how interdependent the economy of Horry County is on its natural resources. It is essential that Horry County implement policies that achieve a balance between a healthy ecosystem and increased development, between green infrastructure and built infrastructure. There is a direct link between how we use land and the quality of our water. Increased stormwater runoff associated with development often begins a chain of events, which includes flooding, erosion, and ecological damage. Horry County is in a position to make changes for a better economic and environmental future by recognizing the unique and abundant resources that are found within the County and taking steps to conserve them for future generations while still encouraging and accommodating responsible economic development.

# STATEMENT OF NEEDS AND GOALS

Recognizing the equal value of built infrastructure and green infrastructure to the economic prosperity of Horry County, it is paramount to promote the management of the County's natural environment in a manner that ensures a balanced and sustainable growth as well as the conservation of environmental resources and open spaces in order to provide for the health, safety and enjoyment of current and future residents.

#### Water Resources

#### Need:

Restore and maintain the chemical, physical, and biological integrity of the County's waters so that they can support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water.

#### Goals:

- Consider watershed boundaries as well as political boundaries when making major land use decisions.
- Work with drinking water providers to ensure that our drinking water quality is maintained.
- Maintain and improve the surface water quality for all waterbodies located in Horry County.
- Maintain and improve water quality in the coastal zone.
- Conserve the essential flood reduction, groundwater recharge, pollution filtering, and recreation functions of wetlands.
- Ensure that flood prone areas and floodways are maintained in a state where their essential natural functions can be performed.
- Recognizing the link between land use and water quality, use a combination of regulation and incentives to ensure that new development adequately mitigates its impacts on water quality.
- Balance the positive attributes of active agriculture and mining in the County with best management practices for water quality.
- The County should take an active role in encouraging development techniques which maintain or improve water quality.

# Land Resources

# Need:

Horry County needs to protect and conserve its forests, agriculture, plant and animal habitat, and urban trees while increasing its preserved open areas, scenic areas and recreational opportunities.

# <u>Goals:</u>

- Protect, promote, and enhance, the forestlands of Horry County in a manner consistent with achieving the greatest good for its citizens.
- Existing trees in the County should be incorporated into new developments to ensure ecological and aesthetic benefits.
- Recognize the fragmentation of the natural landscape that is occurring and take steps to mitigate these effects.
- The use of native species should be encouraged whenever possible.
- Cooperate with agricultural landowners to help ensure the long-term economic viability of farming.
- A Countywide Open Space Plan should guide the creation of permanently protected, interconnected, usable open areas within residential developments and around other significant features in the County.
- Ensure that recreational needs of different geographical areas and age groups are recognized and met Countywide.

# Air Resources

#### Need:

Horry County enjoys high air quality. In order to maintain high air quality, the County needs to continue to support efforts and to encourage programs.

# <u>Goals:</u>

- Support air quality monitoring in the County.
- Encourage and support the use of alternate modes of transportation within the County.

# **IMPLEMENTATION STRATEGIES**

It is recommended that Horry County implements following strategies within either a short term (1-2 years), intermediate term (2-5 years) or long term (5 and more years) time frame in order to fulfill the previously identified Needs and Goals.

# Water Resources

Partner with local rental agencies and hotels to develop an outreach program to educate tourists on the unique and fragile coastal ecosystem of Horry County and behavior which can help or harm this resource **(short term)**.

Provide for the inclusion of low impact development techniques into the County's Land Development Regulations, Zoning Ordinance, Stormwater Design Manual, etc. (short term to intermediate).

Develop and implement mining regulations that address environmental degradation concerns while balancing the need for mined materials **(short term)**.

New County buildings should incorporate low impact design techniques into the overall site plan as a model for private developers (short term to intermediate).

#### Protection of (drinking) water quality and its sources:

Study land use and zoning around the Bucksport Water System wells and implement policies that would further their wellhead protection program (long term).

Stay abreast of emerging health concerns that impact drinking water quality **(continuously)**.

Work with SCDHEC to implement programs, which will improve the surface water quality of those segments of river and which have been listed as impaired Waterbodies **(continuously)**.

Implement a Countywide freshwater quality monitoring program (short term).

Explore the possibility of using reclaimed water for large irrigators (short term).

Work with the Natural Resource Conservation Service, the Farm Bureau and local agricultural and mine landowners to address issues that affect water quality including confined animal feeding operations, buffering, irrigation, and dewatering (short term).

Coordinate with SCDHEC to develop digital maps of permitted septic systems, detention ponds, and related system best management practices (continuously).

# Reduction of water pollution caused by stormwater runoffs:

Continue the relationship between the County, the Waccamaw Watershed Academy, the Waccamaw Riverkeeper, and other like organizations to monitor discharges into the water and provide education to local landowners and developers **(continuously)**.

Work with known sources of point source water pollution to maintain and reduce pollutant discharges (short term to intermediate, dependent on water quality concerns).

Implement an improved beach water quality program (short term).

Develop and implement an illicit discharge detection & elimination (IDDE) program based on the County National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Management Plan **(short term)**.

Develop and implement a Construction Site Runoff program based on the County NPDES Phase II Stormwater Management Plan for Construction Site Runoff **(short term)**.

Develop and implement a Post-Construction Site Runoff Program based on the County NPDES Phase II Stormwater Management Plan for Post-Construction Site Runoff Control (short term).

Reduce the use of impervious surface and encourage the use of pervious surfaces through amendments the to Land Development Regulations and Zoning Ordinance (short term).

Prohibit untreated stormwater from discharging into jurisdictional wetlands and natural waterbodies (short term).

#### <u>Protection of jurisdictional and other wetlands, floodplains, and other</u> ecologically sensitive areas such as riparian corridors and watersheds:

With Horry County being the downstream recipient of water from the Pee Dee and Waccamaw River watersheds, which cross county and state boundaries, it is essential to encourage the creation of interstate and intergovernmental compacts, which address watershed issues (intermediate to long term).

Continue to cooperate with local universities in understanding the effects of our land use decisions on watersheds (continuously).

Adopt a riparian buffer ordinance to ensure a natural vegetated area between development and waterways **(short term)**.

Adopt a wetland buffer ordinance addressing jurisdictional and isolated wetlands **(short term)**.

Cooperate with the Natural Resource Conservation Service to promote the Wetlands Reserve Program as a viable conservation option for qualified landowners (continuously).

Adopt more stringent building requirements for land disturbance in the 100-year flood zone **(short term)**.

Provide incentives for developers to preserve natural vegetation at residential development sites (short term).

Establish an annual awards program highlighting projects that have successfully implemented creative development techniques that conserve natural resources (short term to intermediate).

Cooperate with public education providers by sponsoring workshops, publications and other outreach efforts that could assist private landowners, developers and engineers in implementing natural resources conservation practices on the large and small scale **(continuously)**.

Provide new members of County Boards and Commission with materials to educate them on existing County policies and regulations (continuously).

#### Improvement of stormwater and drainage management:

Provide incentives for developers to incorporate creative stormwater management techniques into their developments including green building technology, pervious surfaces, rain gardens, and bio-retention areas **(short term)**.

Prepare a comprehensive drainage master plan for the County as a way to take a more holistic approach to stormwater management. Areas with significant drainage problems should have more stringent stormwater requirements placed on new development (intermediate).

Improve stormwater management and computer modeling capabilities (intermediate).

Develop a capital improvements plan to resolve major drainage basin problems (short term).

#### Land Resources

# Protection and conservation of ecologically important areas and promotion of sustainable land use:

Promote the South Carolina Forestry Commission's (SCFC) Best Management Practices for forest landowners and professional foresters **(continuously)**.

Sponsor programs to educate private landowners and developers on the benefits of conserving and properly managing forest resources **(short term)**.

Encourage private forest landowners to participate in the SCFC Forest Stewardship Program and the Forest Land Enhancement Program (short term).

Amend the Land Development Regulations to address defensible space as a wildfire mitigation technique when new development is proposed in close proximity to large tracts of forested land **(short term)**.

Provide incentives to developers to maintain existing vegetation within new commercial and residential development **(short term)**.

Revise the tree preservation ordinance to include standards for conservation that would both enhance the aesthetic and the environmental function of urban trees as well as strengthen penalties for violations **(short term)**.

Using the Wildlife Conservation Plan of SCDNR and USFWS as a guide, ensure that the land acquisition and conservation strategies within the County are meeting the diverse habitat needs of species native to the landscape **(short term)**.

Amend the Land Development Regulations to incorporate the Wildlife Conservation Plan and address species habitat in new development **(short term)**.

Support SCDNR and USFWS in their efforts to add property to the Heritage Preserves and the National Wildlife Refuge (continuously).

Actively work to create linkages between existing, preserved large tracts of land within the County **(short term to intermediate)**.

Encourage property owners to participate in the Wildlife Habitat Incentives Program of the Natural Resources Conservation Service (short term to intermediate).

Participate in the planning process for new transportation corridors to ensure that wildlife habitat fragmentation is minimized **(short term)**.

Complete and adopt a Countywide Open Space Plan for the County (short term).

Use the approved Open Space Plan to guide open space dedications and payments to the open space fund in lieu of open space dedications within new developments **(short term)**.

Use the open space fund to purchase large tracts of land designated as ecologically significant by the open space plan (short term and continuous thereafter).

Revise the thresholds for and definitions of open space in the Land Development Regulations and the Zoning Ordinance **(short term)**.

Use the natural resource inventory and the Open Space Plan for the County to guide land use and development patterns towards areas where the effect on natural resources is minimized **(short term and continuous thereafter)**.

Pursue funding available on the state, federal and foundation level for the acquisition of open space within the County **(short term)**.

Explore creative planning techniques, such as transfer of development rights, as a means to conserve important natural and scenic features of the County (short term to intermediate).

Encourage the reuse of existing infrastructure rather than the expansion of infrastructure into undeveloped areas **(short term)**.

#### Native plant species:

The County should utilize native species in any projects undertaken that require landscaping **(short term)**.

Review the list of acceptable landscaping materials included in the Zoning Ordinance and the Land Development regulations to ensure that use of native species is preferred on development projects **(short term)**.

Work with the Master Gardeners and other area interested organizations to educate landowners and developers on the benefits of native species and the hazards of invasive species within their developments **(short term)**.

Research programs for use in the County to eradicate invasive species (short term).

#### Preserving agriculture:

Adopt a right-to-farm ordinance in the County to ensure that active farming operations are not adversely affected by new residential developments (short term).

Work with local agricultural landowners to highlight and market products grown and made in Horry County (short term).

Encourage agricultural landowners to participate in the Farm and Ranch Land Protection Program of the Natural Resource Conservation Service (short term).

Partner with the Convention and Visitors' Bureau to promote agricultural and heritage tourism **(short term)**.

#### More outdoor recreation opportunities:

Prioritize and implement the recommendations of the Horry County Recreation Needs Assessment (short term).

Amend the Land Development Regulations to provide incentives for recreational features such as walking trails and bike paths that link developments to each other and to other significant civic, cultural and commercial areas **(short term)**.

Actively seek grants to help fund new recreational programs and areas (short term).

Complete the construction of the East Coast Greenway through Horry County (short term).

Continue to promote the existing parks and recreational programs within the County to a wide audience **(short term)**.

Work with existing recreational organizations, community centers, senior centers and schools to accurately gauge and address the recreational needs of each (short term).

Continue to acquire property that increases public access to waterbodies in Horry County (short term).

Ensure that the recreational needs of persons with disabilities are addressed (continuously).

#### Air Resources:

#### Protection of good air quality standards:

Cooperate with state and federal agencies in the efforts to monitor air quality (continuously).

Work with known sources of air pollution to maintain and reduce emissions and to mitigate the effects to the extent possible **(short term)**.

Minimize domestic burning of field and yard debris, trash, etc. in Horry County (short term).

Minimize vehicle trips by partnering with Coast RTA to establish park and ride lots to employment centers and beach areas (short term).

Provide incentives for the creation of off street bike and walking trails as means of transportation **(short term)**.

Encourage and provide incentives for mixed use developments built on the pedestrian scale, which minimize the daily number of car trips necessary (short term).

# **APPENDIX**

SCIENTIFIC NAME		LEGAL STATUS
AGALINIS APHYLLA	COASTAL PLAIN FALSE- FOXGLOVE	sc
AGALINIS MARITIMA	SALT-MARSH FALSE- FOXGLOVE	sc
AMARANTHUS PUMILUS	SEABEACH AMARANTH	FT/ST
ANDROPOGON MOHRII	BROOMSEDGE	SC
ANTHAENANTIA RUFA	PURPLE SILKYSCALE	SC
ASCLEPIAS PEDICELLATA	SAVANNAH MILKWEED	RC
BALDUINA UNIFLORA	ONE-FLOWER BALDUINA	SC
CALAMOVILFA BREVIPILIS	PINE-BARRENS REED-GRASS	NC
CALOPOGON BARBATUS	BEARDED GRASS-PINK	SC
CARETTA CARETTA	LOGGERHEAD	FT/ST
CAROLINA BAY		SC
CHAMAEDAPHNE CALYCULATA	LEATHERLEAF	SC
CLEMMYS GUTTATA	SPOTTED TURTLE	ST
COLONIAL WATERBIRD		SC
COREOPSIS GLADIATA	SOUTHEASTERN TICKSEED	SC
COREOPSIS INTEGRIFOLIA	CILIATE-LEAF TICKSEED	SC
COREOPSIS ROSEA	ROSE COREOPSIS	RC
CORYNORHINUS RAFINESQUII	RAFINESQUE'S BIG-EARED BAT	SE
CROTONOPSIS LINEARIS	NARROWLEAF RUSHFOIL	SC
DIONAEA MUSCIPULA	VENUS' FLY-TRAP	RC
ECHINODORUS PARVULUS	DWARF BURHEAD	SC
EUPATORIUM RECURVANS	COASTAL-PLAIN THOROUGH- WORT	sc
FIMBRISTYLIS PERPUSILLA	HARPER'S FIMBRY	NC
FUNDULUS DIAPHANUS	BANDED KILLIFISH	SC
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	FT/SE
HELENIUM BREVIFOLIUM	SHORTLEAF SNEEZEWEED	RC
HELIANTHEMUM GEORGIANUM	GEORGIA FROSTWEED	SC
HELIANTHUS SCHWEINITZII	SCHWEINITZ'S SUNFLOWER	FE/SE
HETERODON SIMUS	SOUTHERN HOGNOSE SNAKE	SC
ILEX AMELANCHIER	SARVIS HOLLY	SC
LACHNOCAULON BEYRICHIANUM	SOUTHERN BOG-BUTTON	SC
LECHEA TORREYI	PIEDMONT PINWEED	SC
LILAEOPSIS CAROLINENSIS	CAROLINA LILAEOPSIS	NC
LIPOCARPHA MICRANTHA	DWARF BULLRUSH	SC

LITSEA AESTIVALIS	PONDSPICE	SC
		SC
MYCTERIA AMERICANA	WOOD STORK	FE/SE
OXYPOLIS TERNATA	PIEDMONT COWBANE	SC
PARNASSIA CAROLINIANA	CAROLINA GRASS-OF- PARNASSUS	NC
PELTANDRA SAGITTIFOLIA	SPOON-FLOWER	SC
PHYSOSTEGIA LEPTOPHYLLA	SLENDER-LEAVED DRAGON- HEAD	SC
PICOIDES BOREALIS	RED-COCKADED WOODPECKER	FE/SE
PITUOPHIS MELANOLEUCUS	PINE OR GOPHER SNAKE	SC
PLANTAGO SPARSIFLORA	PINELAND PLANTAIN	SC
PTEROGLOSSASPIS ECRISTATA	CRESTLESS PLUME ORCHID	SC
PYXIDANTHERA BARBULATA VAR BARBULATA	WELL'S PYXIE MOSS	SC
RHYNCHOSPORA OLIGANTHA	FEW-FLOWERED BEAKED- RUSH	SC
RUELLIA PEDUNCULATA SSP PINETORUM	STALKED WILD PETUNIA	sc
SABATIA BARTRAMII	BARTRAM'S ROSE-GENTIAN	SC
SABATIA KENNEDYANA	PLYMOUTH GENTIAN	RC
SARRACENIA RUBRA	SWEET PITCHER-PLANT	SC
SCHWALBEA AMERICANA	CHAFFSEED	FE/SE
SCLERIA BALDWINII	BALDWIN NUTRUSH	SC
SOLIDAGO PULCHRA	CAROLINA GOLDENROD	SC
SPOROBOLUS TERETIFOLIUS	WIRE-LEAVED DROPSEED	NC
STERNA ANTILLARUM	LEAST TERN	ST
STYLISMA PICKERINGII VAR PICKERINGII	PICKERING'S MORNING-GLORY	SC
TOFIELDIA GLABRA	WHITE FALSE-ASPHODEL	SC
URSUS AMERICANUS	BLACK BEAR	SC

FE - Federal Endangered

FT - Federal Threatened

NC - Of Concern, National (unofficial - plants only)
 RC - Of Concern, Regional (unofficial - plants only)
 SE - State Endangered (official state list - animals only)
 ST - State Threatened (official state list - animals only)

SC - Of Concern, State

# ECONOMIC ELEMENT

The Economic Element of the Horry County Comprehensive Plan provides both an inventory and an assessment of a variety of economic statistics used to determine trends and patterns in economic growth. As the economy of Horry County grows and evolves, it impacts land use patterns, workforce needs, the natural environment, social assets and infrastructure requirements. Providing a stable environment for economic growth is key to achieving economic well-being for both the current and future citizens and businesses of Horry County. Such an effort involves cooperation and collaboration between public and private entities, industry leaders and organizations, educational institutions and citizens, to ensure the natural, social and economic environs are enhanced and protected. The Economic Element is a first step in the search for a greater well-being.

### Basic and Non-Basic Industry

The Element is based on the assumption that certain industrial sectors at the regional level are "basic". This means that these industries produce output that is not consumed locally but is "exported" out of the region for national or international consumption. This assumption allows these sectors to be linked closely to the national economy, and hence follow national trends in productivity and output growth.

Normally, the "basic" sectors are mining, agriculture, manufacturing, and the Federal government. In Horry County, the largest "basic" industry is tourism, one not usually recognized as such because it is based on assets that are physically immobile (the natural environment). Adding to the dilemma is the fact that tourism crosses industrial classifications categorized by the North American Industrial Classification System (NAICS), meaning there is no single occupational category that fully captures the economics of the industry. However, the output of tourism is exported by importing those who consume (vacationers and tourists), and their dollars, and therefore it must be labeled as "basic".

In contrast to the "basic" tourism industry, the "non-basic" sectors are those such as retail trade, financial institutions, healthcare, and construction, the output of which is usually consumed locally. The growth of the "non-basic" sectors depends largely on the growth of the "basic" sectors that form the basis of the region's economy. In Horry County, tourism has certainly had an impact on some if not all of the "non-basic" industries. For instance, retail services are greatly influenced by visitor dollars. Construction is also influenced by tourism, as a growing population of vacationers requires more hotel rooms, retail services, restaurants and other recreational and leisure businesses, not to mention those who return as full time residents in search of housing and other services that require buildings. A growing population requires more houses, healthcare support, financial institutions, educational facilities, and commercial and retail services. In short, "non-basic" industry is that which has a greater percentage of local consumption compared to exported consumption.

In addition to measuring the economic health of a County through "basic" and "nonbasic" industry, it is important to note that other significant economic criteria known as "Soft Assets" exist. Below is a list of the 12 Soft Assets that must accompany a healthy economy.

- 1. Community social and civic organizations
- 2. Job and vocational training programs
- 3. Quality public and private schools
- 4. Community meeting and gathering places
- 5. Quality elementary and secondary education
- 6. Parks, museums, and similar amenities
- 7. Restaurants and hotels
- 8. Youth and adult sports
- 9. Quality housing at all levels
- 10. Social services
- 11. Health and medical facilities
- 12. Low crime rates

Source: Blakely and Bradshaw, Planning Local Economic Development (116)

While these soft assets are important contributors to the overall well being of the economy, it is not the purpose of this Element to report each one individually. Some of these assets are "imbedded" within the larger issue at hand, which is to gain an understanding of current trends in order to form an economic strategy for the future defined by goals, policies and strategies. It is important that the soft assets above be retained when reading through the rest of this Element as their significance to the economy plays a crucial role in the goals, policies and strategies that follow the assessment.

# Economic Profile

In Horry County there exists a direct association between the economy and the natural environment. The ocean and beaches; an abundance of tree, plant and animal species; a moderate climate year round; the black waters of the Waccamaw and Pee Dee Rivers; the Intracoastal Waterway; numerous wetlands, swamps and Carolina Bays all attract visitors, businesses and residents from the world. Economic and recreational opportunities abound for those seeking a life-style found in few places. In fact, the population continues to grow at a rate placing the County on 67<sup>th</sup> place of the top 100 fastest growing counties in the nation. The Myrtle Beach Area Chamber of Commerce reported a total of 13.2 million visitors to the County in 2004. These visitors generated 35.4% of the sales tax collected in Horry County in fiscal year 2004 – 2005. People are drawn to the County because of the environment, and that also affects the economy. Hence, it is paramount that the natural resources of the County be protected.

Horry County's economy has traditionally been divided between agriculture in the western part of the County and tourism in the areas adjacent to the beach. In recent years, the role of agriculture in the overall economy has declined. Employment is highest in the service, retail, FIRE (finance, insurance & real estate) and construction sectors, and totaling 91.63% of the local employment. Retail and shopping opportunities are concentrated in the eastern part of the County where they can serve the population center and the tourism industry. The Coastal Grand Mall draws customers from throughout the region, while Barefoot Landing and Broadway at the Beach cater to both

the tourist trade as well as local custom. Employment in the service sector is also centered east of the Intracoastal Waterway with tourism as its major driver. Businesses including hotels, restaurants, gift shops and amusement parks all provide support for the tourist industry.

The past decade has witnessed a surge in construction and building throughout the County. The unprecedented population growth has given rise to an equally unparalleled building surge that has had dramatic effects on the economy. Developers, contractors, local government, real estate brokers, laborers, insurance companies, financial institutions, engineers and architects are just some of the primary occupations that have witnessed growth in numbers as a result of construction. The Sun News reported \$5.6 billion in real estate sales for 2005. In 2005, Horry County issued a total of 3,968 single family residential and 1,782 multi-family permits. But the economic impacts of construction go well beyond these direct links. In fact, all industries benefit from construction, be it recreation, healthcare, education, transportation, personal services or financial. It is difficult to measure the full impact of construction and real estate throughout the County's economy, although one can certainly assume that it is well beyond the basic information that is available to date.

The population growth in the County is expected to burgeon for the next twenty years, meaning more homes, healthcare, retail, commercial businesses and financial institutions, as well as County services including police, fire and rescue, roads, parks and recreation, libraries, justice and administrative services will be needed. Education will also feel this impact, leading to the need for more classrooms and teachers. As for higher education, thousands of students enroll each fall for classes at Coastal Carolina University, a traditional four-year school, and Horry Georgetown Technical College, an occupational and technical institution. Coastal Carolina has seen a 61% increase in enrollment from 2000 – 2005. Over 7,600 students are enrolled in programs at the University. Other schools include the North American Institute of Aviation at Horry-Conway Airport and Webster University. Higher education is a growing part of the County's economy that offers a wide range of programs, providing a necessary piece to a market that seeks diversification and highly qualified employees.

The healthcare industry is growing rapidly to meet the needs of young and old alike. Hospitals, general practitioners, specialists and support services have an impact not only on the general welfare and health of the public, but also on the economy. These establishments employ thousands in the local workforce including doctors, nurses, administrators, rescue personnel and support staff. In 2004 alone, area hospitals discharged over 128,000 patients who sought medical care for various maladies. Since no single authority tracks the health-care industry, the true effects it has on the economy cannot be measured. However, certain indicators exist that can assist in gauging the impact.

Horry County's economy is poised to grow in many ways. The extent to which the County can influence this progression is dependent upon understanding what the economy is and how actions can influence it. The purpose of this Element is to create a course of action defined by goals, policies and strategies that support economic growth and positively influence citizens and businesses within the County.

# **Employment**

Employment figures are a reflection of Horry County's economic stability and growth. **Table 28** shows employment in the six most significant sectors of the Horry County economy and offers a comparison to South Carolina State totals. Employment has expanded significantly in Horry County growing from 19,760 in 1970 to 118,920 in 2005. This represents an increase of 501.82%. Over the same period employment in South Carolina has increased by 117.67%. By sector in Horry County, construction has increased 519.60%, manufacturing by 69.7%, the wholesale sector by 277.11%, the retail sector by 607.69%, "FIRE" by 992.52% and services by 575.88%. Population figures for Horry County compliment these statistics and point to continued significant growth over the next twenty years.

EMPLOYMENT	1970	1980	1990	2000	2005
SOUTH CAROLINA					
Construction	64,460	92,040	133,830	154,540	159,390
Manufacturing	345,250	398,440	389,540	352,570	311,140
Wholesale	34,640	56,290	66,470	86,830	89,410
Retail	142,790	215,580	331,730	410,390	419,340
"FIRE"	44,170	79,000	109,160	139,520	165,650
Services	193,440	241,870	405,140	595,770	650,340
TOTAL	824,750	1,083,220	1,435,870	1,739,620	1,795,270
HORRY COUNTY					
Construction	2,040	3,430	5,980	10,770	12,640
Manufacturing	3,710	7,490	6,120	7,390	6,290
Wholesale	830	1,540	1,830	2,870	3,130
Retail	5,200	11,500	24,690	34,690	36,800
"FIRE"	1,470	3,820	7,660	12,340	16,060
Services	6,510	12,960	24,440	39,930	44,000
TOTAL	19,760	40,740	70,720	107,990	118,920

### Table 28: Employment by Sector

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

**Table 29** shows employment by sector, as a percentage of total employment and also offers a comparison to South Carolina percentages. The data shows that the service, retail, "FIRE" and construction sectors combine for a total of 91.63% of total employment in Horry County. The manufacturing and wholesale sectors contribute only 7.92% of total employment. This contrasts significantly with South Carolina as a whole where the manufacturing and wholesale sectors employ 22.31% of the workforce.

EMPLOYMENT	1970	1980	1990	2000	2005
SOUTH CAROLINA					
Construction	7.82%	8.50%	9.32%	8.88%	8.88%
Manufacturing	41.86%	36.78%	27.13%	20.27%	17.33%
Wholesale	4.20%	5.20%	4.63%	4.99%	4.98%
Retail	17.31%	19.90%	23.10%	23.59%	23.36%
"FIRE"	5.36%	7.29%	7.60%	8.02%	9.23%
Services	23.45%	22.33%	28.22%	34.25%	36.23%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%
HORRY COUNTY					
Construction	10.32%	8.42%	8.46%	9.97%	10.63%
Manufacturing	18.78%	18.38%	8.65%	6.84%	5.29%
Wholesale	4.20%	3.78%	2.59%	2.66%	2.63%
Retail	26.32%	28.23%	34.91%	32.12%	30.95%
"FIRE"	7.44%	9.38%	10.83%	11.43%	13.50%
Services	32.95%	31.81%	34.56%	36.98%	37.00%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%

### Table 29: Employment by Sector as in percent (%)

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

**Table 30** further recognizes the lack of the wholesale and manufacturing industries in the County compared to the State. In fact, while 6.6% of the total State employment is captured by Horry County, only 2.3% of the wholesale and manufacturing combined State total is employed in the local economy.

Table 30. Percent	Table 30. Percentage of State Employment in Horry County, 2005							
	South		County					
EMPLOYMENT	Carolina	Horry County	Share					
Construction	159,390	12,640	7.9%					
Manufacturing	311,140	6,290	2.0%					
Wholesale	89,410	3,130	3.5%					
Retail	419,340	36,800	8.8%					
FIRE	165,650	16,060	9.7%					
Services	650,340	44,000	6.8%					
TOTAL	1,795,270	118,920	6.6%					

**Table 30**: Percentage of State Employment in Horry County, 2005

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

The *location quotient* is a technique used to identify the concentration of an industrial sector in a local economy relative to a larger reference economy. An industry's share of the local economy is compared with the same share that industry has in the reference economy. If the share is equal to that found in the reference economy, the location quotient equals 1. If the share is greater in the local economy, the location quotient is greater than 1. Anything below 1 represents a deficiency in the local industry when compared to that same industry in the reference economy. The location quotient, sometimes called the concentration factor, is a static measure, picturing the economy at only one point in time. It does not say anything about whether an industry is growing or declining in importance relative to the local economy. The following **Table 31** lists the location quotients for six (6) local industries.

Occupation	South Carolina	Horry County	LQ
Construction	159,390	12,640	1.20
Manufacturing	311,140	6,290	0.31
Wholesale	89,410	3,130	0.53
Retail	419,340	36,800	1.32
FIRE	165,650	16,060	1.46
Services	650,340	44,000	1.02
TOTAL	1,795,270	118,920	

 Table 31: Location Quotient for 2005 Occupations

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

Assuming that higher employment correlates with a higher output, the local economy produces more than it can use of a certain item and presumably exports it to other areas that do not produce as much. In contrast, importation and stunted local employment occurs when a location quotient is less than one for a given industry. In the case of Horry County, construction, "FIRE" and retail have a greater share in the local economy than the State. Under normal circumstances such things cannot be exported, but in the case of Horry County, these industries are in fact exported because those who consume those services (tourists and those relocating) come in from other areas outside this local economy. Tourism and migration create an export economy that remains in the local economy. Instead of the product physically leaving the County, as is the case with exportation, the product remains here and the consumer is "exported" into the local economy.

**Table 32** details projected employment by sector for both Horry County and South Carolina through 2025. Growth in employment is expected to remain strong with the service, retail, "FIRE" and construction sectors leading the way in job creation. Manufacturing is expected to remain flat over the next twenty-five years, while the wholesale sector will add some jobs during the same period. Horry County will continue to create significantly more jobs on a percentage basis than South Carolina as a whole. However, the manufacturing sector projections indicate diminutive growth compared to other sectors. This is troublesome when considering the quality of jobs in relation to earnings by industry that Horry County is projected to gain. **Tables 33** and **34**, historic earnings for Horry County and South Carolina by sector, detail why manufacturing jobs are coveted compared to other sectors.

EMPLOYMENT	2005	2010	2015	2020	2025
SOUTH CAROLINA					
Construction	159,390	172,080	184,750	197,420	210,090
Manufacturing	311,140	313,560	315,980	318,410	320,850
Wholesale	89,410	94,720	100,060	105,400	110,740
Retail	419,340	450,320	481,280	512,230	543,190
FIRE	165,650	177,520	189,410	201,300	213,200
Services	650,340	729,350	808,450	887,540	966,640
TOTAL	1,795,270	1,937,550	2,079,930	2,222,300	2,364,710
HORRY COUNTY					
Construction	12,640	14,850	17,060	19,260	21,470
Manufacturing	6,290	6,550	6,810	7,070	7,330
Wholesale	3,130	3,680	4,240	4,800	5,370
Retail	36,800	41,990	47,150	52,300	57,430
FIRE	16,060	18,330	20,610	22,890	25,170
Services	44,000	50,500	56,990	63,470	69,930
TOTAL	118,920	135,900	152,860	169,790	186,700

### Table 32: Future Employment by Sector

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

# Wages and Earnings

While employment data is closely linked to the health of the economy, wage and earnings data give some insight into how each sector contributes to individual and family incomes.

**Table 33** identifies total earnings, average annual earnings and average weekly earnings across four sectors in Horry County. Interestingly, earnings in the Retail industry have declined since 1970. When adjusting for inflation, this decline is dramatic. This data also indicates consistent growth in weekly wages in both the construction and service sectors for the period between 1970 and 2005. Growth in manufacturing wages has outpaced other sectors and continues to offer the highest weekly wage. This is why manufacturing jobs are so coveted by economic development organizations throughout the Country. Unfortunately, the growth in manufacturing jobs has not kept up with the growth in employment. South Carolina as a whole has benefited greatly from the expansion of manufacturing, but the Country has not been a part of this growth. Horry County, with its limited industrial sector, will continue to see significant growth in jobs outside the manufacturing sector. Retail sector weekly wages in Horry County show a decline over the period 1970 to 2005, this is consistent with data from South Carolina, as well as from other parts of the Country.

Table 33. Historic Earnings for Horry County							
	1970	1980	1990	2000	2005		
Annual Earnings							
Construction	\$47,590,000	\$73,480,000	\$142,870,000	\$285,410,000	\$363,360,000		
Manufacturing	\$65,810,000	\$164,840,000	\$165,400,000	\$282,730,000	\$264,170,000		
Retail	\$99,850,000	\$189,450,000	\$376,720,000	\$619,730,000	\$663,310,000		
Services	\$99,210,000	\$248,060,000	\$518,600,000	\$962,140,000	\$1,100,990,000		
Average Annual Wages							
Construction	\$23,328.43	\$21,422.74	\$23,891.30	\$26,500.46	\$28,746.84		
Manufacturing	\$17,738.54	\$22,008.01	\$27,026.14	\$38,258.46	\$41,998.41		
Retail	\$19,201.92	\$16,473.91	\$15,258.00	\$17,864.80	\$18,024.73		
Services	\$15,239.63	\$19,140.43	\$21,219.31	\$24,095.67	\$25,022.50		
Average Weekly Wages							
Construction	\$448.62	\$411.98	\$459.45	\$509.62	\$552.82		
Manufacturing	\$341.13	\$423.23	\$519.73	\$735.74	\$807.66		
Retail	\$369.27	\$316.81	\$293.42	\$343.55	\$346.63		
Services	\$293.07	\$368.09	\$408.06	\$463.38	\$481.20		

Table 33:	Historic	Earnings	for Horry	/ County
-----------	----------	----------	-----------	----------

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

**Table 34** looks at the same figures for all of South Carolina. Average weekly wages provide a good indicator of which sectors offer higher versus lower wages in aggregate.

Table 34. Historic Earnings for South Carolina							
	1970	1980	1990	2000	2005		
Annual							
Earnings							
Construction	\$1,525,040,000	\$2,355,560,000	\$3,939,230,000	\$4,754,810,000	\$5,053,210,000		
Manufacturing	\$8,034,720,000	\$11,394,130,000	\$13,084,140,000	\$14,446,560,000	\$14,197,780,000		
Retail	\$2,391,020,000	\$3,360,690,000	\$4,979,240,000	\$6,939,500,000	\$7,219,800,000		
Services	\$2,838,740,000	\$4,489,620,000	\$8,768,990,000	\$14,965,300,000	\$17,457,720,000		
Average							
Annual							
Wages							
Construction	\$23,658.70	\$25,592.79	\$29,434.58	\$30,767.50	\$31,703.43		
Manufacturing	\$23,272.18	\$28,596.85	\$33,588.69	\$40,975.01	\$45,631.48		
Retail	\$16,745.01	\$15,589.06	\$15,009.92	\$16,909.53	\$17,217.06		
Services	\$14,675.04	\$18,562.12	\$21,644.35	\$25,119.26	\$26,843.99		
Average							
Weekly							
Wages							
Construction	\$454.98	\$492.17	\$566.05	\$591.68	\$609.68		
Manufacturing		\$549.94	\$645.94	\$787.98	\$877.53		
Retail	\$322.02	\$299.79	\$288.65	\$325.18	\$331.10		
Services	\$282.21	\$356.96	\$416.24	\$483.06	\$516.23		

### **Table 34**: Historic Earnings for South Carolina

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

**Table 35** lists four occupational categories with average annual earnings for South Carolina and Horry County. It is clear that construction, manufacturing and service occupations in the County pay less than their counterparts in the State as a whole. Only the retail occupation pays more, 4.7% more than the State average.

Average Annual Wages	South Carolina	Horry County	\$ Difference	% of State Wage
Construction	\$31,703	\$28,747	\$2,956	90.7%
Manufacturing	\$45,631	\$41,998	\$3,633	92.0%
Retail	\$17,217	\$18,024	\$807	104.7%
Services	\$26,844	\$25,022	\$1,822	93.2%

Table 35. Average	Annual State an	d County Farnin	gs Compared, 2005
Table 00. / Wordge			95 00mparca, 2000

Source: Woods & Poole Economic, Inc. Washington D.C. 2005

### Per Capita Income

One of the best indicators of regional economic health is per capita income. This data allows for equal comparison from the local level up to the national level. Per capita income figures tend to move in concert with one another, and it is very difficult to improve statistical positioning relative to other areas. When a region is able to significantly improve its statistical ranking it shows that major improvements have been made relative to underlying factors, i.e. educational attainment, infrastructure, etc. that have allowed an overall increase in the per capita numbers.

**Table 36** presents Horry County's per capita income relative to surrounding counties, in North and South Carolina, and finally to the United States as a whole. Horry County's per capita income for 2005 is higher than that of all main surrounding counties in both states. Yet, Horry County's per capita income of \$21,691 in 2005 is growing slower than South Carolina's overall per capita income of \$24,532, and even less favorably with North Carolina's \$25,111. Finally, compared to the United States as a whole, Horry County only manages 79.5% of the U.S. total of \$27,299. Therefore it is evident that long-term economic development efforts must be geared toward raising the per capita income to other regions within the Carolinas and the rest of the Nation.

Although the per capita income continues to grow, Horry County's per capita income figures rank low compared to other Metropolitan Statistical Areas (MSA's) throughout the United States.

Table 30. Fel Capita income, 1969, 1999, and 2005 for selected Counties					
					As of U.S. Per
Geography	1989	1999	2005	Change (in %)	Capita Income (%)
				75.1% (1989-	
Horry County	\$12.295	\$19,949	¢21 601	2005); 8.7%	79.5% (2005)
nony county	φ12,303	φ1 <b>3,3</b> 43	φ21,031	· · · · · · · · · · · · · · · · · · ·	79.5% (2005)
				(1999-2005)	
Dillon County	\$8,077	\$13,272	N/A	64.3% (1989-	61.5% (1999)
	+-,	••••,=•=		1999)	
Georgetown County	\$11,084	\$19,805	N/A	78.7% (1989-	91.8% (1999)
	ψ11,004	φ10,000		1999)	01.070 (1000)
Marion County	\$8,185	\$13,878	N/A	69.6% (1989-	64.3% (1999)
Marion County	φ0,105	φ15,070		1999)	04.378 (1999)
				73.5% (1989-	
Brunswick County, NC	\$11,688	\$19,857	\$20,280	2005); 2.1%	74.3% (2005)
				(1999-2005)	
	<b>AA A A A</b>	<b></b>	N1/A	57.8% (1989-	00.00( (4000)
Columbus County, NC	\$9,134	\$14,415	N/A	1999)	66.8% (1999)
				106.2% (1989-	
South Carolina	\$11,897	\$18,795	\$24,532	2005); 30.5%	89.9% (2005)
	<b>\$</b> , <b>\$\$</b> .	<b>\$</b> . <b>\$</b> ,. <b>\$\$</b>	φ,σσ_	(1999-2005)	
				94.8% (1989-	
North Carolina	\$12,885	\$20,307	\$25,111	2005); 23.6%	92.0% (2005)
North Garolina	φτ <del>2</del> ,000	$\psi = 0,001$	$\varphi = 0, 111$	(1999-2005)	<u> </u>
				89.3% (1989-	
United States	\$14,420	\$21,587	\$27,299	2005); 26.5%	100.0%
United States	\$14,420	<del>φ</del> 21,307	<del>\$</del> 27,299		100.0%
				(1999-2005)	

Table 36: Per Capita Income, 1989, 1999, and 2005 for selected Counties

Source: U.S. Census, 1989 - 2005

While per capita income has steadily risen in Horry County, the same can be said for other regions across the Country. **Table 37** indicates that the County is in the bottom 20% of MSA's across the Country in regards to per capita income. In light of this, while the County's per capita income growth from 1989 – 1999 is significant in some instances and in-line in others (compared to surrounding counties), the entire region remains well below other parts of the Country when discussing per capita income.

Metropolitan Statistical Areas	2005	US Rank*
Myrtle Beach-Conway-North Myrtle Beach, SC	\$26,686	296
Anderson, SC	\$26,922	285
Augusta-Richmond County, GA-SC	\$28,105	242
Boston-Cambridge-Quincy, MA-NH	\$48,158	5
Boulder, CO	\$45,944	7
Charleston-North Charleston, SC	\$30,514	168
Florence, SC	\$27,217	275
Lakeland, FL	\$27,938	248
Macon, GA	\$29,466	194
Miami-Fort Lauderdale-Miami Beach, FL	\$36,293	51
Naples-Marco Island, FL	\$44,458	9
New York-Northern New Jersey-Long Island, NY-NJ-PA	\$45,570	8
Phoenix-Mesa-Scottsdale, AZ	\$32,536	117
Punta Gorda, FL	\$27,618	267
Raleigh-Cary, NC	\$35,186	70
Rocky Mount, NC	\$27,116	280
Salt Lake City, UT	\$33,279	108
Santa Rosa-Petaluma, CA	\$40,871	19
Sarasota-Bradenton-Venice, FL	\$40,112	24
Savannah, GA	\$32,069	128
Tampa-St. Petersburg-Clearwater, FL	\$33,008	112
Tucson, AZ	\$28,481	227

Table 37: Per Capita Personal Income by Metropolitan Area, 2005

\* Based on 360 Metropolitan Statistical Areas

Source: US Bureau of Economic Analysis

# Cost of Living

The Consumer Price Index (CPI) is a measure of the average change over time in the prices of consumer items; goods and services that people buy for day-to-day living. The CPI is a complex construct that uses data from several surveys to produce a precise measure of average price change for the consumption sector of the American economy. From this, the Cost of Living Index (COLI) is established, which allows for comparative measures of the rate of change, or inflation/deflation rate in goods purchased directly by consumers in different cities. The standard score of 100 is what one would pay typically in the United States. Therefore, a score below 100 in a given category means that a purchased good in a given geography is less than the American average. A score above 100 for a given geography means a purchased good is above the national average.

Table 30. Cost of Envirg mack for sciectica 0.0. Onics, 2 quarter 2000							
Cities	Composite	Grocery	Housing	Transport	Health	Rent \$	Home \$
Myrtle Beach, SC	95.1	101.2	82.2	96.4	94.5	\$644	\$254,900
Hilton Head,							
SC	109.0	108.3	113.3	104.9	123.5	\$958	\$349,333
Orlando, FL	104.9	106.1	104.1	108.6	96.3	\$816	\$324,951
Phoenix, AZ	100.4	98.8	101.2	103.1	100.8	\$782	\$312,990
Bethesda, MD	133.5	109.5	190.3	113.2	109.7	\$1,505	\$589,590

# Table 38: Cost of Living Index for selected U.S. Cities, 2<sup>nd</sup> quarter 2006

Source: ACCRA, The Council for Community and Economic Research, 2006

Horry County residents fare well when considering other regions in the Country. Overall, the cost of living composite in the County is 4.9% below the national average. Housing is well below the national trend and other areas as noted above in **Table 38**. Interestingly, while per capita income for County residents is below the national average (95.1% in 2006), as is annual wages compared to State levels, the cost of living (92.4% in 1999) in this resort and tourist driven economy is also below the national average. Additionally, cost of living in the County is below that of Hilton Head and Orlando, two economies similar to that of Horry County.

### **Occupation**

Employment by occupation relates to skill levels required to perform various jobs. In Horry County, management and professional related jobs provide employment for a smaller percentage of the working population than they do in South Carolina as a whole and significantly less than they do in the United States. Conversely, in the service and sales and office occupations, Horry County creates a higher percentage of jobs. As seen in **Table 39**, Horry County also shows a higher level of employment in construction, extraction and maintenance, but a somewhat lower level of employment in production, transportation and material moving.

		- )	
	Horry County	South Carolina	United States
Management, Professional and Related	26.3	30.6	34.1
Service	22.6	15.8	16.3
Sales and Office	27.9	25.4	25.9
Farming, Fishing and Forestry	0.4	0.5	0.7
Construction, Extraction and Maintenance	13.4	11.3	10.0
Production, Transportation, and Material Moving	9.4	16.5	13.1

Table 39: Percent of Workforce Em	nlovment h	v Occupation	2005
Table 33. I CICCIII OI WOIKIDICC EII	рюутнени в	y Occupation	, 2000

Source: U.S. Census Bureau, S.C. Budget and Control Board, 2005

# **Employment Status**

Employment status compares the male/female and civilian/military characteristics of the local, State and National labor forces. As shown in **Table 40**, in 2005, 65.0% of persons over the age of sixteen were participating in the labor force in Horry County. This compares favorably with the South Carolina participation rate of 64.6% and the United States participation rate of 65.9%. Noteworthy, is the low unemployment rate of 5.9% in

Horry County in 2005, compared to 8.0% for the State of South Carolina and 6.9% for the entire United States.

	Horry County	%	South Carolina	%	United States	%
TOTAL	182,068	100.0%	3,210,268	100.0%	223,524,814	100.00%
In Labor Force	118,344	65.0%	2,073,833	64.6%	147,302,852	65.9%
Employed	111,243	61.1%	1,897,268	59.1%	136,350,136	61.0%
Unemployed	10,742	5.9%	256,821	8.0%	15,423,212	6.9%

### Table 40: Employment Status, 2005

Source: U.S. Census Bureau, 2005

### **Unemployment Rates**

Unemployment rates provide a snapshot of the economic health of the region. **Table 41** details unemployment rates over a eight-year period from 2000-2007 for Horry County, surrounding counties and South Carolina. Compared with surrounding counties, Horry County had an exceptionally low rate of unemployment. While Dillon, Marion and Georgetown counties were suffering double digit rates of unemployment, Horry County was consistently in the mid to low single digits. Horry County's rate has also been consistently lower than that of South Carolina. In North Carolina, only Brunswick County had a lower unemployment rate than Horry County, while Columbus County had a bit of a higher rate.

	2000	2001	2002	2003	2004	2005	2006	2007
South Carolina	3.7	4.8	5.6	6.8	6.8	8.0	7.4	5.9 (July)
Horry County	3.5	4.9	5.2	5.7	5.9	5.9	5.4	4.3 (July)
Dillon County	6.7	9.2	8.0	9.3	9.7	9.4	9.5	10.5 (July)
Georgetown County	5.3	7.4	8.3	9.8	9.5	8.6	7.5	6.4 (July)
Marion County	9.2	12.3	11.0	12.8	13.5	13.6	12.2	11.9 (July)
Brunswick County, NC	4.6	5.7	6.9	6.4	5.4	5.0	4.5	4.7 (June)
Columbus County, NC	7.7	8.4	8.9	7.9	6.3	6.4	5.7	6.0 (June)

### Table 41: Unemployment Rates, 2000 through 2007

Sources: U.S. Department of Labor – Bureau of Labor Statistics;

S.C. Employment Security Commission; N.C. Employment Security Commission

### Commuting Patterns

Commuting patterns within Horry County and its neighboring counties provides information regarding job creation and regional pull. **Table 42** shows that 93.6% of employed Horry County residents worked within the County in 2000 and even better, 96.6% in 2005. The percentage of employed Dillon County residents working in Dillon

County is 72.4%, the percentage in Georgetown 74.8% and for Marion County 73.1%. This data indicates that within the region, Horry County is creating new jobs at a higher rate, which increasingly allows for its own residents to work closer to home, while also providing jobs for workers from surrounding counties.

	Horry County (2000)	Horry County (2005)	Dillon County (2000)	Georgetown County (2000)	Marion County (2000)
Worked in County of Residence	93,124	105,750	8,212	17,121	9,970
Percent	93.6%	96.6%	72.4%	74.8%	73.1%
Worked Outside of County of Residence	6,380	5,474	3,131	5,771	3,665
Percent	6.4%	5.0%	27.6%	25.2%	26.9%
TOTAL	99,504	109,473	11,343	22,892	13,635

Table 12: Commuting Patterns	2000 & 2005 for Horn	y County and selected Counties
Table 42. Commung Fallens	2000 α 2005 101 Π0Π	y County and selected Countles

Source: U.S. Census Bureau, 2000; 2005

# <u>Tourism</u>

The United States Office of Travel and Tourism asks a simple question: "Where is travel and tourism measured in the economy?" There are many industries that provide goods and services to travelers and tourists. Economic activity attributed to tourism is not easily identifiable in the same way as many other conventional industries. Unlike most industries, tourism is not made up of a collection of business firms and establishments producing and selling the same products or services. For example, travel and tourism includes the airline industry, the hotel industry, and the food and beverage industry, each selling a different set of products or services. While information continues to be collected at the National and State levels, the amount of information at the local level is limited. One of the most important issues that must be addressed by this and other economic studies is determining the impact of tourism on the economy. While it is possible to gain some basic information, the County must work towards a better understanding of tourism, the "basic" industry at the forefront of the local economy.

The Myrtle Beach Area Chamber of Commerce compiled a profile of visitors to Horry County in 2006. As a tourist destination, the County continues to grow in all sectors related to visitors including transportation, recreation, lodging, dining and entertainment. The true reach of tourism dollars is exponential by nature. The impact of visitors to the County on various industries such as healthcare, manufacturing, transportation, education, construction, retail, personal services and finance will require an in-depth study beyond the scope of this Economic Element. Tourism however remains the backbone of the County's economy as the following **Table 43** suggests.

Visitor Occupation			
Visitor Occupatio			or Age
Professional	42%	18 - 34	31%
Service and Labor	26%	35 - 54	51%
Retired	8%	55 - 64	8%
Other	13%	65 and over	10%
Not employed	11%		
Visitor Income		Lengt	h of Stay
\$120,000 and over	4%	1 - 3 nights	20%
\$105,001 - \$120,000	3%	4 - 7 nights	73%
\$90,001 - \$105,000	10%	8 + nights	7%
\$74,001 - \$90,000	10%		
\$49,001 - \$74,000	42%		
\$25,001 - 49,000	20%		
\$25,000 or less	11%		
Visitor Party			
Families	62%		
Couples	18%		
Same gender couples	1%		
3 adults or more	17%	Source: Myrt	le Beach Area
Single adult		Chamber of C	

### Table 43: Horry County tourism analysis, 2006

According to the Chamber of Commerce, visitors to Horry County spend an average \$101.76 per person per day, while group business travelers spent an average of \$208.11 per person per day. This is significant considering the number of visitors to the County. The following table details the resident and visitor populations of five South Carolina counties, and includes the average number of visitors per day.

	Resident	# Visitor	Average #
County	Population	Days/Year	Visitors/Day
Horry	196,629	36,565,777	100,180
Beaufort	120,937	10,574,847	28,972
Charleston	309,969	13,913,024	38,118
Richland	320,677	5,789,415	15,861
Greenville	379,616	4,474,280	12,258

#### Table 44: Resident and Visitor Populations, 2002

Source: South Carolina Department of Parks, Recreation and Tourism

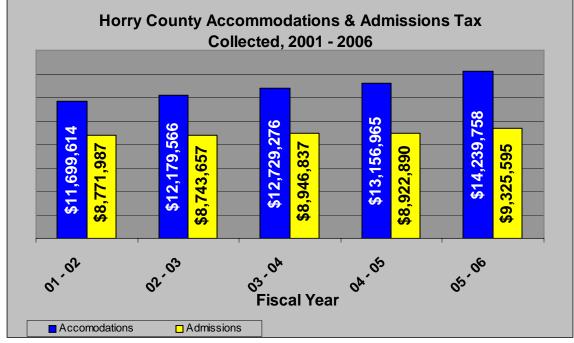
Horry County attracts 15 million more visitor days per year than the other four most visited counties, Beaufort, Charleston, Richland and Greenville combined. This is significant considering the resident population of the County is less than all but Beaufort. The direct effects of visitors are apparent throughout the County, especially along the beachfront where hotel towers dominate the skyline. Below is a table indicating the annual hotel occupancy in the County.

Year	Average Daily Rate	Occupancy Rate	Rooms Sold
2005	\$79.63	59.6%	1,530,715
2004	\$76.86	61.2%	1,568,836
2003	\$73.74	57.9%	1,473,040

Table 45: Hotel and Motel Statistics for Myrtle Beach, 2003 - 200	Table 45: Hote	el and Motel Statisti	cs for Myrtle Beach	ı, 2003 - 2005
---	----------------	-----------------------	---------------------	----------------

Source: South Carolina Department of Parks, Recreation and Tourism

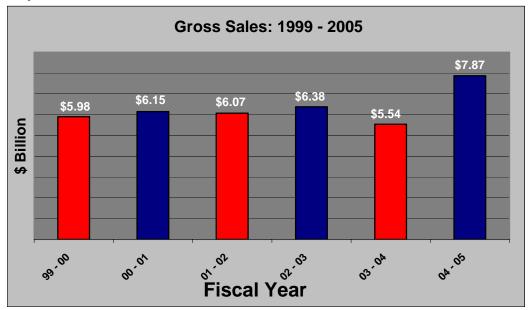
The statewide accommodations tax is set at 2% on all transient accommodations. The statewide admissions tax must be collected by all places of amusement when an admission price has been charged. The tax is 5% of the paid admissions. The following **Graph 7**, taken from reports published by the State Department of Parks, Recreation and Tourism, indicates that these two taxes generate a significant amount of government revenue. More importantly, the chart reflects the central role tourism plays in the local economy.



Graph 7: Horry County Accommodations & Admissions Tax Collected, 2001 - 2006

Source: South Carolina Department of Parks, Recreation and Tourism

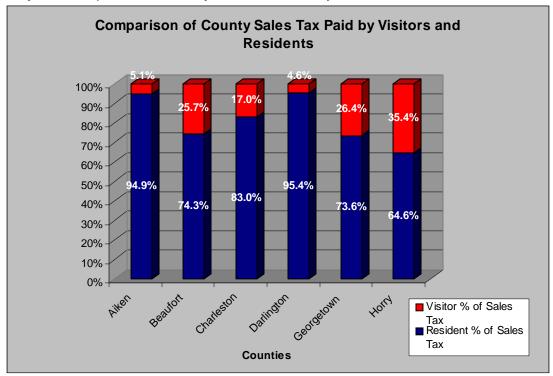
Graph 8: Gross Sales: 1999 - 2005



Source: South Carolina Department of Revenue Annual

Local businesses in Horry County have witnessed a steady growth in sales over the past six years. Gross sales increased \$1.89 billion from 1999 to the end of fiscal year 2005. **Graph 8** presents the gross sales tax collected for six South Carolina counties in 2003.

Comparing the amount of tax generated by residents and visitors for each, it is clear that tourism has a significant impact on the local economy in Horry County. As seen in **Graph 9**, with over 35% of the sales tax paid by visitor dollars, the economics of tourism are beneficial not only to government revenue, but also to the local businesses that generate the sales. Based on the 2004 - 2005 sales of \$7.87 billion (**Graph 8**), approximately \$2.78 billion came by way of travel and tourism dollars. When discussing the future economy it is vital that tourism remain a central element to the County's goals, policies and strategies.



Graph 9: Comparison of County Sales Tax Paid by Visitors and Residents

# **Transportation**

Increasing the commercial airline capacity in the County benefits a wide array of industry including tourism, "FIRE", retail and services. In a report by the South Carolina Department of Commerce, the annual estimated economic impact of airports was measured as shown in **Table 46**, using a calculation that considers the direct, indirect and multiplier effects of airports in the economy. The following table was taken from the report and lists the total employment, annual payroll and total economic output of airports in Horry County using the direct, indirect and multiplier effect approach.

Table 40. Hony County Annual Estimated Economic Impact						
Airport	Total Employment	Total Payroll	Total Output			
Myrtle Beach International Airport	12,646	\$325,221,900	\$756,453,600			
Conway-Horry County Airport	96	\$3,188,700	\$8,975,400			
Grand Strand Airport	137	\$3,628,900	\$10,118,700			
TOTAL	12,879	\$332,039,500	\$775,547,700			

# Table 46: Horry County Annual Estimated Economic Impact

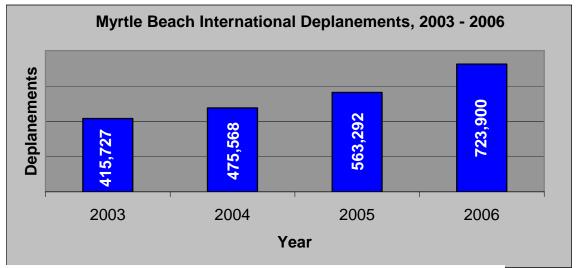
Source: SC Department of Commerce, May 2006

To continue attracting new airlines and expanding service from our existing carriers, it is important that the physical facilities at Myrtle Beach International Airport be expanded to provide the space and services needed by the airlines at rates that they can afford. This is particularly important if the community wishes to attract low cost-air carriers that are important to the region's principal industry, tourism. The same holds true for general aviation growth.

Source: South Carolina Department of Parks, Recreation and Tourism

In a November 2006 study, BACK Aviation Solutions, Washington, DC (BACK), a nationally recognized aviation-consulting firm, calculated the economic benefit of air visitors to the Horry County region to be \$1.35 billion per year. BACK further determined that air visitors stay longer and spend more than "drive" visitors. According to their study, every additional air visitor generates \$2,358 per visit as compared to \$1,447 per visit for drive visitors.

Hence, with current capacities reaching their limits, new terminal facilities are still needed. While there are periodic fluctuations in passenger activity at MYR - just as there are at most U.S. airports - the airport's passenger growth has almost doubled over the past 10 years and FAA's forecast indicates continued passenger growth in the future. A modern terminal with sufficient aircraft gates is needed to accommodate that forecast passenger growth. It is interesting to note that passenger activity at MYR increased more than 25% over the same period a year ago.



Graph 10: Myrtle Beach International Deplanements, 2003 - 2006

Source: South Carolina Department of Parks, Recreation and Tourism; Myrtle Beach International Airport

According to a report published by the South Carolina Department of Parks, Recreation and Tourism (SCPRT), the full economic effect of travel in the County is dramatic. While the above report is based solely on aviation expenditures, the report published by SCPRT includes all forms of travel. As shown in **Table 47**, Horry County received \$2.4 billion in domestic travel expenditures to lead all of South Carolina's 46 counties. Charleston County ranked second with more than \$1.2 billion, followed by Beaufort County with \$823 million.

	Expenditures (\$ Millions)		Employment (Thousands)		Local Tax Receipts (\$) Millions
Horry County	2,678.31	553.89	37.08	152.72	94.60
State	8,525.70	1,781.20	110.30	460.00	196.00
% Of State Total	31.41%	31.10%	33.62%	33.20%	48.27%

Table 47 <sup>.</sup>	Economic	Impact of	Tourism	in Horry	/ County, 2005
I able 41.	ECONOMIC	πηρασί σι	rounsin		y County, 2005

Source: SC Department of Parks, Recreation and Tourism; Travel Industry Association of America, 2006

### <u>Healthcare</u>

In 2004, emergency room and inpatient discharges from area hospitals totaled 128,689 and generated a total charge of \$19.2 million. Healthcare in the United States is a vital economic engine, generating \$1.6 trillion or 13.77% of the Gross Domestic Product (GDP) in 2000. The United States Bureau of Labor Statistics provides the following information:

- As the largest industry in 2004, health care provided 13.5 million jobs—13.1 million jobs for wage and salary workers and about 411,000 jobs for the self-employed.
- 8 out of 20 occupations projected to grow the fastest are in health care.
- More new wage and salary jobs—about 19 percent, or 3.6 million—created between 2004 and 2014 will be in health care than in any other industry.
- Most workers have jobs that require less than 4 years of college education, but health diagnosing and treating practitioners are among the most educated workers.

		<u> </u>	<u> </u>
Age	Discharges	Total Charge	Avg. Charge
Total	98,104	\$193,205,787	\$2,013
45 - 64	19,214	\$53,869,269	\$2,880
65 - 74	7,836	\$36,808,800	\$4,855
75 and Older	8,856	\$50,581,057	\$5,922

#### **Table 48**: Emergency Room discharges by age category, 2004

Source: South Carolina Office of Research & Statistics

Age	Discharges	Total Charge	Avg. Charge
Total	30,585	\$608,537,405	\$15,831
45 - 64	7,570	\$194,708,013	\$20,711
65 - 74	5,145	\$137,449,635	\$21,837
75 and Older	5,960	\$133,740,461	\$18,418

### Table 49: Inpatient discharges by age categories, 2004

Source: South Carolina Office of Research & Statistics

According to a report published by the South Carolina Hospital Association, Horry County hospitals have a significant impact on the local economy. At some point, everyone needs medical attention ranging from a routine check-up to an emergency situation. The healthcare industry not only advances general welfare and health, it also employs thousands of people, from highly skilled doctors to administrative assistants. Each has a vital role in both the healthcare system and the Horry County economy.

### **Table 50**: Economic indicators of area hospitals, 2005

Economic Indicators	Conway Memorial Center	Grand Strand Regional Medical Center
Overall Economic Impact	\$83 million	\$190.3 million
Direct Economic Impact	\$36.1 million	\$82.7 million
Indirect Economic Impact	\$46.9 million	\$107.6 million
Overall Employment	2,062	2,741
Direct Employment	1,229	833
Indirect Employment	833	1,908

Source: South Carolina Hospital Association

# **Construction**

There are developers, construction companies, subcontractors, real estate agents and brokers, banks and lending institutions, home inspectors, rodent and pest inspectors, appraisers, property management companies, paralegals, insurance companies, planners, engineers, architects, interior designers, landscapers and government. Building requires a vast amount of natural, fiscal and human capital. Real estate houses our population, provides places to work and play, places of worship, safety, wellness and security. In all, the construction industry is immense; its full economic impact is difficult to measure. Nonetheless, there are statistics that begin to describe the impacts that a built environment has on the economy.

	1: Total Building sued in Horry County
Year	# Permits Issued
2000	6,859
2001	7,177
2002	7,417
2003	8,588
2004	10,759
2005	12,191
2006*	15,363

Table 52:         Annual Total Housing Unit Permits           Issued by Horry County					
Year	Single Family	Multi Family	Mobile Home		
2000	1,458	788	1,886		
2001	1,586	1,259	1,640		
2002	2,008	664	1,383		
2003	2,641	528	1,228		
2004	3,437	924	1,124		
2005	3,968	1,782	898		
TOTAL	15,098	5,945	8,159		

\* As of September 1, 2006

# Finance, Insurance and Real Estate ("FIRE")

The United States Bureau of Labor Statistics defines the finance and insurance sector as "that which comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions". Three principal types of activities are identified:

- 1. Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities
- 2. Pooling of risk by underwriting insurance and annuities
- 3. Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs

**Table 53** details the pooled employment and wage figures for the finance, insurance and real estate ("FIRE") sectors of the Horry County and South Carolina economies. Steady growth is projected, with a 56.7% increase in employment in the twenty-year projection for Horry County. This is well above the projected statewide growth of 28.7% over the same period. Additionally, earnings for these sectors in Horry County are projected to increase by \$471.89 million, a gain of 105%. This increase is well above the statewide projected growth of 65.6% over the same period.

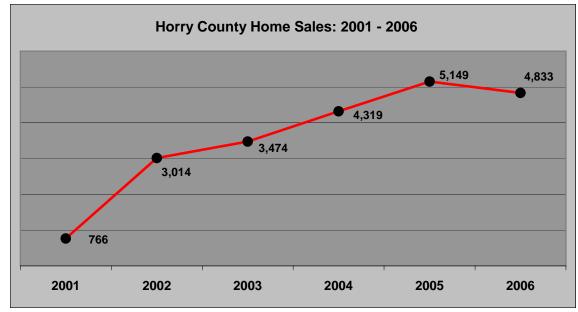
Table 53: "FIRE"	Employment a	and Earnings	; (\$ millions) fo	or State and	County, 2005 -
2025		-			

	2005	2010	2015	2020	2025
South Carolina	165,645	177,520	189,410	201,300	213,200
Horry County	16,060	18,330	20,610	22,890	25,170
South Carolina	\$4,873.32	\$5,559.93	\$6,316.24	\$7,151.81	\$8,073.14
Horry County	\$448.37	\$547.64	\$658.48	\$782.30	\$920.26

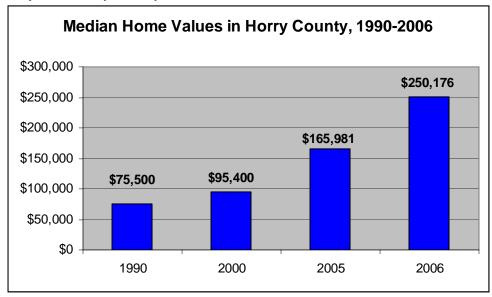
Source: Woods & Poole Economic, Inc. Washington D.C. 2005

**Graph 11** demonstrates that home sales in Horry County have increased tremendously since 2001 according to the Coastal Carolina Association of Realtors. These sales, coupled with median home values from 1990 – 2006 (**Graph 12**), translate into positive economic indicators that support growth in all industries including FIRE, construction, healthcare, retail and services.





Source: Coastal Carolina Association of Realtors



Graph 12: Horry County Median Home Values: 1990 - 2006

# Agriculture

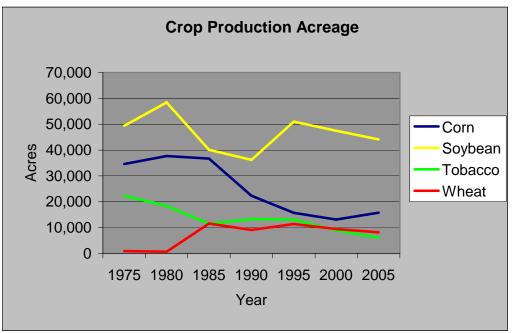
Strawberries, sweet potatoes, tobacco, indigo, rice and corn all have historical roots here in the County. While many farms still harvest these products, soybeans and wheat have become important commodities for farmers in the County. In addition, other land intensive industries (fishing and timber harvesting) continue to be an important aspect to the local economy. Early in the County's history, the inexhaustible supply of pitch, pine tar and turpentine provided a continuing source of naval supplies for the ever-growing City of Charleston. While agrarian economics pales in comparison to that of tourism, construction and healthcare, crops and livestock have a significant impact on the local economy due to the amount of land that is required for cultivation and rearing. The long tradition of living off the land is alive and well today according to **Table 54**.

	Generated Revenue		
Cash Receipts 2005	Horry County	South Carolina	
Crops	\$39,227,000	\$727,664,000	
Livestock	\$23,030,000	\$1,091,065,000	
Total	\$62,257,000	\$1,818,729,000	

### Table 54: Annual Agricultural Revenue, 2005

Source: Clemson University, Department of Applied Economics & Statistics and the S.C. Agricultural Statistics Service.

Graph 13: Crop Production Acreage, 1975 - 2005

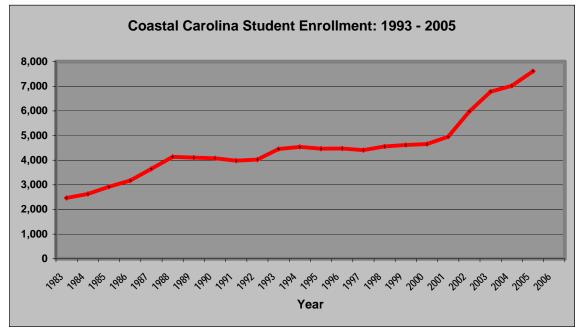


Source: Clemson University, Department of Applied Economics & Statistics and the S.C. Agricultural Statistics Service.

**Graph 13** represents that acreage used for crop production has declined since 1975 according to the chart above. There are several reasons for the decline in acreage, including technological advancement, changing market conditions for certain crops, an increase in the yield per acre, increasingly open markets for commodities and increasing costs for factors of production (land primarily). Succession of farm operations may also be an issue as future generations lose interest in farming, meaning heirs might decide to divide or sell the farm in light of increasing demand for raw land near urban areas.

# **Education**

Coastal Carolina University (CCU) continues to see increasing enrollment (**Graph 14**) because of its commitment to education. The School boasts an unrivaled curriculum, administered through the Colleges of Business Administration, Humanities and Fine Arts, Natural and Applied Sciences, and Education. In all, Coastal Carolina offers 40 majors and 37 minors for undergraduate and graduate degrees. Undergraduate degrees include Business Administration, Computer Science, Finance, Marketing, Marine Science, Economics, Psychology and Engineering. Graduate programs include coastal marine and wetland studies, business administration and education. The wealth of educational opportunity available at Coastal Carolina University provides a strong foundation for an economy that is experiencing tremendous growth. Graduates from these programs not only learn the essential parameters listed above, they also provide the necessary skills for expanding business and industry. In short, the tables below make a strong case for future economic prosperity.



Graph 14: Coastal Carolina Student Enrollment: 1993 - 2005

Source: Coastal Carolina University, Factbooks

Table 55: Annual Residency Enrollment           at Coastal Carolina University				
Year	In-State	Out-of-State		
2000	3,591	1,062		
2001	3,726	1,239		
2002	4,716	1,264		
2003	5,276	1,504		
2004	5,305	1,716		
2005	5,713	1,900		
2006	4,829	3,220		

Source: Coastal Carolina University, Factbook

Table 56:TotalAnnualRevenuesforCoastal Carolina University, 1998 - 2005					
Fiscal Year	Total Revenues				
1998 - 1999	\$46,427,411				
1999 - 2000	\$50,015,626				
2000 - 2001	\$54,619,337				
2001 - 2002	\$60,627,275				
2002 - 2003	\$68,968,748				
2003 - 2004	\$79,460,469				
2004 - 2005	\$89,456,812				
2004 - 2005					

Source: Coastal Carolina University, Factbook

Coastal Carolina is not the only school that is witnessing increasing enrollment. Horry-Georgetown Technical College has seen a similar swell (**Table 57**). The School has an abundance of two-year degrees, professional certification, and licensing in multiple fields including Agriculture Technology, Arts and Science, Business, Health Science, Computer Technology, Industrial Technology, Occupational Technology, Public Service Technology and Engineering Technology. In all, local economic growth is dependent on an educated and diverse workforce that is able to adapt to changing technologies and practices. Fortunately, both Horry-Georgetown Technical College and Coastal Carolina University provide opportunities not only for personal growth, but economic growth as well.

Table 37. HOTC Annual Fair Enrollment,	2000	
Year	Enrollment	Continuing Education
1999	3,505	5,927
2000	3,672	6,823
2001	4,045	5,669
2002	4,528	6,178
2003	5,128	7,573
2004	4,986	9,784
2005	5,232	5,094
2006	5,392	N/A

# Table 57: HGTC Annual Fall Enrollment, 1999 - 2006

Source: Horry Georgetown Technical College

# STATEMENT OF NEEDS AND GOALS

### Need:

Build a robust, sustainable economy that enhances the quality of life for business and citizens throughout Horry County.

# Goals:

- Create and support a coordinated, comprehensive program of economic development.
- Develop and coordinate government funds and incentive programs that target economic growth.
- Promote an education system that supplies a highly qualified workforce for all industries.
- Recruit a diverse mix of business and industry.

# **IMPLEMENTATION STRATEGIES**

It is recommended that Horry County implements following strategies within either a short term (1-2 years), intermediate term (2-5 years) or long term (5 and more years) time frame in order to fulfill the previously identified Needs and Goals.

### Comprehensive Economic Development Program

Work with Horry County Council, municipal government officials, the Myrtle Beach Regional Economic Development Corporation, area Chambers of Commerce, citizens, institutions, organizations, civic groups, and business and industry leaders to complete a comprehensive Economic Development Plan for Horry County (short term to intermediate).

Regularly update identified economic development goals to ensure continuity of programs (continuously).

Encourage the development and expansion of regional economic development partnerships (continuously).

Provide a forum for public and private input on an economic development program (short term).

Coordinate with local industry leaders to disseminate strengths and weaknesses of the current economy **(short term)**.

### Economic growth programs

Develop and implement a comprehensive incentive program that supports industrial growth in Horry County (short term to intermediate).

As opportunities present themselves, acquire key critical parcels of land for commercial and industrial development or redevelopment (short term to intermediate).

Seek funding to preinstall utilities in approved industrial parks in order to increase their marketability (short term).

Encourage the development and expansion of a regional fiber optics network to support industrial development **(short term)**.

### Promotion of highly qualified workforce

Promote the Horry County School System, one of the highest achieving in South Carolina (continuously).

Establish programs specifically designed to increase the graduation rate of targeted student populations **(short term)**.

Coordinate with current industry to tailor programs and research at State colleges (Clemson, MUSC, USC), Coastal Carolina University (CCU), Horry Georgetown

Technical College (HGTC), the Academy for Arts Science and Technology, the Academy for Technology and Academics, and Webster University to meet the changing needs of local companies **(continuously)**.

Work at the State level to designate CCU as the core research university for the South Carolina tourism cluster and seek appropriate funding for programs and research (intermediate).

Encourage the expansion and development of educational facilities that complement economic development and diversification (short term to intermediate).

Coordinate aggressive retraining of displaced workers to ensure their rapid absorption into the economy **(short term)**.

Identify and secure funding for programs that provide job preparedness (short term).

### **Diverse mix of business and industry**

Support economic diversification through recruitment efforts that target industries offering higher wages (short term).

Explore options for creating and marketing a small business incubator facility (short term to intermediate).

Encourage clustering of business and industry by identifying and developing sites for corporate activities and research and development parks, in partnership with private landowners and developers (short term).

Conduct periodic studies of market demand for products and services focusing on unmet needs that could represent new business opportunities and publish information on a regular basis (continuously).

Develop a forum for businesses to discuss local trends, threats and opportunities **(short term)**.

Recruit industries that show a commitment to environmentally sensitive production (short term).

Facilitate the growth of knowledge-based businesses (short term).

Continue efforts to recruit international companies that are either expanding or seeking a presence in the United States (continuously).

Page left intentionally blank

# COMMUNITY FACILITIES & SERVICES ELEMENT

Community Facilities are services available to all inhabitants of Horry County to meet the day-to-day needs of the community and to enhance quality of life. Horry County is one of the fastest growing counties in the state (see **Table 1**); the Community Facilities in the County are greatly affected by the pace of growth and development. The Community Facilities Element is divided into nine sections including: transportation, water and wastewater treatment, solid waste management, storm water management, public safety, general government facilities, educational facilities, libraries, and parks and recreation facilities. Within each section, the element presents an inventory of the current facilities and evaluates desired levels of service and anticipated demand. There is also a section highlighting upcoming projects.

# **Public Transportation**

The Coast Regional Transportation Authority (RTA) is a provider of fixed route bus service and demand-responsive paratransit service for Horry and Georgetown Counties. Coast RTA's fleet consists of more than 50 vehicles and offers year-round service seven days a week. All buses and most shuttles/vans are wheelchair accessible. Coast RTA offers fares and monthly passes at a discount to college students, senior citizens, and customers with physical and mental disabilities. Service animals are permitted to accompany individuals with disabilities on all vehicles.

### Fixed Route Service

Coast RTA operates eight (8) fixed routes, as shown in **Map 8** (below), which include: commuter shuttles, local transit service, neighborhood circulators, and tourist shuttles. Areas served include Aynor, Conway, Georgetown, Myrtle Beach, North Myrtle Beach, Surfside Beach, Loris, and Murrells Inlet. Coast RTA plans to add service to the Myrtle Beach International Airport and to create a tourist shuttle in North Myrtle Beach. Additionally, \$1,000,000 has been designated for much needed bus stop signs and shelters; these improvements should increase ridership and make the system user-friendlier for regular and first-time riders.



Map 8: Existing Coast RTA Fixed Routes

Source: Coast Regional Transportation Authority (April, 2007)

#### Demand Response Service

In addition to its fixed route service, Coast RTA provides demand-responsive paratransit services in Horry and Georgetown Counties. These services include Medicaid transportation, Citizen's Accessible Transit Service (CATS) – a complementary ADA service for persons with disabilities, and Dash About for Seniors – a service designed to provide transportation to citizens over the age of 60, the disabled, and the general public on a space-available basis.

### Emergency Evacuation Service

Coast Regional Transportation Authority (RTA) also provides Horry County with emergency evacuation shuttles. Equipped with high capacity, wheelchair accessible buses, shuttles, and vans, Coast RTA is able to provide transportation in the event of a natural disaster or emergency. Coast RTA is a part of Horry County's Emergency Operations Plan and maintains a station at the Emergency Operations Center when activated.

# Upcoming Projects for Coast RTA

### Park and Ride

Coast Regional Transportation Authority plans to partner with the local communities to establish regional park and ride lots. These park and ride facilities would allow residents to park their cars in a central location and utilize the Coast RTA fixed route bus system for their morning and afternoon commutes.

### North Myrtle Beach Trolley Circulator

North Myrtle Beach has expressed interest in a trolley circulator service to connect the Ocean Boulevard hotels with the many attractions located in North Myrtle Beach.

### Airport Shuttle

Many visitors to the Myrtle Beach area have expressed interest in a shuttle service connecting the Myrtle Beach International Airport to area hotels. This service would initially run with two shuttles and align with flight arrivals and departures. The airport already has shelters and an area designated for shuttle pickups.

### Myrtle Beach Public Market

The City of Myrtle Beach is moving forward with its vision for a public market in Downtown Myrtle Beach. As part of this vision, the City of Myrtle Beach has determined that a trolley connecting the market to the hotel district along Ocean Boulevard is a feature that would contribute to the success of the project. Coast RTA is working closely with the City's Planning Department in the development of this service.

### **Bus Stop Signage and Shelters**

There is currently a lack of identification for the fixed route system, creating confusion and safety concerns as riders flag down buses along the highway. The Grand Strand Area Transportation Study Committee (GSATS) has designated \$1,000,000 for much needed bus stop signs and shelters. This will improve ridership and make the system user-friendly. Coast RTA plans to make each bus stop sign and shelter functional and informational by providing route maps, timetables, and general system information at each location.

#### Intermodal Center

Coast Regional Transportation Authority (RTA) has outgrown its current facility located on Third Avenue in Conway and plans to build a new intermodal center closer to Myrtle Beach. This location does not provide adequate capacity to properly house and maintain its fleet of more than 50 vehicles. Coast RTA has already received earmarked funding in support of this project. The intermodal facility would become the primary hub for the Fixed Route service. The Conway facility would remain a satellite facility for routes servicing central and western Horry County. The Conway facility would also remain the primary hub for the Demand Response service because of its central location. A large portion of the Demand Response ridership is located in the rural areas of Horry County.

### Existing and Planned Bikeways and Sidewalks

Several area municipalities and non-governmental groups have embarked upon independent bikeway and walkway projects. Some of the projects have been in conjunction with the national initiative, The East Coast Greenway. The City of Myrtle Beach has over 14 miles of multipurpose, non-motorized paths (10-12 feet wide), over 3 miles of inroad bike lanes and over 10 miles of "share the road," signed street segments. North Myrtle Beach is currently preparing a comprehensive bikeway plan that will address linkages to residential areas and centers of employment. Surfside Beach installed 1,000 linear yards of sidewalk on Ocean Boulevard in the fall of 2005.

# Rail Service

Horry County is not directly served by rail passenger transit and rail freight services. The County is connected to the Amtrak national system via a van connection. The van, a joint Amtrak-Pee Dee Regional Transit operation, connects Myrtle Beach and Conway with Amtrak's Silver Palm at Florence.

# <u>Airports</u>

Air travel is an important element of the overall transportation system serving the Grand Strand Area. Horry County Department of Airports handled more than 1,566,409 Commercial enplanements and deplanements and 53,246 General Aviation aircraft arrivals in the past year. Myrtle Beach's passenger growth surpassed the national average, in the last decade. The Federal Aviation Administration (FAA) forecasts domestic US enplanements to increase at an average annual rate of 3.5 percent until the year 2009 and 2.9 percent from 2010 to 2020<sup>1</sup>. Applying these rates to Myrtle Beach International Airport (MYR), the total enplanements and deplanements in 2020 are estimated at 2.5 million.

According to a South Carolina Department of Commerce, Division of Aeronautics report released in February 2006 entitled "The Economic Impact of Aviation", the following is the annual estimated economic impact of the four airports in the Horry County Department of Airport's system:

Myrtle Beach International Airport -	\$756.454 Million
Conway – Horry County Airport -	\$ 8.975 Million
Grand Strand Airport -	\$ 10.119 Million
Loris Twin City Airport -	<u>\$.843 Million</u>
Total	\$776.391 Million

Activities at Horry County Airports include commercial aviation, general aviation, air cargo services, flight training, medical transportation, aircraft maintenance and restoration, military exercises, law enforcement, and various other services related to the health, welfare and safety of the community.

**The Myrtle Beach International Airport (MYR)** is located within the city limits of Myrtle Beach at the former Myrtle Beach Air Force Base. Currently, six major U.S. airlines serve MYR – Continental Airlines, Delta Air Lines and Delta Connection, Northwest Airlines, Spirit Airlines, US Airways, and United Express. The airport is comprised of 1,965 acres located on the southerly side of the City of Myrtle Beach between US Route 17 Bypass and Business (Kings Highway). The passenger terminal currently comprises seven gates.

**The Grand Strand Airport (CRE)** is located in the City of North Myrtle Beach and has an instrument landing system (ILS) and precision approach path indicators (PAPIs) in place. The airport occupies 413 acres of land adjacent and parallel to the Atlantic Intracoastal Waterway.

**The Conway-Horry County Airport (HYW)** is located 4 miles west of the City of Conway on US Route 378. The airport's major tenant is the North American Institute of Aviation, a professional pilot training school. Emergency medical helicopter (life flight) services are also based at this airport. The airport is situated on 306 acres of land and does not have ILS capabilities.

*Twin City Airport (5J9)* is located 2.5 miles northeast of the City of Loris off US 701. It is the smallest of the three general aviation facilities in Horry County. It is situated on 50 acres of land and does not have ILS capabilities.

# **Aviation Projections**

The South Carolina System Plan provides forecasts of aeronautical activity at the airports. Airport staff considers these forecasts to be conservative due to the growth of the Grand Strand area. This is particularly evident in the forecasts of aviation demand to be expected at MYR, where the air carrier enplanements and operations projections do not take into consideration recent high growth rates.

The Horry County Department of Airports has Airport Master Plans for all airports. These Master Plans are updated regularly. Please refer to each Airport's Master Plan for details of that Airport's current conditions and planned future improvements. (http://www.horrycounty.org/depts/airports/index.asp)

# <u>Ports</u>

The shallow draft ports of Murrells Inlet and Little River Inlet continue to serve both commercial fishing vessels and pleasure crafts. They are both connected by the Atlantic Intracoastal Waterway, which serves as a storm-safe transportation route for commercial water transportation. All along the Grand Strand, environmental regulations severely limit the construction or substantial expansion of new marinas, so the value of those existing will become more important to the tourists and commercial users of Horry County. Further major commercial ports in the vicinity are located in Wilmington, NC, Georgetown, SC and Charleston, SC.

# Water and Wastewater Supply and Treatment Systems

The Grand Strand Water and Sewer Authority (GSWSA) is the major supplier of potable water for Horry County, servicing an area of approximately 800 square miles. As its raw water source, GSWSA utilizes Bull Creek, averaging daily flows of over one billion gallons. GSWSA's Bull Creek Regional Water Treatment Plant, located in Bucksport, has a daily peak flow capacity of 45 million gallons and is designed for ready expansion.

Along with the GSWSA, other major water suppliers in the County include the Bucksport Water Company and the City of Myrtle Beach. Bucksport serves approximately 11,500 primarily residential customers through 4,600 connections. Bucksport's groundwater wells can yield up to 1.9 million gallons per day. Average daily water flow through the

system is 900,000 gallons per day with a per capita flow of 80 gallons. The City of Myrtle Beach supplies water for its incorporated area, as well as North Myrtle Beach and unincorporated portions of the County. Myrtle Beach's surface water treatment plant now has the ability to generate 40 million gallons per day and the facility's treatment capacity is slated for expansion.

Grand Strand Water and Sewer Authority provides most of Horry County's wastewater treatment services. The municipalities of Myrtle Beach, North Myrtle Beach, and Loris maintain separate treatment facilities. GSWSA offers wastewater treatment to Conway, the Little River Water and Sewage Company service area, the Bucksport Water Company service area, the municipalities of Surfside Beach, Aynor, and North Myrtle Beach, and remaining portions of the unincorporated County.

**Table 58** lists wastewater treatment facilities operating within the County, along with permitted capacities and monthly average treatment flow. Monthly average flows are derived from June 2005 data. Peak flows may exceed the average flow figures.

Wastewater Treatment Facility	Permitted Capacity (in millions of gallons per day)	Monthly Average Flow – June 2005 (in millions of gallons per day)
GSWA Schwartz	14.35	9.8
GSWA Vereen	7.0	2.0
GSWA Conway	4.0	2.4
GSWA Greensea	0.02	0.004
GSWA Bucksport	0.2	0.11
GSWA Longs	0.2	0.06
City of Myrtle Beach	17.00	12.4
Town of Loris	0.70	0.43
City of North Myrtle Beach Ocean Drive	4.5	3.0
City of North Myrtle Beach Crescent Beach	2.9	1.5

Table 58: Wastewater	Treatment Facilities	and Canacities	2005
	rieannent i aonnes	and Capacilles	, 2005

Source: South Carolina Department of Health and Environmental Control

South Carolina Department of Health and Environmental Control establishes wasteload allocations for treatment facilities discharging into the area's surface waters. Surface waters, particularly in the urbanized portions of the County, already contain low levels of oxygen and thus have little remaining ability to absorb additional wastewater discharges. GSWSA has also been very active in exploring alternative wastewater disposal strategies, including the use of golf courses, turf farms, tree farms, and wetlands for land applications.

# Solid Waste Collection and Disposal

The Horry County Solid Waste Authority, Inc. provides solid waste recovery, recycling, and disposal services to the unincorporated parts of the County, as well as municipal areas. The Solid Waste Authority operates a Subtitle D Municipal Solid Waste (MSW) landfill and a Construction and Demolition (C&D) Landfill

on a 734-acre parcel on Highway 90 outside of Conway. The 2001 Solid Waste Management Plan envisions continuing MSW and C&D disposal operations at the current site through 2020 and beyond.

#### **Collection System**

The Solid Waste Authority staffs 23 convenience centers and 1 dumpster site, serving 35,876 households. Collection sites are generally located within a five-mile radius of any given County residence.

Neighborhoods and businesses in unincorporated Horry County also contract for collection services with private haulers. The municipalities of Myrtle Beach, North Myrtle Beach, Aynor, Conway, Briarcliffe Acres, Loris, Surfside Beach, and Atlantic Beach provide curbside collection of household waste and yard waste within their jurisdictions.

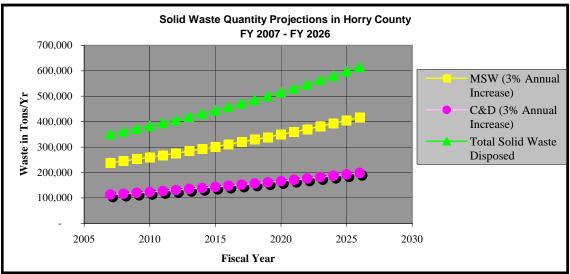
## **Transfer Stations**

There are two municipally operated transfer stations located in Myrtle Beach and North Myrtle Beach. The facilities have a combined capacity of 700 tons per day.

#### **Disposal Facilities**

Solid waste disposed in Horry County consists of two main components – municipal solid waste and hazardous materials. Municipal Solid Waste (MSW) is produced by households and businesses and "other solid waste" is yielded by construction and industrial activities. In FY 2005, Horry County disposed of 222,819 tons of MSW and 127,314 tons of other solid waste for a total of 350,133 tons of solid waste. In FY 2005 Horry County generated approximately 5.6 pounds of MSW per person per day, exceeding the State per capita waste generation rate of 4.4 pounds.

The permanent population and tourism are both major contributors to solid waste generation in Horry County. Based on population and tourism projections, the Authority estimates that solid waste generation will continue to grow at an annual rate of about 3% over the next twenty years as seen in **Graph 15**. Based on these projections, over 10 million tons of solid waste will require disposal over the next twenty years.



Graph 15: Solid Waste Quantity Projections in Horry County, FY 2007 – FY 2026

Source: Horry County Solid Waste Authority 2006

For disposal of MSW, The Highway 90 landfill site is currently permitted from DHEC to operate a total of 67-acres of Subtitle D Landfill area. The permitted Subtitle D Landfill area has approximately 2.8 million tons of MSW capacity remaining as of the beginning of FY 2007. Based on the waste disposal projections, 2.8 million tons of capacity is anticipated to provide MSW disposal capacity through FY 2016.

In order to provide MSW capacity beyond FY 2016, the Solid Waste Authority is also vigorously pursuing permission through DHEC a Subtitle D Landfill *Piggyback Expansion*. The *Piggyback Expansion* provides additional capacity per acre impacted by taking advantage of the "valley between two previously used waste disposal areas". It is anticipated the Piggyback Expansion will provide over 4.6 million tons of MSW, which should provide capacity through the 20-year planning period.

For disposal of other solid waste yielded by construction and industrial activities, the landfill site is currently permitted by DHEC to operate a *Vertical Expansion* over a 120-acre area of a previously filled MSW landfill. It is estimated the permitted area has approximately 2.2 million tons of disposal capacity remaining as of the beginning of FY 2006. Based on the waste disposal projections, 2.2 million tons of capacity is anticipated to provide C&D disposal capacity through FY 2020. Beyond 2020, the Authority plans to co-mingle other solid waste yielded by construction and industrial activities with MSW within the Piggyback Expansion.

Hazardous materials comprise less than one percent of the waste stream in Horry County. The Authority landfill maintains a plan for conformance with the provisions of the South Carolina Solid Waste Policy and Management Act, which regulates the disposal of special wastes in municipal landfills. According to the SCDHEC Bureau of Land and Waste Management Site Assessment Section, 43 sites have been assessed in Horry County as of June 2007 and were included on the Section Project List (SASPL). These 43 sites are comprised of:

- Five (5) sites on the Comprehensive Environmental Response Compensation and Liability Inventory System (CERCLIS);
- Zero (0) sites on CERCLIS are on the National Priority List (NPL);
- 38 sites which have been removed or were never on CERCLIS, these are referred to as "State Sites";
- 23 sites are on the State Priority List (SPL);

CERCLIS is an EPA database of abandoned, inactive, or uncontrolled hazardous waste and spill sites.

#### **Disaster Related Debris Sites**

The Horry County Solid Waste Authority is responsible for managing the permanent removal, temporary storage, burning, grinding and disposal of all debris generated from a disaster-related event. Citizens are responsible for placing disaster- related debris along the curb of the public right-of-way to be eligible for pickup and disposal by the Solid Waste Authority. To expedite debris removal and disposal efforts, the following properties have been designated and approved by the South Carolina Department of Health and Environmental Control (SCDHEC) as Temporary Debris Management Sites:

Horry County Solid Waste Authority Landfill- Highway 90 1187 Acre Tract- Highway 90 & International Drive Green Sea Tract- Highway 33 & Grassy Bay Road Highway 57 Tract- Near Stephens Crossroads

The Temporary Debris Management Sites may not be utilized until proper notification is given to SCDHEC after each disaster- related event. Additionally, each site must be pre-approved by the local SCDHEC office for any burning and/or grinding of vegetative debris generated from a disaster.

## Waste Reduction/Reuse/Recycling

Horry County maintains programs to encourage the recycling of waste, including recycling convenience centers in the unincorporated areas, educational activities, and a central Material Recycling Facility (MRF). The 22,000 square foot MRF currently processes approximately 1,300 tons of material per month. The Solid Waste Authority is in the process of designing and constructing a new 40,000 square foot MRF that will processes approximately 30,000 tons annually. In addition to the 16,000 tons the MRF processes yearly, another 66,500 tons of solid waste materials are recycled. Waste reduction efforts include backyard composting. The SWA operates a yard waste/composting facility, accepting about 105 tons of waste per day. In FY 2005, the SWA processed over 82,500 tons of waste/composting material. Following **Map 9** shows the locations of the SWA recycling convenience centers.



Map 9: Recycling Centers in Horry County

## Stormwater Management

#### Inventory

Horry County is a regional stormwater leader that recognizes stormwater management as a community-wide issue that requires a community-wide solution. Stormwater refers to the precipitation that drains off the land. The amount of impervious surface (i.e., streets, roofs, and parking lots) is the most significant factor affecting the amount of runoff from an area. As Horry County continues to develop from rural to urban uses, runoff volumes and rates will continue to increase. The Stormwater Management Program has a staff of 17 full time employees assisting in providing services, conducting programs, and keeping the County aware of the important issues concerning stormwater.

Daily operations of this department include: review, issuance, and inspection of stormwater permits, excavation and cleaning of ditches and canals, installation and repair of storm drainage systems, beaver control, etc. The goals of this program, as outlined in the Stormwater Management Program Strategic Plan, are to preserve and enhance the quality of the water systems of Horry County; to reduce the impact of flooding in the County; to create public support for the importance of stormwater management; and, to manage stormwater program funds to maximize benefits to the citizens of Horry County.

## Ongoing Projects

#### **NPDES Phase II Compliance Measures**

National Pollutant Discharge Elimination System (NPDES) addresses sources of stormwater runoff that have the greatest potential to negatively impact water quality. The Clean Water Act requires that all discharges from any point source (refer to pages 53 and following) into waters of the United States must obtain an NPDES permit. Phase II of this program regulates small municipalities and must follow these six minimum measures: public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site run-off controls, post-construction run-off controls, and pollution prevention. The goal of this permit is to protect the quality and beneficial uses of the nation's surface water resources from pollution. South Carolina's small municipalities first permit cycle started March 1, 2006 and will continue for the next five years.

## Beach Monitoring Program

The Stormwater Management Department has been monitoring Horry County beaches since 1996. They have performed two research studies, funded by Section 319 Grants, to identify sources of bacteria and measures to minimize impacts. The first two-year project studied surface water runoff and discharge to the coastal zone. The second further investigated the bacteria contamination present in the Atlantic Intracoastal Water Way and the Atlantic Ocean surf zone. Stormwater staff members are currently working with SCDHEC to improve the program for the future.

#### Water Quality Monitoring

Partnering with USGS to provide real-time monitoring stations, the Horry County Stormwater Department has produced a Water Quality-Monitoring Program. There have been three stations recently installed in Chinners Swamp, near Aynor; Buck Creek, near Longs; and Crabtree Swamp, in Conway. An additional station is to be installed at the Conway Marina. These monitoring stations are equipped with several water quality indicators, as well as, height and velocity gages.

#### Stormwater Permitting

The Stormwater Management Program reviews and inspects all new developments disturbing over 10,000 square feet of land. Since the year 2000, the department has

issued over 1,000 stormwater permits within the unincorporated areas of Horry County. During the review and inspection process, emphasis has been placed upon preventing and reducing downstream flooding and on water quality to comply with NPDES Phase II program.

#### **Capital Improvement Plan**

The Stormwater Advisory Board has developed a project prioritization system in order to keep ongoing and upcoming Capital Improvement Projects in order by priority. The County Consultant is also developing a software system needed to analyze and model drainage basins, identify deficiencies, and design improvements. The department hopes to have the new Capital Improvement Plan in place during the year 2007.

#### Strategic Planning

In September of 2004, Horry County Stormwater Management Department embarked on a strategic planning and thinking process. The development of the strategic plan was necessary to plan for future efforts by the department over the next ten to twenty years. The three primary goals were: to ensure that the County Stormwater Management Program is appropriately aligned to the expectations of the County Council and the Community; to establish a unified, articulated plan that can be communicated to all employees that clearly conveys program priority and direction; and to ensure that limited resources are appropriately allocated to achieve the objectives of the County Council and Executive Management. This plan was presented in March of 2005. Topics and concerns reviewed included; major opportunities, the uniqueness of Horry County, leverage actions, risks, shortfalls, continued vitality of the area, management issues, changes needed, continuing progress, low impact development, and water quality and quantity issues.

(For detailed plans please visit http://www.horryCounty.org/stormwater/index.html)

## Public Safety

## Emergency 9-1-1 Center

The Horry County Emergency 9-1-1 Communications Center in Conway is a vital link between the community and the public safety responders in the area. As the first link in the chain of Public Safety, it is the mission of Emergency 9-1-1 to provide courteous, reliable and professional service to the citizens and visitors of Horry County.

All 9-1-1 calls made in Horry County are answered in the Communications Center. In fiscal year 2007, the center received 228,418 calls. This resulted in 120,096 police, and 39,595 fire and ambulance dispatches from the communications center. The center dispatches for Horry County Police Department, Horry County Fire/Rescue, Horry County Environmental Services, Aynor Police Department and Atlantic Beach Police Department. Calls for service from the other municipalities are transferred immediately to them. The projected statistics for call numbers for 2006 and 2007 can be reviewed in **Table 59**.

Dispatched Calls	FY 2007
Horry County Fire/Rescue (EMS/Fire)	39,595
Horry County Environmental Services	10,791
Horry County Police	115,381
Atlantic Beach Police	1,874
Aynor Police	2,220
Horry County Sheriff	621
Totals 9-1-1 calls received	228,418

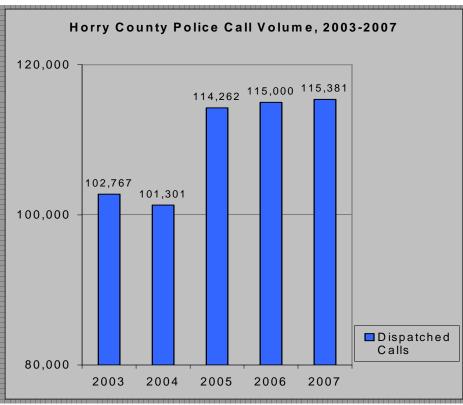
Source: Horry County Emergency Telecommunications Center 2007

The 9-1-1 Center has a staff of 55 people as of June 2007, to assist in all needs: emergency and/or non-emergency. The utmost responsibility of 9-1-1 emergency telecommunicators is to work with service providers and GIS to assure accurate database management, support the mission of the public Safety Division and Horry County Government, and to provide professional and timely customer service. The South Carolina Criminal Justice Academy certifies all telecommunicators. Telecommunicators are trained to provide medical pre-arrival instructions to assist patients before the ambulance arrives. This service allows persons who are directly involved in or related to the emergency to be calmed and have a positive effect on a potentially major situation.

## Police

The Horry County Police Department provides law enforcement services to the unincorporated portion of the County. Municipalities within Horry County also maintain individual police forces. The County participates in mutual aid agreements with the cities and supplements their police services upon request. As of June 2007, the Police Department maintains a staff of 281 commissioned officers, plus 30 non-commissioned support personnel. Services are currently centralized with the M.L. Brown facility in Conway acting as operational center. In 2006 three precinct police stations began operation. These precincts are located at the South Strand Complex (Surfside area), the Ralph Ellis Complex (Stephens Crossroads), and the M.L. Brown Complex (Conway). Additionally, a proposed West precinct (Green Sea Magistrates office) is projected to begin operation in fall 2007, and will initially be administered out of the Green Sea Magistrate's office until a new facility is constructed.

The number of calls dispatched to the Horry County Police is steadily rising. Total volume increased by 10.7 percent between 2004 and 2005. **Graph 16** indicates trends in the call volume handled by the Horry County Police Department.



Graph 16: Horry County Police Department Call Volumes, 2003-2007

Source: Horry County Police Department, 2007

## **Fire Protection**

The Horry County Fire Department provides fire protection services to the unincorporated portion of the County and the Town of Aynor. The Murrells Inlet – Garden City Fire Department operates within a Special Purpose District serving approximately 45 square miles in southeastern Horry County and northeastern Georgetown Counties. The cities of Myrtle Beach, North Myrtle Beach, Conway, and Loris deliver fire services to portions of the County on a contractual basis. The County and municipal departments also augment individual delivery arrangements by participating in mutual aid agreements. County fire service operations are financed through a restricted tax millage.

As of 2007, staffing for the department consists of over 275 full time career staff and over 200 volunteers. Closely following U.S. Highway 501, a boundary line splits the County into two battalions – North and South. Currently, the department operates sixteen (16) Advanced Life Support ambulances 24 hours a day throughout the county. The county operates thirty-eight (38) stations between the career and volunteer staff (see **Table 60**).

The Insurance Services Office (ISO) rates all fire stations throughout the county, which is a private insurance organization that evaluates fire protection capabilities. Ratings criteria include the distance between structures and fire stations, the composition of structures, numbers and types of fire fighting equipment and apparatus, fire stations, and personnel. Lower ratings represent lower premiums assumed by the insurance-holder.

Fire Station	Station No.	Staffing	ISO Rating
Socastee	1	Day-time Career	6/9
Little River	2	Volunteer	6/9
Bucksport	3	Day-time Career	6/9
Forestbrook	4	Volunteer	7/9
Wampee	5	Day-time Career	6/9
Mt. Olive	6	Day-time Career	9
Lake Arrowhead	7	24-hour Career	7
Juniper Bay	8	Volunteer	8/9
Antioch	9	Volunteer	6/9
Ketchuptown	10	Volunteer	9
Nixonville	12	Volunteer	5/9
Longs	13	Volunteer	5/9
Shell	14	Volunteer	7/9
Bayboro	15	Volunteer	7/9
Cates Bay	16	Day-time Career	7/9
Mt. Vernon	17	Day-time Career	5/9
Brooksville	18	Volunteer	Not rated
Cherry Hill	19	Volunteer	5/9
Maple	21	Day-time Career	7/9
University	23	24-hour Career	Not rated
Aynor City	24	Day-time Career	6/9
Goretown	26	Volunteer	5/9
Allens Crossroads	27	Volunteer	7/9
Joyner	28	Volunteer	7/9
Floyds	38	Volunteer	9
Murrells Inlet/Garden City 1		Career/Volunteer	4
Murrells Inlet/Garden City 2		Career/Volunteer	4

**Table 60**: Horry County Fire Department and Murrells Inlet – Garden City District

Source: Horry County Fire Rescue and Murrells Inlet – Garden City Fire District, 2007

Reflecting rapid population growth, call volume handled by Horry County Fire Rescue over the past ten years rose from 3,000 dispatched fire related calls or alarms in 1996 to 5,651 alarms in 2006. The high volume is also attributed to the increase in rescue and first responder activity.

Fire service delivery can be assessed on the basis of turnout time, which represents the elapsed time between the dispatch of the call and the response of the first engine. The average response time for County volunteer stations is 6 minutes and 50 seconds and the average time for a career station is 1 minute and 10 seconds.

#### Emergency Medical Services

The County provides direct emergency medical service response to the unincorporated portions of Horry County, as well as incorporated areas. **Table 61** identifies the Emergency Medical Service (EMS) stations located throughout the County. Each facility is staffed with a least one advanced life support ambulance, an Emergency Medical Technician, and Paramedic.

Seven volunteer-based rescue squads within Horry County provide a supplement to EMS and Fire Rescue response. In 2006, the EMS Division handled 33,750 calls for emergency medical service, a rise of 4.1 percent in demand over the previous year.

EMS delivery is assessed on the basis of response time. Standard response time is 4 to 6 minutes for basic life support and 8 minutes for advanced life support. The Department's overall response average was 7 minutes. Also, **Table 61** presents average response times by station. Higher response times for sites in the rural part of the County reflect the more geographically dispersed nature of the service population.

EMS Sites	Map No.	Average Response Time (in minutes)
Aynor	6	9.32
Bucksport	11	9.21
Conway	7	7.35
Lake Arrowhead	8	6.41
Loris	2	9.31
Mt. Olive	1	8.77
Myrtle Beach	9	6.18
North Myrtle Beach	4	5.91
Red Bluff	5	10.42
Socastee	12	6.01
South Myrtle Beach	10	5.12
Stephen's Crossroad	3	7.49
Surfside Beach	13	5.55

## Table 61: Horry County EMS Facilities

Source: Horry County Fire Rescue, 2005

## **Emergency Management**

Horry County Emergency Management develops plans and coordinates resources to protect the citizens and visitors of Horry County from the hazards that threaten our community. The Department also serves as the liaison between the local, state and federal agencies in the emergency management network. The Emergency Management Department utilizes the framework of the National Incident Management System for all phases of emergency management: prevention, preparedness, response, recovery and mitigation. When preparing for or responding to a disaster or emergency, the department refers to one of many plans that have been developed. The Horry County Emergency Operations Plan is the governing plan for all operations during an emergency or disaster. Other plans such as the Logistics Plan, Hurricane Plan, and the All-Hazards Mitigation Plan address certain aspects of a disaster or emergency and are used in those instances. Through programs like the Horry County Community Emergency Response Team (CERT) and other public education programs, the Department educates the general public on their roles and responsibilities during a disaster or emergency. The Department also develops and coordinates emergency and disaster training for the many Public Safety and non-profit response agencies throughout the County. While the Department uses an all-hazards approach in planning, there are three main points of focus: natural hazards, technological hazards and training. These issues embrace a wide variety of specialized equipment, response teams, and projects that enhance the department's capability.

#### Natural Hazards

Horry County is vulnerable to a wide variety of natural hazards that threaten life and property. The natural hazards that could potentially affect the County are listed below.

- -Hurricane -Flooding -Tornados -Severe Thunderstorms & Wind -Storm Surge -Severe Winter Storms -Earthquake -Wildfire -Lightning -Drought -Tsunami
- -Extreme Heat

The Emergency Management Department relies on many types of equipment and technology to monitor and respond to disasters or emergencies caused by natural hazard. The most recognized software used in the emergency management field is Hurrevac. The Hurrevac software allows emergency management officials to monitor tropical systems and use the applications to plan and prepare for the possibility of an evacuation. The Weather Sentry satellite weather feed can be monitored in the EMD office or at a remote site via the Internet. Some equipment can also be used at public education events for demonstration purposes. The WeatherPak Weather Station can monitor and give readings of wind direction, temperature, humidity, and other helpful information. Since 2006, the Emergency Management Department holds an annual Hurricane Preparedness Expo. The purpose of this expo is to educate local residents and businesses on how to prepare for the hazards of a hurricane and to make them aware of the current public safety procedures used during the threat of a hurricane.

## **Technological Hazards**

There are two main types of technological hazards that Horry County is vulnerable to: Hazardous Materials (HazMat) and Terrorism. HazMat can be defined as any item or agent (biological, chemical, physical) which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors. Terrorism can be executed in many different forms and/or situations. According to the United States Department of Homeland Security, terrorism can be broken down into five categories: Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE). The Emergency Management Department has received Homeland Security Grants to purchase specialized equipment in response to any terrorist attack. Fortunately, due to the similarities of the HazMat and terrorism categories, most equipment can be utilized in both situations. Rae Detection Four Gas Monitors, Thermal Imagers, and a RAMP Biodefense System can all be used in a HazMat or terrorist situation. From 2003 to 2005 Horry County received over 2 million dollars of Homeland Security funds to purchase such equipment. Many different specialty teams within the County can utilize this equipment. Horry County is recognized throughout the state for its regional response teams such as the Chemical, Ordnance, Biological, and Radiological Team (COBRA); the County Agro-Terrorism Response Team (CART); and the Explosive, Ordnance, Demolition Team (EOD).

## Training

The Emergency Management Department provides three different types of training exercises: tabletop, functional, and full-scale. There are many different County departments, private and healthcare industries and Extremely Hazardous Substance (EHS) facilities required to exercise particular plans to meet or satisfy industrial or government requirements. Most exercises will require the same public safety agencies to respond and participate to meet the basic criteria. Therefore, Emergency Management has taken the role of planning and conducting exercises throughout the year to include the agencies and facilities that need to meet a particular requirement. This not only reduces exercise redundancy but also promotes the partnership of private and government agencies. In 2006 – 2008 the Emergency Management Department will develop and conduct four tabletops, four functional, and three full-scale exercises.

## **General Government Facilities**

Horry County maintains a council-administrator form of government, with a current fulltime staff of approximately 1,900 employees. Horry County employment numbers rose in the 1990s and continues to rise as of present. Staffing growth is a likely function of population increases and heightened development activity in Horry County. The County workforce has also become more full-time, with less reliance on part-time temporary staff.

Most Horry County government facilities are located in the County seat of Conway. The M. L. Brown Building houses Public Safety facilities such as: Fire and Rescue, Police and Emergency Management. The Judicial and General Government Complex opened its doors in 2002 housing thirteen of the forty departments including: Assessor, Treasurer, Auditor, Register of Deeds, Planning & Zoning, Codes Enforcement, Finance, County Administrator, County Attorney, Budget and Revenue; Public Information, County Council and Human Resources. The Public Works facility is located on Privitts Road. These departments all work together to insure the best quality service to Horry County citizens.

## **Educational Facilities**

## PK-12 Education

Education is vital to overall community well-being and Horry County is committed in providing a quality education to all children. The Horry County School District maintains a countywide school system with nine attendance zones in Aynor, Conway, Carolina Forest, Green Sea/Floyds, Loris, Myrtle Beach, North Myrtle Beach, St. James and Socastee. The system is currently the third largest in South Carolina. The district

operates a total of 46 schools: 25 elementary/primary schools, 12 middle/intermediate schools, 9 high schools and 2 career center/academies.

As Horry County grows, so does the need for new schools and classrooms. On November 2, 2004, a \$240 million bond referendum was approved for additional schools and renovations. The list of projects in Horry County Schools' Phase III Building Program includes six new schools and additions and renovations to 20 others. Work will be carried out in all attendance zones during Phase III.

The adequacy of PK-12 educational facilities can be assessed through two levels of service indicators – the percentage of maximum enrollment capacity used and comparison with Horry County average enrollment guidelines. The Horry County Board of Education establishes the following guidelines for student enrollment by school type: 600-700 students for elementary schools; 700-950 students for middle schools; 900-1,300 students for high schools. The average size of the student body as of school year 2007 is 681 for elementary schools, 736 for middle schools and 1,205 for high schools. However, the overall school system is operating at 102 percent of its maximum enrollment capacity as of spring 2007. Of the County's 46 schools, 25 now exceed recommended capacity.

Based on Waccamaw Regional Planning and Development Council projections, Horry County will have 57,064 children age 5 to 18 in 2020. Assuming that the percentage of children attending public schools remains constant from the calculated 2000 figures, approximately 93 percent of the total school age population, or 53,070 children, will enroll in the Horry County School system. **Table 62** identifies 2020 space requirements by comparing the current enrollment capacity of each school type with projected student populations.

	Current Capacity	2020 Student Population*	New Capacity Required
Elementary school	14,527	25,474	10,947
Middle school	8,428	12,736	4,308
High school	11,292	14,860	3,568
Total	34,247	53,070	18,823

Table 62: Student Enrollment Projections and Capacity Needs, 2020

Sources: Horry County School System; (\*)Waccamaw Regional Planning and Development Council.

With a total facility capacity of 34,247 in 2005, the system will have to accommodate an additional 18,823 students by 2020. Assuming the County maintains present average enrollment sizes for each school type and recent growth trends continue, a total of 23 new facilities - 15 elementary schools, 5 middle schools and 3 high schools will be needed.

(For detailed plans for Horry County Schools please visit: http://www3.hcs.k12.sc.us)

## Higher Education

#### Coastal Carolina University

Coastal Carolina University (CCU) is a four-year institution located in Conway. CCU is comprised of 52 buildings on 302 acres. The campus includes the Burroughs & Chapin Center for Marine and Wetland Studies and the Coastal Science Center, located on the East Campus at the Atlantic Center on US Highway 501. The University also offers courses at the Coastal Carolina University Higher Education Center in Myrtle Beach, the Waccamaw Center for Higher Education in Litchfield and a campus in Georgetown. Waites Island, a 1,062 acres pristine barrier island on the Atlantic coast, provides a natural laboratory for extensive study in marine science and wetlands biology.

Coastal Carolina University offers baccalaureate or undergraduate degrees in 40 fields of study and 37 undergraduate minors. The University also offers master's degree programs in business administration, education, and coastal marine and wetland studies. As of summer 2007, the University had an enrollment of 8,600 students. Approximately sixty percent of the student body is comprised of South Carolina residents.

#### Horry-Georgetown Technical College

Horry-Georgetown Technical College (HGTC) is a comprehensive community/technical college providing more than 60 associate degrees, diploma and certificate programs of study in a wide variety of career fields, as well as offering transfer opportunities to students intending to pursue a bachelors degree or beyond. The College has three campuses, located in Conway, Georgetown, and Myrtle Beach, and an off-campus instructional site at North Myrtle Beach High School. HGTC is among the fastest growing educational institutions in South Carolina, with student enrollment increasing more than 100 percent over the past decade. Annual degree program enrollment exceeds 7,500 students and each year and HGTC serves more than 15,000 students through Continuing Education and customized training. An annual growth rate of 3-5% is projected for the foreseeable future.

#### Webster University

Webster University maintains a Myrtle Beach campus with a current enrollment of 340 students. The University offers a Master's Degree in Business Administration and a Master of Arts with emphasis in business, counseling, human resources development, and management. With the addition of a new campus facility, Webster's enrollment virtually doubled between 1996-1997. The University anticipates further expanding classroom space and increasing its enrollment.

## Library Facilities

The Horry County Library System provides library services on a countywide basis. The Library System consists of nine locations including: Aynor, Bucksport, Green Sea/Floyds, Loris, North Myrtle Beach, Socastee, Stephens Crossroads and Surfside Beach and the main branch located in Conway. The library has identified a tenth location to be built within the Carolina Forest Development. The current and projected staffing for each library location is listed in **Table 63** below. The City of Myrtle Beach also has a municipal library, the Chapin Memorial Library, which is the only municipally owned and operated public library in South Carolina.

Library staffing and services seek to expand over time by increasing to meet the growing information demands of the population. The library facilities are becoming adaptable to the increasing amount of information that is available electronically. Also the library buildings are seeking to accommodate the multiplicity of formats (videos, DVDs, music CDs, and audio books) that are available. Library services provided at different libraries depend on the size of the building and the population surrounding the area.

Location	2006 Staff (Current	)2007 Staff
		(Estimated)
Aynor	2	2
Bucksport	2	2
Conway	6	12
Green Sea/Floyds	2	2
Loris	2	2
North Myrtle Beach	4	4
Socastee	8	8
Stephens Crossroad	2	2
Surfside Beach	4	4
Old Conway Library Building		
Bookmobile	2	2
Outreach	1	1
Administration and Support services	13	13
Total	48	54

Table 63: Horry County Me	morial Library Staffing Levels
---------------------------	--------------------------------

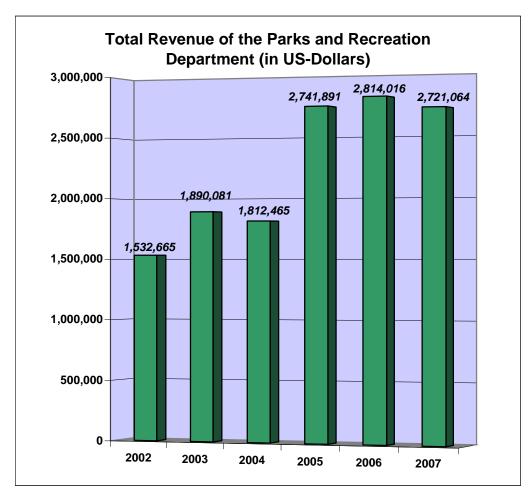
Source: Horry County Libraries 2007

## Parks and Recreation Facilities

The Parks & Recreation Department in Horry County was created to meet the immediate and long-term recreational needs of County residents. The Department's activities are funded through a County General Fund, and a special tax district in Socastee finances a separate community recreation fund.

Currently the department dedicates five (5) full-time and three (3) part-time staff members for park upkeep and other associated parks and recreation activities. The professional staff of Horry County Parks and Recreation Department is dedicated to providing quality active and passive recreational opportunities. These opportunities encompass diverse programs and facilities to promote the mental, physical, and social well being of its citizens. In 2006, there were approximately 11,000 participants in these programs.

With a projected 2008 fiscal year budget of \$4.5 million, the main source of revenue will come from the Horry County Government 1.5 millage. Additional sources of revenue come from participant registration and sponsorships.



Graph 17: Revenue from Parks and Recreation from 2002 - 2007 fiscal year

Source: Horry County Budget Control and Finances, 2007

One of the major budgetary positions of the department is the replacement and/or restoration of parks and recreational facilities from their original state. Further, the department is also adding new parks and recreational amenities as much as their budget allows for.

## Capital projects that were accomplished in the 2007 Fiscal Year

- Creation of six (6) new playgrounds at following park locations: Garden City Public Park, Michael Morris Graham Park, North Strand Park, Pee Dee Park, Socastee Landing, Waccamaw Park
- Red Bluff Boat Landing (with South Carolina Department of Natural Resources (SCDNR) and Grant Administration):
   Replace ramp; General renovation
- Loris Nature Park:
- Michael Morris Graham Park:
- Pee Dee Park:

Replace ramp; General renovation Begin of park construction Addition of ball field Addition of ball field

With such a diverse community, the Parks and Recreation Department must maintain diversity to better serve Horry County not only as a whole, but also on an individual basis. For a full description of Horry County Parks and Recreation facilities please see the Natural Resources Element of the Comprehensive Plan.

# STATEMENT OF NEEDS AND GOALS

# Public Transportation Facilities

## Need:

Create a transportation system that improves and expands travel choices for citizens and visitors.

## <u>Goal:</u>

• Provide an effective and efficient mix of transit modes and transfer facilities to achieve seamless inter-modal travel.

## Water and Wastewater Facilities

## Need:

Provide a safe and adequate public supply of drinking water and water flow sufficient for various purposes throughout the County and provide for the collection, treatment and disposal of wastewater discharge in a manner, which protects & preserves the County's natural environment.

## Goals:

- Accommodate all populations and extend public water and wastewater as needed
- Expand water and wastewater treatment facilities to meet the service needs of the County.
- Work with drinking water providers to ensure that our drinking water quality is maintained.
- Extend public sewer provisions to the unserved areas of the County with unsuitable environmental conditions.

## Solid Waste Management

## Need:

Minimize the amount of solid waste generated within the County & dispose of all solid waste in a manner that maintains public health, reduce management costs, and protect the natural environment.

## Goals:

- Educate the citizens of Horry County about ways to properly dispose of waste and ways to reduce material versus disposal.
- Assess population growth to meet solid waste management needs for Horry County.
- Provide strong leadership required to promote regional integrated solid waste management planning.

## Stormwater Management

## Need:

Provide for the management of stormwater that maintains adequate drainage throughout the County, minimizes flood damage to property, and protects the water quality standards of Horry County.

## Goals:

- Preserve and enhance the quality of the waters of Horry County.
- Reduce flooding in Horry County and enhance the capabilities to manage stormwater runoff.
- Foster public support for the importance of stormwater management.
- Effectively manage stormwater program funds to maximize the benefits to citizens.

# Public Safety

## Need:

Protect the health, safety, and welfare of County residents and visitors through the provision of responsive, highly trained staff that are adequately equipped to provide public safety services.

## Goals:

- Identify and prioritize technology needs.
- Assess how population growth impacts response times throughout the County.
- Provide adequate facilities to accommodate the Public Safety Division.
- Reduce the vulnerability and exposure of the public from losses due to emergency or disaster thorough emergency preparedness & management.

## **General Government Facilities**

(Note: General Government Facilities includes a number of departments, for specific departmental information please visit the respective Community Facilities information)

## Need:

Provide for administrative facilities of sufficient space and functionality to maintain the efficient delivery of government operations and promote the aesthetic character of the County.

## <u>Goal:</u>

• Improve and expand government offices to accommodate the growing service demand of the County.

## Education K-12

## Need:

Expand the existing school system to accommodate the growing student population of Horry County.

## Goal:

• Foster communication and cooperation between the Horry County School District and Horry County Government to provide for adequate educational facilities.

## Library Facilities

## Need:

Maintain a library system with facilities, resources, and technological capabilities sufficient to provide for the cultural enrichment of County residents and to ensure convenient and equitable access to available information.

## Goals:

- Improve and expand the existing library system to accommodate the growing service needs of the County population.
- Increase public awareness of Horry County Library facilities, materials, and programs.
- Increase the number of staff and volunteers, as necessary, to assist the department in providing library and information services at higher quality levels of service on a more cost effective basis.

## Parks and Recreation Facilities

## Need:

Provide a balanced system of developed park properties for both active and passive uses including specialized recreational, cultural and arts facilities. Promote a variety of recreational programming and cultural arts events.

## Goals:

- Consider options for the expansion of recreation opportunities.
- Protect, maintain and enhance the natural environment by developing parks, trails and adequate outdoor recreational facilities in an environmentally sensitive manner.

- Develop and maintain parks, recreational facilities, trails and open space areas appropriate for the type of use and nature of the facility.
- Increase public awareness of Horry County facilities and programs.
- Increase the number of staff and volunteers, as necessary, to assist the department in providing cost effective recreation services at a higher level of service.

# **IMPLEMENTATION STRATEGIES**

It is recommended that Horry County implements following strategies within either a short term (1-2 years), intermediate term (2-5 years) or long term (5 and more years) time frame in order to fulfill the previously identified Needs and Goals.

## Public Transportation Facilities

Increase the frequency of transportation service in areas with a defined need (short term).

Encourage the development of regional transit facilities and services (short term).

Encourage regional transit agencies to consider connectivity of all types of transit services (intermediate).

Explore the opportunity of park and ride facilities (short term to intermediate).

Research and support energy efficient forms of transportation (intermediate to long term, depending on economic alternatives and national funding programs).

## Water and Wastewater Facilities

Review population projections periodically for potential capacity restructuring and/or redevelopment (continuously).

Encourage a reclaimed water system for secondary uses that could be used throughout the County **(short term to intermediate)**.

Review the current capacity for efficient and cost-effective expansion possibilities (short term to intermediate as need for expanding facilities arises).

Develop a strategic plan for long-term expansion of facilities (intermediate).

Coordinate with municipalities to project the necessity of expansion and potential areas (short term to intermediate as need for expanding facilities arises).

Encourage regional water and wastewater facilities beyond the boundaries of Horry County (intermediate to long term time frame).

Study land use and zoning around the Bucksport Water System wells and consider the conversion to a regional surface water supply **(short term)**.

Stay abreast of emerging health concerns that impact drinking water quality (continuously).

Identify and evaluate areas where environmental conditions are in danger due to septic tank failure and explore possible grant and funding opportunities to provide public sewer in environmentally sensitive areas **(short term)**.

## Solid Waste Management

Provide comprehensive information on the website about reducing, reusing and recycling material versus traditional disposal **(short term).** 

Continue to provide education programs for youth (short term).

Evaluate outreach programs for effectiveness (short term).

Support state efforts with the anti-litter campaign (short term).

Support criminal sanctions for littering (short term).

Support countywide programs for Horry County wetlands (short term).

Evaluate the solid waste management plan goals to address projected growth (short term).

Review documentation of other areas that have progressively managed a population similar to Horry County (short term).

Pursue solid waste disposal options while also protecting public health and minimizing impact to the natural environment **(short term)**.

Continue to produce projections of municipal solid waste (MSW) for future use (short term; continuously).

Develop an intergovernmental agreement setting forth specific areas of possible multicounty cooperation and secure commitments from other jurisdictions (intermediate to long term depending on when own capacities are reached).

Encourage the development of a regional solid waste management plan (short term to intermediate).

Promote routine intergovernmental meetings to foster continuing cooperation and interest in regional solid waste management planning (short term; continuously).

Explore and support alternative fuel sources with and for businesses and industries (short term to intermediate).

## Stormwater Management

Develop and implement programs focused around public education & participation, pollution management and post construction site run-off based on the County NPDES Phase II Stormwater Management Plan **(short term)**.

Identify, protect & conserve the natural functions of wetlands & water bodies through pollutant reduction **(short term)**.

Implement a Countywide freshwater and beach water quality monitoring program, including comprehensive testing **(short term)**.

Develop and coordinate regional watershed management plans (intermediate).

Implement subdivision review for regional stormwater impacts (short term).

Evaluate stormwater management plan for its effectiveness as population in Horry County grows **(short term to intermediate)**.

Establish a regional watershed collection system (short term).

Discourage development in flood planes, zones, and hazardous areas (short term).

Improve documentation of existing easements including using GIS and GPS mapping capabilities (short term).

Continue to require easement dedication from developers through a workable and credible easement program for all County drainage facilities **(short term)**.

Continue to evaluate and enforce drainage design requirements for new development (short term).

Provide programs to educate the design engineering community (short term to intermediate).

Develop and implement solutions for defined major drainage problems (short term).

Develop a plan and implement basin studies on a prioritized basis (short term to intermediate).

Improve techniques and computer modeling capabilities (short term).

Make information and education accessible and provide citizens with appropriate venues to participate in the stormwater management program **(short term).** 

Support the efforts of the Stormwater Advisory Board (short term).

Develop and publicize a list of organizations that provide an opportunity for citizen participation (short term).

Encourage stakeholder partnerships to resolve common stormwater issues (short term).

Strengthen ordinances that promote the conservation of natural resources (short term).

Educate river users and adjacent landowners about their cumulative effects on our rivers (short term).

Partner with local rental agencies and hotels to develop an outreach program to educate tourists on the unique and fragile coastal ecosystem of Horry County and behavior, and publicize those circumstances or items that can help or harm this resource **(short term)**.

Educate coastal zone residents about their cumulative effects on the ocean and saltwater marshes (short term).

Research signage in flood prone areas (short term).

Develop a stormwater maintenance management plan and prioritize capital improvement project list (**short term**).

Provide funding to monitor and enforce compliance with County stormwater management regulations (short term).

Monitor and update the Stormwater Management Strategic Plan (short term).

## Public Safety

Evaluate current technical systems for usability (short term).

Standardize information within County datasets (short term).

Modernize computer systems within the Police & Fire and Rescue departments for use during emergency calls, as necessary **(short term to intermediate)**.

Provide comprehensive integrated technology solutions, including E911, Police Department, Fire/Rescue, Sheriff's Office, Detention Center, and the Judicial System (short term to intermediate).

Restructure the Police Department to provide for precinct configuration, allowing the department organization to be more community based **(short term to intermediate)**.

Restructure the Fire/Rescue Department into a multiple battalion configuration, providing for increased service and a more community- focused organization (short term to intermediate).

Monitor the response times of the public safety departments (short term).

Increase staffing of law enforcement officers and Fire/Rescue units, as needed, to maintain adequate service delivery levels (short term).

Periodically evaluate needs for expansion, relocation or additions to Public Safety facilities (short term; continuously).

Build precincts in locations that will provide efficient safety services to the citizens of Horry County (short term to intermediate).

Coordinate with municipalities to provide adequate services when annexation occurs (dependant on time frame of annexing municipality).

Reduce delay and potential loss of life and property due to communication breakdowns (**short term; continuously**).

Provide public education explaining preparedness in the event of emergencies and/or natural disasters (**short term; continuously**).

Periodically evaluate emergency management plans for efficiency and effectiveness (short term; continuously).

Establish an evaluation process of current facilities for emergency preparedness (**short term**).

Continue communication with other public safety divisions to provide the best quality emergency management services (**short term to intermediate**).

## **General Government Facilities**

Establish a Capital Improvement Plan for general government facilities (short term).

Continue to monitor facilities capacities and locations based on population growth and residential need in order to maintain service levels (short term; continuously).

#### Education K-12

Establish a periodic meeting to discuss projections of future educational facilities (short term; continuously).

Initiate communication with Horry County Board of Education to discuss using school facilities for recreational purposes & local community needs (short term to intermediate).

Explore the feasibility of an adequate public facilities ordinance based on education facilities needs **(short term)**.

#### **Library Facilities**

Create a library facilities plan (short term).

Evaluate need for the timely expansion and/or renovation of existing facilities (short term).

Seek opportunities to provide expanded technology services including WiFi (short term).

Maintain a user friendly and interactive web site (short term).

Increase staff visibility at community events (short term).

Cultivate relationships with the media outlets (short term).

Develop and implement an effective marketing campaign for programs and facility use (short term to intermediate).

Utilize cooperative advertising and promotion with other entities (short term to intermediate).

Review and increase staff on an as needed basis (short term).

Implement a volunteer training program (short term to intermediate).

Recruit quality employees and volunteer personnel (short term).

Clarify roles and responsibilities of "friends" groups, associations, task forces, etc. through defined policies and procedures **(short term)**.

Develop employee and volunteer recognition and appreciation programs (short term).

## Parks and Recreation Facilities

Continue to coordinate with the municipalities to ensure that all County residents have access to adequate recreational opportunities and review expansion options periodically (short term; continuously).

Monitor and evaluate the effectiveness of current tools for providing parks and recreation facilities **(short term)**.

Coordinate with Planning & Zoning Department staff on population projections and potential expansion needs (short term).

Periodically review and update needs assessment study (short term; continuously).

Initiate communication with Horry County Board of Education to discuss using school facilities for recreational purposes (short term).

Work with Planning & Zoning Department staff to ensure adequate parks and recreation facilities are considered when new subdivisions are approved **(short term)**.

Plan trails & minimize impacts on environmentally sensitive areas when locating trails and other developed facilities (short term to intermediate depending on priority project list of the Parks and Recreation Department).

Develop and implement a management plan for land conservation (short term to intermediate).

Preserve wildlife corridors and areas of high quality natural vegetation (short term; continuously).

Establish maintenance standards, design development standards and vegetation standards and management plans for various types of parks and recreation facilities (short term).

Access maintenance and renovation projects system-wide, periodically, including bringing existing facilities in conformance with ADA standards (short term).

Encourage sidewalks and or other appropriate pedestrian walkways as a part of outdoor recreational facilities (short term).

Develop a user friendly and interactive web site (short term).

Increase staff visibility at community events and board meetings (short term).

Cultivate relationships with the media outlets and provide opportunities for public participation (short term).

Develop and implement an effective marketing campaign for programs and facility use (short term).

Utilize cooperative advertising and promotion with other entities (short term).

Investigate the possibility of a heritage corridor (short term to intermediate).

Review and increase staff on an as needed basis (short term).

Implement a volunteer training program utilizing national volunteer certification programs such as the National Alliance for Youth Sports and participating statewide efforts such as "Promise to Kids" (intermediate).

Recruit quality employees and volunteer personnel (short term to intermediate as need arises).

Clarify roles and responsibilities of citizen groups, associations, task forces, etc. through defined policies and procedures **(short term)**.

Develop employee and volunteer recognition and appreciation programs (short term).

Page left intentionally blank

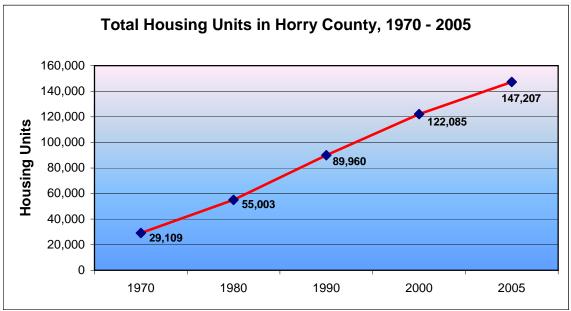
# **HOUSING ELEMENT**

Housing plays an essential role in the community, shaping an area's physical form and overall character. This element is divided into 3 sections: housing inventory and trends, housing affordability and housing programs. In the first section, an inventory of current conditions and trends are discussed. This section presents historical data and current figures concerning types of housing, age of housing, occupancy and tenure. In the next section, housing affordability in Horry County is analyzed using income data, fair market rents, home sale values and mortgage costs. The housing program section gives a broad overview of initiatives being addressed in the County. These range from making programs that make housing more affordable to programs that provide housing for special needs populations. Finally, the element is closed with a discussion on goals, strategies and objectives that promote safe, affordable and equitable housing in Horry County.

## Housing Inventory and Trends

## Number of Housing Units

Horry County has been experiencing a steady growth in the number of housing units and this growth is shown in **Graph 18** below. During the 1970s, the overall inventory of housing units increased by 89 percent. The growth rate waned in the 1980s and the housing stock only increased by 63 percent. Between 1990 and 2000, the number of housing units grew by 35.7 percent to 122,085 total units. Building permit data also reflects a rapid development. The County issued 29,440 new units in the unincorporated areas between 2000 and 2005. That figure increases to 33,381 when the incorporated areas are included. Yet, the slump in the housing market within the year 2007, has led to a decrease in residential building permits in the County (37% drop in building permits between 2006 and 2007). Nonetheless, a quick recovery within the following one (1) to two (2) years is expected.



**Graph 18**: Total Housing Units in Horry County

Source: US Census Bureau

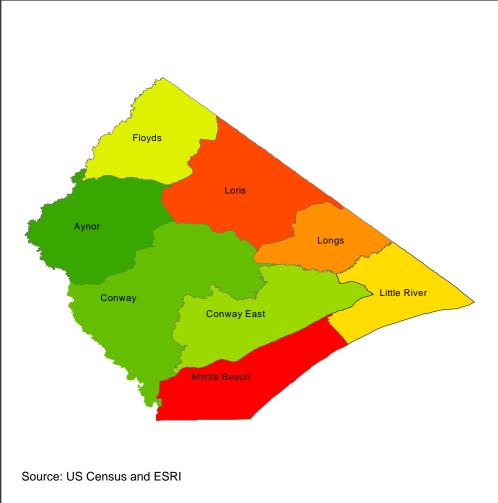
This data is also examined from a location perspective in **Table 64**. Housing units were totaled in each of the census divisions of Horry County. The areas that experienced the most growth between 1990 and 2000 were Conway East and Longs, which doubled the number of housing units. Consistently the Myrtle Beach census division and the Little River census division contain the largest percentage of housing units in Horry County. **Map 10** depicts the County's Census Divisions.

	Aynor	Conway	Conway East	Floyds	Little River	Longs	Loris	Myrtle Beach	Horry County
Total Units in 1990 (% of Horry County Total)	2,711 (3%)	10,369 (11.5%)	7,329 (8.1%)	1,246 (1.4%)	20,171 (22.4%)	1,206 (1.3%)	4,304 (4.8%)	42,624 (47.5%)	89,960 (100%)
Total Units in 2000 (% of Horry County Total)	3,800 (3.1%)	13,681 (11.2%)	15,012 (12.3%)	1,436 (1.2%)	28,261 (23.1%)	2,517 (2.1%)	5,873 (4.8%)	51,505 (42.2%)	122,085 (100%)
Percentage Change from 1990 to 2000	40.2%	31.9%	104.8%	15.2%	40.1%	108.7%	36.5%	20.8%	35.7%

 Table 64:
 Horry County Census Divisions, 2000

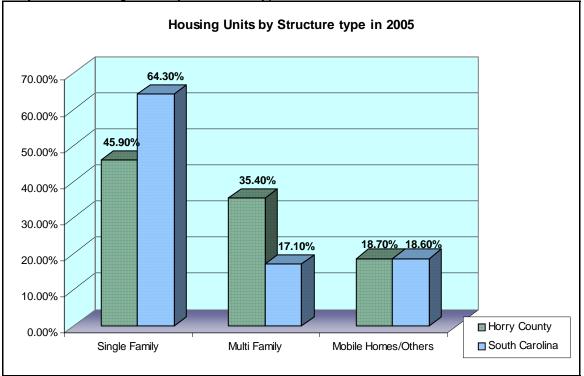
Source: US Census, 2000

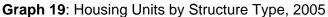




# <u>Housing Mix</u>

**Graph 19** depicts the total mix of housing structures by the classifications of singlefamily, multi-family and mobile homes/other. Compared to the State, Horry County has a larger percentage of multi-family units than single-family units. This trend can be attributed to the County's large seasonal population and its effects on the local housing market.





Source: U.S. Census Bureau, 2005

Table 65 and Graph 19 explore the housing mix data further at both the census divisions level and from the unincorporated perspective. Single-family residences constituted the largest component of the County's total housing stock with 45.9 percent of all units in 2005. Ninety-five (95) percent of these single-family residences were detached structures. The western census divisions of Aynor, Floyds and Loris had the highest shares of single-family units. The eastern coastal Divisions of Little River and Loris contained comparatively lower percentages of single-family homes. To track housing activity in the County from 2000 to 2005, Graph 20 displays the number of residential units by housing type authorized in the unincorporated area of the County. Approved single-family units have tripled from 1,458 units in 2000 to 3,968 units in 2005, but have decreased significantly to 2,627 single-family units in 2006 as a result of the overall decline in the housing market. Within those numbers, the bulk of new construction was represented by the Carolina Forest development in the Conway East census division. The Carolina Forest area experienced tremendous growth in the late 1990s and in the 2000s. It is anticipated that this multi-subdivision development will be home to 33,000 to 35,000 people. According to the recorded final plats, 80 percent of the units recorded thus far are approved for single-family residences.

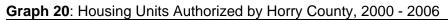
Multi-family housing units comprised approximately one-third of Horry County's overall housing stock in 2000. The greatest concentration of multi-family housing is found in the tourist-oriented census divisions of Myrtle Beach and Little River. In contrast, the rural western divisions of Aynor, Floyds and Loris had the least amount of multi-family housing. Multi-family unit construction throughout the County declined between 2002 and 2003. After a short rebound 2004 through 2005, the multi-family development in the local housing market plunged to only 44 authorized units in 2006. Current housing market conditions have altered leaving multi-family developments at a standstill, yet overall, this type of housing consistently comprises 20 percent of the approved housing units in unincorporated Horry County.

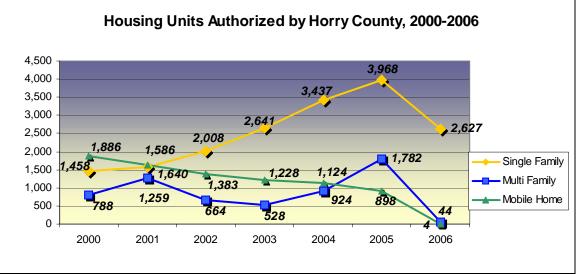
Mobile homes have made up nearly 28 percent of the approved housing units over the last six years. The number of mobile home permits issued in the unincorporated areas of Horry County has been declining since 2000 when the number of mobile home permits issued was greater than the number of single-family permits. Areas with the greatest percentage of mobile homes were the rural areas of Aynor, Floyds, Longs and Loris census divisions. Higher percentages of mobile home permits also correspond with median household income. These four census divisions had median household incomes approximately 17 percent below Horry County's average (US Census, 2000).

	Aynor		Conway East		Little River	Longs		Myrtle Beach	Horry County
Single Family	54.7%	57.2%	49.8%	62%	42.1%	48.5%	58.2%	44.7%	47.4%
Multi Family	1.2%	8.6%	26.5%	0.4%	46.4%	9.2%	3.6%	39.8%	32.1%
Mobile Home & Other	44.1%	34.2%	23.7%	37.6%	11.5%	42.3%	38.2%	15.5%	20.5%

**Table 65**: Horry County Housing Census, 2000

Source: US Census, 2000

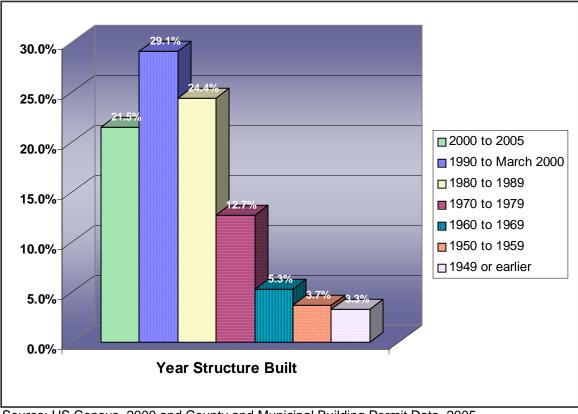




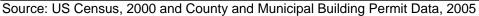
Source: Horry County Code Enforcement, 2000 - 2006

# Age of Housing

The majority of housing in Horry County is relatively new. Close to 75 percent of the total number of housing units has been built in the last 25 years and 50 percent of the overall housing inventory was only built from 1990 to 2005. Only a bit over three (3) percent of the housing stock was built prior to 1949. Based on building permit data twenty-one percent of the housing stock was built in the last five years. Much of this growth has been focused in the coastal census divisions of Conway East, Little River and Myrtle Beach.



Graph 21: Age of Housing 1940-2005



## **Occupancy**

Horry County's vacancy rate in 2000 was 33 percent, exceeding South Carolina's rate of 12.5 percent. The County's vacancy rate continues to be the highest in the State. High vacancy rates typically suggest an excess of housing units relative to demand. However, given the resort-oriented segments of the County's housing market, the rate more likely captures the high proportion of units in seasonal use. Vacancy is calculated for April 1 of the Census year, prior to the peak of the tourist season. Second homes and units built specifically for seasonal rental purposes tend to yield higher vacancy rates. Similarly, other tourist-based, coastal housing markets feature high vacancy rates; such as, 28 percent in Georgetown County and 19 percent in Beaufort County.

A review of vacancy by County census divisions further illustrates the influence of seasonal housing (**Table 66**). Coastal census divisions such as Little River and Myrtle

Beach display a large number of vacant units, while the vacancy rate in the western divisions of Longs, Loris, Conway, Floyds, and Aynor are equal to or below the state's rate. An increase is noted in the Conway East. That census division has experienced a 6.5 percent increase in vacancy rate. This increase also reflects the attractiveness of this area to second homebuyers by its proximity to the ocean.

						,		
	Aynor	Conway	Conway East	Floyds	Little River	Longs	Loris	Myrtle Beach
Total Units	3,800	13,681	15,012	1,436	28,261	2,517	5,873	51,505
Total Vacant Units	413	1,252	2,905	181	16,148	385	637	18,364
% Units Vacant	10.8%	9.2%	19.4%	12.6%	57.1%	15.3%	10.8%	35.7%
Source: LIS	Concus 20	200						

Table CC. Vegent Llouding	انتظ مناما		Canava Divisiona	2000
Table 66: Vacant Housing	Units by r	Horry County	Census Divisions,	2000

Source: US Census, 2000

The U.S. Census Bureau separates vacant seasonal housing from all vacant households. The Census defines seasonal vacant housing as vacant units used or intended for use only in certain seasons, weekend or other occasional use throughout the year. **Table 67** (below) describes the different classifications of vacancy. Over half of Horry County's vacancies are for seasonal, recreational or occasional use. Although the numbers themselves have increased by 23 percent since 1990, the rate of vacancy has remained the same at 22 percent of the total housing units.

Table 67: Vacancy Status in Horry County, 2000

	Number of Units
For rent	9,674
For sale only	2,057
Rented or sold, not occupied	1,321
For seasonal, recreational, or occasional use	25,838
For migrant workers	95
Other vacant	1,300
TOTAL	40,285

Source: US Census, 2000

# <u>Tenure</u>

Among those housing units classified as occupied, the US Census Bureau identifies two types of tenure status—owner and renter. As of 2000, 73 percent of occupied units were owner-occupied, while the remaining 27 percent were rental. The homeownership rate in Horry County increased by 4.5 percent from 1990 to 2000. Taking into account the robust construction trends and the decreasing vacancy the trend indicates that the area's housing market continues to absorb recently constructed homes. It also suggests that more people are becoming permanent residents for reasons such as retirement, climate, jobs, comparative national affordability, etc. This is further substantiated in following **Table 68**, which shows that owner-occupied units are also increasing.

	1980	1990	2000			
Owner Occupied Units	23,925	38,198	59,699			
% Owner Occupied	68.8%	68.5%	73.0%			
Renter Occupied Units	10,873	17,566	22,101			
% Renter Occupied	31.2%	31.5%	27.0%			
TOTAL	34,798	55,764	81,800			

Table 68: Housing Units by Tenure, 1980 - 2000

Source: US Census, 1980-2000

Furthermore, **Table 69** illustrates where people lived in 1995. Seventy-one percent of Horry County's residents lived in Horry County in 1995. Of those that did not live in the County in 1995, 79 percent came from out of state and the majority came from other areas of the south. The census divisions with the greatest in-migration were the coastal census divisions of Myrtle Beach and Little River as well as the growing area of Conway East.

Table 69: Residence in 1995 of Horry County and Census Divisions, 2000

	Horry County	Aynor	Conway	Conway East	Floyds	Little River	Longs	Loris	Myrtle Beach
Total residents in 2000	185,564	8,317	31,323	29,613	3,010	25,067	5,214	12,919	70,101
Same house in 1995	91,452	5,788	17,322	12,591	2,102	11,442	3,410	8,821	30,516
Different house in 1995	94,112	2,529	14,001	17,022	908	13,625	1,804	4,638	39,585
In United States in 1995	91,015	2,454	13,497	16,429	874	13,250	1,697	4,502	38,312
Same county	41,431	1,786	8,267	6,676	430	4,854	1,032	2,923	15,463
Different county	49,584	668	5,230	9,753	444	8,396	665	15,779	22,849
Same state	10,339	262	1,814	1,754	257	908	87	402	4,855
Different state	39,245	406	3,416	7,999	187	7,488	578	1,177	17,994
Northeast	13,633	132	1,166	3,096	17	2,448	228	368	6,178
Midwest	4,832	46	605	1,103	25	787	13	58	2,195
South	19,017	221	1,509	3,387	145	3,983	325	729	8,718
West	1,763	7	136	413	0	270	12	22	903
Outside United States in 1995	3,097	75	504	593	34	375	107	136	1,278

Source: US Census, 2000

# Affordable Housing

The Department of Housing and Urban Development (HUD) defines affordable housing as when the occupant or family spends no more than 30 percent of their gross household income towards their total gross housing costs whether renting or owning. Housing costs include rent or mortgage costs, water, sewer gas and electric services. According to HUD formulas, very low-income families are defined as those earning 50 percent or less of the area's median income (AMI). Low-income families earn between 50 percent and 80 percent of AMI. Families earning from 81 percent to 120 percent of the AMI are classified as moderate income. Adjustments are made for family size. Total housing costs equal to 30 percent or more of income may indicate affordability problems.

# <u>Income</u>

According to the National Low Income Housing Coalition (NLIHC), the area median income (AMI) for Horry County was \$50,650, nearly \$2,000 lower than South Carolina's AMI. Those families whose income is 30 percent of the area median income are considered very low-income. In addition to comparing the AMI between South Carolina and Horry County, **Table 70** examines the maximum affordable monthly housing costs by the percentage of family area median income. For example, 50 percent of family AMI (federal definition of low-income family) can spend up to an average of \$633 per month on housing if they live in Horry County. This amount is lower than the state average. Similarly, a moderate-income family (80 percent of AMI) meets the federal definition of affordable when they utilize no more than \$1,013 of their family income towards housing costs (NLIHC Out of Reach Report, 2005).

	Area Median Income (AMI)			Maximum Affordable Monthly Housing Cost by % of Family AMI				
Location	Annual	Monthly	30% of AMI	30%	50%	80%	100%	
South Carolina	\$52,685	\$4,390	\$15,805	\$395	\$659	\$1,054	\$1,317	
Horry County	\$50,650			\$380	\$633	\$1,013	\$1,266	

T-1-1- 70	A	· La consta da Libraria	<b>•</b> • • • • • •		0005
	Average Family	y income in Horr	y County	/ and South Carolina	1, 2005

Source: NLIHC Out of Reach Report, 2005

# Home Value

Average home values for specified owner-occupied houses in Horry County have risen considerably in the last decade and a half (see **Table 71**), increasing almost by double (90%) between 1990 and 2005. **Map 11** on the next page, depicts estimated average values for owner-occupied homes for 2005 by zip code. The map shows whether housing in a particular zip code is above or below the median home value in Horry County for 2005. As the County average was \$143,500 based on U.S. Census data, the average home values for the individual zip code areas in the County represent estimates that were specially recalculated by the Horry County Planning and Zoning Department to better illustrate discrepancies in home values based on location, e.g. how close they are to the beach. With overall average home values increasing by 19.88% between 2000 and 2005 throughout Horry County, the most appreciating zip code areas are located along the shoreline (34.07%) and in the transitional areas just west of the Intracoastal Waterway (e.g. Carolina Forest, Longs, and Loris) with an increase in values of 32.72%.

The most recent recorded median home sales price in Horry County was \$250,176 in 2006 (Coastal Carolina Association of Realtors, 2007). Yet, that number only represents an average price for listed homes that were sold in 2006, but does not relate to the

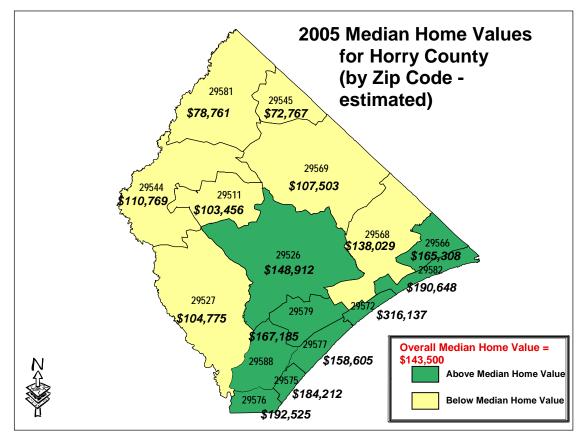
average value of specified owner-occupied homes in an area depending on its very location, which is vital for assessing real estate values.

Year	Value	Percent Increase
1990	\$75,500	N/A
2000	\$119,700	58.54 %
2005	\$143,500	19.88 %

Table 71: Horry County Specified Owner-occupied Median Home Value, 1990 - 2005

Sources: US Census, 1990, 2000, and 2005

Map 11: Estimated Median Home Values in Horry County, 2005



Source: US Census Bureau 2000, 2005

## **Renter Affordability**

The National Low Income Housing Coalition publishes a yearly report titled *Out of Reach,* which provides local level data concerning affordable housing choices. One of the most poignant aspects of their research is assessing renter affordability. In Horry County there are 81,800 households. Of these households, 27 percent or 22,101 households are renters (NLIHC Out of Reach Report, 2005).

In order to assess affordability, fair market rents (FMR) are evaluated. For comparison, the state averages are also shown. The table below gives the average rents based on

the number of bedrooms. Rents in Horry County for a two-bedroom unit are 13.6 percent higher than the state's average.

Location	Zero	One	Two	Three	Four
South Carolina	\$472	\$520	\$591	\$751	\$828
Horry County	\$533	\$586	\$684	\$817	\$990

#### Table 72: Fair Market Rents (FMR) by number of bedrooms, 2005

Source: NLIHC. 2005

Table 72 (above) further studies rents by calculating the necessary income in order for someone to afford each bedroom's fair market rent. For instance, in Horry County one would need an annual income of \$27,360 in order to afford a two-bedroom unit. The next set of columns give the percentage of annual median income in order to afford each bedroom unit. From **Table 70**, the annual median income for Horry County is \$50,650. Those households that earn 54 percent of annual median income can afford a twobedroom unit in Horry County. Table 73 (below) demonstrates that rental housing in Horry County is unaffordable for very low-income households (households that earn 30 percent of the annual median income) (NLIHC Out of Reach Report, 2005).

	Annual Income				Perce	ent of F	amily A Incom		Median	
Location	Zero- Bedroo m FMR				Four- Bedroo m FMR					Four- Bedroom FMR
South Carolina	\$18,887	\$20,787	\$23,633	\$30,028	\$33,106	36%	39%	45%	57%	63%
Horry County	\$21,320	\$23,440	\$27,360	\$32,680	\$39,600	42%	46%	54%	65%	78%

Table 73:	Necessarv	Income to	afford FMR	by bedrooms,	2005
	1100000000			s, seareen.e,	

Source: NLIHC, 2005

Next, affordability is examined based on renter income and wage. The estimated renter median household income for Horry County is \$31,428 and the monthly rent affordable at renter median income is \$786. To pay the fair-market rent for a two-bedroom unit it would require 87 percent of the renter median household. It is estimated that 43 percent of renters are unable to afford a two-bedroom unit at fair market rent. The table also considers hourly wages. The estimated renter hourly wage is \$8.74 and the monthly rent that is affordable at the mean renter wage is \$454. An interesting comparison shown in this table is that the renter household income for Horry County is higher than that of the State's, but the renter hourly wage is lower. Subsequently, Horry County renters on hourly wages can afford less rent than the South Carolina average (NLIHC Out of Reach Report, 2005).

	ŀ	lousehold lı	ncome (200	5)	Renter Wa	ge (2004)
Location	Estimated Renter Median Household Income	Renter	Bedroom	Estimated Percent of Renters Unable to Afford Two- Bedroom FMR		Monthly Rent Affordable at Mean Renter Wage
South Carolina	\$28,158	\$704	84%	42%	\$9.47	\$492
Horry County	\$31,428	\$786	87%	43%	\$8.74	\$454

#### **Table 74**: Household Incomes and Renter Wages in 2005

Source: NLIHC, 2005

The *Out of Reach* report looks at income from both the salary and hourly perspective. Income is used to calculate the housing wage. Housing wage is the hourly wage necessary to pay the area's fair market rent for a two-bedroom unit while maintaining the federal standard of affordability—spending no more than 30 percent of income on housing costs. Information used in **Table 72**, Fair Market Rents by Bedroom Unit, was used to calculate the hourly wage needed in order to afford each number of bedroom units at fair market rent. A person in Horry County needs to earn \$13.15 per hour in order to afford a two-bedroom unit at fair market rent (NLIHC Out of Reach Report, 2005). As a result of this study, minimum wage earners would have to work 102 hours per week to afford a two-bedroom apartment in Horry County.

Table 75. Willin	Table 75. Minimal Wages needed for Housing, 2005					
Hourly Wage Needed to Afford (At 40 hours per week)						
Location Zero-Bedroom One-Bedroom Two-Bedroom Three- Four- FMR FMR FMR Bedroom Bedroom FMR FMR FMR FMR FMR						
South Carolina	\$9.08	\$9.99	\$11.36	\$14.44	\$15.92	
Horry County	\$10.25	\$11.27	\$13.15	\$15.71	\$19.04	

#### Table 75: Minimal Wages needed for Housing, 2005

Source: NLIHC, 2005

Approximately 35 percent of the population in Horry County works in retail, entertainment, recreation or food services (US Census, 2000). Traditionally, these industries are associated with a tourism economy and employ workers at or slightly above minimum wage. The federal minimum wage is \$5.15 per hour. South Carolina does not have a state minimum wage. The two tables below analyze housing affordability based on minimum wage. The first table (**Table 76**) states how many hours one would have to work per week to afford a particular bedroom unit. At minimum wage, one would have to work 102 hours to afford a two-bedroom apartment in Horry County where as the State average is 88 hours. **Table 77** illustrates how many full-time jobs would be necessary earning minimum wage. One would need over two incomes earning minimum wage to afford a two-bedroom unit. For those working at minimum wage,

housing affordability is of serious concern in Horry County (NLIHC Out of Reach Report, 2005).

1000	Tuble Te. Nedeclary heard of work por wook to anora heading, 2000					
Location	Zero- Bedroom FMR	One- Bedroom FMR	Two- Bedroom FMR	Three- Bedroom FMR	Four- Bedroom FMR	
South Carolina	71	78	88	112	124	
Horry County	80	88	102	122	148	

Table 76: Necessary hours of work per week to afford Housing, 2005

Source: NLIHC, 2005

Table 77 Necessary	amount of full time	iobs at minimum	wage to afford Housing, 2005
	y arriount of full time	jobs at minimum	

Location	Zero- Bedroom FMR	One- Bedroom FMR	Two- Bedroom FMR	Three- Bedroom FMR	Four- Bedroom FMR
South Carolina	1.8	1.9	2.2	2.8	3.1
Horry County	2.0	2.2	2.6	3.1	3.7

Source: NLIHC, 2005

Recently, the City of Myrtle Beach inventoried rental housing within their jurisdiction. The 2005 Inventory and Analysis of Multi-family Housing in Myrtle Beach report found that there was a shortage of multi-family housing. For the purposes of this study, the definition of multi-family was limited to rental housing. The study cited that a contributing factor to the decrease in rental units was the lack of affordable housing in the area and the new trend of converting rental properties to individually owned units either as affordable housing or for seasonal users (City of Myrtle Beach, 2005).

## Barriers to Affordable Housing

Communities that strive to ensure a diverse mix of housing face barriers when trying to provide affordable housing. The greatest barrier to affordable housing is the availability and price of land. The rising cost of land and the widening gap between income and housing costs contribute to this obstacle. Another impediment is financing. Federal funding for housing has been steadily declining and state and local governments struggle to compensate for this loss in revenue. Furthermore, building regulations and government fees can make affordable housing even more challenging. These include costs and fees associated with land development regulations, zoning, building code, and infrastructure fees (tap fees).

Housing problems become apparent when there is lack of suitable, affordable housing. HUD defines housing problems as one or more of the following:

- Cost Burden— greater than 30% of income is spent on housing
- Overcrowding— a residential unit is occupied by 1.01 or more persons per bedroom
- Lacking complete kitchen or plumbing facilities

Of the 81,800 households in Horry County, only 2,343 households (2.9 percent) would meet HUD's definition of being overcrowded. There were 122,085 housing units in Horry County in 2000. Seven hundred and ninety-three lack plumbing facilities and 804 lack kitchen facilities (US Census, 2000). These figures represent a small portion of the population.

Horry County's greatest barrier to affordable housing is the unbalanced relation between the costs of housing and income. According to the 2000 Census, 27.4 percent of households in Horry County experience cost burden. Twenty-one (21) percent of homeowners and 38.8 percent of renters spend greater than 30 percent of their income on housing and associated costs. The National Low Income Housing Coalition updated this statistic for renters and reports that 43 percent of renters are unable to afford a two-bedroom unit at fair market rent (NLIHC Out of Reach Report, 2005).

## Housing Programs

### **Community Development Block Grants**

The federal government supports affordable housing initiatives for persons with low- and moderate-income through the Community Development Block Grant Program (CDBG). As one of the oldest programs in the Department of Housing and Urban Development, the Community Development Block Grant Program strives to develop viable communities by providing decent housing and a suitable living environment and also by expanding economic opportunities for the low- and moderate-income persons. CDBG funds from HUD can be distributed directly to an urban community or administered through the State Department of Commerce, Office of Grants Administration. When urban communities receive CDBG funds directly from HUD in order to further the mission of providing decent and suitable housing, these communities are considered "Entitlement Communities". Grant money can go towards any of the following:

- Acquisition of real property
- Relocation and demolition
- Rehabilitation of residential and non-residential structures
- Construction of public facilities and improvements such as water and sewer facilities, streets, neighborhood centers and the conversion of school buildings for eligible purposes
- Public services, within certain limits
- Activities relating to energy conservation and renewable energy resources
- Provision of assistance to profit-motivated business to carry out economic development and job creation/retention activities (http://www.hud.gov/).

In order to be eligible as an Entitlement Community, Horry County's population must be at least 200,000 excluding the population of existing entitled cities. It is anticipated that the County will be an entitlement community by the 2010 census.

Although the County is not currently an Entitlement Community, the County has received CDBG funds from the state. The following **Table 78** shows how many projects have been completed within the last five years through the CDBG program.

Project Name	Activity
,	53 bathroom connections/installation or construction
Hemingway Road Sewer Project	36 bathroom connections/installation or construction
Bennett Town Sewer Project	57 bathroom connections/installation or construction

#### **Table 78**: Community Development Grant Projects completed by Horry County

Source: Horry County Grants Administration

#### South Carolina State Housing Finance and Development Authority

The State Housing Finance and Development Authority offer homeownership and rental programs to qualified candidates. Homeownership programs include first time homebuyer loans, down payment assistance and a single parent loan program. The Authority also administers the Home Investment Partnerships Program (HOME), a federal program established under the Cranston-Gonzales National Affordable Housing Act of 1990. The HOME program is designed to promote partnerships among the federal government, state and local governments, nonprofit and for-profit sectors who build, own, manage, finance and support low-income housing initiatives.

The Authority manages several statewide rental assistance programs including the Section 8 Housing Choice Voucher Program. Locally, the Myrtle Beach, Conway, and Atlantic Beach Housing Authorities administer this program. Because Horry County is not an Entitlement County, there is not a countywide program. Other rental assistance programs include the Low-Income Housing Tax Credit Program and the Multifamily Tax Exempt Bond Financing Program.

In 1992, South Carolina enacted the South Carolina Housing Trust Fund. This legislation commits revenues from an increase in the documentary stamp tax on real estate sales to the development of affordable housing. The fund collects approximately two million dollars annually (http://www.sha.state.sc.us/).

#### United States Department of Agriculture, Rural Development

Rural residents can seek assistance through the USDA Rural Development Office. A sample of the services that they provide are direct and guaranteed loans for incomequalified candidates, rental assistance, rural rental housing programs, farm labor housing programs, home repair loans and grants.

#### Waccamaw Regional Council of Governments

The Waccamaw Regional Council of Governments (COG) serves Horry, Georgetown and Williamsburg Counties and sponsors a Fair/Affordable Housing Fair in April and publishes and affordable housing resource and social services guide quarterly. They refer citizens to credit counseling and homebuyer workshops and plan to co-sponsor these events and provide housing counseling in 2007.

#### Waccamaw HOME Investment Partnership Consortium

Several jurisdictions within the Waccamaw Region, including Horry County, entered into an intergovernmental agreement that created the Waccamaw HOME Investment Partnership Consortium. The Waccamaw HOME Consortium is a regional organization that receives a yearly entitlement from the HOME Program (HOME Investment Partnership Program), which is a federally funded program through the Department of Housing and Urban Development and provides technical assistance for projects that increase affordable housing opportunities within the Waccamaw Region. The anticipated allocation for the region is approximately \$1 million per year. Myrtle Beach is the lead agency for the Consortium because they are the largest entitlement community in the region. The Waccamaw COG administers the program (Waccamaw Regional Council of Government).

Organizations such as Habitat for Humanity and the Grand Strand Housing and Development Corporation as well as private developers also service the area by providing and constructing affordable housing for low-income families.

## Fair Housing

The Fair Housing Act was passed by Congress in 1967 and amended in 1988. The Act and its amendments protect individuals from housing discrimination because of their race, color, national origin, religion, sex, disability or familial status. Under the law, these are defined as "protected classes".

The Fair Housing Act is enforced by the Department of Housing and Urban Development. The South Carolina Human Affairs Commission enforces state laws against discrimination and also protects individuals against retaliation-acts of harm to those who have asserted their fair housing rights. The Waccamaw Regional Council of Governments Fair Housing Program is the local agency that provides intake of complaints. Also, this agency provides outreach education and promotes substantially equivalent local ordinances in all the county municipalities. They have a toll-free hotline in English and Spanish, a website with printable Fair Housing Materials for Consumers, Realtors and Property Managers. Fair housing complaints are often not reported. From 1997 to 2003 there were only 17 fair housing complaints filed in Horry County (Table **79**). The majority of the investigated complaints found that there were no violations of the fair housing act (South Carolina Human Affairs Commission, 2003). In 2005 the Waccamaw COG began a strategic educational outreach program to raise awareness about fair and equal housing opportunities. In 2005, there were six complaints received. The organization also coordinates the Regional Fair Housing Council, which provides networking, program support and referrals to those involved in the housing industry. In addition, the South Carolina Centers for Equal Justice provide free legal assistance to qualified low-income persons who may be victims of housing discrimination (Waccamaw Regional Council of Government).

Complaint and Action	Totals
Total Filed	17
Resolution	
No Cause	12
Conciliation	4
Closed	1

 Table 79:
 Fair Housing Complaints fled 1997 - 2003

Source: SC Human Affairs Commission, 2003

## Waccamaw Economic Opportunity Council

The Waccamaw Economic Opportunity Council has been providing programs and services to Horry County residents since 1965. The agency provides assistance for numerous social programs. Those programs relating to housing include:

- Community Service Block Grants—the agency provides assistance in obtaining housing through referrals and/or deposit assistance as well as provides assistance with emergency housing assistance
- Low Income Home Energy Assistance Program
- Weatherization Assistance Program—provides assistance with reducing household energy consumption by applying energy conservation measures.

## The South Carolina Centers for Equal Justice

The South Carolina Centers for Equal Justice is a statewide law firm that provides legal services to eligible South Carolinians. There are 13 offices across the state with a local office in Conway. The center provides legal representation, counsel, education and outreach in a variety of areas. Areas pertaining to housing and income include the following:

- Housing—evictions foreclosures, home and real estate ownership
- Consumer—loan and installment purchases, bankruptcy, claim and delivery, credit actions
- *Public Benefits*—Social Security, SSI, food stamps, TANF, Medicare, Medicaid, veteran's benefits, driver's license reinstatement
- *Employment*—wage claims, working conditions, unemployment compensation
- Migrant Farm Workers—individual rights, public benefits, employment

## Special Needs Housing

Due to unique circumstances, certain populations of Horry County require special services in order to meet their housing needs. Although Horry County Government does not provide any type of special housing, this need is being addressed by state agencies, nonprofit organizations and faith-based groups. In the County there is special needs housing and services for persons with disabilities, the elderly, children (shelters and foster home care), persons coping with addiction/rehabilitation or with health related conditions as well as temporary and transitional housing for victims of domestic violence.

#### Homelessness

Homelessness is a growing issue for Horry County. The County has the largest population of homeless individuals in the state. Total Care for the Homeless Coalition (TCHC) is made up of 60 housing and supportive service provider organizations from Horry, Georgetown, Williamsburg, Sumter, Clarendon and Lee Counties. The Coalition's goal is to create and maintain a continuum of care that will provide stability and independence for homeless and other population groups, which are at extreme risk of falling into homelessness. The Coalition performed a homeless count in January of 2005. The TCHC count revealed that there were 1,501 homeless persons in Horry County. Of that number, 366 persons resided in shelters with the remaining homeless population of 1,135 being unsheltered, living on the street and in parks, alleys, transportation depots and abandoned buildings. From the count 1,095 were males and 406 were female. One thousand three hundred and six reported some type of disability problem (mental, physical, substance abuse, HIV/AIDS). The count found that 841 had been homeless for over one year and the primary reason for homelessness was an economic reason such as job loss, low wages, eviction, etc. (Horry County Homeless Report, 2005).

## **Conclusion**

Rapid population increases and rising development activity in the County indicate a very dynamic housing market. Over half of the housing in Horry County has been built within the last 15 years (between 1990 and 2005) and more growth is anticipated. Seasonal vacancies make up a significant portion of vacancy rate and vacationers and part-time residents have absorbed much of residential development. Due to increased demand,

housing prices continue to rise along the coast. The rise in price is also being felt in other parts of the County as affordable land becomes scarcer.

Affordable housing is often seen as an urban issue. As Horry County becomes more urban, affordability will become of greater concern. The availability and affordability of housing play a key role for both community and economic health. Sustainable economic development relies on the availability of affordable housing. For instance, areas cannot expect to attract and retain quality businesses if the area lacks affordable housing in close proximity to jobs. As workers seek proper housing, they are moving farther from employment and community centers leading to sprawl development patterns (The National Association of Counties, 2005).

Affordable housing also needs to be approached from a holistic and regional point of view. Solutions to housing and affordable housing problems will occur when opportunities for viable housing choices are sought across jurisdictional and political boundaries. Working with municipalities and participating in regional programs is an essential component in providing Horry County residents with one of the most basic human needs—shelter.

State and federal programs regarding housing already exist in Horry County, but funding is limited. Once the County attains Entitlement status from the Department of Housing and Urban Development, more funding for housing will be available. Education and outreach programs exist for both affordable and fair housing although gaps in the types of programs offered are noted. Programs and services also exist for special needs populations. However, limited funding for these programs means that only a portion of the population who need assistance have an opportunity to receive it. As Horry County looks to the future, considerations need to be made to ensure an array of housing opportunity for all populations is maintained in manner that promotes community and economic health.

# STATEMENT OF NEEDS AND GOALS

## **General Need:**

To promote safe and affordable living environments for all residents including those with special needs, to maintain the diversity in the types of housing, to support efforts to prevent housing discrimination and seek resources to meet these desired housing goals.

## Affordable Housing

### Need:

Promote affordable housing opportunities to meet the household needs of all socioeconomic groups.

### <u>Goals:</u>

- Raise the awareness of the need for affordable housing and build community consensus on the importance of affordable housing.
- Increase affordable housing opportunities in Horry County for low and moderateincome households.
- Preserve long-term housing affordability.
- Promote mixed income development with mixed residential uses.
- Provide incentives to the development community to create and maintain affordable housing within Horry County.

## **Housing Diversity and Condition**

#### Need:

Continue to promote a mix of housing types and ensure that all housing units, subdivisions and site plans are developed to promote community health, public safety, aesthetics and functionality.

## Goals:

- Encourage a variety of housing types to accommodate a full variety of income, age and cultural groups.
- Encourage quality design and construction of subdivisions, site plans and housing units to promote community health, public safety, aesthetic appeal and function ability.

## Special Needs Housing

## Needs:

Support measures that identify community services, shelter and income assistance and promote access to resources for all people with special needs.

## Goals:

- Encourage development of housing to serve households with special needs such as the disabled, elderly, and homeless.
- Encourage the development and modification of housing units to accommodate households with special needs.
- Continue to search for regional, multi-faceted approaches to providing housing and services to the growing homeless population with emphasis on homeless families.

## Fair Housing

### Need:

Support all efforts to prevent and fight housing discrimination.

## Goals:

- Examine fair housing policies to ensure residents are protected from discrimination.
- Educate residents about their rights and responsibilities to fair housing.

## **Creating Resources**

## Need:

As the population grows and eligibility for federal and state funding increases, allocate resources to respond to the expanding need to provide affordable and safe housing.

## Goals:

- Develop a County housing program to coordinate the creation of affordable housing, promote the need to provide special housing within the County and work to educate community on fair housing issues.
- Seek outside resource opportunities to meet the County's housing goals.

# **IMPLEMENTATION STRATEGIES**

It is recommended that Horry County implements the following strategies within either a short term (1-2 years), intermediate term (2-5 years) or long term (5 and more years) time frame in order to fulfill the previously identified Needs and Goals.

## Affordable Housing

Establish a task force of area professionals and interested parties to examine affordable housing issues (short term).

Develop and implement outreach strategies to raise awareness concerning affordable housing to increase its acceptability to residents **(short term)**.

Recommend policies to encourage a diverse mix of housing types and price levels (short term).

Seek federal, state and foundation funding opportunities to create more affordable housing (intermediate).

Investigate incentives for historic preservation, aesthetic improvement to rural affordable housing, and assist developers to utilize available resources (intermediate).

Work with interested parties to acquire vacant sites or un-occupied buildings for low-income housing projects (intermediate).

Utilize public land to create affordable and mixed-income housing (intermediate).

Promote affordable housing opportunities near to job centers, community facilities and commercial services (short term).

Coordinate with municipalities and adjacent counties to address providing low and moderate-income households on a regional scale (short term).

Investigate, establish and promote affordable housing policies that require long-term affordability to maximize the public benefit of tax dollars being spent to provide affordable housing to today's residents **(short term)**.

Promote tax incentives that maintain lower rents. This can be accomplished by basing the property tax rate of qualified affordable housing developments on the income of the property instead of the real-property market value (intermediate).

Create a community land trust for affordable housing (intermediate).

Adopt policies that encourage housing of multiple price levels to be interspersed throughout a development rather than in a concentrated location (intermediate).

Coordinate with state and federal agencies to streamline administrative processes (long term).

Review zoning ordinance and land development regulations for instances where the cost associated with the regulation make providing affordable housing unfeasible (continuously).

Expedite the permitting and review processes for pre-certified builders of affordable housing (intermediate).

Consider reduced fees for pre-certified builders of affordable housing (intermediate).

Provide tax and other financial incentives to the private market for affordable housing projects (intermediate).

Investigate density bonuses for the inclusion of affordable housing on development projects (short term).

Explore the feasibility of a local affordable housing trust fund (short term).

Explore options that would allow public land to be used to construct affordable housing (short term).

Encourage projects that address environmental issues and energy efficient building design (continuously).

## **Housing Diversity and Condition**

Continue to monitor building permit data annually and assess trends in the market (continuously).

Create housing policies that maintain the County's current diversity in housing type (short term).

Investigate the feasibility of establishing minimum housing standards for Horry County and enforce those standards through condemnation, rehabilitation and rehabitation of existing substandard structures **(short term)**.

Support efforts to better measure the seasonal housing population of Horry County (short term).

Ensure that all new housing is constructed to standards that promote health and safety (continuously).

Continue to update building codes to reflect improvements in construction (continuously).

Continue to update zoning codes to reflect improvements in site and building design (continuously).

In site design, be sensitive to aesthetics, open space and natural resources (short term).

Incorporate architectural and design-related criteria into small area plans (intermediate).

Promote innovative and environmentally sound housing development through better coordination among county departments and various development interests (short term).

Encourage subdivision design that includes affordable housing with innovative design techniques that seek to minimize environmental impacts and land disturbance (short term).

Support energy-efficient design and alternative energy technology in new housing and housing development (intermediate).

### Special Needs Housing

Participate in regional initiatives regarding special needs housing (continuously).

Give technical support to agencies that provide services and housing for special needs categories and help promote their services **(short term)**.

Help agencies seek federal, state and foundation funding for the development of housing serving households with special needs (continuously).

Work with the state legislature to adequately fund housing and services for special needs populations (long term).

Continue to monitor housing development for the Americans with Disabilities Act (ADA) through the County's development review process (continuously).

Investigate changes to the Building Code to allow greater accessibility to all types of housing units (short term).

Initiate programs to assist with adaptations and modifications (intermediate).

Encourage new housing developments to adapt their plan options to allow accessibility (short term).

Recognizing that homeless families and individuals need services beyond shelter in order to maintain permanent housing, the County should support regional initiatives and collaborate with interested parties to support services that keep families and individuals in housing (short term).

Work with others in the region to improve access for homeless families and individuals seeking emergency shelters, transitional housing, and permanent housing **(short term)**.

Encourage agencies that develop homeless shelters and other supportive housing developments serving homeless families and individuals (continuously).

Support agencies that provide preventative measures, such as rental or mortgage assistance, to prevent the homelessness of families and qualified individuals (continuously).

## Fair Housing

Support federal, state and regional initiatives to develop local Fair Housing Ordinances (continuously).

Keep abreast of changes to federal and state Fair Housing Laws (continuously).

Assist in an outreach plan that educates individuals of their rights, and housing providers of their obligations, under the Fair Housing Law (intermediate).

Provide and place fair housing information in key locations within the government center, libraries and other County buildings **(short term)**.

Partner with local Fair Housing Agencies to maximize resources and effectiveness (short term).

#### **Creating Resources**

Seek federal and state funding to institute a countywide housing program (short term).

Identify resources to perform a needs assessment study for workforce housing (short term).

Educate the development community on how to use federal and state programs to provide affordable housing (continuously).

Educate the public on the different types and availability of affordable housing programs within the County (continuously).

Develop strategies to identify sites for affordable housing (short term).

Work with other jurisdictions to develop a holistic approach in meeting regional housing needs (intermediate).

Pursue funding from federal and state programs (intermediate).

Explore public/private partnerships to ensure that any public dollar spent on housing spurs additional investment of private capital **(short term)**.

Page left intentionally blank

# LAND USE ELEMENT

The Land Use Element considers all previous elements of this Plan and incorporates the information therein to produce a current analysis and future strategy that emphasizes the principles of sustainable development.

This Element is structured into two central components: Current and Future Land Use. The first component examines existing land use categories. It provides an inventory and analysis of residential, agricultural, commercial, industrial, institutional, public, environmentally sensitive and recreational land uses. It also provides an examination of water and soils to determine current environmental conditions throughout the County. Additionally, roads and transportation, zoning and permit data are considered in the overall analysis of current conditions, establishing a baseline understanding of the interaction between the land and human activities.

The second component includes a future land use strategy. The strategy is reinforced by objectives that clearly define the purpose for adopting a set of needs, goals and implementation strategies. The future land use strategy identifies and recommends locations where future growth is encouraged without negatively impacting the social, economic and ecological context of the community and environment, expressing the need to establish sustainable growth patterns throughout Horry County. It also identifies the current settlement patterns within the County and focuses on these areas in determining suitable locations for future growth and development. The identified areas are on the future land use map, which also incorporates future land uses defined by local municipalities.

To maintain a community with a healthy economic base and provide services for our residents, businesses and visitors, a diversity of land uses should be provided that include residential uses for different socio-economic levels, retail, commercial and employment centers, schools, parks (both active recreation areas and passive open space), churches, hospitals and other community services. Public infrastructure such as streets, police, fire and rescue, open space, water, sewer and utilities are needed to support the current and future population. Quality development that reinforces the community, natural environment and economy is critical to our current and future prosperity. These fundamental principles are the basis of this Element and are the result of a need for sustainable development, a doctrine that emphasizes social equity, economic prosperity and ecologic integrity.

The World Commission on Environment and Development (WCED) in the report titled *Our Common Future* defines Sustainable Development as "*development that meets the needs of the present without compromising the ability of future generations to meet their own need*". The National Association of Counties (NACo) has adopted the ten (10) principles of sustainable development as follows:

- Interdependence
- Collaboration
- Stewardship
- Diversity
- Prevention
- Equity

- Effectiveness
- Education
- Flexibility
- Responsibility

For a complete description of the National Association of Counties (NACo) adopted sustainable development principles, please see the **Appendix F**.

The World Tourism Organization recognizes the need for sustainable development. In 1995, the Lanzarote Charter for Sustainable Tourism, together with the United Nations, jointly developed the paradigm that states "*Tourism development shall be based on criteria of sustainability, which means that it must be ecologically bearable in the long term, economically viable, as well as ethically and socially equitable for the local communities.*" The organization also recognizes that "*sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its (tourisms') long-term sustainability*".

The National Association of Home Builders (NAHB) is also aware of the need for sustainable development. In 2005, NAHB published the Model Green Home Building Guidelines, a visionary document that has gained industry and market acceptance across the Country. It opens with a remark that states "*Although we cannot avoid affecting the environment when we build a house, green building can work toward minimizing that environmental impact.*" The NAHB has six Model Green Building Guidelines that reflect the industry's commitment to sustainability. The six guidelines are builted here, but a full description of each one is included in the **Appendix G**:

- Lot Preparation and Design
- Resource Efficiency
- Energy Efficiency
- Water Efficiency/Conservation
- Occupancy Comfort and Indoor Environmental Quality
- Operation, Maintenance and Education

The importance of achieving sustainable development in Horry County is emphasized throughout this Plan. **Graph 6** in the Natural Resources Element illustrates how dependent the economy of Horry County is on natural resources.

Hence, the needs, goals and implementation strategies present a course of action that recommends planning tools to support sustainable development initiatives in light of natural limitations, existing and historical development patterns, the availability of services and infrastructure, and citizen preferences identified through the planning process.

Sustainability can be achieved in many different ways. For example, the developer who builds a house using green design is positively affecting environmental sustainability. Perhaps that same developer builds a subdivision that mixes incomes and includes affordable housing units. This in turn promotes economic and social sustainability. Another method of sustainability is to allow cluster development so a developer can realize the same return on investment with a smaller footprint on the land, which promotes economic sustainability for the developer while simultaneously promoting environmental integrity. Another method is by the adoption of a Capital Improvements

Plan that establishes current and future public needs as well as adequate levels of service for County services like libraries, police and fire protection. The Capital Improvements Plan would promote social and economic efficiency. These are just some of the many examples of how sustainability can be incorporated into everyday life.

#### Water quality decrease

**Table 19** in the Natural Resources Element shows that out of 28 total water sampling areas throughout the County, seventeen (17) had at least one water quality indicator showing a statistically significant decrease in water quality. In 2004, 95% of beach closings in Horry County were directly attributed to elevated bacteria levels due to polluted stormwater run off. Beach closings and degraded water quality hurt the local economy as much as the natural environment, thereby undermining the sustainability of both.

#### **Recreation facilities**

The Natural Resources Element also notes that in 1999, the Planning and Zoning Department hired a consultant to complete a recreation needs assessment for 1999-2009. The study found the development of active and passive recreational facilities has not caught up with the rapid growth of the region. Even if all parks were built according to schedule, using current population projections, the park facilities would still fall short of the acreage goals set by the needs assessment. This deficiency has immediate and long lasting negative effects to the quality of life for Horry County.

#### **Community Facilities**

The Community Facilities and Services Element notes that the call volume handled by Horry County Fire Rescue from 1996 to 2005 increased by 350% due to rapid population growth. In 1996 the department responded to just over 3,000 alarms and in 2005 that number had risen to over 11,000. Horry County Fire Rescue is a vital component of the County's infrastructure, and population growth has had measurable impacts on this service. This same impact is witnessed in other vital components to the infrastructure, such as schools.

#### Schools

The average size of the Horry County student body is 681 for elementary schools, 736 for middle schools and 1,205 for high schools as noted in the Community Facilities Element. The school system is operating at 102 percent of its maximum enrollment capacity as of spring 2007. Of the County's 46 schools, 25 now exceed recommended capacity. With a total facility capacity of 34,247 in 2005, the system will have to accommodate an additional 18,823 students by 2020. Assuming the County maintains present average enrollment sizes for each school type and recent growth trends continue, a total of 23 new facilities, 15 elementary schools, five (5) middle schools and three (3) high schools could be needed.

#### Housing

The Housing Element notes that a person in Horry County needs to earn \$13.15 per hour in order to afford a two-bedroom housing unit at fair market rent (NLIHC Out of Reach Report, 2005; see Housing Element). Approximately 31% of the 2005 population in Horry County worked in retail, entertainment, recreation or food services (Woods & Poole, 2005). Traditionally, these industries are associated with a tourism economy and employ workers at or slightly above minimum wage. At minimum wage, one would have to work 102 hours per week to afford a two-bedroom apartment in Horry County. 21% of homeowners and 38.8% of renters spend greater than 30% of their income on housing and associated costs. The National Low Income Housing Coalition updated this statistic for renters and reports that 43% of renters are unable to afford a two-bedroom unit at fair market rent (NLIHC Out of Reach Report, 2005).

The Land Use Element spatially reflects the majority of stated needs, goals and implementation strategies noted in the other elements of the Comprehensive Plan. The degree to which the County has grown over the past decade presents challenges that will require regularly updating this Plan in the future. As we move forward with implementation, it is imperative that we understand how the past and present impacts our collective future and the choices we will make. Tomorrow's decisions will require a greater knowledge of how the County continually changes, and our ability to adapt to changing circumstances will ensure a greater measure of sustainability in the future.

## Land Use History

The natural functions and primary uses of the land in Horry County have changed significantly since it's founding in 1801. Surrounded by the Lumber and Little Pee Dee Rivers as well as the Atlantic Ocean, Horry County's proud reference as the "Independent Republic" stems from the fact that this land was unreachable to anybody from the landside for a long time. Its geographic isolation and diverse natural resources and landscapes made Horry County a unique place for many different people who have settled here. From second sons of English noblemen to pirates and fishermen, fur traders, loggers (**Picture 1**) and farmers, the beauty and the wealth of the land has attracted people ever since its exploration, and has spurred the development of settlements throughout the territory.

Picture 1: 19th century logging crew



Although the County was spared from severe destruction, the post-Civil War years were nonetheless difficult. Due to outbreaks of diseasess and the generally ailing economy the economic situation was depressed; however, the arrival of the railroad into Conway in 1887 and to the beach in 1901 provided welcomed relief (**Picture 2**).

Picture 2: Train service on Main Street in Conway



(Photos courtesy of Horry County Museum)

The economic turmoil led to the closure of most of the naval shipyards along the Waccamaw River, and had a negative effect on the local employment and income situation that was somewhat compensated by the growing popularity and suitability of planting tobacco (**Picture 3**).

Picture 3: Tobacco barn

Picture 4: Burroughs shipyard in Bucksport



(Photos courtesy of Horry County Museum)

A short time after the commencement of railroad transportation, the first hotel named "Seaside Inn" opened (**Picture 5**). That event marked the start of the Grand Strand's growing popularity as a vacation destination, spurring tourist-orientated development all along the seashore.

Picture 5: The early "Seaside Inn"



(Photo courtesy of Horry County Museum)

The growing importance of the automobile as a means of transportation led to increased highway construction in Horry County improving accessibility. The opening of the Atlantic Intracoastal Waterway, which originally was planned to enhance homeland security from the sea, indirectly contributed to the growing attractiveness of the area as a vacation destination. The transformation from an agricultural based economy to a tourist driven destination is largely attributed to the advent of personal transportation and accessibility to the area.

Since the 1950's, the importance of the tourist industry in Horry County has grown substantially to become the main revenue generator and land use converter. Over the years the tourist industry, which started out in Myrtle Beach, has spread geographically all across the County creating a diverse mix of land uses. Influencing the reputation of the area are the countless world-class golf courses with their upscale lodging and

residential communities. A mild climate and diverse natural resources offer a multitude of opportunities for many outdoor activities as well as shopping, dining, and other leisure activities.

The County's growing population brings with it both opportunities and challenges as it plans for the future. The past and the links to the land must be considered when planning how to interact with the multitude of natural resources that exist throughout the County. Expansion of the economy and the growth of the population is possible with land-use planning that protects the natural resource assets while simultaneously promoting quality of life. It is these natural resources that make Horry County the place where millions of people vacation, and hundreds of thousands live and work.

### Land Use Inventory

Those who live, work and play in Horry County take advantage of the tremendous variation of landscapes at their disposal. From coastal beaches to inland waterways, a full spectrum of natural environments can be found. These natural landscapes are complemented by urban areas located just a short drive away. Throughout the County and within a short drive; farmland gives way to suburbia, suburbia becomes city center and the process reverses; urban corridors transition into rural landscapes marked by dense forests, farmland, wetlands, and fresh vegetable and fruit stands. Indeed, Horry County is a diverse patchwork of people, places and activities. The current land use inventory and analysis



Horry County Planning and Zoning Dept.

captures some of this diversity in terms of how residents, visitors and businesses engage in their natural surroundings and organize the space to live, work and play.

The current land use analysis and inventory is structured to provide a base analysis of the relationship between the people and the land. As such, much of this section focuses on establishing a baseline measurement for future endeavors. Following the discussion of zoning and building permit data is an inventory and analysis of land use classifications in Horry County. The current land use map is based on a predefined set of major land uses that capture the relationship between the population and physical landscape. Current land use classifications include:

- Conservation/Preservation
- Rural Conservation
- Rural Residential
- Suburban Residential
- Urban Residential
- Mixed
- Sales and Service
- Institutional
- Recreation and Entertainment
- Industrial
- Public and Government, and

• Utility.

These twelve (12) predefined land use classifications broadly define the interactions between people and places, and a spectrum of physical environments ranging from natural to built. All in all, the current land use definitions together with the actual map are the basis for projecting land use over the next 18 years.

The inventory consists of five significant factors shaping land use in Horry County. First, water is a major physical feature in all parts of the County. It determines the use of land, its value, developability, design, and the overall layout of the built and unbuilt environments. Secondly, soils have a tremendous impact on the use of land. Soil types in Horry County typically have physical properties that limit development options and affect functionality of the natural landscape.

The transportation system is the third significant factor that determines how land is being developed in Horry County. Roads contribute to the type of development as well as the intensity. For example, an urban corridor, such as U.S. 501, is appropriate for large-scale commercial development. An urban corridor is at the top of the road hierarchy system. It determines: volume capacity, safety standards, travel time, as well as connectivity and development potential not only on a local but also on a regional level.

The current land use analysis and inventory includes a great deal of zoning and permitting information. The analysis utilizes compiled data: rezoning data dating back to 1999, as well as, building permit information dating back to 1988. The rezoning data is particularly useful as it details unfortunate consequences of the zoning actions from the 1980's, e.g. favorable conditions for urban sprawl, or allowed development in inappropriate areas, etc. In addition, the building permit information establishes a development timeline, adding legitimacy to the often-stated notion that the County has seen "explosive growth" over the past decade.

## <u>Water</u>

Water, more than any other physical feature, defines the use of land in Horry County. According to the National Wetland Inventory data, there are more than 328,000 acres of wetlands in Horry County (see **Appendix H**). Bordered on one side by the Atlantic Ocean, and on the other side by the Pee Dee River, access to Horry County from all other regions requires traversing water. Once inside the County, the Pee Dee River, Waccamaw River and Intracoastal Waterway create a spider web entanglement of wetlands and swamps that cover approximately 45% of the land. The omnipresence of different types of water in the County results in a biologically diverse landscape containing a large variety of animal and plant communities. This diversity has always played a central part in attracting residents, businesses and visitors to the area, and all have capitalized on the existence of this natural resource. Since its early beginnings, water continues to be the main attraction.

The Environmental Protection Agency and the Army Corps of Engineers have adopted the following definition of "wetlands":

"Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

# Wetlands generally include swamps, marshes, bogs, and similar areas."

Congress enacted the Clean Water Act (CWA) in 1977 "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. section 1251(a)). One of the mechanisms adopted by Congress to achieve that purpose is a prohibition on the discharge of any pollutants, including dredged or fill material, into "navigable waters" except in compliance with other specified sections of the CWA. In most cases, this means compliance with a permit issued pursuant to CWA sections 401 and 404. Sections 401 and 404 of the United States Clean Water Act regulate development within property classified as wetlands. In South Carolina there is no comprehensive program or single agency responsible for wetlands management; only the U.S. Army Corps of Engineers can carry out wetlands determination.

The primary focus of the Section 401 Water Quality Certification of the CWA is to maintain the role wetlands play in the protection of surface water quality and its use. Section 401 gives the State some ability to control water quality impacts. In evaluating whether a particular discharge activity should be permitted, the U.S. Army Corps of Engineers applies the Section 404(b)(1) guidelines requiring 1) the avoidance of wetland impact where feasible, 2) minimization of impacts where practical and 3) compensation for any unavoidable impacts through mitigation measures. The State of South Carolina addresses physical and hydrological impacts on wetlands and water quality to protect existing uses and prevent degradation by requiring storm water review and buffers for wetlands that are impacted by development.

Two key Supreme Court cases, Rapanos vs. Untied States and Carabell vs. United States, have determined the types of wetlands that the U.S. Army Corps of Engineers (USACOE) asserts jurisdiction. The cases also define how to determine such wetlands. The key findings of these two cases include the following:

The agency will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)
- Wetlands that directly abut such tributaries

The USACOE will also decide jurisdiction over the following waters based on a factspecific analysis. It will determine whether they have a significant connection with what are considered traditional navigable waters (the so-called significant nexus standard):

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to, but that do not directly abut a relatively permanent nonnavigable tributary

Jurisdiction generally will not be asserted over the following features:

- Swales or erosion features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters.
- Significant nexus includes consideration of hydrologic and ecologic factors (e.g., volume, duration, and frequency of flow; size of the watershed; average annual rainfall; average annual winter snow pack; potential of tributaries to carry pollutants and flood waters to traditional navigable waters; provision of aquatic habitat that supports a traditional navigable water; potential of wetlands to trap and filter pollutants or store flood waters; maintenance of water quality in traditional navigable waters).

The degree to which water impacts the County is evident when considering the management of this abundant resource. The Horry County Stormwater Management



Source: Coastal Carolina University

Program is fighting an unending battle to reduce flooding and prevent further degradation of water resources caused by new development. Comparing data from 1998 and 2005, development has increased the total impervious areas in Horry County from 19,000 acres to 32,000 acres, a 60% increase in only seven (7) years. Even with standard stormwater ponds that only temporarily store excess runoff onsite, development has drastically increased the runoff volume that ultimately reaches the streams, rivers and the Ocean. In an effort to curb stormwater runoff, other areas of the Country are using low impact development techniques that are proving to very successful. Conservation subdivision be practices can actually reduce development costs and can dramatically reduce the negative stormwater

impacts of land development. These strategies need to be encouraged in sensitive areas and are included as Strategies in this Element. In order for these tools to become a reality, they need to ultimately be included within the planning and zoning legal framework for Horry County, starting with the Comprehensive Plan.

The abundance of water has and will continue to be a major factor in determining land use in Horry County. It is important that government, residents, businesses and visitors respect and treat water as an essential infrastructure. Water not only ensures ecological biodiversity and watershed function, it is also the basis for economic growth; and it is a key component to the value of property. All in all, water is a means to secure and proliferate the health, safety and future economic prosperity of Horry County.

## <u>Soils</u>

When considering how land may be used, soil is a significant variable in the equation. In conjunction with the hydrologic character of Horry County, most soil types are made up of a varying combination of sand, silt, loam or clay. Additionally, lands in the coastal region typically have a water table at or near the surface; therefore, most soil types in the County have unfavorable drainage and water-absorption characteristics. The type of soils generally suitable for agricultural and forestry uses in Horry County amount to approximately 350,420 acres, or 547 square miles. This includes 189,313 acres, or 295 square miles (25.9% of the total County) classified by the U.S. Department of Agriculture (USDA) as "soils of statewide importance" (see **Appendix I**). Taking into consideration drainage and permeability, the actual amount of land suitable for agricultural and forestry uses is reduced to a mere 200,183 acres, or 312 square miles.

According to the USDA National Resource Conservation Service, 27 out of 29 occurring soil types in Horry County are not suitable for residential or commercial development (see **Appendix J** for soil definitions and analysis). High soil acidity is the leading culprit behind this statistic. High soil acidity causes medium to high risk for corrosion of unprotected steel and/or concrete. Seventeen (17) of all soil types are rated "limited" to "very limited" for their capability of sustaining small commercial buildings or even residential dwellings. This is due to limited soil stability resulting from shallow depth to water saturated zones within the soil. Also, due to the limited soil stability and high water tables, construction is limited to above ground construction (i.e. basements cannot be utilized into the construction plans). Other causes for the limited suitability of the land are unfavorable shrinking and swelling habits of the soil type and the concern of flooding.

While these factors are important when considering development patterns, it is difficult to use the data for any meaningful discussion of the future growth potential of the County. Certain soil characteristics can be mitigated. For instance, treated concrete and steel can be used in soils that display a high acidity; or, residential units can be built on taller foundations, thereby reducing the threat of flooding as a result of soil type.

Above all, it is important to remember that the unique combination of water and soil creates an exceptional place where Carolina Bays, American Alligators, black waters and Bald Cypress are the norm. Indeed, Horry County has unique natural landscapes deserving the utmost respect when considering where to develop human activities and uses.

## **Roads/Transportation**

A typical resident or visitor will never have the time or the desire to see all 4,567 linear miles of the National, state and local roads constituting the transportation network in Horry County (see **Appendix K**). Altogether, the road network consumes almost 124,000 acres of land (this number represents only travel surface and not actual right-of-way). This fact makes roads the second largest land use in Horry County.

Road infrastructure significantly impacts the utilization of land and the intensity of development throughout the County. For instance, the characterization of U.S. Highway 501 per the Horry County Land Development Regulations as an arterial roadway establishes it at the top of the road hierarchy system. The following table outlines the street hierarchy system (**Table 80**).

Street Classification	Design Speed	Posted Speed	Example
Arterial	60	45	U.S. 501
Collector	45	35	Carolina Forest Blvd.
Subcollector	30	25	Willow Bend Dr.
Access	30	25	Dragonfly Dr.

Source: Horry County Planning and Zoning Department

Road capacity and design are directly correlated with land use types and intensities. U.S. Highway 501 (see the above example) serves as the main corridor from which other streets branch. This creates a hierarchical system of streets that serve as access points for less intense land uses. The "arterial", in this example U.S. Highway 501, provides access to both sides of the right-of-way for less intense land uses such as residential. The placement of commercial development along the main arterial requires residential development to support it. The land uses established as a result of the arterial and the ensuing commercial development are typically residential or less intense commercial. In turn, these uses require access to the higher order transportation system. As such, the road network is established according to the above table. In terms of current and future land use patterns, the above mentioned regional road hierarchy system is one of the most essential components. It is vital that the infrastructure capacity is in place to support a growing population over the next 18 years.

Capacity ratios are an excellent resource for gauging the effects of extraordinary population growth on existing infrastructure. **Table 81** captures 2005 data that details capacity for some of the most important roads in the County.

Roadway	<b>Typical Cross-Section</b>	<b>Current Volume/Capacity Ratio</b>
U.S. 17 Bypass (Myrtle Beach)	4-7 lanes divided	0.96 - 1.35
U.S. 17 Business (Myrtle Beach)	4-6 lanes divided	0.96 - 1.15
U.S. 17 (North Myrtle Beach)	4-6 lanes divided	0.98 - 1.12
U.S. 501	4 lane divided	0.64 – 1.55
U.S. 701	2-4 lane undivided	0.67 - 1.07
U.S. 378	2-4 lane undivided	0.52 - 0.68
S.C. 9	4 lane divided	0.65 - 0.70
S.C. 31 (Carolina Bays Parkway)	6 lane divided	0.20 - 0.30
S.C. 22 (Conway Bypass)	4-6 lane divided	0.16 - 0.65
S.C. 90	2 lane undivided	0.47 - 0.90
S.C. 905	2 lane undivided	0.18 - 0.86
S.C. 319	2 lane undivided	0.14 - 0.27
S.C. 707	2 lane undivided	1.10 - 1.75
S.C. 917	2 lane undivided	0.2
Highway 19 (S-19)	2 lane undivided	0.1

Table 81: Existing Traffic Conditions on Principal Highways in Horry Count	/. 2005
--	---------

Source: South Carolina Department of Transportation

The "Volume/Capacity Ratio" range shown in the above table is the result of dividing the lowest and highest traffic count numbers by the established level of service capacity standard numbers in accordance with road type, design and number of lanes. Traffic count numbers for 2005 were obtained from the S.C. Department of Transportation

(SCDOT). According to the table, U.S. 17 Bypass, U.S. 17 Business, U.S. 701 and S.C. 707 were above capacity in 2005. These ratios have continued to steadily increase, and many citizens are already aware of the dangerous conditions that exist as a result of too much traffic.

One of the traffic hotspots is the segment of S.C. Highway 707, between S.C. Highway 544 and the Georgetown-Horry County Line. With the road already above capacity, rezoning requests for a development potential of 2,506 additional residential units have been approved. With the realization of all proposed development, traffic problems will further arise.

Horry County maintains approximately 900 miles of unpaved roads, 519 miles of paved roads, 2,400 miles of drainage lines and approximately 67 bridges. This does not include any State or Federal highways as part of the maintenance system, which account for an additional 748 miles. The primary goals and objectives of the County are to provide a more efficient. highly productive road maintenance and construction program; increase the County's ability to pave more



Source: roadtraffic-technology.com

roads and improve maintenance standards and techniques; provide infrastructure for stormwater management; and to provide efficient infrastructure for the County.

Whether or not initial construction costs are borne by developers or by Horry County, once built, the public road maintenance becomes the County's responsibility. Through an infrastructure valuation analysis completed in 2006 (and modified January 2007), there is a \$394,419,312 replacement cost value attached to 1,419 total miles of arterial, collector, access and dirt roads, and bridges. The estimated balanced revenues and expenditures (budgeted costs) for maintenance for fiscal years 2004-2007 are as follows:

FY 2004\$13,026,057FY 2005\$15,982,333FY 2006\$15,458,433FY 2007\$8,372,292 (partial year)

Of the paved and improved roads in Horry County, approximately 20% are in substandard condition. The main goals in the FY 2006-2007 budget is to construct and pave 8.5 miles of roads and upgrade another 24 miles of roads to include roadside drainage. Because there are so many variables to consider, it is difficult to arrive at the exact cost estimate per mile of maintenance. However, the overall budgeted amount divided by the "stated goals" of the County indicates \$257,609 per linear mile of maintenance. New construction costs are extremely high and unpredictable due to planning and design, engineering, permitting and right-of-way acquisition. Market fluctuations and global demand for material also impact estimated and actual costs.

The extent to which the County government can or will affect the utilization of land in regard to future road capacity in the future has yet to be determined. However, it is the intent of this Element to act as a guide for future land use planning, meaning the

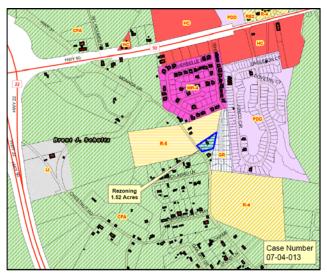
information provided here needs to be considered before making short or long term planning decisions.

## <u>Zoning</u>

Land use can be defined as the occupation or utilization of land for any human activity or purpose. As an extension of land use, zoning determines the intensity of any given use. Zoning is a government regulation developed to protect lower impact uses and the people who engage in those uses (for instance housing), from higher impact uses, such as industry and commerce. Zoning is a legislative land-based tool, which has derived from the general police functions as defined by the Fifth and Fourteenth Amendments of the United States Constitution.

In 2001, the remainder of Horry County was zoned. Large swaths of the County were placed into broad zoning classifications that allowed a great many uses. One of the broadest classifications is the Forest Agriculture (FA) district that exists throughout many parts of the County to this day. This "catch all" classification allows for multiple uses on half acre lots or greater. While the intensity of the land is clear (.5 acre lots), the use is not. The intent of the FA district is to allow for the utilization of the land "for agriculture, forestry, low-density residential, commercial, social, cultural, recreational, and religious uses." Here the issue is clear; the FA zoning district dictates intensity and not actual use.

A portion of Horry County was zoned in 1987. That portion consisted of everything east of the Waccamaw River and approximately a 6-mile radius around Conway. By 1996, County Council decided to expand zoning in Horry County, starting with the major highway corridors of U.S. 501 West, U.S. 701 North and South, the western segment of S.C Highway 9, and U.S. 378. After the introduction of the very generalized "FA" zoning district, County Council had earlier initiated the Commercial FA ("CFA") and Limited FA ("LFA") zoning district in order to protect specific rural areas of Horry County, e.g. the Red Bluff area, from outlandish land uses such as industrialized hog farms or even land fills, and to limit the possible land uses and development density in those areas. As

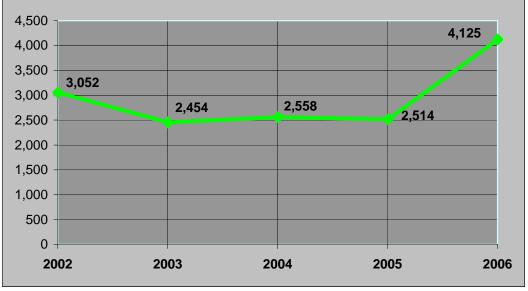


Horry County Planning and Zoning Department

zoning had progressed with the years, the County's goal to "blanket" zone the entire land area did not come easy. In 2000, the County introduced a "green card" like system, where property owners could determine and officially request their specific zoning. Some critics say that this procedure helped undermine had later comprehensive planning efforts. As for example, the many changes to the "FA" (Forest Agriculture) original zoning classification allow for too many possible residential and commercial land uses and therefore, under long-range planning aspects considered unfavorable are to sensibly plan for explosive population growth. Without a clear land use objective and strategy, the County has experienced rapid growth with little idea of the effects such growth has had and is still having on the natural environment, infrastructure, the economy and quality of life.

Since the aforementioned introduction of zoning in 1987, the Horry County Planning and Zoning Department has seen a shift from the broad categorization of uses captured in the "FA" district to more precise classifications that not only accommodate a refined measure of intensity, but also a particular set of uses. Many of the rezonings that the County has processed since 2002 began as "FA", Commercial FA ("CFA") or Limited FA ("LFA"). In fact, since 2002 there have been a total of 205 rezoning cases, totaling 6,992 acres, specifically requesting a zoning designation other than the original FA classification. This represents 47.5% of all rezoned acres in the County since 2002. All but six of the 205 have requested a form of residential zoning, with the majority (109) granted a suburban residential classification allowing for lot sizes between 10,000 square feet and half an acre. Overall, since 2002, 14,703 acres of the County have been rezoned to accommodate some other use or intensity than that which was initially allowed by the original zoning district.

The data captured below is an indication of the rate at which the County has been developing. It represents the physical manifestations of population growth. The rapid conversion from undeveloped to developed lands indicates the need for a comprehensive approach to future planning endeavors.

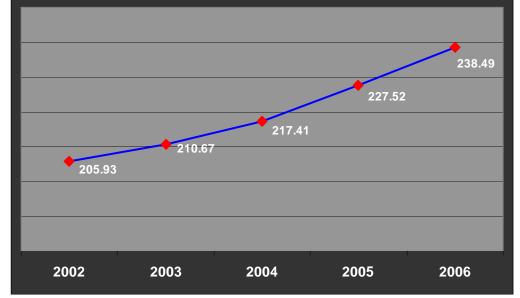


Graph 22: Total acreage of rezoned land 2002 - 2006

Source: Horry County Planning and Zoning Department

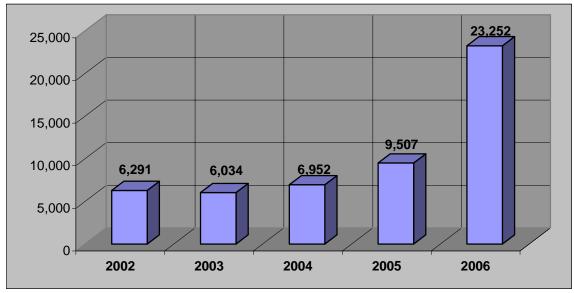
In 2006, a sharp increase in both the number of rezonings and the amount of acreage involved was seen by the Planning Department. A shrinking supply of readily available land for residential development purposes over this four-year period may have been the cause. As of 2006, it seems that the supply of developable land had dwindled to the point where development interests saw the need to secure enough land to develop in the years to come.

**Graph 23** tracks the estimated population growth during these years. It is clear that sustained growth was occurring during this time. In fact, there was a 15.8% increase in the overall population from 2002 through 2006.



Graph 23: Estimated Population (in Thousands) for Horry County, 2002 - 2006

**Graph 24** illustrates the continued population growth in previous years has led to an increase in potential new housing units, especially in 2006, with a approximate 23,000 additional housing units, more than the potential of 2003 through 2005 combined.



Graph 24: Number of potential new housing units created through rezoning, 2002 - 2006

The information above is indicative of the growth that has occurred in the County. It begins to inform decision makers of the possible effects of future population growth in

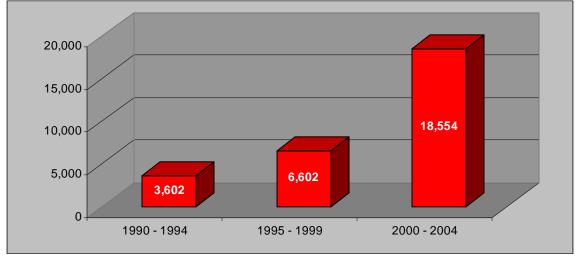
Source: SC Budget and Control Board, Office of Statistics and Research

Source: Horry County Planning and Zoning Department

regard to infrastructure, environmental integrity and quality of life for the citizens of Horry County.

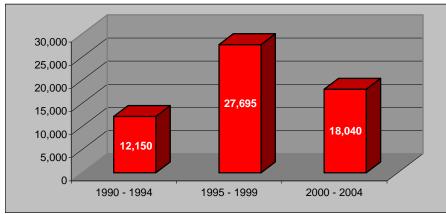
## Permits

While zoning speaks to potential land use, building permits speak to the actual transition from one land use to the next. Building permit data is a significant contributor to the current land use analysis because it tracks the manifestations of population growth. Incredible population growth from 1990 through 2004 resulted in an equally tremendous number of building permits being issued during the same period. **Graph 25** illustrates exponential growth in permitted acreage between 1990 and 2004.



Graph 25: Permitted Land Development Acres by 5-Year Increments, 1990 - 2004

Population growth, shown in **Graph 26**, created a demand for residential and commercial developments in the late 90's. Since 2000, the development community has been busy, more than doubling the amount of permits issued in the 1990's in a matter of five (5) years. The consequence of this growth is swift urbanization along several corridors, such as U.S. 501, S.C. 90 and S.C. 707. Large tracts of land such as Carolina Forest and areas between Loris and Longs also grew.



Graph 26: Population Growth in Horry County, 1990 - 2004

Source: Horry County Planning and Zoning Department

Source: Horry County Planning and Zoning Department

Based on the table below, which details building permit issuances between 1988 and 2006, Horry County's undeveloped land area decreased by 12,261 acres (19.16 square miles) due to newly permitted residential land uses, by an additional 6,603 acres (10.32 square miles) for new commercial uses, 90 acres for industrial uses, and 1,314 acres (2.05 square miles) for institutional land uses. The ratio of this occurrence is 2 to 1 (2:1); or, in other words, for every permitted acre that is directly related to a job (commercial, institutional, industrial) two (2) acres are permitted for residential use.

Land Use	Total Acres	% Of Total Permits
Residential	12,261	60.49%
Commercial	6,603	32.58%
Institutional	1,314	6.48%
Industrial	90	0.44%
TOTAL	20,268	100.00%

 Table 82:
 Permitted Land Development Acres by Land Use, 1988 - 2006

Source: Horry County Planning and Zoning Department

From 1988 through 2006 population increased by 89,250 people. The number of people employed increased by 60,100 during this same time period. This increase in population (89,250) resulted in 12,261 permitted acres. For each increase of 100 people, an average of 13.73 acres of residential use was permitted over this 18-year period. By combining commercial, institutional and industrial uses, 8,007 additional acres were permitted, meaning for each increase of 100 employees, an average of 13.32 acres of employment related land uses resulted. Combining all uses, 22.4 acres of land were permitted for each increase of 100 in the population. In all, over 20,000 acres of land have been permitted in the 18-year period from 1988 - 2006. It is important to note that permitted acres do not equal developed acres, as a large percentage is reserved for open space, stormwater drainage, road and/or utility easements, meaning only a percentage of the land is actually used for development purposes.

#### Current Land Use

The Current Land Use Map included in this section, is a graphic representation of how the land is currently used. The map includes land use categories such as residential, sales. service. industrial. institutional. mixed. rural conservation. conservation/preservation, recreation, entertainment, utility, public and government. The map also includes road right-of-ways and major water features. The current land use map is an important tool that assists in understanding how past growth has impacted the physical nature of the County, and for understanding how future growth will impact natural resources, established neighborhoods, commercial corridors, agricultural areas and the transportation network. The following is a description of the land use categories included in the current land use map:

#### Conservation/Preservation

Conservation/Preservation lands are permanently protected areas of natural and man made landscapes. Ownership is typically in the form of a government (Federal, State, Regional, local) or non-profit organization. Land in this category may be within a conservation easement. Many of these properties are used for active and passive recreational purposes. Boat landings, playgrounds, community parks, beach access points, State parks and ball fields are examples of active and passive recreation areas. Some lands in this category are preserved due to the importance they impose regarding favorable natural processes (Carolina Bays, wetlands, ocean front and heritage preserves). Other lands serve a governmental and/or institutional purpose for the general public such as spoilage basins, the Myrtle Beach International Airport, fire towers and educational centers.

#### **Rural Conservation**

Rural Conservation includes a range of agricultural, commercial, industrial and residential uses in which the intensity of development is limited due to the large size of each parcel. Rural conservation describes parcels greater than 10 acres in size. These tracts provide for agricultural and/or agricultural related uses, and preserve the character of rural lands, and are intended to have very low densities with one (1) unit every ten acres. The majority of the tract is left in a natural state.

#### **Rural Residential**

Rural Residential lands are large lot residential uses between one (1) and ten (10) acres in size. Rural residential uses are found throughout the County, and the classification of "rural" is based on the intensity of development per lot, the lack of continuous city services such as water and sewer, and the degree to which the natural state of a parcel is left intact. Dwelling units include detached single-family homes, mobile homes and manufactured housing.

#### Suburban Residential

Suburban Residential provides for a range of residential housing types and intensities on properties between 6,200 square feet and one (1) acre in size. Dwelling units include detached single-family homes, duplexes, triplexes, multiplexes, mobile homes and manufactured housing.

#### Urban Residential

Urban Residential describes all residential uses with lot sizes smaller than 6,200 square feet. Included are all single and multi-family housing regimes such as attached and detached single-family homes, duplexes, triplexes, multiplexes, townhouses, apartments and condominiums.

#### Mixed

Any lands that mix residential, commercial and/or industrial uses are included in this category. The category includes a variety of uses and intensities such as rural to urban residential, retail establishments, office buildings, educational facilities, recreational facilities and other public amenities.

#### Sales and Service

Sales and Service lands consist of a variety of retail and office uses such as medical offices, administrative facilities, shopping centers, restaurants and auto oriented businesses. Sales and services generally follow major transportation corridors. When these uses congregate, they form commercial centers ranging from strip mall developments to regional shopping complexes.

#### **Recreation and Entertainment**

Recreation and Entertainment includes all activities associated with a transient population including hotels and restaurants. The category also includes all recreation

and entertainment based businesses such as golf courses, movie theaters, bowling alleys, health spas, marinas and amusement parks.

#### Industrial

Industrial provides for industrial land uses that serve the residents of Horry County. The industrial land use category includes both light and heavy industries typically connected with manufacturing, assembly, processing or storage of products.

#### **Public and Government**

Public and Government includes all facilities, structures, and lands that are owned, leased, or operated by a government entity or the private sector for use by the public.

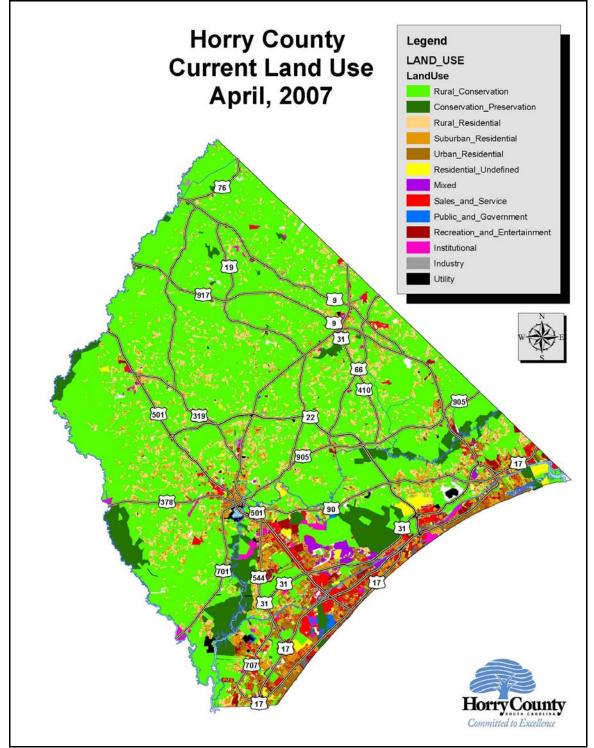
#### Utilities

Utilities includes all facilities, structures, and lands that are owned, leased, or operated by a government entity, authority or the private sector used to provide a public service such as water, electricity, telephone and waste services.

#### Institutional

Institutional includes all facilities, structures, and lands owned, leased, or operated by a tax-exempt entity excluding government and utilities. Schools, churches, hospitals, colleges, organized establishments, foundations, societies and other non-profit organizations are included in the category.





The Current Land Use Map is a visual companion to the data and represents the relationship between land uses. It is a means to conveniently display overall development patterns and influential factors that have shaped the built and natural environments. Included in the map are all of the land use categories above as well as roads and major water bodies. A larger copy of the map is included in the Appendix of this document as well. The Map is a tool that assists with establishing where future growth and development can potentially occur, and is therefore the basis for the land use analysis below, and the Future Land Use section of this Element.

Define ditan ditta		% Of County
Defined Land Use	Acres	Total
Conserved Lands	49,331	7.04%
Rural Conservation	486,744	69.48%
Rural Residential	54,739	7.81%
Suburban Residential	21,046	3.00%
Urban Residential	8,591	1.23%
Residential	22,274	3.18%
Mixed Uses	5,916	0.84%
Sales and Service	21,757	3.11%
Recreation and Entertainment	13,840	1.98%
Institutional	8,581	1.22%
Public and Government	1,631	0.23%
Utility	2,874	0.41%
Industry	3,255	0.46%
TOTAL ACREAGE	700,579	100.00%

 Table 83:
 Land Uses in Horry County, 2007

Source: Horry County Planning and Zoning Department

# Land Use Analysis

Horry County is a large landmass (1,133 square miles) that has seen a significant amount of urbanization since 1990. The majority of Horry County, however, is classified as "Rural Conservation", and therefore rural according to the land use definitions. Of the more than 700,000 acres of land area, 84.33% is defined as large-tract land areas with little or no human activity. This percentage is obtained by combining the Conservation/Preservation Lands, Rural Conservation and Rural Residential land use categories. Removing the Rural Residential land use from this calculation yields 76.52% of the County as "rural".

## **Residential Land Uses**

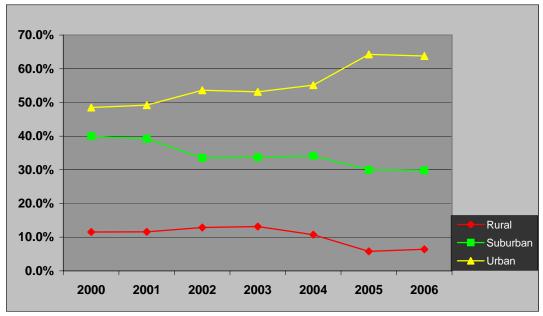
Residential development equaled 97% of all building permits issued between 2002 and 2006. **Table 84** (below) details the ratios of current residential development patterns in comparison to other land uses.

Residential Type	Acres	% Of Total	
Rural Residential	54,739	48.6%	
Suburban Residential	21,046	18.7%	
Urban Residential	8,591	7.6%	
Residential	22,274	19.8%	
Mixed Uses	5,916	5.3%	
TOTAL	112,566	100.0%	

**Table 84**: Residential Acreage Comparisons

Source: Horry County Planning and Zoning Department

As the general land development pattern of the County continues to shift from rural to urban, so will the allocation of the residential population. This means that the ratio of rural residential will decrease as the population in areas, representing an urban and suburban lifestyle, continues to grow. **Graph 27** identifies this shift using the current rural, suburban and urban land use categories and building permit data from 2000 through 2006.

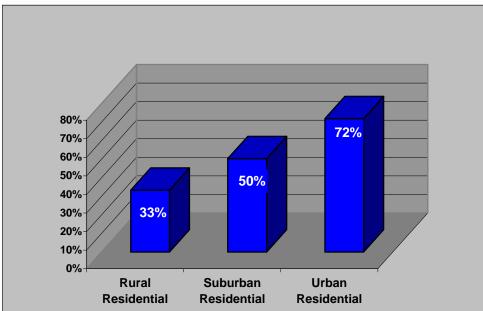


Graph 27: Building Permits by Land Use Category, 2000 - 2006

Source: Horry County Planning and Zoning Department

Since 2000, the ratio of rural residential building permits to all other residential permits has decreased by 5.1%. Suburban residential permits have decreased by 10.2%, while urban building permits have increased by 15.3%. Growth in the number of urban residential units has outpaced the growth of suburban and rural residential units. **Graph 28** indicates that the population shift from rural to urban over the past 7 years has been significant.





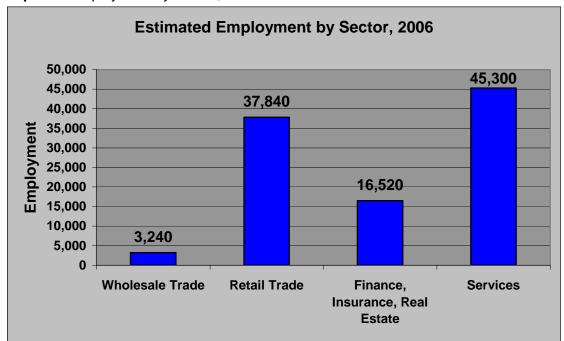
Source: Horry County Planning and Zoning Department

The number of households in Horry County is projected to be 143,950 in the year 2025. This is a substantial increase when considering the estimated number of households for 2006 was 96,340. That results in an increase of 47,610 households, who will predominantly want to live in new urban and suburban communities, thereby contributing to the overall growth pattern and land conversion in Horry County. The extent to which this shift will occur is unknown. Too many variables exist to accurately project how many households will be absorbed according to the defined land uses. It is safe to say, however, that as the County becomes even more urbanized, opportunities for locating new households in rural areas will decrease. It is imperative that future planning endeavors in areas, where the rural lifestyle is preferred and environmental constraints exist, respect those circumstances and help prevent from urban development on encroaching on it.

# **Employment Related Land Uses**

The majority of employment related land use is captured in the "Recreation and Entertainment" and "Sales and Service" land use categories. The "Recreation and Entertainment" land use classification captures the tourist related land uses such as hotels and restaurants. When combined, this classification or land use is the largest industry in the County.

The "Sales and Service" classification captures traditional commercial establishments and industries including finance, real estate, auto related services and retailers. Together, these land use categories consume 35,597 acres of land in Horry County. **Graph 29** depicts those employment sectors most affected by the "Sales and Service" and "Recreation and Entertainment" land use categories; wholesale trade, retail trade, finance, insurance and real estate (FIRE), and services. Combined, the estimated 2006 employment in these sectors equals 104,906.



Graph 29: Employment by Sector, 2006

Source: Woods and Poole Economic Data, 2005.

According to **Table 83**, the "Sales and Service" and "Recreational and Entertainment" land use categories account for 35,597 acres. Dividing the total 2006 employment by the combined acreage of these two land use categories, each employee consumes 0.339 acres, or 33.9 acres per 100 employees.

Manufacturing related land use is captured by the "Industry" category in **Table 83**. The current employment in this sector is well below the State and National average (as detailed in the Economic Element of this Plan). 2005 employment ratios for this sector in the State and County economies equaled 17.33% and 5.29% respectively. This proportional discrepancy in 2025 for the State and County is expected to be 13.6% and 3.9% respectively. In terms of land use, the "Industry" classification captures a mere 0.46%, or 3,255 acres of total land in the County. Using the 2006 estimated employment in the manufacturing sector to determine acres consumed per 100 employees equals 51.34.

#### Public and Institutional Land Uses

The "Public and Government" land use category consumes 0.23% or 1,631 acres of the total County land area. Horry County, Federal and State agencies, and local municipalities are represented in this classification. The "Institutional" land use category captures a wide variety of activities normally associated with churches, hospitals, schools, and some specific government and public functions such as libraries and fire stations. This land use classification totals 8,581 acres or 1.22% of the County. The "Utility" land use classification includes service providers such as Grand Strand Water and Sewer Authority and Horry Telephone Cooperative, and accounts for 2,874 acres or 0.41% of the County total. Together, these land use classifications consume 1.86% or 13,086 acres of total land area in the County. All three of these classifications are similar in that they provide public services yet are not for profit businesses. Additionally,

land consumption is closely tied to population growth, as residents, businesses and visitors require emergency services, management of public lands, water and sewer, administrative functions and garbage disposal.

The current land use analysis and inventory has detailed the extent to which human activities, natural resources, political decisions and population growth have influenced the landscape and spatial organization of Horry County. Many factors will continue to influence land use in the future. Economics, natural resources, social values, politics, infrastructure, population growth, cultural traditions, environmental regulations and historical trends all have had a significant, and sometimes difficult to capture, influence on land use. This will continue to be the norm in the future as the County looks to accommodate an increasing population and a shrinking supply of land. An additional 98,415 people by 2025 means urban areas will continue to expand. The transportation network will need to be maintained and capacity increased. Protection of wetland systems, drainage basins and natural resource areas will continue to be critical in regards to quality of life for the future population for a myriad of reasons. Schools, solid waste disposal, emergency services and other government service capacities will need to be increased to meet the demand of the future population. Quality job growth and wages need to increase as well to keep up with cost of living, and the diversity of employment in the County will need to be promoted in order to expand industries that have a disproportionate representation in the local economy. In all, the future is full of potential and a myriad of opportunities. As the population continues to grow, Horry County must continue to plan to ensure the continued health, safety and welfare of residents, businesses and visitors.

# FUTURE LAND USE

Reflecting on previous comprehensive plans has enabled the examination of past trends of physical growth and the marked achievements and failures of stated objectives. Much of this examination is apparent in the current land use analysis and map discussed earlier in this Element. Contrary to the more urban settlement pattern along the coast, two-thirds of the total area of Horry County (1,133.70 square miles) is classified as being undeveloped or developed at low densities, representing an agrarian lifestyle that contradicts the tourist driven economy found along the Grand Strand. The Future Land Use strategy recognizes these two differing settlement patterns and promotes the continuation of this distinctness. With urbanized areas along the Grand Strand between the Atlantic Ocean and the Intracoastal Waterway becoming increasingly settled, urban land uses have extended into sparsely populated areas following principal corridors throughout the County. This is strikingly apparent along Highways 90, 905 and 701 South, as well as Highway 707 where many major developments are currently underway and/or planned for in the near future.

The Future Land Use Element is the most visionary. It is, therefore, the most challenging part of a Land Use Element within a Comprehensive Plan. It recognizes current and historical trends while providing an opportunity to reflect on strengths, weaknesses and opportunities. When crafting a future land use policy, it is crucial to understand that it is not an exact science. While facts and data play important roles, so do opinions, values, beliefs and numerous variables that are difficult, if not impossible, to account for. Variables such as market demand, land availability, population, jobs, environmental integrity, transportation, current policies, natural disasters, and the existence of community facilities and services affect the future use of land. Horry

County has seen dramatic growth over the past few decades. With a projected additional population increase of 110,000 people by the year 2025, Horry County must grow accustomed to rapid growth and its effects on our collective quality of life. With urbanized areas between the Atlantic Ocean and the Intracoastal Waterway becoming more established everyday, growth is moving further inland along principal highway corridors. The purpose of the future land use section is to identify opportunities and limitations of future growth, and to better understand how future land development can occur in a productive, efficient and sustainable manner for all involved.

Coordination between the Horry County Planning Commission and the Horry County Planning and Zoning Department, Horry County Public Safety and Emergency Management, Horry County Parks and Recreation, Horry County School District, the South Carolina Department of Transportation, the development community, citizens, higher education institutions, non-profit organizations, special interest groups, Federal, State, regional and local governments is imperative to the future vitality of citizens and businesses. While current land use regulations affect when and where development occurs, the importance of collaboration and partnerships is paramount to all future land uses in Horry County. Visions are only as strong as the ability to work together to see it through. Land use is not only the responsibility of the County and the elected representatives, it is the responsibility of all who live and work here today and in the future.

# Future Land Use Objectives

The goal of the Land Use Element is to promote long-term sustainable land development. An organized land use system now and in the future must achieve and sustain a balanced community between the human settlements and natural environment of Horry County. In collaboration with the Comprehensive Plan Steering Committee, the main objectives of Future Land Use in Horry County are as follows:

- Minimize scattered development in rural neighborhoods, crossroads communities, villages, urban and suburban corridors, urban communities, and cities by focusing growth where infrastructure and services are readily available or planned for the future.
- Ensure adequate transportation facilities and capacities are provided before major development projects are permitted.
- Achieve and sustain a balanced community where urban areas thrive, rural areas are strengthened, and natural landscapes flourish.
- Continue to provide a safe, healthy, livable and beautiful community that retains its unique identity and heritage.
- Positively influence and enhance the quality, visual character and accessibility of all development in Horry County while minimizing negative impacts to residents, businesses, natural resources and public infrastructure.
- Preserve traditional land based activities such as agricultural and forest cultivation, hunting and traditional water activities such as fishing, swimming and boating, while simultaneously protecting natural areas and scenic views for the enjoyment of the general public and the conservation of indigenous fauna and flora.

- Respect watershed and similar ecological boundaries when making land use decisions.
- Adopt policies and strategies that promote and reflect the unique characteristics of urban, suburban and rural areas.
- Partner with local municipalities, regional planning stakeholders and public service providers on criteria for annexations, provision of public services (water, sewer, stormwater, schools, public emergency and safety response facilities), land use, and development standards.

**<u>Notice</u>**: Please note that the Horry County Planning and Zoning Department, together with the Comprehensive Plan Steering Committee, recognizes that the above Objectives are not complete. Further objectives may be added over time.

# Future Land Use Strategy

The Future Land Use Strategy emphasizes the importance of sustainability throughout the entire County. The baseline of this strategy is to identify and recommend locations where future growth is encouraged without negatively impacting the social, economic and ecologic context of the community and environment. The Future Land Use Strategy expresses the need to establish and proliferate sensible growth patterns to promote the overall high standard of living in Horry County. Balancing economic and social forces and the environmental imperatives of resource conservation and renewal for the future is the basis of sustainable development and this Land Use Element.

What is most important to future land use is recognizing land as a finite resource. Once the landscape has been altered from its original form, it is extremely difficult to regain what is lost to developed lands. Tourism, industry, commercial and other activities are to be encouraged and promoted, but always with the cognitive thought that what has made Horry County so successful today can turn into burdens and challenges tomorrow. Farsighted and proactive planning designed to insure continued socio-economic success, is necessary.

The Future Land Use Map and the contents of this plan are flexibly designed to accommodate the needs of physical growth until the year 2025 and establish a Need with a set of Goals and Implementation Strategies that serve as a checklist to accomplish the Plan. The collective long-term goals and objectives of the Future Land Use section are to achieve growth-to-conservation appropriateness and fiscal efficiency in the delivery of all public services to the current and future inhabitants of Horry County.

There are a multitude of opportunities that can be addressed using clear long range planning objectives. Additional growth in Horry County is good and necessary, but we must encourage growth to happen in an environmentally, socially and economically responsible way to achieve overall sustainability.

The following land use definitions capture an overall hierarchy of human settlement patterns. On one end of the spectrum are those areas that have little to do with human activities. On the opposite end of the spectrum are the incorporated cities where the majority of County residents reside, businesses operate and visitors frequent. The Future Land Use Map is a visual depiction of this hierarchy; projecting where growth could possibly occur by providing a clear distinction between urban, transitional and rural land development patterns. Beginning with the highest category being *Cities*, which are incorporated places with defined boundaries and governing bodies, higher density development, both residential and non-residential, is encouraged to grow from these places into areas identified as Transitional Growth Areas, the surrounding lands where the future boundaries may soon expand. There are Rural Communities, Crossroads Communities and Urban Communities, unincorporated areas found throughout Horry County that have developed around vital activities and buildings such as churches and The Scenic Landscape and Conservation Areas are commercial crossroads. ecologically important tracts of land that are vital to the County population as a whole. And there are Economic Activity Centers that support a wide variety of commercial and institutional uses. In all, the following defined areas are intended to form a holistic system of interrelated areas to prepare for and thus more sensibly steer additional population growth over the next eighteen (18) years.

# Future Land Use Definitions

## Scenic Landscape and Conservation Areas

"Scenic Landscape and Conservation Areas" are lands identified by an internal 6-to-9 point evaluation system (see **Appendix L**) established by the Planning and Zoning Department in collaboration with the IT/GIS Department. Parcels of land that provide ecosystem services such as Carolina Bays, wetlands, areas of rare or endangered plants and animal species, wildlife habitats, pristine forests, floodplains and agricultural lands with above average soil qualities are included in this category.

The Future Land Use Strategy stresses the importance of protecting these highly valuable natural areas from any use that could undermine their ecological function. Not only do these lands serve a natural function (clean air and water, flood control), they also provide recreational opportunities for the public.

<u>Definition:</u> "The Future Land Use Map indicates "Scenic Landscape and Conservation Areas" provide for ecosystem services and are intended to remain undeveloped in perpetuity due to the presence of ecologically significant features."

#### **Rural Areas**

"Rural Areas" are farms, pastures, fields, woods, indigenous natural areas, estates, small settlements and mainly undeveloped roadside views. Large tracts of undeveloped land, and land used for agricultural based services are the basis for this category.

<u>Definition:</u> "The Future land Use Map indicates "Rural Areas" are to support compatible residential and commercial development at current zoning and to promote the rural lifestyle found throughout these areas. Institutional uses such as churches and schools are also found scattered throughout these areas. Increased density is supported through mitigation efforts that support sustainable development."

#### **Rural Communities**

"Rural Communities" are typically located in areas of the County that have historically developed around places of worship, trading posts, country stores and/or post offices. Low density (0.5 acres and above) residential uses support the local economy, serving commercial and institutional uses typically found within a short distance of the

crossroads of two (2) rural corridors; however, the development of these communities can also occur in a linear fashion along one principle rural corridor.

<u>Definition:</u> "The Future Land Use Map indicates "Rural Communities" are traditional settlements and places of congregation in which any proposed development is compatible with surrounding densities and current settlement patterns."

#### Rural Corridors

"Rural Corridors" follow major cross-country highways that typically support low density and scattered settlement patterns. These corridors are not suitable for future growth, as they exist as a means to access the rural areas throughout the County.

<u>Definition:</u> "The Future Land Use Map indicates "Rural Corridors" are areas of low growth and rural land uses in which any proposed development is compatible with surrounding densities and current settlement patterns."

#### Crossroads Communities

"Crossroads Communities" are located at the crossing of two Rural Corridors. These nodes provide for localized services and residential development in a manner that fits into the historical development pattern and character of a specific community.

<u>Definition:</u> "The Future Land Use Map indicates "Crossroads Communities" are traditional settlements and places of congregation in which any proposed development is compatible with surrounding densities and current settlement."

## Suburban Corridors

"Suburban Corridors" support suburban and urban residential development, and community focused commercial, recreational and institutional development. These corridors are defined as "suburban" due to the community-focused services found along the corridor as opposed to regional-focused services found along urban corridors.

<u>Definition:</u> "The Future Land Use Map indicates "Suburban Corridors" are linear transportation routes that support community focused suburban land uses and densities. Corresponding commercial, recreational and institutional development meeting the day-to-day needs of the resident population and businesses are suitable uses for these corridors. Future development using the Suburban Corridor designation to determine use and density must have access to the corridor."

## **Economic Activity Centers**

"Economic Activity Centers" are identified on the Future Land Use Map as high-density growth centers at the intersection of major regional limited and non-limited access highways. Possessing favorable transportation qualities in proximity to regional transportation interchanges, these Centers are important due to the potential for interregional economic enterprises that support large commercial and residential developments and public amenities. Dependent on quick and capacious transportation access, these Centers include parcels within a radius of 1.0 mile for urban density commercial and 1.0 - 2.0 miles for urban density residential, recreational and institutional land uses around present-day and future interchanges off of S.C. Highway 22 (Veteran's Highway) and future Interstate Highway 73. These Centers are to be developed at an urban intensity and density, and will represent new economically diverse gateways to the County.

<u>Definition:</u> "The Future Land Use Map indicates "Economic Activity Centers" are centrally located nodes of regional importance that are capable of supporting transportation services, industrial, commercial, residential, recreational and institutional uses at urban densities."

#### **Urban Corridors**

"Urban Corridors" support regional commercial, institutional, recreational and industrial uses. Large tracts of residential development are also supported, taking advantage of easy access to the transportation network and convenient services.

<u>Definition:</u> "The Future Land Use Map indicates "Urban Corridors" are linear transportation routes that support regional focused urban land uses and densities. Corresponding transportation services, industrial, commercial, recreational and institutional uses at urban densities, meeting the regional needs of the resident, business and visitor population are suitable for these corridors. Future development using the Urban Corridor designation to determine use and density must have access to the corridor."

#### Urban Communities

"Urban Communities" are the unincorporated areas of Horry County that have developed at urban and suburban densities but are located outside of incorporated communities. Although these areas are unincorporated, Urban Communities are compatible with the urban and suburban development patterns found within incorporated cities in the County. These communities have access to urban and suburban corridors.

<u>Definition:</u> "The Future Land Use Map indicates "Urban Communities" are settlements with a variety of urban and suburban residential, commercial, institutional, recreational and industrial uses capable of absorbing a large proportion of future growth. Urban Communities are proximate to Urban and Suburban Corridors."

## Transitional Growth Area

"Transitional Growth Areas" are defined by the current water and sewer service districts that surround the incorporated Cities of Conway and Loris as well as the Town of Aynor. Annexation is expected to occur as these areas become settled in the future and the jurisdictions expand. Suburban and urban residential, commercial, institutional and recreational development patterns are supported in these areas due to their proximity to Urban and Suburban Corridors, as well as the incorporated jurisdictions who will annex development in the future.

<u>Definition:</u> "The Future Land Use Map indicates "Transitional Growth Areas" are those lands located near the current municipal boundaries of the Cities of Conway and Loris as well as the Town of Aynor. The Transitional Growth Areas follow the current water and sewer service districts of these jurisdictions. Future uses in these areas include suburban and urban residential, commercial, institutional and recreational at varying densities and intensities."

## Cities

All urban land uses within established city limits are identified as "Cities" on the Future Land Use Map. The Future Land Use Strategy recognizes any specific Comprehensive Plan statements of the Cities of Conway, Loris, Myrtle Beach, North Myrtle Beach, Atlantic Beach, Briarcliffe Acres, and Surfside Beach as well as the Town of Aynor and supports the aforementioned municipalities as absolute places for urban services and land uses.

<u>Definition:</u> "The Future Land Use Map indicates "Cities" are those areas located within the jurisdictional boundaries of an incorporated city. Land uses within "Cities" are defined according to the future land use maps for each jurisdiction."

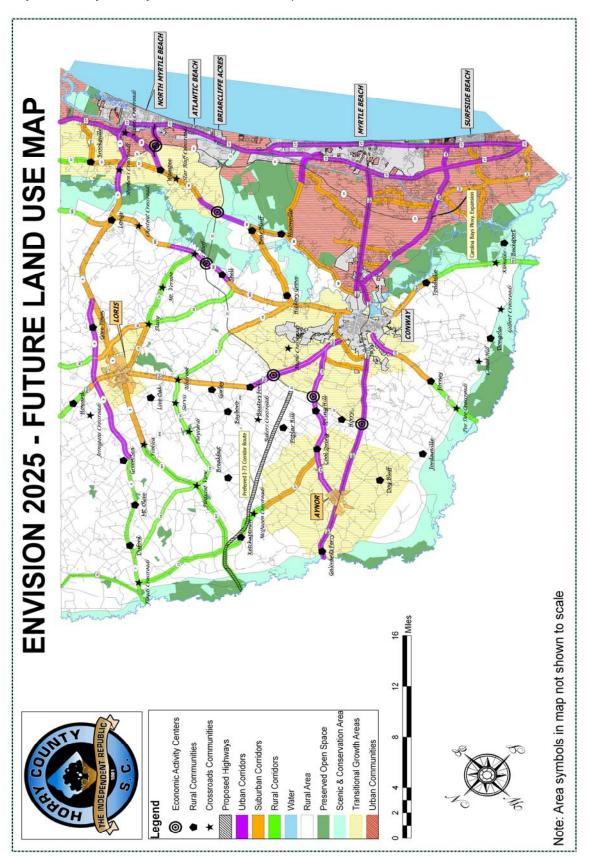
# FUTURE LAND USE MAP

Based on the Objectives, a specific Need with a set of Goals and Implementation Strategies has been created. A Future Land Use Map is included that visually details these policies. A larger version of the Map is included in **Appendix M**, and a full size version is available for viewing in the Planning and Zoning Department. The "Future Land Use Map's" of municipal jurisdictions within the County are also included in the Appendix. All of these areas are shaded on the map below.

A Corridor Expansion Map is included as an addendum to the Future Land Use Map. The Map identifies future road right of way widening projects throughout the County that are necessary to accommodate expected traffic volumes. This Map is found in **Appendix N** of this Comprehensive Plan, and will be utilized in the future when making land use, zoning and land development decisions.

The depiction is a guide for future land use and zoning decisions by the appointed members of the Planning Commission and elected members of the County Council. Therefore, the map shall not be interpreted as a legally binding document.

Page left intentionally blank



# STATEMENT OF NEEDS AND GOALS

## Need:

Guide future development in the County in an economically and environmentally sustainable manner to promote the health, safety and general welfare of present and future residents, businesses and visitors.

# Goals:

- Encourage growth in existing and planned areas throughout the County through reinvestment and new development that improves the quality of life by respecting and reinforcing existing community forms and values.
- Promote sustainable development patterns through environmentally friendly design, balanced land uses, a variety of housing choices, and a well-integrated transportation system, public facilities and amenities.
- Encourage the protection of rural areas that have distinct resources, characteristics and a traditional way-of-life in Horry County in a manner that respects private property rights while simultaneously minimizing the natural resource impacts of new growth and development.
- Develop a coordinated approach to population growth and land development with consistent standards of evaluation to measure the effects of urbanization on the capacity and accessibility of public services, existing settlement patterns and the natural environment.
- Promote community involvement and stakeholder participation.
- Safeguard private property rights of all landowners.

# **IMPLEMENTATION STRATEGIES**

It is recommended Horry County implement the following strategies within short term (1-2 years), intermediate term (2-5 years) or long term (5 and more years) time frame.

#### Growth through reinvestment and new development

Develop an Adequate Public Facilities Plan that identifies base levels of service as well as funding mechanisms for maintaining current levels of service and infrastructure capacity in the future **(short term)**.

Create a 20-year Capital Improvements Program (CIP) to address all the County's public investment needs **(short term)**.

Adopt design guidelines for commercial and Planned Development District (PDD) developments and an architectural review process to evaluate the appropriateness and encourage a variety of buildings, properties, and land uses to create architecturally and physically attractive areas **(short term)**.

Adopt a Fix It First policy that gives top priority to repair and reinvestment in existing infrastructure (short term).

Produce a Unified Development Code combining the County's Land Development Regulations and Zoning Ordinance into one document removing redundancy, and increasing the effectiveness of planning and development standards in Horry County (short term to intermediate).

Address the need for open space retention, parks and schools, landscaping, subdivision connectivity, public safety and multi-modal transportation **(short term)**.

#### Promotion of sustainable development patterns

Adjust the County's zoning regulations to provide for greater flexibility for mixed uses, multiple housing types and compact development patterns **(short term)**.

Develop and implement an Incentive Zoning Ordinance for developments that provide public facilities, infrastructure improvements and/or improved design standards (short term to intermediate).

Develop and implement a Cluster Development Ordinance for commercial, residential and mixed-use developments in which a significant portion of the site is set aside as undivided, permanently protected open space, while the buildings (houses, shops, etc.) are clustered on the remainder of the property **(short term to intermediate)**.

Encourage the preservation of sensitive environmental features and open space within development plans in exchange for incentives to the developer **(short term)**.

Encourage low impact development designs to minimize impervious coverage throughout Horry County (short term).

Develop a Horry County Trails and Open Space Master Plan to identify current and future needs, potential acquisitions, potential funding mechanisms and an implementation program **(short term)**.

Adopt an Urban Forestry and Greenway Plan to increase the amount of accessible Open Space and to enhance and preserve the quality of naturally unique areas **(short term)**.

Develop an ordinance to severely limit the discharge of untreated stormwater runoff from developed areas into wetlands **(short term)**.

Encourage the use of the South Carolina Forestry Commissions Best Management Practices (short term).

Develop a "Traffic Impact Analysis" report to advise of potential adverse effects due to increased volume to be expected **(short term)**.

Revisit "Parking Regulations" to determine the best site design requirements concerning vehicular ingress and egress, proximity to congested intersections, lateral access between separate but adjacent sites, and forward motion design **(short term)**.

Consider the programmed "Pavement Management System" to insure routine and periodic maintenance can occur as necessary with minimal disruption to the motoring public (short term to intermediate).

Develop an "Access Management Program", sometimes referred to as a Driveway Access Manual that would require adequate separation between individual curb cuts, installation of service lanes, and turn-lanes with capacity for the intended uses, and possible installation of traffic signals **(short term)**.

## Rural Areas

Develop Rural Area Management Plans (RAMP) that detail the land use needs of specific rural communities and areas **(short term)**.

Develop a voluntary based Transfer of Development Rights Program. For example: a Rural Land Stewardship Program would allow a rural landowner to profit from the development potential of his or her land while keeping it in agricultural or rural use **(short term)**.

Develop an Agricultural Security Areas Ordinance to provide protection from ordinances that would otherwise limit or restrict agricultural activities **(short term)**.

Protect Riparian Corridors (short term).

Encourage cooperation and an open forum between the citizens, County, State, National, and regional agencies and organizations, both public and private, with an interest in conservation and preservation of natural resources **(short term)**.

Promote the use of existing mechanisms or vehicles of property conservation such as the USDA conservation banks for property conservation **(short term to intermediate)**.

Preserve rural character and the lifestyles of property owners in areas well beyond the urban-suburban fringe, while providing opportunities for compatible development patterns (long term).

#### Evaluation of population growth and land development

Coordinate with various County departments to develop a system and database to assist in evaluating future policies and infrastructure needs. This will enable the Planning and Zoning Department to monitor and record land use adequacy and development permitting (intermediate to long term).

Initiate studies with other governmental departments and agencies to provide practical guidelines for evaluating the fiscal impacts of land development proposals and decisions on a long-range basis to avoid sudden increases in unfunded infrastructure costs (long term).

Regularly assess the attainment of the goals of the Comprehensive Plan using performance benchmarks. Failure to meet these benchmarks will automatically trigger a mandatory management response, such as a report to the Planning Commission and County Council containing recommended corrective actions (continuously).

Encourage the need for private property rights to be considered and protected in land use planning and to be consistent with the State and Federal guidelines. The Comprehensive Plan should provide equal growth opportunities for all communities in the county and should respect, at a minimum, the existing zoning **(continuously)**.

# APPENDIX

Appendix F: Ten (10) Principles of Sustainable Development

## PRINCIPLES OF SUSTAINABLE DEVELOPMENT

(National Association of Counties (NACo), Joint Center for Sustainable Development, Washington, D.C., 1995)

#### 1) Interdependence

To care for our communities, our decisions must not be short-sighted or negligent of our economic development; the natural, cultural and historic resources that our people and economy rely upon; and the ability to care for our people in an equitable way.

## 2) Collaboration

County government will collaborate with other local authorities, regional, federal and state government, industry, not-for-profit organizations and our citizens, to ensure healthy and sustainable community development.

## 3) <u>Stewardship</u>

County government is responsible for managing our resources through planned use in the present, to ensure continued use in the future.

## 4) <u>Diversity</u>

Counties are responsible for governing a diversified, balanced economy based on naturally and socially diverse communities.

## 5) Prevention

Counties have the capacity to prevent community instability by considering the broader implications of community decision-making and by avoiding problems instead of reacting to them.

## 6) Equity

County governments must actively balance economic, social and ethnic needs to create economically viable and sustainable communities by grating all community members access to information, resources and decision-making.

## 7) Effectiveness

County government is committed to effective use of its human and natural capital to develop economically so that human, cultural, historical and natural resources are used and managed efficiently and for the greater good of the community.

## 8) Education

County government is accountable to the community it serves and has a responsibility to facilitate the flow of information within its community, to learn from others and to promote awareness among its citizens.

# 9) Flexibility

Counties recognize that implementing sustainability means different things in different communities. Counties are committed to demonstrating the flexibility through the use of outside tools or incentive programs, necessary for each community to achieve locally defined sustainable development goals.

## 10)<u>Responsibility</u>

To obtain sustainable development, all community members are responsible for contributing to and maintaining economic stability, social equity and a healthy environment in the present and for the future.

**Appendix G:** Model Green Home Building Guidelines

# MODEL GREEN HOME BUILDING GUIDELINES

(National Association of Home Builders, Washington, D.C., 2005)

**Lot Preparation and Design** - Even before the foundation is poured, careful planning can reduce the home's impact on natural features such as vegetation and soil; and enhance the home's long-term performance. Such preparation can provide significant value to the homeowner, the environment, and the community.

**<u>Resource Efficiency</u>** – Advanced framing techniques and home designs can effectively optimize the use of building materials. This section also details how careful material selection can reduce the amount of time and money needed for home maintenance; and demonstrates equally important construction waste management concepts.

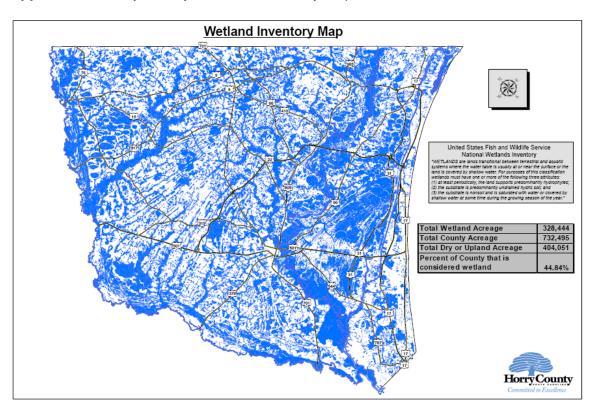
**Energy Efficiency** – This is the most quantifiable aspect of green building. The information in this section will help a builder create a better building envelope and incorporate more energy efficient mechanical systems, appliances, and lighting into a home, yielding long-term utility bill savings and increased comfort for the homeowner.

<u>Water Efficiency/Conservation</u> – Although, the relative importance of water availability and usage varies from region to region, the concern with adequate supply is becoming more widespread geographically. Experience also shows that employing the line items from this section of the Guidelines for indoor and outdoor water use can reduce utility bills, regardless of location.

<u>Occupancy Comfort and Indoor Environmental Quality</u> – Effective management of moisture, ventilation, and other issues can create a more comfortable and healthier indoor living environment.

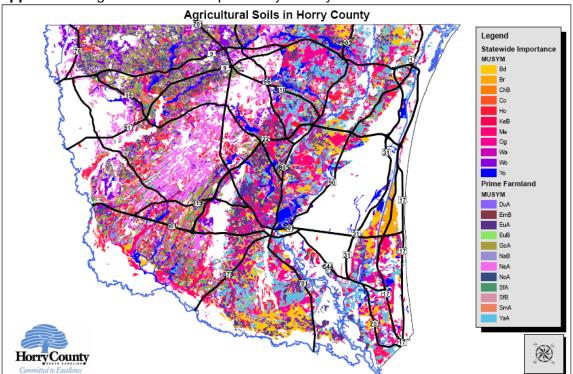
**Operation, Maintenance and Education** - Given the level of effort a home builder goes through to create a well thought out home system, it would be a shame not to give the home owner guidance on how to optimally operate and maintain the house. Line items from this section show a builder how best to educate homeowners on the features of their new green home.

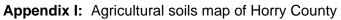
Page left intentionally blank



# Appendix H: Horry County Wetlands Inventory Map

Page left intentionally blank





**Appendix J:** Suitability analysis of soil types in Horry County

## Suitability analysis of soil types in Horry County

(USDA, National Cooperative Soil Survey, Soil Survey Division; URL: <u>http://soils.usda.gov; http://soildatamart.nrcs.usda.gov</u>)

#### Soils suitable for agriculture

Duplin series (DuA)

Acreage of soil type in Horry County: 2,835 (0.4%);

"The Duplin series consists of moderately well drained, moderately slow permeable soils that have formed in clayey Coastal Plain sediments. These upland soils have slopes ranging from 0 to 7 percent."

Characteristics: Loamy fine sand; the soil is strongly acid or very strongly acid, except where limed.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: somewhat limited Dwellings with basements: very limited Small commercial buildings: somewhat limited

Agricultural suitability: All areas are prime farmland.

Use and vegetation: "Approximately two-thirds of the total acreage is in cultivation with the remainder in pasture and forest. Common crops grown are corn, cotton, soybeans, tobacco, peanuts, truck crops, and small grain. Original forests consisted of pine and mixed hardwood. Loblolly pine, longleaf pine, white oak, southern red oak, sweetgum, blackgum, yellow-poplar, flowering dogwood, and American holly are dominant species."

Drainage and permeability: "Moderately well drained; slow runoff; moderately slow permeability."

Sewage suitability: Very limited usage in regards to septic tank absorption and sewage disposal due to limited depth to water saturated zone and slow water movement. Also very limited seepage.

• <u>Emporia</u> series (EmB)

Acreage of soil type in Horry County: 5,530 (0.8%)

Characteristics: Loamy fine sand; Landscape: Coastal Plain; Landform: Upland; Parent Material: Marine sediments; Slope: commonly 1 to 6 percent, but range from 0 to 50 percent; Elevation (type location): 20 to 150 feet;

Development suitability: Risk of corrosion - Uncoated steel: Moderate; Concrete: High;

Dwellings without basements: not limited Dwellings with basements: somewhat limited Small commercial buildings: not limited

Agricultural suitability: All areas are prime farmland. Use and vegetation: "Major Uses: crops, some forestry Dominant Vegetation: Where cultivated-- peanuts, soybeans, cotton, corn, and tobacco. Where wooded-- loblolly pine, Virginia pine, oaks, hickory, sweet gum, and red maple."

Drainage and permeability: "Drainage class (Agricultural): well drained Index Surface Runoff: medium to high Internal Free Water Occurrence: moderately deep to deep, common Permeability: moderately slow to slow."

Sewage suitability: Very limited usage in regards to septic tank absorption and sewage disposal due to limited depth to water saturated zone and slow water movement. Also very limited seepage.

• <u>Eulonia</u> series (EuA; EuB)

Acreage of Eulonia A (slopes 0–2%) in Horry County: 28,755 (3.9%) Acreage of Eulonia B (slopes 2–6%) in Horry County: 2,795 (0.4%)

Characteristics: Loamy fine sand Landscape: lower coastal plain Landform: uplands and stream terraces Hillslope Profile Position: summits, shoulders Parent Material: marine or fluvial sediments Slope: 0 to 6 percent

Development suitability: Risk of corrosion: N/A Dwellings without basements: somewhat limited Dwellings with basements: very limit Small commercial buildings: somewhat limited – All due to limited depth to watersaturated zone

Agricultural suitability: All areas are prime farmland. Use and suitability: "Major Uses: woodland, some pasture and cropland -Dominant Vegetation: Where cultivated-- corn, soybeans, or small grain. Where wooded loblolly, longleaf, and slash pine, oaks, hickory, and sweetgum."

Drainage and permeability: "Drainage Class (Agricultural): moderately well drained Internal Free Water Occurrence: moderately deep, common Index Surface Runoff: negligible to medium Permeability: moderately slow"

Sewage suitability: Very limited usage in regards to septic tank absorption and sewage disposal due to limited depth to water saturated zone and slow water movement. Also very limited seepage.

• <u>Goldsboro</u> series (GoA)

Acreage of soil type in Horry County: 32,705 (4.5%)

Characteristics: Loamy fine sand Landscape: Lower to upper coastal plain Landform: Marine terraces, uplands Hillslope Profile Position: Summit, shoulder Parent Material: Marine deposits, fluviomarine deposits Slope: 0 to 10 percent

Development suitability: Risk of corrosion - Uncoated steel: Moderate; Concrete: High; Dwellings without basements: somewhat limited Dwellings with basements: very limit Small commercial buildings: somewhat limited – All due to limited depth to water saturated zone

Agricultural suitability: All areas are prime farmland. Use and suitability: "Major Uses: Cropland Dominant Vegetation: Where cultivated--corn, peanuts, tobacco, soybeans, small grain, cotton, and pasture. Where wooded--loblolly pine, longleaf pine, slash pine, sweetgum, southern red oak, white oak, water oak, and red maple, yellow poplar. Understory plants include American holly, blueberry, flowering dogwood, greenbrier, persimmon, redbay, southern bayberry (waxmyrtle), inkberry (bitter gallberry), honeysuckle, poison ivy, and summersweet clethra."

Drainage and permeability: Drainage Class (Agricultural): Moderately well drained Internal Free Water Occurrence: Moderately deep, transitory Flooding Frequency and Duration: None Ponding Frequency and Duration: None Index Surface Runoff: Negligible to medium Permeability: Moderate

Sewage suitability: Very limited usage in regards to septic tank absorption and sewage disposal due to limited depth to water saturated zone and slow water movement. Also very limited seepage.

• Lynchburg series (Ln)

Acreage of soil type in Horry County: 12,040 (1.6%)

Characteristics: Loamy fine sand Landscape: Lower to upper coastal plain Landform: Marine terraces, flats Parent Material: Marine deposits, fluviomarine deposits Slope: 0 to 2 percent

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: somewhat limited Dwellings with basements: very limit Small commercial buildings: somewhat limited – All due to limited depth to water saturated zone

Agricultural suitability: Prime farmland if drained. Use and suitability: "Major Uses: About one-half of the soil is in cropland or pasture and the remainder is in forest Dominant Vegetation: Where cultivated--corp. soybeans, cotton, tobacco, truck crops

Dominant Vegetation: Where cultivated--corn, soybeans, cotton, tobacco, truck crops, small grains, or improved pasture. Where wooded--oak, sweetgum, blackgum, longleaf pine, slash pine, loblolly pine, and an understory of gallberry and pineland threeawn."

Drainage and permeability: Depth Class: Very deep Drainage Class (Agricultural): Somewhat poorly drained Internal Free Water Occurrence: Shallow, common Flooding Frequency and Duration: None Ponding Frequency and Duration: None Index Surface Runoff: Negligible Permeability: Moderate

Sewage suitability: Very limited usage in regards to septic tank absorption and sewage disposal due to limited depth to water saturated zone and slow water movement. Also moderately limited seepage.

• <u>Nankin</u> series (NaB)

Acreage of soil type in Horry County: 3,025 (0.4%)

#### Characteristics: Fine sandy loam

The Nankin series consists of very deep, well drained, moderately slowly permeable soils on uplands of the Coastal Plain. They formed in stratified loamy and clayey marine sediments.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: not limited Dwellings with basements: not limit Small commercial buildings: not limited

Agricultural suitability: All areas are prime farmland.

Use and suitability: Most areas are in woodland with some areas in cropland or pasture. Loblolly pine, longleaf pine, and slash pine the dominant trees.

Drainage and permeability: Well drained; moderately slow permeability.

Sewage suitability: Very limited usage in regards to septic tank absorption due to slow water movement. Somewhat limited sewage disposal due to limited seepage.

#### • <u>Nansemond</u> series (NeB)

Acreage of soil type in Horry County: 35,435 (4.8%)

Characteristics: Loamy fine sand Landscape: Coastal Plain Landform: marine terraces, stream terraces Parent Material: marine deposits, alluvium

Development suitability: Risk of corrosion - Uncoated steel: Moderate; Concrete: High; Dwellings without basements: somewhat limited Dwellings with basements: very limit Small commercial buildings: somewhat limited – All due to limited depth to watersaturated zone

Agricultural suitability: All areas are prime farmland.

Use and suitability: Major Uses: crops and forestry Dominant Vegetation: Where cultivated-- Corn, soybeans, peanuts, and tobacco. Where wooded-- loblolly pine, Virginia pine, shortleaf pine, oaks, sweetgum, and hickory.

Drainage and permeability: Drainage class (Agricultural): moderately well drained Index Surface Runoff: very low Internal Free Water Occurrence: shallow and moderately deep, common Permeability: moderately rapid

Sewage suitability: Very limited usage in regards to septic tank absorption and sewage disposal due to very limited depth to water saturated zone and seepage.

• <u>Norfolk</u> series (NoA)

Acreage of soil type in Horry County: 9,330 (1.3%)

Characteristics: Loamy fine sand Landscape: Lower, middle, or upper coastal plain Landform: Uplands or marine terraces Hillslope Profile Position: Summits, shoulders, backslopes Parent Material: Marine deposits or fluviomarine deposits

Development suitability: Risk of corrosion - Uncoated steel: Moderate; Concrete: High; Dwellings without basements: not limited Dwellings with basements: somewhat limited – due to depth to saturated zone Small commercial buildings: not limited

Agricultural suitability: All areas are prime farmland.

Use and suitability:

Major Uses: Mostly cleared and used for general farm crops. Dominant Vegetation: Where cultivated--corn, cotton, peanuts, tobacco, and soybeans. Where wooded--pines and mixed hardwoods.

Drainage and permeability: Depth Class: Very deep Drainage Class (Agricultural): Well drained Internal Free Water Occurrence: Deep, transitory or very deep Index Surface Runoff: Negligible to medium Permeability: Moderate (Saturated Hydraulic Conductivity: Moderately high)

Sewage suitability: Somewhat limited usage in regards to septic tank absorption and very limited sewage disposal due to limited depth to water saturated zone, slow water movement and seepage.

• <u>Suffolk</u> series (SfA; SfB)

Acreage of soil type "Suffolk A (slopes 0-2%) in Horry County: 8,300 (1.1%) Acreage of soil type "Suffolk B (slopes 2-6%): 2,360 (0.3%)

Characteristics: Loamy fine sand Landscape: lower and middle coastal plain Landform: uplands and stream terraces Hillslope Profile Position: summit, shoulder, backslope Parent Material: marine or fluvial sediments Slope: 0 to 50 percent

Development suitability:

Risk of corrosion - Uncoated steel: Moderate; Concrete: High; Dwellings without basements: not limited Dwellings with basements: not limited Small commercial buildings: not limited

Agricultural suitability: All areas are prime farmland.

Use and suitability:

Major Uses: Nearly level and gently sloping soils are mostly cleared and use for cropland, strongly sloping though very steep areas are mostly forested Dominant Vegetation: Where cultivated-- corn, cotton, peanuts, soybeans, tobacco, small grain, and truck crops. Where wooded-- pines and mixed hardwoods.

Drainage and permeability: Drainage Class (Agricultural): well drained Internal Free Water Occurrence: none Index Surface Runoff: negligible to high Permeability: moderate

Sewage suitability: Very limited usage in regards to septic tank absorption and sewage disposal due to very limited seepage and slow water movement.

• <u>Summerton</u> series (SmA)

Acreage of soil type in Horry County: 1,195 (0.2%)

Characteristics: Fine sandy loam The Summerton series consists of very deep, well drained, moderately slowly permeable soils that formed in thick sediments on old stream terraces in the Coastal Plain. Slopes range from 0 to 12 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: not limited Dwellings with basements: not limited Small commercial buildings: not limited

Agricultural suitability: All areas are prime farmland.

Use and suitability: Most of the soil has been cleared and is used for growing corn, soybeans, cotton, small grain, and pasture and hay grasses. Forested areas are mixed pines and hardwoods.

Drainage and permeability: Well drained; medium runoff; moderately slow permeability.

Sewage suitability: Very limited usage as for septic tank absorption due to slow water movement, but unlimited sewage disposal suitability.

• <u>Wahee</u> series (Wa)

Acreage of soil type in Horry County: 15,430 (2.1%)

Characteristics: Fine sandy loam

Soil Reaction: Very strongly acid to moderately acid in the A horizon except where limed and extremely acid to strongly acid in the B, BC and C horizons. Parent Material: Clayey and loamy marine or fluviomarine sediments.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: somewhat limited Dwellings with basements: very limited Small commercial buildings: somewhat limited – all due to low depth to saturated zone

Agricultural suitability: Farmland of statewide importance

Use and suitability:

Dominant Vegetation: Where forested--blackgum, loblolly pine, water oak, willow oak, swamp chestnut, southern red oak, and sweetgum. Understory species include large gallberry, wax myrtle (southern bayberry), inkberry (bitter gallberry), greenbrier, cane, and sweetbay.

Where cultivated--corn, soybeans, and pasture.

Drainage and permeability: Agricultural Drainage Class: Somewhat poorly Surface Runoff: Slow Permeability: Slow

Sewage suitability: Very limited usage as for septic tank absorption and for sewage disposal suitability due to slow water movement, low depth to saturated zone, and moderate seepage

• <u>Yauhannah</u> series (YaA)

Acreage of soil type in Horry County: 41,155 (5.6%)

Characteristics: Fine sandy loam The Yauhannah series consists of deep, moderately well drained loamy soils that formed in marine sediments of the lower Coastal Plain. Slopes range from 0 to 6 percent.

Development suitability: Risk of corrosion - Uncoated steel: Moderate; Concrete: High; Dwellings without basements: somewhat limited Dwellings with basements: very limited Small commercial buildings: somewhat limited – all due to low depth to saturated zone

Agricultural suitability: All areas are prime farmland.

Use and suitability: Largely cleared and used for growing corn, soybeans, small grains, cotton, tobacco, and truck crops. Forest vegetation consists of loblolly and longleaf pine intermixed with hardwoods.

Drainage and permeability: Moderately well drained; slow surface runoff; moderate permeability. The water table is within 1.5 to 2.5 feet of the surface for as much as 4 months during most years.

Sewage suitability: Very limited usage as for septic tank absorption and for sewage disposal suitability due to low depth to saturated zone, limited seepage and moderately slow water movement

• <u>Yemassee</u> series (Ye)

Acreage of soil type in Horry County: 29,730 (4.1%)

#### Characteristics: Loamy fine sand

The Yemassee series consists of very deep, somewhat poorly drained, moderately permeable, loamy soils that formed in marine sediments. These soils are on terraces and broad flats of the lower Coastal Plain. Slopes range from 0 to 2 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: Moderate; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone

Agricultural suitability: Farmland of statewide importance

Use and suitability: Forested areas are dominantly loblolly pine, slash pine, longleaf pine, sweetgum, blackgum, water oak, dogwood, and hickory. Cultivated areas are primarily used for corn, soybeans, small grain, truck crops, and pasture grasses.

Drainage and permeability: Somewhat poorly drained; slow runoff; moderate permeability. The water table is about 1.0 to 1.5 feet below the soil surface for as much as 4 months during winter and early spring in most years.

Sewage suitability: Very limited usage as for septic tank absorption and very limited sewage disposal suitability due to low depth to saturated zone, slow water movement and moderate seepage.

## Hydric Soils

Explanation of hydric criteria:

Hydric soils are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or

- Are poorly drained or very poorly drained and have either:
  - A water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
  - ✓ A water table at a depth of 0.5 feet or less during the growing season if permeability is equal to or greater than 6 inches/hour in all layers within a depth of 20 inches, or
  - ✓ A water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 inches/hour in any layer within a depth of 20 inches
- Soils that are frequently ponded for long or very long duration during the growing season
- Soils that are frequently flooded for long or very long duration during the growing season
- <u>Beaches</u> series (Bc)

Acreage of soil type in Horry County: 1,540 (0.2%)

• <u>Bladen</u> series (Bd)

Acreage of soil type in Horry County: 32,295 (4.4%)

Characteristics: Fine sandy loam Landscape: lower and middle coastal plain Landform: uplands, stream terraces Parent Material: acid, clayey fluvial or marine sediments

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone and unfavorable shrinking and swelling habits of the soil type

Agricultural suitability: Farmland of statewide importance

Use and suitability: Major Uses: forest

Dominant Vegetation: Where cultivated--. Corn, soybeans, and pasture are the principal crops on drained areas. Where wooded-- slash pine, loblolly pine, longleaf pine, sweetgum, blackgum, and water oaks. The undergrowth is waxmyrtle, gallberry, scattered palmetto, wiregrass, and sawgrass.

Drainage and permeability: Drainage Class (Agricultural): poorly drained Internal Free Water Occurrence: very shallow, persistent Index Surface Runoff: negligible to very slow Permeability: slow

Sewage suitability: Very limited usage as for septic tank absorption and very limited sewage disposal suitability due to low depth to saturated zone and slow water movement.

Bohicket series (Bo)

Acreage of soil type in Horry County: 2,705 (0.4%)

Characteristics: Silty clay loam

The Bohicket series consists of very poorly drained, very slowly permeable soils that formed in marine sediments in tidal marshes. These soils are flooded twice daily by sea water. Slopes are less than 2 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to flooding concerns, low depth to saturated zone and unfavorable shrinking and swelling habits of the soil type

Agricultural suitability: N/A

Use and vegetation: Wetland wildlife habitat. Too soft for cattle grazing. Vegetation is smooth cordgrass.

Drainage and permeability: Very poorly drained; very slow runoff; very slow permeability.

Sewage suitability: Very limited usage as for septic tank absorption and very limited sewage disposal suitability due to flooding, low depth to saturated zone and slow water movement.

• <u>Brookman</u> series (Br)

Acreage of soil type in Horry County: 4,490 (0.6%)

#### Characteristics: loam

The Brookman series consists of very deep, very poorly drained, slowly permeable soils that formed in thick clayey sediments on marine terraces of Pleistocene Age. These soils are on broad shallow depressions in the lower Coastal Plains. They are saturated in late winter and early in the spring, and occasionally in the summer and fall. Water runs off the surface very slowly. Slope is dominantly less that 2 percent. Near the type location the mean annual temperature is 67 degrees F, and mean annual precipitation is 50 inches.

Development suitability: Risk of corrosion - Uncoated steel: Moderate; Concrete: Moderate; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone and unfavorable shrinking and swelling habits of the soil type

#### Agricultural suitability: Farmland of statewide importance

Use and vegetation: Most areas remain in native vegetation consisting of gums, cypress, oaks, palms, maples and water tolerant grasses. Cleared areas are used for production of corn, soybeans, oats, and pasture.

Drainage and permeability: Brookman soils are very poorly drained. Runoff is very slow, and permeability is slow. A water table is at a depth of 0 to 1.0 foot late in winter and early spring, and occasionally in the summer and fall.

Sewage suitability: Very limited usage as for septic tank absorption and very limited sewage disposal suitability due to very slow water movement, low depth to saturated zone and moderate seepage.

• <u>Coxville</u> series (Co)

Acreage of soil type in Horry County: 6,600 (0.9%)

Characteristics: Fine sandy loam Landscape: Lower to upper coastal plain Landform: Flats, Carolina bays, and depressions Parent Material: Marine deposits or fluviomarine sediments Slope: 0 to 2 percent

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone and unfavorable shrinking and swelling habits of the soil type

Agricultural suitability: Farmland of statewide importance

Use and vegetation: Major Uses: Forest, some pasture and cropland Dominant Vegetation: Where cultivated--corn, soybeans, and truck crops. Where wooded--loblolly and longleaf pine, sweetgum, blackgum, water oak, willow oak, water tupelo, elm, and hickory.

Drainage and permeability: Drainage Class (Agricultural): Poorly drained Internal Free Water Occurrence: Very shallow to shallow, common to persistent Flooding Frequency and Duration: None Ponding Frequency and Duration: None Permeability: Moderately slow

Sewage suitability: Very limited usage as for septic tank absorption and very limited sewage disposal suitability due to very slow water movement, low depth to saturated zone.

• <u>Hobcaw</u> series (Ho)

Acreage of soil type in Horry County: 11,615 (1.6%)

Characteristics: Fine sandy loam

The Hobcaw series consists of deep, very poorly drained, moderately permeable, loamy soils that formed in marine or fluvial sediments on the Lower Coastal Plain. Slopes are less than 2 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone.

Agricultural suitability: Farmland of statewide importance

Use and vegetation: Most of the acreage is in forest; and the native vegetation consists of sweetgum, blackgum, water tupelo, cypress, water and willow oaks, and undergrowth of bay bushes, myrtle, and gallberry. Cleared and drained areas are used principally for growing corn, soybeans, small grain, truck crops, and pasture.

Drainage and permeability: Very poorly drained. Runoff is ponded or very slow. Permeability is moderate. The water table is above or near the surface for 3 to 6 months in most years.

Sewage suitability: Very limited usage as for septic tank absorption and very limited sewage disposal suitability due to low depth of saturated zone, very bad seepage and slow water movement.

• <u>Hobonny</u> series (Hy)

Acreage of soil type in Horry County: 19,015 (2.6%)

Characteristics: Muck

The Hobonny series consists of very poorly drained, nearly level, moderately permeable, organic soils that formed mainly in herbaceous plant material mixed with woody plant material and a small amount of mineral soil material. The organic materials are more than 51 inches thick. Slopes are less than 1 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to subsidence and flooding concerns, low depth to saturated zone and high organic matter content.

Agricultural suitability: N/A

Use and vegetation: Nearly all of these soils are used for wildlife habitat. Many areas were used for rice culture prior to the twentieth century. Some areas have a sparse stand of young baldcypress (taxodium distichum).

Drainage and permeability: Very poorly drained; the water table ranges from 1 foot above to 0.5 foot below the surface unless protected. Internal drainage is very slow to none. Permeability is moderate.

Sewage suitability: Very limited usage as for septic tank absorption due to flooding and subsidence concerns, low depth to saturated zone and bad seepage, also very limited sewage disposal suitability due to flooding concerns and high organic matter content, further low depth to saturated zone and bad seepage.

• <u>Johnston</u> series (Jo)

Acreage of soil type in Horry County: 51,125 (7.0%)

Characteristics: Loam Landscape: Lower to upper coastal plain Landform: Flood plain, swamp Geomorphic Component: Tread Parent Material: Alluvium Slope: 0 to 2 percent

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to flooding concerns and low depth to saturated zone.

Agricultural suitability: N/A

Use and vegetation: Major Uses: Woodland Dominant Vegetation: Where wooded--water tupelo, swamp tupelo, sweetgum, yellow poplar, green ash, water oak, and baldcypress. Also, loblolly pine grows in areas that have been drained. Understory plants include inkberry (bitter gallberry), American holly, greenbrier, switchcane, blueberry, honeysuckle, and poison ivy. Where cultivated--corn, soybeans, and pasture.

Drainage and permeability: Depth Class: Very deep Drainage Class (Agricultural): Very poorly drained Internal Free Water Occurrence: Shallow, common Flooding Frequency and Duration: Frequent or occasional for very brief to long periods Ponding Frequency and Duration: None Index Surface Runoff: Negligible Permeability: Moderately rapid

Sewage suitability: Very limited usage as for septic tank absorption due to flooding concerns, low depth to saturated zone and bad seepage, also very limited sewage disposal suitability due to flooding concerns, low depth to saturated zone and bad seepage.

• <u>Leon</u> series (Le)

Acreage of soil type in Horry County: 33,975 (4.6%)

#### Characteristics: Fine sand

The Leon series consists of very deep, moderate to moderately slowly permeable, poorly and very poorly drained soils on upland flats, depressions, stream terraces, and tidal areas. They formed in sandy marine sediments of the Atlantic and Gulf Coastal Plain. Near the type location, the mean annual temperature is about 68 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 5 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone.

Agricultural suitability: N/A

Use and vegetation: Most areas of Leon soils are used for forestry, range, and pasture. Areas with adequate water control are used for cropland and vegetables. Natural vegetation consists of longleaf pine, slash pine, water oak, myrtle, with a thick undergrowth of saw palmetto, running oak, fetterbush, inkberry (gallberry), chalky bluestem, creeping bluestem, and pineland three awn (wiregrass). In depressions, the vegetation is dominated by bracken fern, smooth sumac and swamp cyrilla are common. Vegetation in the tidal areas includes bushy seaoxeye, marsh hay cord grass, seashore salt grass, batis, and smooth cord grass.

Drainage and permeability: Poorly drained and very poorly drained; moderate to moderately rapid permeability in the Bh horizons, moderate to moderately slow in the B'h horizons, and rapid in the other layers.

Sewage suitability: Very limited usage as for septic tank absorption and sewage disposal due to low depth to saturated zone and bad seepage.

## • <u>Lynn Haven</u> series (Ly)

Acreage of soil type in Horry County: 23,285 (3.2%)

#### Characteristics: Sand

The Lynn Haven series consists of very deep, poorly and very poorly drained sandy soils are in low areas and depressions the Gulf Coast and Atlantic Flatwoods. They formed in thick deposits of sandy marine sediments. Near the type location, the mean annual temperature is about 68 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 5 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone.

Agricultural suitability: N/A

Use and vegetation: Most areas of Lynn Haven soils remain in their natural state. A few small areas are used for truck crops and pasture land. The native vegetation consists of slash pine, longleaf pine, or cypress and bay trees with an undergrowth of sawpalmetto, gallberry, fedderbush, huckleberry, and pineland threeawn. In depressions, cypress and bay trees are denser along with blackgum, red maple, and Ogeechee lime. The shrubs include fetterbush, Virginia willow, buttonbush, and waxmyrtle. Common herbaceous plants and vines include muscadine grape, greenbriars, and poison ivy, along with maidencane grass, cinnamon fern and sphagnum.

Drainage and permeability: Poorly or very poorly drained; moderately rapid or moderate permeability.

Sewage suitability: Very limited usage as for septic tank absorption and sewage disposal due to low depth to saturated zone and bad seepage.

<u>Meggett</u> series (Me)

Acreage of soil type in Horry County: 34,330 (4.7%)

Characteristics: Loam Landscape: Lower to upper coastal plains, river valleys Landform: Stream terraces, flood plains, flats Parent Material: Alluvium, fluviomarine deposits Slope: 0 to 3 percent

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: Moderate; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone, flooding concerns and unfavorable shrinking and swelling habits of the soil type.

#### Agricultural suitability: Farmland of statewide importance

Use and vegetation: Major Uses: Most areas are in planted pines or native vegetation. A small acreage is cleared and used for row crops or pasture. Dominant vegetation: Where wooded--consists of water oak, maple, pines, and sweetgum; understory is cabbage palmetto, wax myrtle, and gallberry.

Drainage and permeability: Depth Class: Very deep Drainage Class (Agricultural): Poorly drained Internal Free Water Occurrence: Very shallow, thick, common Flooding Frequency and Duration: None to frequent for brief to long periods Ponding Frequency and Duration: None Index Surface Runoff: Negligible Permeability: Slow (Saturated Hydraulic Conductivity: Low) Shrink-Swell Potential: High

Sewage suitability: Very limited usage as for septic tank absorption due to flooding concerns, slow water movement, low depth to saturated zone and bad seepage, also very limited sewage disposal suitability due to flooding, bad seepage, and low depth to saturated zone.

• <u>Ogeechee</u> series (Og)

Acreage of soil type in Horry County: 35,350 (4.8%)

#### Characteristics: Loamy fine sand

The Ogeechee series consists of very deep, poorly drained, moderately permeable soils that formed in thick beds of loamy fluvial and marine sediments. The soils are on nearly level broad flats, drainageways, and slight depressions on the lower Coastal Plain generally below about 50 feet elevation. Slopes are from 0 to 2 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: Moderate; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone.

Agricultural suitability: Farmland of statewide importance

Use and vegetation: Most of the soil is in forest of mainly loblolly pine and hardwoods. Cleared areas are used for growing corn, soybeans, hay, and pasture.

Drainage and permeability: Ogeechee soils are poorly drained; slow runoff; moderate permeability. Depth to water table is from +1.0 to 1.0 foot.

Sewage suitability: Very limited usage as for septic tank absorption due to flooding concerns, slow water movement, low depth to saturated zone and bad seepage, also

very limited sewage disposal suitability due to flooding, bad seepage, and low depth to saturated zone.

• <u>Osier</u> series (Os)

Acreage of soil type in Horry County: 4,380 (0.6%)

#### Characteristics: Loamy sand

The Osier series consists of very deep, poorly drained, rapidly permeable soils on flood plains or low stream terraces. They formed in sandy alluvium. Near the type location, the mean annual temperature is about 67 degrees F, and the mean annual precipitation is about 46 inches. Slopes range from 0 to 2 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone and flooding concerns

Agricultural suitability: N/A

Use and vegetation: Most areas of Osier soil is in forest. The vegetation consists primarily of sweetgum, blackgum, water oak, red maple, swamp holly, bay, slash pine, and longleaf pine. The understory vegetation is mostly briars, vine, canes, myrtle, and gallberry.

Drainage and permeability: Poorly drained; rapid permeability.

Sewage suitability: Very limited usage as for septic tank absorption due to flooding concerns, low depth to saturated zone, bad seepage, and filtering capacity. Also very limited sewage disposal suitability due to flooding, bad seepage, and low depth to saturated zone.

• <u>Pocomoke</u> series (Po)

Acreage of soil type in Horry County: 38,220 (5.2%)

Characteristics: Fine sandy loam

The Pocomoke series consists of very deep, very poorly drained soils formed in sandy Coastal Plain sediments. Pocomoke soils are on broad low-lying uplands and in closed depressions. Slopes range from 0 to 2 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone.

Agricultural suitability: N/A

Use and vegetation: Cleared and adequately drained areas are used for corn, soybeans, pasture and truck crops. Blueberries, strawberries and melons are grown in some areas. Native vegetation includes water and willow oaks, swamp maple, bay, sweetgum, cypress, pond pine, slash pine and loblolly pine.

Drainage and permeability: Poor drainage.

Sewage suitability: Very limited usage as for septic tank absorption due to low depth to saturated zone and slow water movement. Also very limited sewage disposal suitability due to bad seepage, and low depth to saturated zone.

• <u>Rutlege</u> series (Ru)

Acreage of soil type in Horry County: 38,220 (5.2%)

Characteristics: Loamy sand Landscape: lower and middle coastal plain Landform: flats, depressions, flood plains Parent Material: marine or fluvial sediments Slope: 0 to 2 percent

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone.

Agricultural suitability: N/A

Use and vegetation: Major Uses: truck crops, forest

Dominant Vegetation: Where cultivated-- for corn, soybeans, blueberries, hay and pasture. Where wooded--blackgum, Carolina ash, red maple, sweetbay, tulip popular, water oak, pin oak, pond pine, slash pine, and loblolly pine. The understory is huckleberry, wax myrtle, greenbriar, grasses and sedges. Some ponded areas consist of entirely grasses and sedges.

Drainage and permeability:

Drainage Class (Agricultural): very poorly drained Internal Free Water Occurrence: very shallow, persistent Index Surface Runoff: negligible, ponding is common in depressional areas Permeability: rapid

Sewage suitability: Very limited usage as for septic tank absorption due to low depth to saturated zone, bad seepage, and filtering capacity. Also very limited sewage disposal suitability due to bad seepage, and low depth to saturated zone.

<u>Woodington</u> series (Wo)

Acreage of soil type in Horry County: 40,735 (5.6%)

Characteristics: Fine sandy loam

The Woodington series consists of poorly drained soils on broad, smooth interstream divides on the Coastal Plain. They are formed in loamy textures in Coastal Plain sediments. Slopes range from 0 to 2 percent.

Development suitability: Risk of corrosion - Uncoated steel: High; Concrete: High; Dwellings without basements: very limited Dwellings with basements: very limited Small commercial buildings: very limited – all due to low depth to saturated zone.

Agricultural suitability: Farmland of statewide importance

Use and vegetation: Most of the area is in forest of mixed hardwood and pine with loblolly and pond the principal pine species. Cleared areas are used for corn, soybeans, small grains, and pasture.

Drainage and permeability: Poorly drained; slow runoff; moderately rapid permeability. A seasonal high water table is within 10 inches of the surface in periods of high rainfall.

Sewage suitability: Very limited usage as for septic tank absorption and also very limited sewage disposal suitability due to low depth to saturated zone and bad seepage.

• <u>Yonges</u> series (Yo)

Acreage of soil type in Horry County: 29,730 (4.1%)

#### Characteristics: Fine sandy loam

The Yonges series consists of very deep, poorly drained, moderately slowly permeable soils that formed in thick loamy sediments on the lower Coastal Plain. Slopes are less than 2 percent.

Development suitability:

Risk of corrosion - Uncoated steel: High; Concrete: Moderate;

Dwellings without basements: very limited

Dwellings with basements: very limited

Small commercial buildings: very limited – all due to low depth to saturated zone.

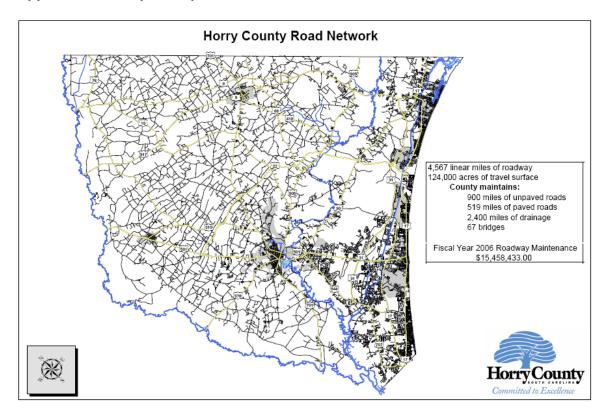
#### Agricultural suitability: Farmland of statewide importance

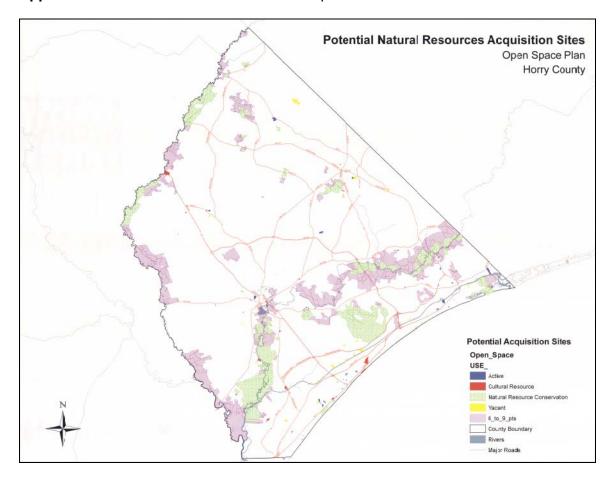
Use and vegetation: Most of the area is in forests of sweetgum, loblolly pine, water oak, live oak, willow oak, and minor species such as holly and blackgum with undergrowth of shrubs and vines. Cleared and drained areas are used for cabbage, Irish potatoes, soybeans, corn, and pasture.

Drainage and permeability: Poorly drained; very slow runoff; moderately slow permeability. Water table is within 10 inches of the surface for about 6 months during most years. Some areas in narrow drainageways commonly flood.

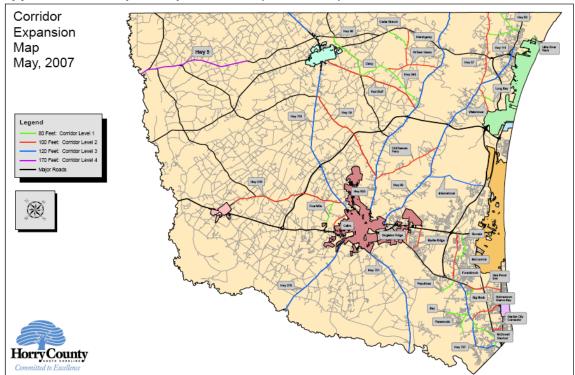
Sewage suitability: Very limited usage as for septic tank absorption due to low depth to saturated zone and very slow water movement. Also very limited sewage disposal suitability due to low depth to saturated zone and moderate seepage.

Appendix K: Horry County road network

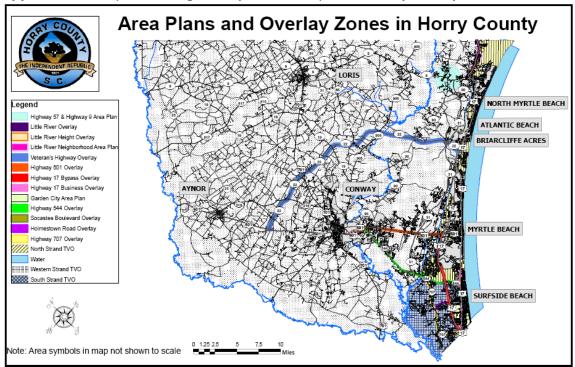




# Appendix L: Potential Natural Resources Acquisition Sites



Appendix M: Horry County Corridor Expansion Map



Appendix N: Map of existing overlays and area plans in Horry County

Appendix O: Description of existing overlays and area plans in Horry County

## Existing Overlay zones and Area Plans in Horry County Overview

<u>Note:</u> The following information on overlay zones and area plans is summarized, and therefore does not represent the complete language as can be found in the Horry County Zoning Ordinance and other specific ordinances.

**Overlay zones** (Section 723 ff., Horry County Zoning Ordinance)

"Overlay zones are applied only in conjunction with other zoning districts, and may impose a set of additional requirements or relax a set of requirements imposed by the underlying zoning district. (...) Overlay zones are applicable when there is a specific public interest in a geographical area that does not coincide with the primary district boundaries" (Section 723, Horry County Zoning Ordinance).

**Socastee Boulevard Overlay Zone** (Section 723.2, Horry County Zoning Ordinance)

<u>Purpose:</u> To protect existing and adjacent land uses from possible adverse effects of any new development.

<u>Applicability</u>: Renovated or newly constructed structures within 200 feet on either side of Socastee Boulevard right-of-way. Also, preservation of protected and specimen trees as defined in section 528 within 200 feet of Socastee Boulevard right-of-way.

<u>Planning Commission Review</u>: Planning Commission shall review all development plans in corridor before issuance of building permits.

<u>Additional development and design requirements</u>: In addition to underlying zoning district structure are to incorporate following:

- a. Usage of brick, glass, siding (vinyl or wood), stone, or stucco on 100% of building façade facing Socastee Boulevard;
- b. Usage of aforementioned on 50% of building façade facing any public right-of-way other than Socastee Blvd;
- c. Discouragement of blank or uninterrupted building facades and encouragement of attractive design techniques;
- d. Structure height shall not exceed 36 feet; except copulas, spires, or other ornamental features that may reach a height of 50 feet;
- e. Enclosure of roof mounted mechanical equipment on structures visible from corridor.

Other selected requirements:

- a. Provision of landscaping around foundation of structure;
- b. Provision of a 25-foot landscaped buffer between corridor and structure (must be indigenous plants);
- c. Tree preservation of existing specimen trees on site (no fewer that 15 specimen trees to be retained while preparing site for construction);
- d. Enclosure and screening of lots related to auto, boat, mobile home and recreationrelated sales or rental facilities;
- e. Utilities services shall be located underground when possible, and also utility substations visible form the corridor shall be screened;

f. Special on-site sign requirements (see Ordinance);

## Veteran's Highway Overlay Zone (Section 723.4, Horry County Zoning Ordinance)

<u>Purpose:</u> To preserve the exceptional scenic value of the highway and maintain the serene farm field and natural vistas from the highway for all travelers to enjoy.

<u>Applicability:</u> Overlay zone extends 1,000 feet of the right-of-way line on both sides of Veteran's Highway (S.C. 22). Also applicable are following supplemental sign regulations (selected):

- a. Off-premise signs are prohibited, except for official signs or logo signs of government agencies;
- b. On-site signs associated with businesses must have at least 400 feet of Veteran's Highway frontage, and shall only be permitted one primary sign of maximum 35 feet;
- c. Animated signs or signs with flashing lights are prohibited in the corridor;
- d. (See other supplemental sign regulations in Ordinance).

### **Highway 501 Overlay Zone** (Section 723.5, Horry County Zoning Ordinance)

<u>Purpose:</u> To provide standards relative to accessibility, appearance and safety in the development of commercial, industrial, multi-family residential and office projects that utilize Highway 501 as their primary means of access. Furthermore, the overlay zone is to create unified development that promotes a sense of place and to develop projects compatible with the carrying capacity of Highway 501 as a major transportation corridor.

<u>Applicability:</u> Highway 501 overlay zone starts at eastern base of Highway 501 bridge outside of Conway (near Grainger Steam Plant) and terminates at intersection of Highway 501 and Canal Street in Myrtle Beach. The overlay extends 500 feet of the right-of-way line on each side of the highway. Renovated or newly constructed commercial, industrial, multi-family residential and office developments partially or completed located within shall comply with these regulations.

Specific zoning-related overlay requirements (selected):

- a. Structure heights shall not exceed the underlying zoning districts permitted height, except for copulas, spires and other ornamental features that may be permitted to increase their height by no more than 30 feet;
- Installment of a 25-foot landscaped buffers between corridor and parking areas of property to minimize visual mass;
- c. Special on-site signage requirements (see Ordinance);

### **Temporary Vending Overlay Zone** (Section 723.6, Horry County Zoning Ordinance)

<u>Purpose:</u> To Provide limits on the number of temporary vending permits in conjunction with festivals, fairs, or special events occurring within the county.

#### Applicability:

a. Southern Strand Temporary Vending Overlay (SSTVO) – area between S.C. 544 on then north, Atlantic Ocean on the east, Intracoastal Waterway on the west, and Horry-Georgetown County Line on the south;

- b. Northern Strand Temporary Vending Overlay (NSTVO) area lying east of western right-of-way line of U.S. 17 from South Carolina – North Carolina State Line to where highway crosses Intracoastal Waterway (ICWW), at which point the NSTVO shall be that area bounded by the Atlantic Ocean to the east, S.C. 544 to the south, and the ICWW to the west;
- c. Western Strand Temporary Vending Overlay (WSTVO) area of Horry County previously not defined within either the SSTVO or NSTVO.

Permits for temporary vending in any of the above TVOZ shall be limited to no more than two hundred-fifty (250) permits per festival, fair or special event.

Highway 544 Overlay Zone (Section 723.8, Horry County Zoning Ordinance)

<u>Purpose:</u> To provide standards relative to accessibility, appearance and safety in the development of commercial, industrial, multi-family residential and office projects that utilize Highway 544 as their primary means of access.

<u>Applicability:</u> Divided in two segments, the East Highway 544 Overlay beginning at the junction of U.S. 17 Business and S.C. 544 near Surfside Beach, and the West Highway 544 Overlay from intersection of U.S. 17 Bypass and S.C. 544 northwards and terminating at the beginning of the Highway 544 bridge over Highway 501 Bypass near Conway.

Overlay segments generally extend 300 feet to either side of the right-of-way lines of Highway 544.

Renovated or newly constructed commercial, industrial, multi-family residential or office developments that are wholly or partially located within shall comply with the overlay regulations.

<u>Required plan review:</u> Proposed developments or renovations within the overlay shall be reviewed by the Planning Department or Planning Commission.

Specific Development and Design Standards:

- a. Structure heights: Structures within the East Highway 544 Overlay shall not exceed 35 feet in height; structures within the West Highway 544 Overlay shall not exceed 50 feet, except for copulas, spires and other ornamental features that may reach a height of 50 feet;
- b. Installment of a 25-foot landscaped buffers between corridor and parking areas of property to minimize visual mass;
- c. Special on-site signage requirements (see Ordinance); e.g. properties with 400 feet frontage to corridor shall be permitted one maximum 35 feet high free-standing primary sign; animated signs or signs with flashing lights are prohibited in corridor except for time and temperature boards and light emitting diode (LED) displays shall be allowed;

Highway 707 Overlay Zone (Section 723.9, Horry County Zoning Ordinance)

<u>Purpose:</u> To provide standards relative to accessibility, appearance and safety in the development of commercial, industrial, multi-family residential and office projects that utilize Highway 707 as their primary means of access. Furthermore, the overlay zone is

to create unified development that promotes a sense of place and to develop projects compatible with the carrying capacity of Highway 501 as a major transportation corridor.

<u>Applicability:</u> The Highway 707 Overlay starts at the intersection with Dick Pond Road or Old Highway 544 and ends at Horry-Georgetown County Line.

The overlay shall extend 200 feet to either side of the right-of-way line of Highway 707.

Renovated or newly constructed commercial, industrial, multi-family residential or office developments that are wholly or partially located within shall comply with the overlay regulations.

<u>Required plan review:</u> Proposed developments or renovations within the overlay shall be reviewed by the Planning Department or Planning Commission.

Specific Development and Design Standards:

- a. Structure heights: Structures within the Highway 707 Overlay shall not exceed 35 feet in height. The roof, copulas, spires and other ornamental features are allowed to increase building height to 50 feet; height of steeples, bell towers, spires of churches, synagogues, temples or other places of worship may be increased up to 75 feet;
- Parking: Installment of a 25-foot landscaped buffers between corridor and parking areas of property to minimize visual mass and enhance appearance of parking areas from corridor;
- c. On-site sign requirements to reduce overload and sign clutter in the corridor by only permitting one 35-foot-tall freestanding primary sign on properties with at least 400 feet corridor frontage; for each 400 feet in frontage an additional sign of 25 feet in height shall be permitted; animated signs or signs with flashing lights are prohibited in corridor except for time and temperature boards and light emitting diode (LED) displays shall be allowed; (see Zoning Ordinance for other special sign requirements);

## Holmestown Road Overlay Zone (Section 723.10, Horry County Zoning Ordinance)

<u>Purpose</u>: To provide standards relative to accessibility, appearance and safety in the development of commercial, industrial, multi-family residential and office projects that utilize Holmestown Road as their primary means of access. Furthermore, the overlay zone is to create unified development that promotes a sense of place and to develop projects compatible with the carrying capacity of Holmestown Road as a major transportation corridor.

<u>Applicability:</u> The Holmestown Road Overlay Zone starts at the intersection of Highway 707 and Holmestown Road and travels east until Holmestown Road ends at the intersection with U.S. 17 Bypass.

The overlay shall extend 200 feet to either side of the right-of-way lines of Holmestown Road.

Renovated or newly constructed commercial, industrial, multi-family residential or office developments that are wholly or partially located within shall comply with the overlay regulations.

Specific Development and Design Standards:

- a. Structure heights: Structures within the Highway 707 Overlay shall not exceed 35 feet in height. The roof, copulas, spires and other ornamental features are allowed to increase building height to 50 feet; height of steeples, bell towers, spires of churches, synagogues, temples or other places of worship may be increased up to 75 feet;
- b. Parking: Installment of a 25-foot landscaped buffers between corridor and parking areas of property to minimize visual mass and enhance appearance of parking areas from corridor;
- c. On-site sign requirements to reduce overload and sign clutter in the corridor by only permitting one 35-foot-tall freestanding primary sign on properties with at least 400 feet corridor frontage; for each 400 feet in frontage an additional sign of 25 feet in height shall be permitted; animated signs or signs with flashing lights are prohibited in corridor except for time and temperature boards and light emitting diode (LED) displays shall be allowed; (see Zoning Ordinance for other special sign requirements);

## Little River Height Overlay Zone (Section 723, Horry County Zoning Ordinance)

<u>Purpose:</u> To develop standards that will protect the Little River area from over development that would impact the safety within the area and desirability to visit Horry County; to propose new standards for development appropriate to the needs of the area; to proceed with a height restriction on new construction in the area to prevent developments that are out of character with the surrounding area.

<u>Applicability:</u> The Little River Height Overlay shall begin at the intersection of Golf Avenue, Highway 90 and Highway 17 and Kingsport road and terminate at North Carolina State Line; furthermore the overlay shall extend 500 feet to the north and west of the right-of-way line of Highway 17 and shall extend to the Atlantic Ocean on the east and include the North Myrtle Beach Marina.

<u>Applicable Height Restrictions:</u> Height of all new construction within the Little River Height Overlay shall not exceed 60 feet, unless the property is rezoned to a Planned Development district (PDD); a height of up to 120 feet may be approved in a PDD.

Little River Overlay Zone (Section 723.11, Horry County Zoning Ordinance)

<u>Purpose:</u> To provide standards relative to accessibility, appearance and safety in the development of commercial, industrial, multi-family residential and office projects and to provide unified development that promotes a sense of place and provides opportunities to develop projects engineered to be compatible with the carrying capacity of an urban corridor.

<u>Applicability:</u> Applicable to any substantially modified or newly constructed commercial, industrial, multi-family residential or office developments that is located partially or completely within the overlay boundaries, which includes the area generally 250 feet to the east and west of Highway 17 right-of-way lines; the overlay zone shall begin at the North and South Carolina State Line and continues south to the overpass of Highway 90 at the intersection of Highway 9 and Highway 17.

## Specific Development and Design Standards:

a. Required Drawings:

- All buildings and structures within the overlay zone shall be required to submit a site plan that includes a list of materials, building dimensions, architectural elevations of all building sides, location of service areas and mechanical equipment, screening devices, site furnishings, exterior lighting fixtures, all signage and other information as determined necessary to ensure consistency with the intent of this Overlay Ordinance;
- b. Building façade:
  - No smooth-faced concrete block, tilt-up concrete panels or prefabricated steel panels allowed, unless the visible finish is comprised of a suitable finish material, e.g. brick, glass, synthetic clapboard siding, split-face decorative block, stone, hardiplank siding or cementitious siding, stucco;
  - Rear and side facades shall be of materials and design characteristics consistent with that of the front; use of inferior or lesser quality materials for side or rear facades shall be prohibited;
  - Blank or uninterrupted building facades visible from the corridor shall be designed in a manner that reduces the building mass by breaking the façade into smaller segments by utilizing architectural elements repetitively, e.g. pilasters, columns, canopies/porticos, arcades, colonnades, change in texture or masonry pattern, windows, trellis with vines, etc.
  - Implementation of distinct architectural entrances for planned shopping centers with leasable area exceeding 10,000 sq. ft. and multi-tenant buildings;
- c. Building roof:
  - Usage of shingles, metal standing seam, tile or other similar materials shall be used for roofs visible from corridor;
  - Building of less than 5,000 sq. ft. of gross floor area shall be designed with gabled or pitched roofs, with a minimum pitch of 6 to 12;
- d. Special design standards:
  - Usage of gable or hip roofs on gas stations and convenience stores with canopies over gas pumps being attached to main building;
  - Automobile service bays shall not face the corridor;
  - Businesses engaged in leasing, rental or sale of merchandise that front the corridor shall adhere to the landscaping and buffer requirements;
  - Storage areas for salvaged materials or vehicles waiting for repair shall be screened from corridor by a 6 foot high opaque enclosure; a 8 foot wide landscaped buffer shall be located around the enclosure;
  - Fencing shall consist of wood, stone, or brick materials;
  - Non-residential structures exceeding 25,000 sq. ft. must be separated from residentially designated or zoned lands at least 50 feet;
  - Sidewalks and pedestrian connections shall be installed between outparcels and the primary lot, and between outparcels to enhance the internal circulation and create a streetscape experience for customers;
- e. Parking:
  - All parking facilities shall be buffered from the corridor;
  - No one parking module shall consist of more than 100 spaces;
  - A 9 foot wide by 14 foot long parking island shall be provided for for every 10 parking spaces in a continous row for a maximum of 20 spaces per bay between parking islands;
  - Parking areas containing more than 100 spaces shall provide a ten-foot landscaped island between each parking module;

- f. Lighting:
  - A lighting plan will be required with submittal of all commercial development plans within the overlay;
  - All light fixtures, except streetlights, shall be located as to minimize stray light trespassing across property boundaries;
  - The orientation of all lighting shall be downward;
  - Luminaire heights shall not exceed a height of 18 feet, except in areas where the total number of parking spaces exceeds 100; in such cases luminaire heights shall not exceed 25 feet;
  - Searchlights, laser source lights, or any similar high-intensity light is prohibited;
  - Outdoor lighting installed on canopies shall use diffusers and be shielded;
  - Illuminated areas around buildings shall only use shielded lighting or offbuilding lighting that doesn't create glare off the property;
- g. Other appearance requirements:
  - Utility services shall be located underground where possible;
  - Dumpsters shall be placed in the rear yard;
  - Dumpsters, which may be seen from adjacent properties shall be screened on all four sides;
  - Accessory structures shall be compatible with main buildings in style, color, and materials;
  - Commercial outdoor display areas, sales tents, play areas, and commercial play devices are prohibited, except where a special event is held and a permit is issued;
  - Outdoor storage areas shall comply with the most restrictive screening requirements set forth in the Horry County Zoning Ordinance;
- h. Access management:
  - Consolidation and reduction in the number in access points is encouraged to ensure that development within the overlay does not impact the carrying capacity of the corridor;
  - Use of Shared Access to serve adjacent parcels abutting the corridor with frontage widths less than 200 feet are required for new lots;
  - Generally the use of shared or joint access between two or more properties is encouraged;
  - Driveways shall be designed with adequate on-site storage for entering and exiting vehicles to reduce unsafe conflicts with through traffic or on-site traffic and to avoid congestion at the entrance;
- i. Sign regulations:
  - Signs shall be a maximum of 12 feet high (as measured from finished grade level to top); multi-tenant parcels with over 300 feet frontage shall be allowed to increase their sign height up to 25 feet;
- j. Perimeter landscaping:
  - A landscaped buffer shall be provided around all perimeters for parcels that abut the corridor;
  - Permitted uses in the setback, outside of the buffer, are those uses permitted in the underlying zone including but limited to lawns, parking areas, driveways and stormwater management structures;
  - All plants used for landscaping shall be indigenous to this climate and shall be properly maintained in a healthy, controlled manner by the property owner;

## II. Area Plans

Area plans are designed to give members of the community the opportunity to discuss the direction that growth and development should take in their area. Area plans also allow citizens to make recommendations to County Council on how questions regarding development in their community should be approached. Area plans can be used to cover elements of the Horry County Comprehensive Plan, such as the land use element, in greater detail: they can also address issues that community members feel are important which are not discussed in the Comprehensive Plan.

## Highway 17 Business and Highway 17 Bypass Area Plan (Ordinance No. 108-04)

<u>Purpose:</u> To ensure there is a guide that citizens can use to help manage present and future growth in conjunction with the County's social, physical and natural environments. The plan will be used as a reference document by developers, county staff, the Planning Commission, and County Council when making decisions involving the Highway 17 Business and Highway 17 Bypass area.

<u>Study area:</u> On January 8, 2002 the Horry County Council directed the Planning Commission to conduct a land use study for property located south of the intersection of U.S. 17 Bypass and S.C. 544 to the intersection of Glenn's Bay Road and Holmestown Road. Due to growth issues, the Horry County Planning Commission decided to expand the area to include the entire leg of Highway 17 Bypass south of U.S. 501 to the Georgetown County line. A combined Committee decided to study only the properties already identified in the Area Plans that were located within 500 feet on either side of Highway 17 Business and Highway 17 Bypass.

#### Recommendations:

- a. Future land uses should be appropriate to current development such as established residential neighborhoods to minimize potential conflicts between uses.
- b. Possibly implement overlay tools such as landscaping, screening, signage, height, façade requirements, etc. to prevent such conflicts.
- c. Development adjacent to entrances to residential neighborhoods that serve the local community should be encouraged, e.g. neighborhood-scale commercial business.
- d. Pedestrian connections should be encouraged.
- e. Future development should be carefully reviewed, and the impacts on traffic and congestion should be understood before projects are allowed to proceed.
- f. Implementation of improved road engineering standards on Highway 17 Business as identified by the south Strand U.S. Highway 17 Business Corridor Study published by the Waccamaw Regional Planning and Development Council:
  - Connections to roadways (streets or driveways) greater than 600 feet in separation
  - Minimum spacing for median crossovers greater than 1,320 feet
  - Desired traffic signal spacing greater than 1,320 feet
  - Access to adjacent parcels for traffic generators of greater than 500 trips per day
  - Additional easements for access between parcels where feasible
  - Out-parcels should not be permitted direct access to Highway 17 Business

- g. Continue to review all new developments in study area with consideration to Average Daily Trips (ADT) generated and the effect on vehicular movement along Highways 17 Business and Bypass.
- h. Better inter-connectivity among adjacent parcels should be encouraged within commercial and residential developments and between each other.
- i. Coordination of a tree-planting program along the Highway 17 Business corridor and usage of distinct visual treatments for the entrances of each of the communities along the corridor (Myrtle Beach, Surfside Beach, Garden City)
- j. Coordinate signage that directs traffic and provides information to promote cohesiveness along the Highway 17 Business corridor.
- k. Facilitate pedestrian movement by adding sidewalks along Highway 17 Business where possible.
- I. Pedestrian/bike crossings at all major intersections along Highway 17 Business.

## Highway 57 and Highway 9 Area Plan (Ordinance No. 34-04)

<u>Purpose:</u> To establish guidelines that will help manage growth and guide development in the Highway 57 and Highway 9 area. The plan will be used as a reference document by developers, county staff, the Planning Commission, and County Council when making decisions involving the Highway 57 and Highway 9 area.

<u>Study area:</u> The core study area begins at the intersection of Highway 57 and Highway 9 and extends outward one-half mile. The transition study area runs from the boundary of the core area outward another one-half mile. The secondary study area contains the final one-half mile out from the transitional study area.

Recommendations:

- a. Create a corridor overlay including higher buffering requirements for Highway 9 within 3-5 years after adoption of area plan (September 2004);
- b. Pay special attention to landscaping, signage and parking when reviewing new developments in that area;
- c. Consider transitional uses and increase use of open space and buffering to balance adverse uses, e.g. commercial and residential, light industrial and residential, commercial and light industrial uses;
- d. Encourage developers to use Planned Development District (PDD) to achieve appropriate mix of uses and transitions between uses;

#### Garden City Area Plan\_(not adopted as Ordinance)

<u>Purpose:</u> At the request of Horry County Council the Planning Commission has undertaken a study of the Garden City area and developed a plan to address development and other issues. District 5 Council Representative Howard Barnard III liased with the Town of Surfside Beach and Georgetown County to ensure that the plan took into consideration its links to the wider region and invited representatives from both areas to participate on the committee.

<u>Study area:</u> The Garden City study area is roughly bounded by the Town of Surfside Beach to the north, Georgetown County to the south, the Atlantic Ocean to the east and Highway 17 Bypass to the west. The study area is approximately 5.5 square miles, with 1.8 miles of beachfront. Based on 2000 U.S. Census data the population of the Garden city area was 9,357.

Recommendations:

- a. Close median cuts and consolidate curb access points;
- b. Signalize busy intersections and provide for pedestrian signal indications and crosswalks;
- c. Improve geometry and add turn lanes where necessary;
- d. Install additional lane on U.S. 17 Business to accommodate acceleration and deceleration movements;
- e. Ensure that all new development in Garden City provides adequate pedestrian and bike facilities;
- f. Explore funding options and grant opportunities that would allow the Garden City community to build and enhance the sidewalk network;
- g. Use available funding for the East Coast Greenway to build multi-use path through Garden City from Georgetown County line to Surfside Beach;
- h. Develop a parking plan for the Garden City beach area;
- i. Work with SCDOT to identify a corridor for a southern evacuation route;
- j. Explore options for adding more park space in Garden City where feasible;
- k. Explore the possibility of developing an overlay for Garden City to better protect key natural assets;
- I. Explore options for mixed-use and traditional neighborhood development in both green field development and redevelopment;
- m. Work with Stormwater to introduce low-impact design options;
- Implement overlay for U.S. Highways 17 Business and Bypass to set standards on building facades and roofs, parking areas, lighting, utility locations and dumpsters, accessory structures, outdoor display and storage, access management, signage, landscaping and buffer requirements;
- o. Encourage office and other low intensity uses when new development is directly adjacent to residential development;

## Little River, South Carolina Neighborhood Area Plan (Ordinance No. 34-03)

<u>Purpose:</u> To create an innovative future land use plan that would be sustainable and workable for the area in the years to come.

<u>Study area:</u> The Little River Neighborhood Plan Area Committee chose an area from Baldwin Avenue to Lakeside Drive and from Highway 17 to the Intracoastal Waterway as boundaries for the most critical area to study first.

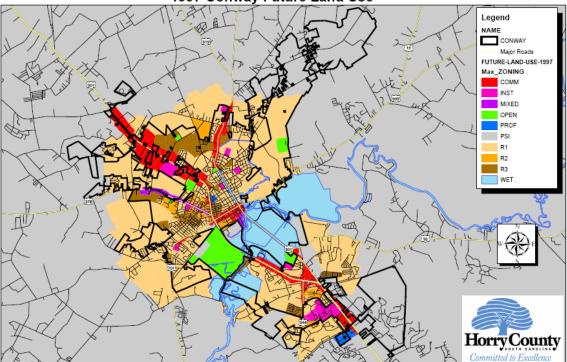
## Recommendations:

a. Design Ideas:

- Develop detail urban design plans for the central business district areas along Highway 17 and down by the riverfront;
- Create specific architectural and review standards for all commercial businesses in the plan area. Propose and proceed with assisting in improving the facades of local businesses in the plan area;
- Create a pedestrian friendly streetscape plan for certain portions of the plan area;
- Create a parking plan for the central business district area along Highway 17 and down by the riverfront;

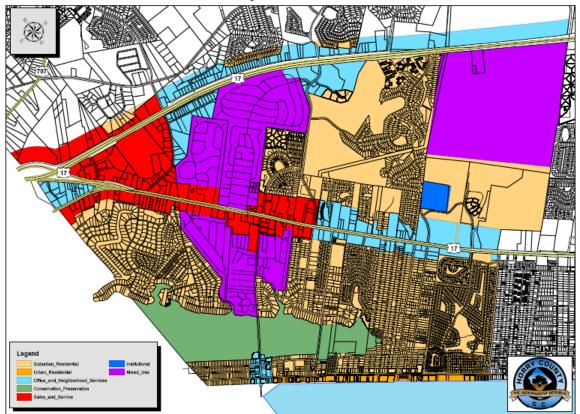
- Propose doing a study of the signs in the central business district areas along Highway 17 and down by the riverfront. Create a plan that might reduce the visual clutter of all the current signs;
- Create a tree overlay zone in the central business district areas and park areas that protects and maintains all the old trees. Also, develop a tree planting program to replenish the urban forest in the area.
- b. Capital Improvement Ideas:
  - Develop a detail design plan for sidewalks, bikeways, trails, benches, street lighting, etc. linking Highway 17 and riverfront business district areas;
  - Expand recreational opportunities near the central business area for a small community children's park, sidewalks, trails, benches, picnic tables, etc.
  - Review the need for connecting the entire boardwalk for public access and enjoyment by the businesses down at the waterfront

Appendix P: City of Conway Future Land Use Map (1997)

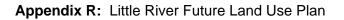


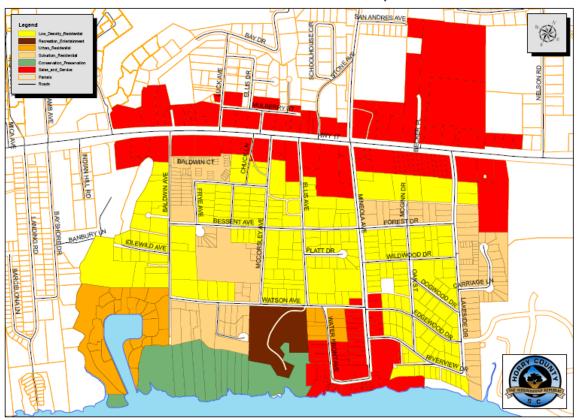
1997 Conway Future Land Use

# Appendix Q: Garden City Future Land Use Plan

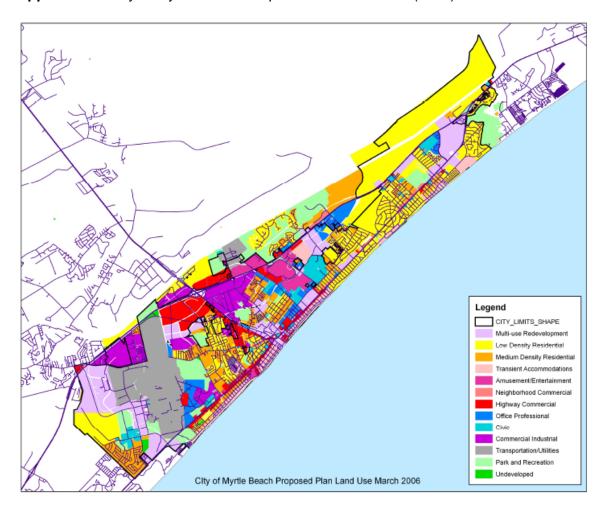


# Garden City Future Land Use Plan

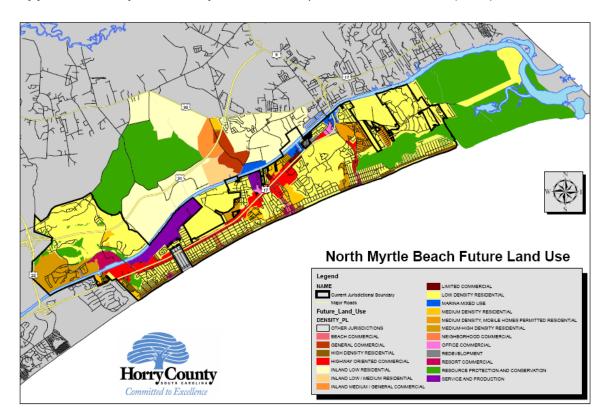




Little River Future Land Use Map



Appendix S: City of Myrtle Beach Proposed Land Use Plan (2006)



## Appendix T: City of North Myrtle Beach Proposed Land Use Plan (2006)

# **BIBLIOGRAPHY**

- Bucksport Water System, 2005: "Water Quality Report"
- Center for Sustainable Communities, National Association of Counties and the Fannie Mae Foundation, 2005: *"Opportunities for County Government and the Affordable Housing Challenge"*
- Center for Watershed Protection, Watershed Restoration, URL: http://www.cwp.org/tools\_restoration.htm
- Children's Museum of South Carolina; URL: http://www.cmsckids.org/
- City of Myrtle Beach, Community Development Office, 2000: "Homeless in Myrtle Beach: A Study of Resources, Needs and Gaps and a Continuum of Care Plan"
- City of Myrtle Beach, Community Development Office, 2005: "Myrtle Beach Housing and Community Development Consolidated Plan 2005-2010 and 2005 Annual Action Plan"
- City of Myrtle Beach, Home Alliance, Inc., 2005: "Report on Homelessness in Horry County From Survey Data taken January 27, 2005"
- Clemson University, Department of Forestry and Natural Resources, 2001: "South Carolina Ranking for Cash Receipts from Timber Harvests"
- Coastal Carolina Association of Realtors: *Multiple Listing Service data sets on home sales for 2000-2005*
- Coastal Carolina University; URL: http://www.coastal.edu/
- Dennis, F.C., 2004: "Creating Wildlife Defense Zones"
- Ecological Society of America, 1997: "Ecosystem Services Benefits Supplied to Human Societies by Natural Ecosystems"
- Ecological Society of America, 2003: "Sustaining Healthy Freshwater Ecosystems"
- Franklin G. Burroughs & Simeon B. Chapin Art Museum; URL: <u>http://www.myrtlebeachartmuseum.org/</u>
- Grand Strand Water and Sewer, 2005: "Water Quality Report"
- Greentreks Network, Inc., 2005: "Native Species"
- Horry County, 1999: *Comprehensive Plan*; URL: <u>http://www.horrycounty.org/envision/index.aspx</u>
- Horry County Code Enforcement: Building permit data from 2000-2005

- Horry County Government; 2005: "Financial Plan FY 2004-2005"
- Horry County Government; 2006: "Financial Plan FY 2005-2006"
- Horry County Historical Society; URL: http://www.hchsonline.org/
- Horry County Museum; URL: http://www.horrycountymuseum.org
- Lesikar, B., 1999: "Septic Tank Soil Absorption Fields, Texas Agricultural Extension Service"
- LS3P Associates Ltd.: "Horry County Recreation Needs Assessment, 1999-2009"
- Myrtle Beach Area Convention and Visitors Bureau; URL: <u>http://www.grandstrandevents.com/</u>: "Complete List of Events for the Area".
- Myrtle Beach Pavilion; URL: http://www.mbpavilion.com/
- Myrtle Beach Surface Water Treatment Facility, 2005: "Water Quality Report"
- National Association of Home Builders, 2003: "The Practice of Low Impact Development"
- National Low Income Housing Coalition, February 3, 2006, URL: <u>http://www.nlihc.org/oor2005/</u>: "Out of Reach Report 2005"
- National Register of Historic Places for Horry County
- Natural Resources Defense Council, 2005: "Testing the Waters"
- Nonpoint Education for Municipal Officials (NEMO), NEMO Project Fact Sheet Three, 1994: "*Impacts of Development on Waterways*"
- Nonpoint Education for Municipal Officials (NEMO), Soapbox Editorial Number Three, 1998: "Attainable?"
- Nonpoint Education for Municipal Officials (NEMO), NEMO Project Fact Sheet Ten, 1999: "Carving Up the Landscape: Habitat Fragmentation and What To Do About It"
- Nonpoint Education for Municipal Officials (NEMO), *Linking Land Use to Water* Quality; URL: <u>http://nemo.uconn.edu/</u>
- Ontario Cooperative Extension, Extension Notes, The Importance of Urban Trees
- South Carolina Department of Health and Environmental Control (SCDHEC), 303(d) List of Impaired Waterbodies, 1994 – 2004
- South Carolina Department of Health and Environmental Control (SCDHEC), 1997: "Wetlands and Their Importance"

- South Carolina Department of Health and Environmental Control (SCDHEC), 2000: Watershed Water Quality Report, Pee Dee Basin
- South Carolina Department of Health and Environmental Control (SCDHEC), "The Facts on Wetlands"; URL: <u>http://www.scdhec.gov/environment/water/docs/fswets.pdf</u>
- South Carolina Department of Health and Environmental Control (SCDHEC), Beach Monitoring Program, 2004: *Quality Assurance Project Plan*
- South Carolina Department of Health and Environmental Control (SCDHEC), Bureau of Air Quality, 2004: South Carolina Air Emissions Inventory
- South Carolina Department of Health and Environmental Control (SCDHEC), 2004: State of South Carolina Integrated Report for 2004, Part II: Assessment and Reporting
- South Carolina Department of Health and Environmental Control (SCDHEC), Bureau of Water, 2005: *Watersheds and Planning*
- South Carolina Department of Health and Environmental Control (SCDHEC), 2005: "Comprehensive Wildlife Conservation Plan"
- South Carolina Department of Natural Resources (SCDNR), *Heritage Preserves;* URL: <u>http://www.dnr.sc.gov/wild/heritage/hp/hpmap.html</u>,
- South Carolina Department of Natural Resources (SCDNR), "Regulations for Floodplain Management"; URL: <u>http://www.dnr.sc.gov/water/envaff/flood/floodregs.html</u>,
- South Carolina Department of Natural Resources (SCDNR), 2001: "Heritage Preserves - Now or Never: Protecting Our Special Places"
- South Carolina Forestry Commission, "Best Management Practices for Forestry"; URL: <u>http://www.state.sc.us/forest/refbmp</u>
- South Carolina Forestry Commission, "Wildland-Urban Interface: Fire Prevention"; URL: <u>http://www.state.sc.us/forest/nfpacc</u>
- South Carolina Hall of Fame; URL: <u>www.myrtlebeachinfo.com/chamber/aboutarea/halloffame/default.html</u>
- South Carolina State Housing Finance and Development Authority, URL: <u>www.sha.state.sc.us</u>
- South Carolina Human Affairs Coalition, URL: http://www.state.sc.us/schac/index.html
- SCNEMO, "What is Nonpoint Source Pollution?"; URL: http://www.scseagrant.org/;
- The Sun News; Myrtle Beach, SC; August 8, 2005: "Home in Running for National List"

- Tiner et al., 2002: Geographically Isolated Wetlands: A preliminary assessment of their characteristics and status in selected areas of the United States
- United States Bureau of the Census, American Fact Finder, February 3, 2006, General Housing Characteristics: 2000. Census Summary File 1 (SF 1) 100-Percent Data and Census Summary File 3(SF 3) Sample Data. Horry County, South Carolina; URL: <u>http://factfinder.census.gov/servlet/BasicFactsServlet</u>
- United States Department of Agriculture (USDA), 2002, Agricultural Census
- United States Department of Agriculture (USDA), Forest Service and The Conservation Fund, *"Green Infrastructure*"; URL: <u>http://www.greeninfrastructure.net/</u>
- United States Department of Agriculture National Resources Conservation Service (NRCS), Horry County Field Office, 2005: "Unique Wetlands Make a Comeback in Horry County"; URL: <u>http://www.sc.nrcs.usda.gov/success/horrywrp.html</u>
- United States Department of Agriculture, Rural Development, URL: <u>www.rurdev.usda.gov</u>
- United States Department of Housing and Urban Development, February 3, 2006, URL: <u>www.hud.gov</u>
- United States Environmental Protection Agency (USEPA), U.S. Army Corps of Engineers (ACOE), 1977: *Wetland Definition, 42 Fed. Reg. 37, 125-26, 37128-29*
- United States Environmental Protection Agency (USEPA), 1999: "Emissions by Category Report for Horry County"
- United States Environmental Protection Agency (USEPA), Watershed Academy Web, 2002: *Principles of Watershed Management*
- United States Environmental Protection Agency (USEPA), 2005: *Air Data, Air Quality Index*
- United States Fish and Wildlife Service (USFW), Overview, Waccamaw National Wildlife Refuge; URL: <u>http://www.fws.gov/refuges/profiles/index.cfm?id=42512</u>
- United Way of America, May 2004 and October 2, 2005, *"Affordable Housing";* URL: <u>http://national.unitedway.org/publicpolicy/docs/AffHousing\_Fact\_Sheet.pdf</u>:
- University of Georgia, 2001: Carolina Bays Fact Sheet
- Waccamaw Regional Council of Governments, Fair Housing Program; URL: <u>www.waccamawhousing.org</u>
- Waccamaw Regional Council of Governments: Building permit data for municipalities in Horry County from 2000-2005
- Waccamaw Regional Council of Governments, 2005: "Affordable Housing Guide"

- Waccamaw Regional Planning Commission, 1995: Levels of Impervious Surface Coverage, Horry County
- Waccamaw Regional Planning Commission, 1995: Potential Levels of Imperviousness, Horry County
- Waccamaw Regional Planning and Development Council; 1973: "Horry County Survey of Historical Places"
- Winyah Rivers Foundations, URL: http://www.winyahrivers.org/