

## ANNEX 10 TO BASIC PLAN

### SOUTHERN COASTAL CONGLOMERATE

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#### I. INTRODUCTION

This Annex is applicable to those counties comprising the Southern Coastal Conglomerate, including Beaufort, Jasper, Colleton, Hampton, Allendale, Bamberg, Barnwell, and Aiken.

#### Southern Coastal Conglomerate



## **II. COUNTY OPERATING CONDITIONS (OPCONS)**

South Carolina counties have adopted the concept of advance warning, through the system of Operating Conditions (OPCONS). These OPCONS increase the County Emergency Operations Center's (EOC's) level of readiness on a scale from 5 to 1 when a pre-determined set of criteria are met. OPCONS do not have to progress sequentially from 5 to 1; they will be established for existing conditions at the time. Each OPCON includes those key issues regarding communications, essential coordination and response activities appropriate for the hazard threatening the state. Southern Conglomerate OPCONS are detailed at Attachment A.

## **III. OPERATIONAL AREAS**

To mitigate the effects of a disaster of any size and type, the State and counties have developed Operational Areas and Operational Area response protocols within their respective areas of responsibility. The Operational Area Model for Southern Conglomerate counties are found within Attachment B of this Annex which details the modeling of possible losses from a catastrophic hurricane.

## **IV. THE CONGLOMERATE SYSTEM**

South Carolina uses the conglomerate system to provide interrelated hurricane support to counties and citizens. This concept provides for evacuation routes through the conglomerates to allow or funnel the population from the threatened coastal regions. Evacuation traffic for this conglomerate is located at Attachment C. Additional traffic plans detailing specific protocol's that may be utilized in traffic control are located at attachments D through F. Shelters are located along evacuation routes inland to provide for that portion of the population that require sheltering and are unable to proceed to safer locations. Attachment G discusses shelters for the Southern Conglomerate. . Attachment H reviews the Conglomerate County Mass Transportation plans.

## **V. CONGLOMERATE ANNEX ATTACHMENTS**

- A. OPCON Activities
- B. Operational Areas
- C. Evacuation and Traffic Management
- D. U. S. Highway Counter Flow
- E. U. S. Highway 21 Reversal
- F. U. S. Highway 278 Reversal
- G. Shelter Management
- H. Mass Transportation

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## ATTACHMENT A: OPERATING CONDITION LEVELS

### I. INTRODUCTION

- A. In order to make maximum use of advance warning, a system of Operating Conditions (OPCON) was established. These OPCONs increase the Emergency Operations Center's (EOC's) level of readiness on a scale from 5 to 1. Each OPCON is declared when a predetermined set of criteria has been met. OPCONs will not necessarily progress sequentially from 5 to 1. The OPCON placed in effect at any given time will be the appropriate one for existing conditions at the time. Each OPCON includes those key issues regarding communications, essential coordination, and response activities appropriate for the hazard threatening the state.
- B. Activities for each OPCON follow. The lists highlight key hurricane operational activities, and are not considered inclusive of all activities. The activities listed herein supplement existing county-specific Standard Operating Procedures (SOPs). This Annex applies to the Southern Conglomerate and outlines the basic activities and tasks that may be accomplished at specific operating conditions that will mirror those at State level. County actions may vary from this annex to meet the needs at local level.

### II. OPCON ACTIVITIES

- A. **OPCON 5** indicates the EOC is at normal day-to-day operations. Prior to hurricane season, all hurricane plans will be reviewed, and points of contact/telephone numbers verified. During hurricane season, storms are tracked and monitored at this level. At a minimum, the respective areas noted below should accomplish the tasks annotated.
  - 1. Operations
    - a. Review all preparedness plans, SOPs, and update alert rosters.
    - b. Conduct an orientation meeting with selected county officials and EOC staff to review hurricane evacuation and sheltering plans and procedures.
    - c. When a storm is detected:
      - 1). Review the advisory package, and plot forecast data.
      - 2). Consider discussing the situation with the following agencies: SCEMD Operations, other counties within the coastal conglomerate, and the NWS office servicing the area.
  - 2. Public Information
    - a. Review public affairs materials and methods for distribution.
    - b. Encourage EOC personnel to update family preparedness plans.

- B. **OPCON 4:** Once a storm poses a possible threat to South Carolina, if conditions warrant, the EOC may move to OPCON 4. The primary events that will occur at this level are the notification of key personnel of the hazard and initiation of preparatory activities. The EOC will be primarily staffed by selected county emergency management personnel. At a minimum, the following areas/Emergency Support Functions (ESFs) should accomplish the listed actions.

1. Operations

- a. Notify the SEOC of Operations status.
- b. Lead Conglomerate County, Beaufort County, notifies: other counties within their conglomerate of OPCON level change, other Coastal Conglomerate lead counties, and the NWS office servicing the conglomerate.
- c. Brief county and municipal officials.
- d. Implement the EOC staffs' family preparedness plans.
- e. Document major decisions by local, State, and Federal officials, such as but not limited to, date/time of watches and warnings, teleconferences, State of Emergency declarations, and special local meetings.
- f. Review advisory package, and plot forecast data. Determine projected evacuation times to include decision time, start time, and completion times.
- g. Participate in SCEMD-led telephone conferences discussing the storm. Be prepared to discuss any local issues that might impact an evacuation such as local festivals, golf tournaments, road construction, etc.
- h. Check emergency generator and communications systems.
- i. Begin preparing the EOC for 24-hour operations.
- j. Consider having county Public Information Officer (PIO) deploy to the EOC.

2. Mass Care (ESF-6)

Review conglomerate shelter plans, and alert local ARC chapter of possible sheltering operations.

3. Law Enforcement (ESF-13)

Contact law enforcement agencies and request that they review their evacuation responsibilities including TCP staffing.

4. Emergency Traffic Management (ESF-16)

Request the SCDOT Resident Maintenance Engineer and SCDOT Resident Construction Engineer review the status of the evacuation routes to determine if there are any potential problems, such as road maintenance, that might adversely affect the evacuation. Discuss the possibility of an evacuation, and have SCDOT Resident Maintenance Engineer and SCDOT Resident Construction Engineer review possible steps that could be taken to alleviate any problems.

5. Public Information (ESF-15)

a. Review media packet, and prepare to disseminate to the press.

b. Respond to requests from the media.

- C. **OPCON 3:** Once a storm poses a significant threat to South Carolina, EOCs will move to OPCON 3. EOCs readiness may increase and be staffed by county emergency management personnel and key support agencies. The primary events that will occur in this stage include evacuation discussions (including voluntary evacuations and mandatory evacuation), holding pre-evacuation conferences, and other preparatory activities. At a minimum, the following areas/ESFs will accomplish the listed actions.

1. All Emergency Support Functions

Emergency officials should complete family preparedness activities, and be prepared for extended emergency operations.

2. Operations

a. Notify the SEOC of Operations status.

b. Lead Conglomerate County, Beaufort County, notifies: other counties within their conglomerate of OPCON change, other Coastal Conglomerate lead counties, and the NWS office servicing the conglomerate.

- c. Maintain documentation of major decisions, meetings, and Watches and Warnings.
  - d. Conduct information briefings for key county officials and EOC staff. Ensure everyone is focused on those tasks that are essential.
  - e. Participate in SCEMD-led telephone conferences discussing evacuation times. Be prepared to discuss any local issues that might impact on the evacuation such as local festivals, golf tournaments, road construction, etc.
  - f. Review advisory package, and plot forecast data. Determine updated evacuation times to include decision time, start time, and completion times.
  - g. Consider issuing a county-level call for voluntary evacuation. Prior to doing so, coordinate with other conglomerate counties and with SEOC Operations. Possible inclusions in the voluntary evacuation are tourists and those that need more time to transport vehicles, boats, recreational vehicles, etc.
  - h. Establish a link with SEOC WebEOC, if not already accomplished.
  - i. Complete preparation for 24-hour EOC operations.
3. Mass Care (ESF-6)
- Notify local ARC chapter of probable sheltering operations and to begin preparations for opening shelters.
4. Law Enforcement (ESF-13)
- Notify local officials that a major evacuation might be ordered in the next 24 hours or less. Local law enforcement officials should begin coordinating with State officials to ensure everything is in place to efficiently manage the evacuation operation.
5. Public Information (ESF-15)
- Monitor the media.
6. Emergency Traffic Management (ESF-16)
- a. Continue to monitor evacuation routes and TCPs.

- b. Prepare for personnel and equipment deployment to evacuation route TCPs.
- D. **OPCON 2:** Once the SEOC decision is made that a voluntary evacuation or mandatory evacuation order is imminent, the county EOC should consider increasing readiness to OPCON 2. At a minimum, areas/ESFs listed below should accomplish the annotated tasks.
  - 1. Operations
    - a. Notify the SEOC of Operations status.

Lead Conglomerate County, Beaufort County, notifies: other counties within their conglomerate of OPCON change, other Coastal Conglomerate lead counties, and the NWS office servicing the conglomerate.
    - b. Review advisory package, and plot forecast data. Determine updated evacuation times to include decision time, start time, and completion times.
    - c. Maintain documentation of major decisions, meetings, and Watches and Warnings.
    - d. Participate in SCEMD-led telephone conferences discussing evacuation.
    - e. County EOC should be fully activated at this stage..
    - f. Conduct information briefings for key county officials and EOC staff. Ensure everyone is focused on tasks that are essential to the evacuation. Counties should be prepared for a “Declaration of a State of Emergency” from the Governor.
    - g. Notify local officials that an evacuation will be ordered for the Southern Coastal Conglomerate. Law enforcement officials need to have personnel and equipment in place by a time specified by the SEOC.
    - h. Activate appropriate local government emergency procedures.

2. Mass Care (ESF-6)

- a. Notify local ARC chapter to open shelters at the designated time.
- b. Update and provide status of shelter operations and evacuee populations.

3. Health and Medical (ESF-8)

Provide Nurse Liaison support at Lead County EOC to assist in telephone triage at shelters.

4. Emergency Traffic Management (ESF-16)

- a. Monitor TCPs and road conditions.
- b. Local enforcement officials have personnel and equipment in place as specified by SEOC.

E. **OPCON 1:** Once a voluntary evacuation recommendation or mandatory evacuation order is announced to the public, the level automatically moves to Operating Condition (OPCON) 1. At this level, the EOC will coordinate the evacuation, and will remain at this OPCON through storm landfall and the response phase. At a minimum, the following areas/ESFs should accomplish the annotated tasks.

1. Operations

- a. Notify the SEOC of Operations status.

Lead Conglomerate County, Beaufort County, notifies: other counties within their conglomerate of OPCON change, other Coastal Conglomerate lead counties, and the NWS office servicing the conglomerate.

- b. Review advisory package, and plot forecast data. Determine the projected arrival time of 34-knot winds (40 mph), and remind public officials and EOC staff that preparatory activities need to be completed prior to this time.
- c. Participate in SCEMD-led telephone conferences discussing evacuation.
- d. Monitor the evacuation operation. Be prepared to take corrective actions in the event of unforeseen circumstances such as road work, bridge operations, or major accidents.



- e. Maintain documentation of major decisions, meetings, and Watches and Warnings.
- f. Conduct information briefings for key county officials and EOC staff. Ensure everyone is focused on those tasks that are essential.
- g. Review the SC Recovery Plan, and begin planning to implement:
  - 1). Damage Assessment operations, and
  - 2). Donated Goods operations.
- 2. Mass Care (ESF-6)
  - a. Monitor local ARC shelter operations. Determine the occupancy levels, and be prepared to open supplemental shelters if the need arises.
  - b. Update and provide status of shelter operations and evacuee populations.
- 3. Health and Medical (ESF-8)

Provide Nurse Liaison support at Lead County EOC to assist in triage at shelters.
- 4. Emergency Traffic Management (ESF-16)

Monitor traffic control points and road conditions. Ensure evacuation process is proceeding smoothly. Keep operations informed of all progress and unforeseen circumstances.

### **III. REENTRY OPERATIONS**

- A. Once the Governor rescinds the mandatory evacuation order, reentry operations may begin if conditions in impacted/affected counties permit. Reentry is the transition phase to recovery operations. The SEOC and county EOCs remain at OPGON 1 during reentry. Reentry is managed at the local level commensurate with local conditions. The following considerations (not all inclusive) should be used by local officials to determine the feasibility of permitting reentry:
  - 1. County Emergency Manager Director/Coordinator
    - a. Continue staffing of the EOC with the following functions as required:

Transportation	Hazardous Materials
Communications	Food Services
Public Works and Engineering	Energy
Public Information	Law Enforcement
Mass Care	Search and Rescue
Health and Medical Services	Donated Goods and Services

- b. Coordinate with public information agencies to broadcast bulletins about local conditions, restricted areas, and further protective actions.
  - c. With county executive leadership, assess conditions in the following functional areas:
- 2. Transportation (ESF-1)
  - a. Determine the status of primary and secondary road network.
  - b. Determine the status of traffic regulatory devices (signs, traffic lights, etc.).
  - c. Determine the status of bridges and bridge approaches.
  - d. Implement debris clearing operations to open prioritized roadways to emergency responders along all Interstates, U.S. highways, primary and secondary roads affected by the storm.
  - e. Upon completion of debris clearing operations, commence debris collection operations.
- 3. Communications (ESF-2)
  - a. Determine the status of emergency and local government/response communications network.
  - b. Determine the status of communications at critical facilities (e.g., EOCs, hospitals, and shelters).
  - c. Determine the status of commercial communications networks (radio, TV, and cellular).
- 4. Public Works and Engineering (ESF-3)
  - a. Determine the extent of debris clearance requirements.
  - b. Determine the status of water and sewer (water pumps, lift stations, and wells).

- c. Determine the status of Public Works personnel, equipment, and facilities.
- 5. Firefighting (ESF-4)
  - a. Identify any known fire threats or incidents.
  - b. Determine the status of firefighting force, equipment, and facilities.
  - c. Determine the status of water sources available.
  - d. Coordinate with local DOT agencies concerning the need to remove debris from local/secondary roads.
- 6. Mass Care (ESF-6)
  - a. Determine the status/number/staffing of shelters available for reentry.
  - b. Implement shelter closing and consolidation according to procedures in State Annex, Shelter section.
- 7. Health and Medical (ESF-8)
  - a. Determine the status of public health systems/issues.
  - b. Determine the status of EMS staff, equipment, and facilities.
  - c. Determine the status of hospitals and nursing homes.
- 8. Search and Rescue (ESF-9)

Determine the status of rescue personnel, equipment, and facilities.
- 9. Hazardous Materials (ESF-10)
  - a. Identify any Hazardous Material (HazMat) incidents or threats.
  - b. Determine status of HazMat response force, equipment, and facilities.
- 10. Food Services (ESF-11)

Determine the status/availability of mass feeding sources/facilities.
- 11. Energy (ESF-12)

- a. Determine the status of power grid: outages, damage, and time to restore.
  - b. Determine the status of natural gas facilities/pipelines (if any).
- 12. Law Enforcement (ESF-13)
  - a. Identify any security requirements or concerns.
  - b. Determine the status of general disaster conditions from local authorities to provide situation updates.
- 13. Public Information (EFS-15)
  - a. Coordinate with public information officers: local EOCs will need to issue correct information about when and where it is safe for residents to return to the area. State and county joint press releases might be necessary following a mass evacuation when there was no reported damage because of return traffic management issues.
  - b. PIO staff will be prepared to respond to media inquiries and monitor media.
  - c. Press releases will be prepared and ready for distribution.
  - d. PIO will coordinate with State and local agencies and organizations on release of the following types of information:
    - 1). SCDHEC health bulletins
    - 2). ARC closing, consolidation, and opening of public shelters
    - 3). SCDOT/SCDPS status of roads
    - 4). SCPRT tourism industry oriented information, State park openings
    - 5). SCDOI insurance claim information
- 14. Donated Goods and Volunteer Services (ESF-18)

Determine the availability of people and resources.

## ATTACHMENT B: OPERATIONAL AREAS

### I. INTRODUCTION

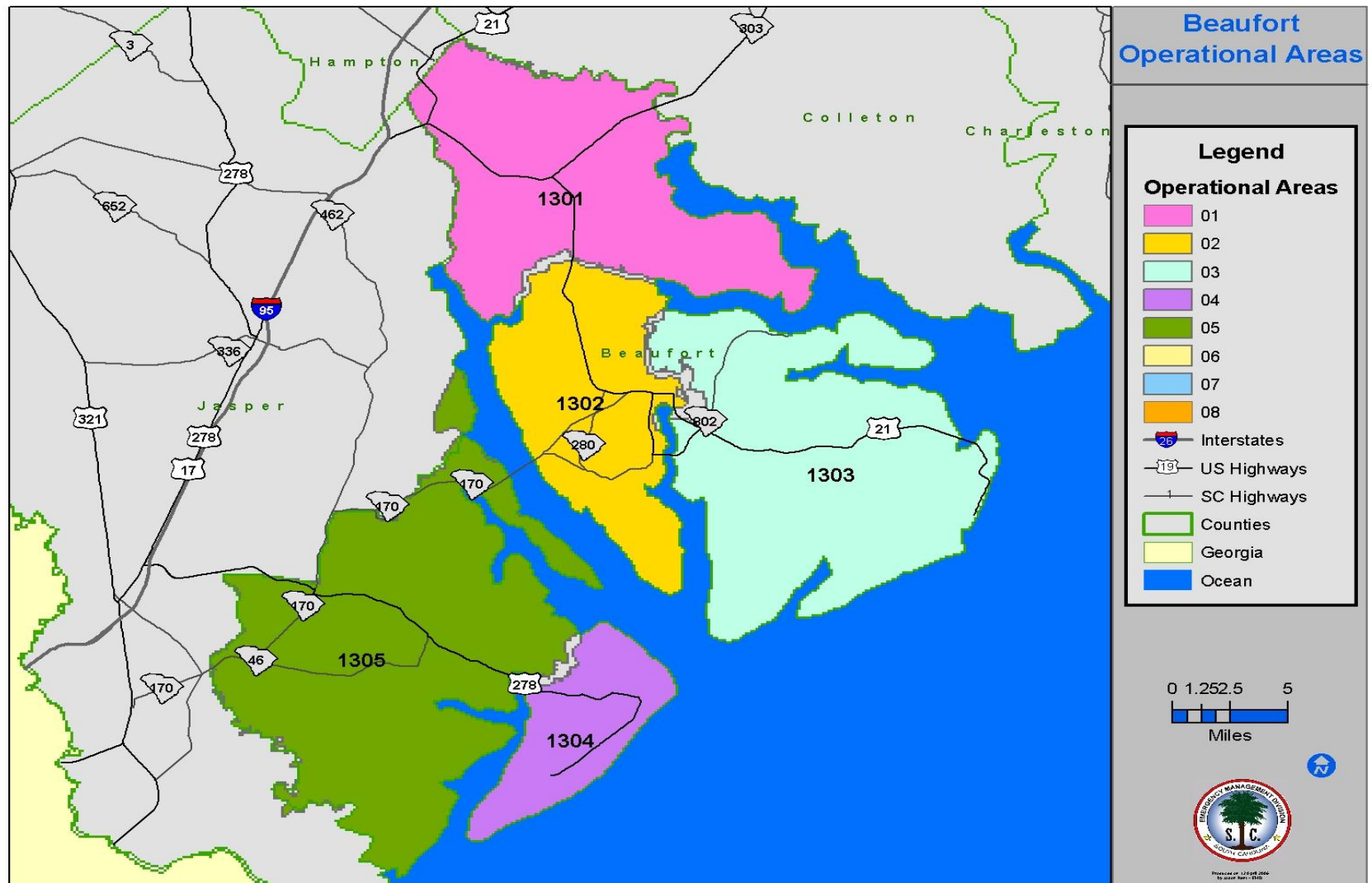
The Operational Areas for the Southern Conglomerate are provided in this Attachment. The maps display those areas developed by SCEMD and the respective counties creating manageable, easily recognizable areas within each county that affords a basis to model possible effects of disastrous weather occurrences. Additionally, these areas are used to identify key and critical facilities that are important to continued governmental functioning and or recovery. These areas also assist the counties and the State in focusing response to an emergency situation. Using data derived from modeling based on the FEMA baseline program, Hazards US (HAZUS), projections have been developed on potential losses from a catastrophic storm.

#### A. Operational Area Modeling

1. The maps in the following section depict Operational Areas in the three Southern Conglomerate counties. The Operational Areas are composed of one or more census tracts to enable SCEMD to conduct hurricane loss estimation modeling and baseline disaster needs assessments.
2. The graphs and charts following the maps depict the worst-case loss estimates and baseline human needs requirements developed for each Operational Area. HAZUS – MH was used to develop the loss estimates and formed the basis for the human needs requirements. Note that the loss estimates that follow are the result of wind damage only. Storm surge loss estimates will be conducted and included in the charts when future HAZUS versions contain that capability.
3. Worst-case, noted below in the charts, for each coastal county is defined as a Category 5 hurricane that makes landfall in the county so as to generate the maximum wind damage to the greatest area. For baseline planning purposes, pre-evacuation permanent population data in each operational area formed the computational baseline. A small percentage of the estimated tourist or visitor population was included in the analysis to reflect the assumption that this segment of the population will have evacuated for a Category 5 hurricane and will not return post-impact.
4. The majority of the data below was developed using the 2007 projected U.S. Census estimates. Essential facility loss estimates and hazardous material sites are based on 2000 HAZUS data and are so marked.
5. Information contained in the following charts and graphs should be used to develop pre-storm, initial response/support plans which will form the planning basis for actual, real-time response/support planning.

6. This section provides planning figures for basic support items in a hurricane response scenario. The demographic information loss details estimated needs for sheltering and provided additional planning needs such as displaced households, age, Spanish-speaking populations, and others. The need for pet shelter support is also noted.
7. Additional loss estimates highlight Essential Facilities (Based on 2000 HAZUS data), Hazardous Materials Sites (Based on 2000 HAZUS data), Residential Damage, and potential type and weight (in tons) of debris in a post storm scenario.
8. Finally, commodity requirements based on citizen needs are displayed by water, meals, ice, and selected commodity. The daily support packages by individual item are provided for planning purposes.

## BEAUFORT COUNTY



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**OPERATIONAL AREA DESCRIPTIONS**

<b>OPERATIONAL AREA: Southern Conglomerate</b>			
<b>COUNTY NAME: BEAUFORT COUNTY</b>			
<b>COUNTY CODE: Beau</b>			
<b>County/ID</b>	<b>FIPS Code</b>	<b>Location</b>	<b>Description/Boundary</b>
<b>Beau -1</b>	1301	Sheldon	West boundary is the county line and the Pocotaligo River. North boundary is the county line / Combaee River. East and southern boundary is the Coosaw River. Includes Chisolm and Williman Islands.
<b>Beau -2</b>	1302	Beaufort	Includes the entirety of Port Royal Island as bordered by the Broad, Beaufort, and Coosaw Rivers. Includes Beaufort and Parris Island Marine Corps Recruit Depot and the US Marine Corps Air Station.
<b>Beau -3</b>	1303	St. Helena Island	Includes the islands of St. Helena, Lady's, and Fripp; also Huntington State Park as bounded by Port Royal Sound, the Atlantic Ocean, and St. Helena Sound
<b>Beau -4</b>	1304	Hilton Head	Include the entire island of Hilton Head as bounded by Port Royal Sound, the Atlantic Ocean, and Calibogue Sound.
<b>Beau -5</b>	1305	Bluffton	Bounded by the county line to the west and south. The Broad River to the north and east. Includes Bull, Daufuskie, and Pinckney Islands.



### DEMOGRAPHICS AND NEEDS ASSESSMENT

Beaufort County Category	Description	Operational Area 1301 (3.43%)	Operational Area 1302 (36.82%)	Operational Area 1303 (15.55%)	Operational Area 1304 (28.45%)	Operational Area 1305 (15.75%)	Beaufort County Total
Demographics	Population	4,995	53,620	22,645	41,431	22,936	145,627
	Total Households	2,172	23,313	9,846	18,013	9,972	63,316
Additional Demographic Information	Age 65 or older	834	8,955	3,782	6,919	3,830	24,320
	Non English speaking HH	495	5,308	2,245	4,102	2,271	14,417
	Homeless	50	536	226	414	229	1,456
	HH w/o Transportation	93	1,002	423	775	429	2,723
	Disabled	1,109	11,904	5,027	9,198	5,092	32,329
Initial Shelter	Displaced Households	383	10,091	6,616	13,094	6,647	36,831
	<b>Persons per H/H (2.3 people per H/H)</b>	881	23,209	15,217	30,116	15,288	84,711
	# of People Seeking Short-term shelter	135	2,711	1,744	2,780	1,436	8,806
Animal Response	# of pets needing shelter (60% of HH Seeking Shelter)	35	707	455	725	375	2,297

## CRITICAL NEEDS

Needs Assessment	Description	Operational Area 1301 (3.43%)	Operational Area 1302 (36.82%)	Operational Area 1303 (15.55%)	Operational Area 1304 (28.45%)	Operational Area 1305 (15.75%)	Beaufort County Total
Drinking Water: 3 1-liter bottle per person per day	Sheltered	135	2,711	1,744	2,780	1,436	8,806
	Persons per HH displaced (minus # in shelters)	746	20,498	13,473	27,336	13,852	75,905
	Emergency Workers (2.5 per 100 displaced households)	10	252	165	327	166	921
	<b>Total Liters of water per day</b>	<b>2,671</b>	<b>70,385</b>	<b>46,147</b>	<b>91,331</b>	<b>46,363</b>	256,896
Meals (2 meals per day)	Sheltered	270	5,422	3,488	5,560	2,872	17,612
	Persons per HH displaced (minus # in shelters)	1,492	40,997	26,946	54,672	27,704	151,811
	Emergency Workers (2.5 per 100 displaced households)	19	505	331	655	332	1,842
	<b>Total Meals Per Day</b>	<b>1,781</b>	<b>46,923</b>	<b>30,764</b>	<b>60,887</b>	<b>30,909</b>	171,264
Ice = 8 lb. Bag daily	1 bag per/displaced person (minus # in shelters)	<b>746</b>	<b>20,498</b>	<b>13,473</b>	<b>27,336</b>	<b>13,852</b>	<b>75,905</b>
	1 bag per person sheltered	<b>135</b>	<b>2,711</b>	<b>1,744</b>	<b>2,780</b>	<b>1,436</b>	7,370
	<b>Total Bags of Ice per Day</b>	<b>881</b>	<b>23,209</b>	<b>15,217</b>	<b>30,116</b>	<b>15,288</b>	<b>84,711</b>
Blankets 2 per person	<b>Sheltered</b>	<b>270</b>	<b>5,422</b>	<b>3,488</b>	<b>5,560</b>	<b>2,872</b>	<b>17,612</b>
Cots	<b>1 per sheltered</b>	<b>135</b>	<b>2,711</b>	<b>1,744</b>	<b>2,780</b>	<b>1,436</b>	8,806
	<b>20% overture</b>	<b>27</b>	<b>542</b>	<b>349</b>	<b>556</b>	<b>287</b>	1,761
	<b>Total Cots</b>	<b>162</b>	<b>3,253</b>	<b>2,093</b>	<b>3,336</b>	<b>1,723</b>	<b>10,567</b>
Generators	1 per 385 people sheltered	0	7	5	7	4	23
Portable Toilets	1 per 15 people sheltered	9	181	116	185	96	587

## DAMAGE

County Category	Description	Operational Area 1301 (3.43%)	Operational Area 1302 (36.82%)	Operational Area 1303 (15.55%)	Operational Area 1304 (28.45%)	Operational Area 1305 (15.75%)	Beaufort County Total
Essential Facilities (Based on 2000 HAZUS data)	#Police Stations Total	0	0	0	0	1	1
	*Probability of At Least Moderate Damage >50%	0	0	0	0	0	0
	#Schools Total	2	24	6	9	3	44
	*Probability of At Least Moderate Damage >50%	1	6	1	2	1	11
	# Hospitals Total	0	2	0	1	0	3
	*Probability of At Least Moderate Damage >50%	0	0	0	6	0	6
	# Fire Stations Total	0	9	6	6	4	25
	*Probability of At Least Moderate Damage >50%	0	2	1	1	1	5
Inventory of Hazardous Materials Sites (Based on 2000 HAZUS data)		2	35	12	16	8	73
Residential Damage	Total # of Houses	3,970	34,137	23,076	47,185	22,621	130,989
	Moderate Damage Count	1,094	9,631	4,586	11,224	5,500	32,035
	Severe Damage Count	357	9,199	6,479	16,276	6,751	39,062
	Completely Destroyed County	375	8,740	9,930	15,531	7,689	42,265
	<b>Damage Subtotal</b>	1,826	27,570	20,995	43,031	19,940	113,362
Debris Total Weight (Tons)	Brick/Wood	10,161	299,111	247,202	532,846	211,793	1,301,113
	Concrete / Steel	582	20,101	21,488	15,875	11,616	69,662
	Tree	416,654	318,643	600,115	243,350	951,124	2,529,886
	Eligible Tree Weight	16,666	74,773	69,388	139,685	82,612	383,124

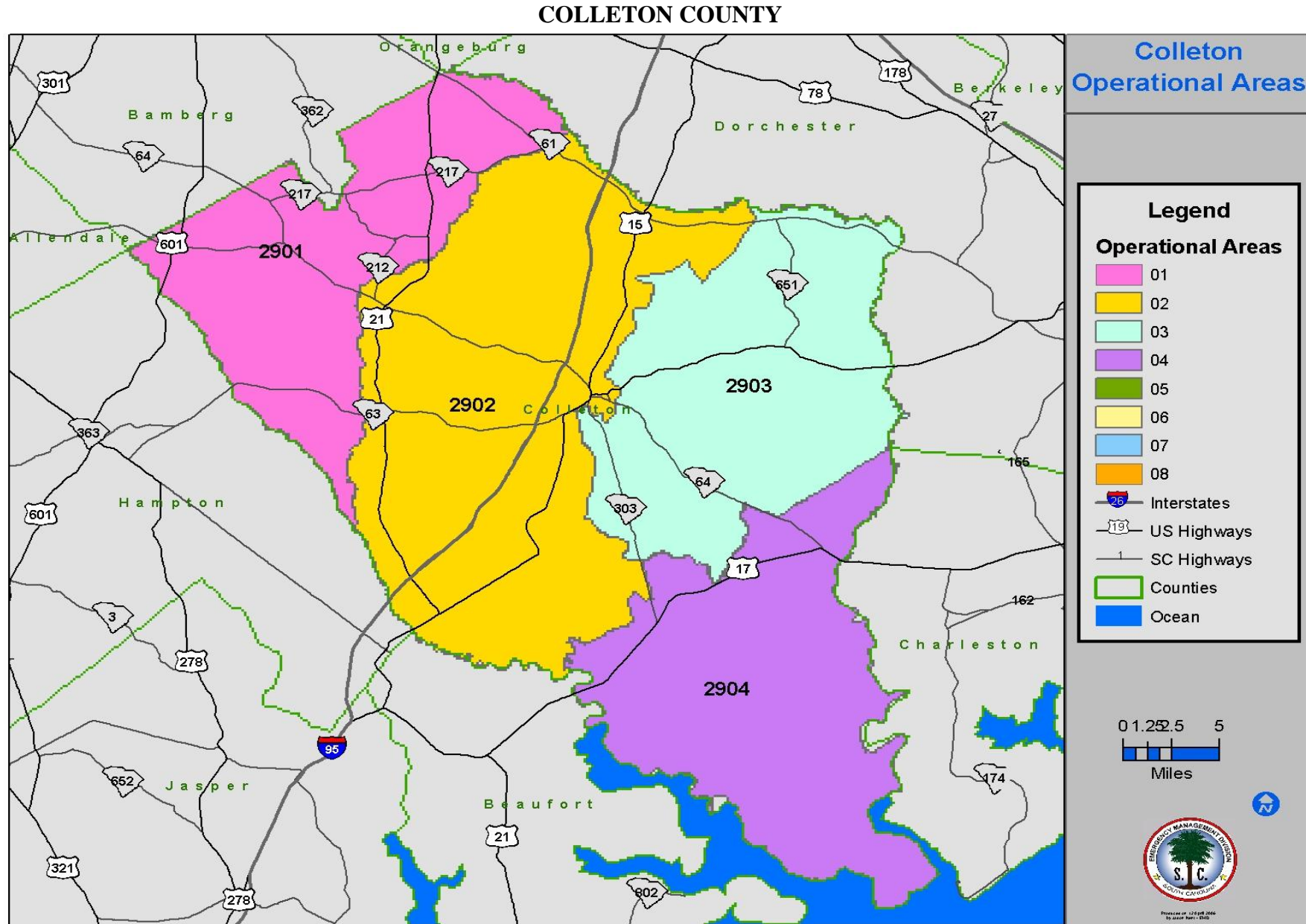
\*At Least Moderate Damage means the facility needs to be inspected before reuse.

### DAILY RESOURCE REQUIREMENTS (EST)

Beaufort County Category	Description	Operational Area 1301 (3.43%)	Operational Area 1302 (36.82%)	Operational Area 1303 (15.55%)	Operational Area 1304 (28.45%)	Operational Area 1305 (15.75%)	Beaufort County Total
Ice	8 lb bag/per person	881	23,209	15,217	30,116	15,288	84,711
8 lb per bag	Total Weight per Operational Area	7,047	185,674	121,734	240,930	122,305	677,690
	Tons of ice	4	93	61	120	61	339
1 pallet/275 bags	Total # pallets per Operational Area	3	84	55	110	56	308
20 pallets per truck	Total number of Trucks per day	0	4	3	5	3	15
Water	3 one liter bottles/per person/day	2,671	70,385	46,147	91,331	46,363	256,896
12 bottles per case	Total cases per Operational Area	223	5,865	3,846	7,611	3,864	21,408
30 lb per case	Total Weight per Operational Area	6,679	175,962	115,367	228,327	115,907	642,241
	Tons of water	3	88	58	114	58	321
70 cases per pallet	Total # pallets per Operational Area	3	84	55	109	55	306
20 pallets per truck	Total number of Trucks per day	0	4	3	5	3	15

### DAILY RESOURCE REQUIREMENTS (EST) (CONT)

Beaufort County Category	Description	Operational Area 1301 (3.43%)	Operational Area 1302 (36.82%)	Operational Area 1303 (15.55%)	Operational Area 1304 (28.45%)	Operational Area 1305 (15.75%)	Beaufort County Total
Meals	2/person/day	1,781	46,923	30,764	60,887	30,909	171,264
12 meal per case	Total cases per Operational Area	148	3,910	2,564	5,074	2,576	14,272
20 lbs per case	Total Weight per Operational Area	2,968	78,205	51,274	101,479	51,514	285,440
	Tons of MREs	1	39	26	51	26	143
48 cases per pallet	Total # pallets per Operational Area	3	81	53	106	54	297
40 pallets per truck	Total number of Trucks per day	0	2	1	3	1	7
	Total number of Trucks	0	10	7	14	7	38
	# of type III PODs required	0	5	3	6	3	17
	# of personnel required to operate PODs	6	149	97	193	98	542



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**OPERATIONAL AREA DESCRIPTIONS**

<b>OPERATIONAL AREA: Southern Conglomerate</b>			
<b>COUNTY NAME: COLLETON COUNTY</b>			
<b>COUNTY CODE: Coll</b>			
<b>County/ID</b>	<b>FIPS Code</b>	<b>Location</b>	<b>Description/Boundary</b>
<b>Coll -1</b>	2901	Lodge	West and south borders are the county lines. East and south boundaries are generally a line following Buckhead Creek to the Little Salkehatchie River to the county line. Includes Hodge, Williams, and Smokes.
<b>Coll -2</b>	2902	Walterboro	West and south boundary generally a line following Buckhead Creek to the Little Salkehatchie River to the county line. North boundary is the county line and eastern boundary from the north and the county line following Sidneys Rd., Round O Rd., Pleasant Grove Rd., Stock Farm Rd., Burlington Rd., Ivanhoe Rd. to Walterboro, east of Walterboro to Jefferies Road, Asheboro Rd., S.C. 303, Fox Creek Rd., Cuckold Creek to the county line. Includes the Town of Walterboro.
<b>Coll -3</b>	2903	Cottageville	Western boundary from the north and the county line following Sidneys Rd., Round O Rd., Pleasant Grove Rd., Stock Farm Rd., Burlington Rd., Ivanhoe Rd. to Walterboro, east of Walterboro to Jefferies Rd., Asheboro Rd. North and east is the county line. Southern boundary is Lowndes Landing Rd., Parkers Ferry Rd., Highway 64, Fuller Swamp Creek, and Horseshoe Creek. Includes Cottageville.
<b>Coll -4</b>	2904	Donnelley Wildlife Management Area	Bounded by Combahee River to the west, south and east by Edisto River and the Saint Helena Sound. The north Lowndes Landing Rd., Parkers Ferry Rd., Highway 64, Fuller Swamp Creek, Horseshoe Creek, and Fox Creek Road, Cuckold Creek to the county line. Includes the Donnelley Wildlife Management Area, Bear island Management Area and St. Helena Sound Heritage Trust Preserve.

## DEMOGRAPHICS AND NEEDS ASSESSMENT

Colleton County Category	Description	Operational Area 2901 (10.40%)	Operational Area 2902 (50.87%)	Operational Area 2903 (32.42%)	Operational Area 2904 (6.32%)	Colleton County Total
Demographics	Population	4,105	20,077	12,796	2,494	39,472
	Total Households	1,785	8,729	5,563	1,084	17,162
Additional Demographic Information	Age 65 or older	538	2,630	1,676	327	5,170
	Non English speaking HH	119	582	371	72	1,145
	Homeless	41	201	128	25	395
	HH w/o Transportation	77	375	239	47	738
	Disabled	911	4,457	2,841	554	8,763
Initial Shelter	Displaced Households	20	1,251	2,151	701	4,123
	<b>Persons per H/H (2.3 people per H/H)</b>	46	2,877	4,947	1,612	9,483
	# of People Seeking Short-term shelter	6	389	638	188	1,221
Animal Response	# of pets needing shelter (60% of HH Seeking Shelter)	2	101	166	49	319



## CRITICAL NEEDS

Needs Assessment	Description	Operational Area 2901 (10.40%)	Operational Area 2902 (50.87%)	Operational Area 2903 (32.42%)	Operational Area 2904 (6.32%)	Colleton County Total
Drinking Water: 3 1-liter bottle per person per day	Sheltered	6	389	638	188	1,221
	Persons per HH displaced (minus # in shelters)	40	2,488	4,309	1,424	8,262
	Emergency Workers (2.5 per 100 displaced households)	1	31	54	18	103
	<b>Total Liters of water per day</b>	<b>140</b>	<b>8,726</b>	<b>15,003</b>	<b>4,889</b>	<b>28,758</b>
Meals (2 meals per day)	Sheltered	12	778	1,276	376	2,442
	Persons per HH displaced (minus # in shelters)	80	4,977	8,619	2,849	16,524
	Emergency Workers (2.5 per 100 displaced households)	1	63	108	35	206
	<b>Total Meals Per Day</b>	<b>93</b>	<b>5,817</b>	<b>10,002</b>	<b>3,260</b>	<b>19,172</b>
Ice = 8 lb. Bag daily	1 bag per/displaced person (minus # in shelters)	<b>40</b>	<b>2,488</b>	<b>4,309</b>	<b>1,424</b>	<b>8,262</b>
	1 bag per person sheltered	<b>6</b>	<b>389</b>	<b>638</b>	<b>188</b>	<b>1,221</b>
	<b>Total Bags of Ice per Day</b>	<b>46</b>	<b>2,877</b>	<b>4,947</b>	<b>1,612</b>	<b>9,483</b>
Blankets 2 per person	<b>Sheltered</b>	<b>12</b>	<b>778</b>	<b>1,276</b>	<b>376</b>	<b>2,442</b>
Cots	<b>1 per sheltered</b>	<b>6</b>	<b>389</b>	<b>638</b>	<b>188</b>	<b>1,221</b>
	<b>20% overture</b>	<b>1</b>	<b>78</b>	<b>128</b>	<b>38</b>	<b>244</b>
	<b>Total Cots</b>	<b>7</b>	<b>467</b>	<b>766</b>	<b>226</b>	<b>1,465</b>
Generators	1 per 385 people sheltered	0	1	2	0	3
Portable Toilets	1 per 15 people sheltered	0	26	43	13	81

## DAMAGE

County Category	Description	Operational Area 2901 (10.40%)	Operational Area 2902 (50.87%)	Operational Area 2903 (32.42%)	Operational Area 2904 (6.32%)	Colleton County Total
Essential Facilities (Based on 200 HAZUS data)	#Police Stations Total	0	1	0	0	1
	*Probability of At Least Moderate Damage >50%	0	0	0	0	0
	#Schools Total	2	18	6	4	30
	*Probability of At Least Moderate Damage >50%	0	6	2	1	9
	# Hospitals Total	0	1	0	0	1
	*Probability of At Least Moderate Damage >50%	0	0	0	0	0
	# Fire Stations Total	3	6	3	3	15
	*Probability of At Least Moderate Damage >50%	0	2	1	1	4
Inventory of Hazardous Materials Sites (Based on 200 HAZUS data)		5	26	9	7	47
Residential Damage	Total # of Houses	1,701	7,833	5,385	2,587	17,506
	Moderate Damage Count	114	2,082	1,640	654	4,490
	Severe Damage Count	12	731	932	787	2,462
	Completely Destroyed County	11	516	1,140	831	2,498
	<b>Damage Subtotal</b>	137	3,329	3,712	2,272	9,450
Debris Total Weight (Tons)	Brick/Wood	1,369	39,808	57,725	46,915	145,817
	Concrete / Steel	8	1,277	3,677	2,694	7,656
	Tree	212,839	805,365	840,252	866,032	2,724,488
	Eligible Tree Weight	6,385	41,633	39,857	25,981	113,856

\*At Least Moderate Damage means the facility needs to be inspected before reuse.

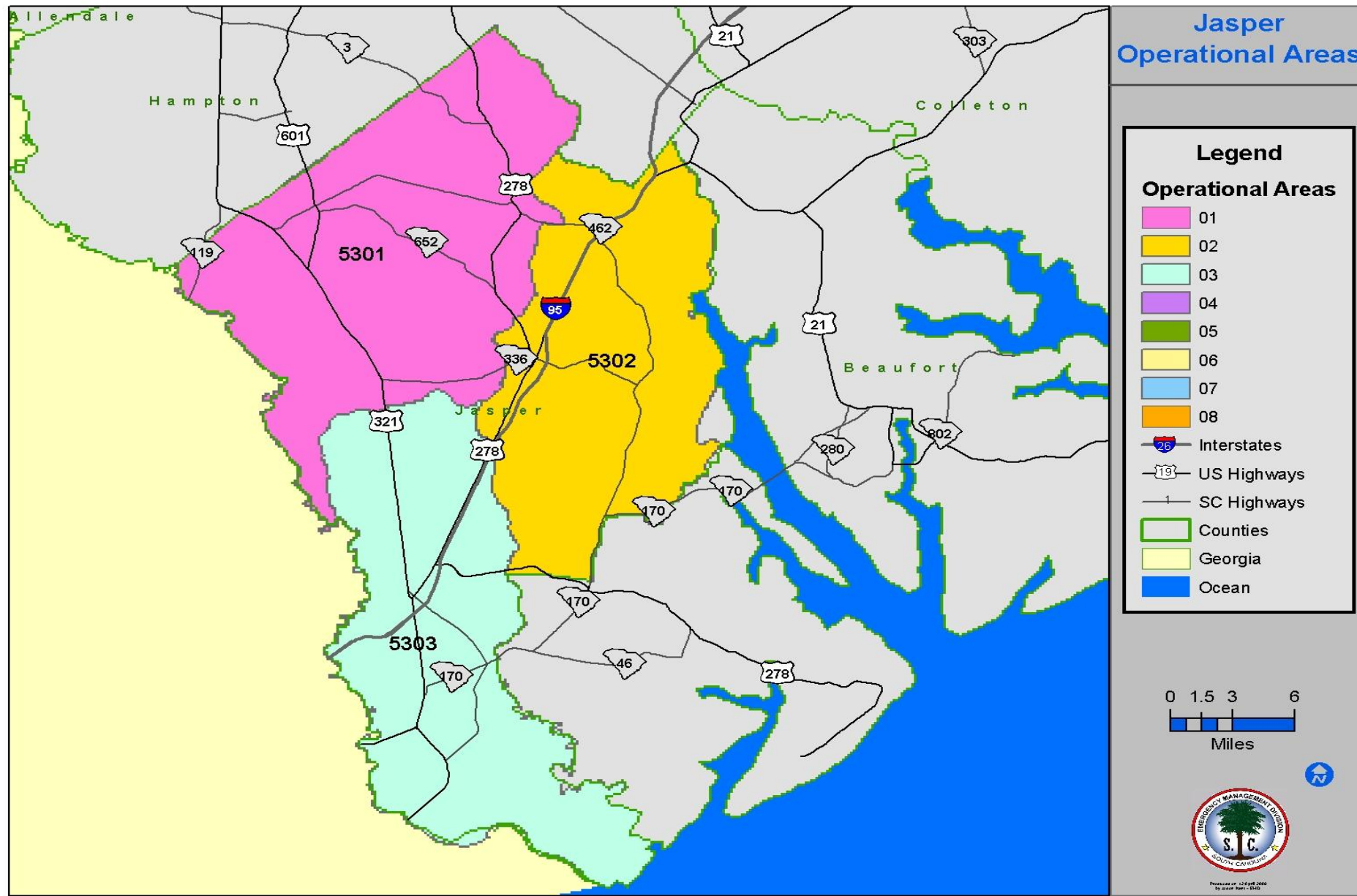
### RESOURCE REQUIREMENTS

Colleton County Category	Description	Operational Area 2901 (10.40%)	Operational Area 2902 (50.87%)	Operational Area 2903 (32.42%)	Operational Area 2904 (6.32%)	Colleton County Total
Ice	8 lb bag/per person	46	2,877	4,947	1,612	9,483
8 lb per bag	Total Weight per Operational Area	368	23,018	39,578	12,898	75,863
	Tons of ice	0	12	20	6	38
1 pallet/275 bags	Total # pallets per Operational Area	0	10	18	6	34
20 pallets per truck	Total number of Trucks per day	0	1	1	0	2
Water	3 one liter bottles/per person/day	140	8,726	15,003	4,889	28,758
12 bottles per case	Total cases per Operational Area	12	727	1,250	407	2,396
30 lb per case	Total Weight per Operational Area	349	21,814	37,508	12,224	71,895
	Tons of water	0	11	19	6	36
70 cases per pallet	Total # pallets per Operational Area	0	10	18	6	34
20 pallets per truck	Total number of Trucks per day	0	1	1	0	2

### RESOURCE REQUIREMENTS (CONT)

Colleton County Category	Description	Operational Area 2901 (10.40%)	Operational Area 2902 (50.87%)	Operational Area 2903 (32.42%)	Operational Area 2904 (6.32%)	Colleton County Total
Meals	2/person/day	93	5,817	10,002	3,260	19,172
12 meal per case	Total cases per Operational Area	8	485	834	272	1,598
20 lbs per case	Total Weight per Operational Area	155	9,695	16,670	5,433	31,953
	Tons of MREs	0	5	8	3	16
48 cases per pallet	Total # pallets per Operational Area	0	10	17	6	33
40 pallets per truck	Total number of Trucks per day	0	0	0	0	1
	Total number of Trucks	0	1	2	1	4
	# of type III PODs required	0	1	1	0	2
	# of personnel required to operate PODs	0	18	32	10	61

## JASPER COUNTY



## OPERATIONAL AREA DESCRIPTIONS

<b>OPERATIONAL AREA: Southern Conglomerate</b>			
<b>COUNTY NAME: JASPER COUNTY</b>			
<b>COUNTY CODE: Jasp</b>			
<b>County/ID</b>	<b>FIPS Code</b>	<b>Location</b>	<b>Boundary</b>
<b>Jasp -1</b>	5301	Pineland	North and west boundaries are county lines. South boundary is the Savannah River / State line. East boundary from the county line generally south along Stock Farm Road, Morgan Road, Long Haul Rd., Malphrus Rd. easterly parallel to Tarboro Rd. ending at State Dam Rd. Includes Towns of Robertville, Tarboro Pineland, and Gillisonville.
<b>Jasp -2</b>	5302	Ridgeland	North and east bounded by the county lines. South and west boundaries from the north along Stock Farm Rd., Morgan Rd., Long Haul Rd., Malphrus Rd. easterly parallel to Tarboro Rd. ending at State Dam Rd. South. Includes the Towns of Ridgeland, Coosawhatchie, and Grahamville.
<b>Jasp -3</b>	5303	Hardeeville	West boundary is the Savannah River / State line. North is State Dam Rd., Floyd Rd., Medwestvaco Rd. then south along the stream to the State line. Includes Hardeeville, Jasper State Park, and Savannah River National Wildlife Refuge.

## DEMOGRAPHICS AND NEEDS ASSESSMENT

Jasper County Category	Description	Operational Area 5301 (25.37%)	Operational Area 5302 (42.92%)	Operational Area 5303 (31.71%)	Jasper County Total
Demographics	Population	5,533	9,361	6,916	21,810
	Total Households	2,406	4,070	3,007	9,483
Additional Demographic Information	Age 65 or older	592	1,002	740	2,334
	Non English speaking HH	426	721	533	1,679
	Homeless	56	94	69	218
	HH w/o Transportation	103	175	129	408
	Disabled	1,228	2,078	1,535	4,842
Initial Shelter	Displaced Households	666	1,024	1,166	2,856
	<b>Persons per H/H (2.3 people per H/H)</b>	1,532	2,355	2,682	6,569
	# of People Seeking Short-term shelter	205	309	362	876
Animal Response	# of pets needing shelter (60% of HH Seeking Shelter)	53	81	94	229

## CRITICAL NEEDS

Needs Assessment	Description	Operational Area 5301 (25.37%)	Operational Area 5302 (42.92%)	Operational Area 5303 (31.71%)	Jasper County Total
Drinking Water: 3 1-liter bottle per person per day	Sheltered	205	309	362	876
	Persons per HH displaced (minus # in shelters)	1,327	2,046	2,320	5,693
	Emergency Workers (2.5 per 100 displaced households)	17	26	29	71
	<b>Total Liters of water per day</b>	<b>4,645</b>	<b>7,142</b>	<b>8,133</b>	19,921
Meals (2 meals per day)	Sheltered	410	618	724	1,752
	Persons per HH displaced (minus # in shelters)	2,654	4,092	4,640	11,386
	Emergency Workers (2.5 per 100 displaced households)	33	51	58	143
	<b>Total Meals Per Day</b>	<b>3,097</b>	<b>4,762</b>	<b>5,422</b>	13,280
Ice = 8 lb. Bag daily	1 bag per/displaced person (minus # in shelters)	<b>1,327</b>	<b>2,046</b>	<b>2,320</b>	<b>5,693</b>
	1 bag per person sheltered	<b>205</b>	<b>309</b>	<b>362</b>	876
	<b>Total Bags of Ice per Day</b>	<b>1,532</b>	<b>2,355</b>	<b>2,682</b>	<b>6,569</b>
Blankets 2 per person	<b>Sheltered</b>	<b>410</b>	<b>618</b>	<b>724</b>	<b>1,752</b>
Cots	<b>1 per sheltered</b>	<b>205</b>	<b>309</b>	<b>362</b>	876
	<b>20% overture</b>	<b>41</b>	<b>62</b>	<b>72</b>	175
	<b>Total Cots</b>	<b>246</b>	<b>371</b>	<b>434</b>	<b>1,051</b>
Generators	1 per 385 people sheltered	1	1	1	2
Portable Toilets	1 per 15 people sheltered	14	21	24	58



## DAMAGE

County Category	Description	Operational Area 5301 (25.37%)	Operational Area 5302 (42.92%)	Operational Area 5303 (31.71%)	Jasper County Total
Essential Facilities (Based on 2000 HAZUS data)	#Police Stations Total	0	1	0	1
	*Probability of At Least Moderate Damage >50%	0	0	0	0
	#Schools Total	0	4	1	5
	*Probability of At Least Moderate Damage >50%	0	1	0	1
	# Hospitals Total	0	2	0	2
	*Probability of At Least Moderate Damage >50%	0	1	0	1
	# Fire Stations Total	3	3	2	8
	*Probability of At Least Moderate Damage >50%	1	1	1	3
Inventory of Hazardous Materials Sites (Based on 2000 HAZUS data)		3	10	3	16
Residential Damage	Total # of Houses	2,363	2,994	2,464	7,821
	Moderate Damage Count	714	975	760	2,449
	Severe Damage Count	351	526	521	1,398
	Completely Destroyed County	333	423	518	1,274
	<b>Damage Subtotal</b>	1,398	1,924	1,799	5,121
Debris Total Weight (Tons)	Brick/Wood	17,295	28,896	31,107	77,298
	Concrete / Steel	1,311	1,794	2,575	5,680
	Tree	884,462	694,452	760,034	2,338,948
	Eligible Tree Weight	26,534	27,778	22,801	77,113

\*At Least Moderate Damage means the facility needs to be inspected before reuse.

## RESOURCE REQUIREMENTS

Jasper County Category	Description	Operational Area 5301 (25.37%)	Operational Area 5302 (42.92%)	Operational Area 5303 (31.71%)	Jasper County Total
Ice	8 lb bag/per person	1,532	2,355	2,682	6,569
8 lb per bag	Total Weight per Operational Area	12,254	18,842	21,454	52,550
	Tons of ice	6	9	11	26
1 pallet/275 bags	Total # pallets per Operational Area	6	9	10	24
20 pallets per truck	Total number of Trucks per day	0	0	0	1
Water	3 one liter bottles/per person/day	4,645	7,142	8,133	19,921
12 bottles per case	Total cases per Operational Area	387	595	678	1,660
30 lb per case	Total Weight per Operational Area	11,613	17,856	20,332	49,802
	Tons of water	6	9	10	25
70 cases per pallet	Total # pallets per Operational Area	6	9	10	24
20 pallets per truck	Total number of Trucks per day	0	0	0	1

### RESOURCE REQUIREMENTS (CONT)

Jasper County Category	Description	Operational Area 5301 (25.37%)	Operational Area 5302 (42.92%)	Operational Area 5303 (31.71%)	Jasper County Total
Meals	2/person/day	3,097	4,762	5,422	13,280
12 meal per case	Total cases per Operational Area	258	397	452	1,107
20 lbs per case	Total Weight per Operational Area	5,162	7,936	9,037	22,134
	Tons of MREs	3	4	5	11
48 cases per pallet	Total # pallets per Operational Area	5	8	9	23
40 pallets per truck	Total number of Trucks per day	0	0	0	1
	Total number of Trucks	1	1	1	3
	# of type III PODs required	0	0	1	1
	# of personnel required to operate PODs	10	15	17	42

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## **ATTACHMENT C: EVACUATION AND TRAFFIC MANAGEMENT**

### **I. INTRODUCTION**

This Attachment is applicable to those counties comprising the Southern Coastal Conglomerate including Beaufort, Jasper, Colleton, Hampton, Allendale, Bamberg, Barnwell, and Aiken.

### **II. EVACUATION ZONES**

Evacuation zones are areas that need to be evacuated for a particular hurricane scenario to protect residents at risk from flooding or high winds. The parameters for the zones are:

1. Easily describable to the public over radio and television.
  2. Based upon easily identifiable roadway or natural features for boundary identification.
  3. Relate to storm surge limits based on the most recent SLOSH model.
  4. In hard copy, allow coastal residents to determine if their home is in a storm surge vulnerable evacuation area.
  5. Be useable for transportation modeling/clearance time calculations.
  6. Be related to census/traffic analysis zone boundaries for population and dwelling unit tabulations and calculations of vulnerable populations.
- B. Coastal counties have several clearance time modeling zones based on the hurricane surge flooding. This information is a key element of the transportation analysis. The evacuation zone map follows.
- C. Clearance Time Modeling Zones. Three (3) of the Southern Conglomerate counties have clearance time modeling zones based on the hurricane surge flooding. The following table shows for each county the clearance time modeling zones and the hurricane categories.

Clearance Time Modeling Zones Table		
County	<u>Clearance Time Modeling Zones</u>	All Residents in Traffic Zones:
Jasper	Evacuation Zone Cat 1-2	1-3
	Evacuation Zone Cat 3-5	1-7
Beaufort	Evacuation Zone Cat 1	1-9
	Evacuation Zone Cat 2	1-13, 15-24
	Evacuation Zone Cat 3-5	1-24
Colleton	Evacuation Zone Cat 1	1-2
	Evacuation Zone Cat 2-5	1-4

**Due to the error in forecasting the strength of hurricanes, consideration will be given to evacuating for one category higher storm than predicted.**

D. Evacuation Zone Descriptions

1. COLLETON COUNTY EVACUATION AREAS

- a. Category 1 Evacuation Area: All residents and tourists south of U.S. 17, including Edisto Beach and all manufactured housing residents.
- b. Category 2 Evacuation Area: All residents and tourists south of Alternate 17, Ritter Road, and south of the Iron Crossroads and Cottageville Communities; Edisto Beach; and all manufactured housing residents.
- c. Category 3 Evacuation Area: All residents and tourists south of Alternate 17, Ritter Road, and south of the Iron Crossroads and Cottageville Communities; Edisto Beach; and all manufactured housing residents.
- d. Category 4 Evacuation Area: All residents and tourists south of Alternate 17, Ritter Road, and south of the Iron Crossroads and Cottageville Communities; Edisto Beach; and all manufactured housing residents.
- e. Category 5 Evacuation Area: All residents and tourists south of Alternate 17, Ritter Road, and south of the Iron Crossroads and Cottageville Communities; Edisto Beach; and all manufactured housing residents.

## 2. BEAUFORT COUNTY EVACUATION AREAS

### a. Category 1 Evacuation Area:

**South of the Broad River:** All residents and tourists on Hilton Head, Daufuskie and Bull Islands; and all manufactured housing residents.

**North of the Broad River:** All residents and tourists on Fripp, Hunting Island State Park, Morgan, Coosaw, Chisolm, Dataw, and Brays Islands; on St. Helena's Island, those living ocean side of Seaside Road and Coffin Point Road; all remaining low-lying areas adjacent to the Coosaw, Morgan, Combahee, Beaufort, Broad, Huspah, and Whale Branch Rivers; and all manufactured housing residents.

### b. Category 2 Evacuation Area: All residents and tourists are asked to evacuate except those living south of U.S. 278 and west and north of S.C. 46 to the Jasper County line.

### c. Category 3 Evacuation Area: All residents and tourists are asked to evacuate.

### d. Category 4 Evacuation Area: All residents and tourists are asked to evacuate.

### e. Category 5 Evacuation Area: All residents and tourists are asked to evacuate.

## 3. JASPER COUNTY EVACUATION AREAS

### a. Category 1 Evacuation Area: All residents and tourists east of S.C. 462, south of S.C. 170, and west of Purrysburg Road (S.C. 34) up to Bagshaw Swamp; and all manufactured housing residents.

### b. Category 2 Evacuation Area: All residents and tourists east of S.C. 462, south of S.C. 170, and west of Purrysburg Road (S.C. 34) up to Bagshaw Swamp; and all manufactured housing residents.

### c. Category 3 Evacuation Area: All residents and tourists east and south of I-95 and west of Purrysburg Road (S.C. 34); west of I-95, areas northwest of Hardeeville and south of Bagshaw Swamp, and the Coosawhatchie area north of Taylor Mill Road (CR 175) and east of Loghaul Road (CR 39); and all manufactured housing residents.

### d. Category 4 Evacuation Area: All residents and tourists east and south of I-95 and west of Purrysburg Road (S.C. 34); west of I-95, areas

northwest of Hardeeville and south of Bagshaw Swamp and the Coosawhatchie area north of Taylor Mill Road (CR 175) and east of Loghaul Road (CR 39); and all manufactured housing residents.

- e. Category 5 Evacuation Area: All residents and tourists east and south of I-95 and west of Purrysburg Road (S.C. 34); west of I-95, areas northwest of Hardeeville and south of Bagshaw Swamp and the Coosawhatchie area north of Taylor Mill Road (CR 175) and east of Loghaul Road (CR 39); and all manufactured housing residents.

#### 4. HAMPTON COUNTY EVACUATION AREAS

- a. Category 3 Evacuation Area: All residents and tourists in low-lying areas along the Tulifinny River and all manufactured housing residents.
- b. Category 4 Evacuation Area: All residents and tourists in low-lying areas along the Tulifinny River and all manufactured housing residents.
- c. Category 5 Evacuation Area: All residents and tourists in low-lying areas along the Tulifinny River and all manufactured housing residents.

### III. ESTIMATED EVACUATION CLEARANCE TIMES

- A. Clearance time is one of two major considerations involved in issuing an evacuation order or advisory. The other time is the arrival of sustained tropical storm winds. The clearance times were calculated by storm scenario and by behavioral characteristic for each conglomerate. A discussion on the calculation of the estimated evacuation clearance times is found in the Basic Plan.
- B. Clearance time is the time required to clear the roadway of all vehicles evacuating in response to a hurricane situation. Clearance time begins when the first evacuating vehicle enters the road network, and ends when the last evacuating vehicle reaches an assumed point of safety. The assumed point of safety for the Southern Conglomerate is the Allendale/Hampton County line. Clearance time includes the time required by evacuees to enter the road network (referred to as mobilization time) and the time spent by evacuees traveling along the road network due to traffic congestion (referred to as queuing delay time). Clearance time does not relate to the time any one vehicle spends traveling on the road network, and does not include time needed for local officials to assemble and make a decision.
- C. Clearance times generally fall below 24 hours for most of the scenarios. Due to the location of the controlling bottlenecks for clearance time calculations (U.S. Highway 278 off Hilton Head), evacuation traffic does nothing to an adjacent conglomerates' clearance time situation. For the Southern Conglomerates, clearance times are



largely a function of how well bottlenecks near the coast are processing evacuation traffic and whether inland TCPs are manned.

- D. For the Southern Conglomerate, individual household commute times were estimated from Beaufort to Aiken. The worst household commute times will be 2 to 6 hours in Category 1 hurricane when there is low-tourist occupancy. For a Category 1 hurricane with high-tourist occupancy, these times will be 8 to 11 hours for worst household commute times. Again, the shorter household commute times result from a longer loading of the highway network, whereas, the longest household commute times result from the rapid/quick loading of the road network. For a Category 3-5 scenario with high-tourist occupancy, worst household commute times could be as high as 11 to 14 hours. Even with the counter flow operation on U.S. 278, households leaving during the middle of the evacuation could have a 7 to 10 hour commute.
  
- E. Lane Reversal and Counter Flow Plans. If conditions require their implementation, South Carolina will employ one of more of the following lane reversal (four lanes outbound), or counter flow (three of four lanes outbound) plans in the Southern Conglomerate. Only one of these plans (U.S. 278 counter flow) may provide a conglomerate-wide clearance time reduction. These plans are described in more detail in the attachments to this Annex.
  - 1. Reversal plans: U.S. 21 in the city of Beaufort from the U.S. 21/S.C. 280 intersection to the U.S. 21/U.S. 17 intersection in Gardens Corner; and U.S. 278 off of Hilton Head from the Cross Island Expressway to the U.S. 278/I-95 interchange.
  
  - 2. Counter flow plans: U.S. 21 in the city of Beaufort from the U.S. 21/S.C. 280 intersection to the U.S. 21/U.S. 17 intersection in Gardens Corner; and U.S. 278 off Hilton Head from Spanish Wells Road to the U.S. 278/I-95 interchange.
  
- F. The following are the calculated hurricane evacuation clearance times for the Southern Conglomerate. Several hundred clearance time runs were done based on differing intensity of hurricanes, evacuation area assumptions, rapidity of evacuees' response, and differing tourist seasons.

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**SOUTHERN CONGLOMERATE CLEARANCE TIMES**  
**(In Hours)**  
**(From the South Carolina Hurricane Evacuation Restudy)**

	<u>Normal Lane Use</u>		<u>US 278 Reversal</u>	
	<u>Low Tourist Occupancy</u>	<u>High Tourist Occupancy</u>	<u>Low Tourist Occupancy</u>	<u>High Tourist Occupancy</u>
<b>Category 1 Hurricane</b>				
Rapid Response	12.00 hours	17.50 hours	8.25 hours	11.50 hours
Medium Response	12.50	18.50	8.75	12.50
Long Response	13.00	19.50	9.00	13.25
<b>Category 2 Hurricane</b>				
Rapid Response	16.50	22.50	11.00	15.25
Medium Response	17.00	23.50	12.00	16.25
Long Response	17.50	24.50	12.50	17.00
<b>Category 3-5 Hurricane</b>				
Rapid Response	20.00	25.25	14.00	17.25
Medium Response	20.50	27.00	14.50	18.50
Long Response	21.00	27.25	15.00	19.00

**Note:** Controlling traffic bottleneck is the road segment U.S. 278 from Burnt Church Road to Buckwalter Parkway. Times reflect 2007 estimated census figures and a 2007 localized traffic study for specific routes in Beaufort County. Clearance Times not displaced for U.S. 21 reversal or U.S. 21 counter flow. Potential local savings only.

**G. SOUTHERN CONGLOMERATE PHASING**

1. Category 1: A voluntary or mandatory evacuation recommendation will be based on the above table.
2. Category 2: A mandatory evacuation recommendation will be based on the above table. A voluntary evacuation may be recommended approximately 12-24 hours prior to a mandatory evacuation.
3. Category 3-5: A mandatory evacuation recommendation will be based on the above table. A voluntary evacuation will be recommended approximately 12-24 hours prior to a mandatory evacuation.

**H. SOUTHERN CONGLOMERATE US HIGHWAY 278 COUNTERFLOW**

1. Category 1: No counter flow is planned.
2. Category 2: During peak tourist season (Memorial Day through Labor Day), a counter flow of U.S. Highway 278 may be recommended.
3. Category 3-5: A counter flow of U.S. Highway 278 will be recommended.

#### **IV. TRAFFIC MANAGEMENT**

Evacuation of the population away from vulnerable areas is one of the most crucial issues in protecting lives in the face of an approaching hurricane. The basic traffic management concept is to allow traffic to flow along evacuation routes unimpeded and to supplement existing traffic control devices with law enforcement personnel who will staff selected TCPs within the conglomerate. Each TCP has been established to provide assistance to the evacuating populace. Various law enforcement agencies and the National Guard are responsible for staffing or monitoring predetermined TCPs.

#### **V. EVACUATION ROUTES**

The South Carolina Department of Public Safety (SCDPS)/Highway Patrol (SCHP) and the South Carolina Department of Transportation (SCDOT) in coordination with local officials established hurricane evacuation routes. The SCDOT maintains the evacuation route directional signs.

#### **VI. TCP STAFFING COORDINATION**

The SCHP, in cooperation with local law enforcement agencies, compiled the TCPs listed within each conglomerate section. The South Carolina National Guard (SCNG), where identified, will work as partners with State and local law enforcement agencies. In the TCP Staffing listing where personnel requirements are indicated, unless otherwise indicated the staffing represents a 24- hour period.

#### **VII. TRAFFIC FLOW EQUIPMENT**

The SCDOT will provide all necessary equipment identified during Evacuation Route Coordination meetings to include barriers, cones, remote signal devices, etc. This equipment is detailed in the Emergency Traffic Management (ESF-16) Standard Operating Procedures (SOP).

#### **VII. TRAFFIC MANAGEMENT OPERATIONS/EVACUATION ROUTE MONITORING**

- A. TCP Staffing. The TCPs will be staffed by designated agencies during evacuation and reentry when requested by the State Emergency Operations Center (SEOC), and will be staffed until traffic resumes normal levels of operation.
- B. Lane Reversal/Counter Flow Procedures. The operational decision of when and if to reverse lanes or activate counter flow measures during an evacuation or reentry is covered in the Basic Plan. The counter flow and reversal plans for U.S. Highway 278 in Beaufort County, and the counter flow and reversal plans for U.S. Highway 21 in Beaufort County, are presented later in this section.
- C. Emergency Access Routes to Coastal Areas. Eastbound emergency traffic will use the outermost Eastbound, (#2) lane on Highway 278 or Highway 21, as applicable, during counter flow operations.

- D. Radio Surveillance. ESF-16 will monitor SCHP radio traffic for potential problems. Local EOCs should likewise monitor local law enforcement channels, and report problems to ESF-16.
- E. Video Surveillance. SCDOT will provide closed-circuit television images of evacuation routes, where available, to the ESF-1 (Transportation) and ESF-16 operations personnel.
- F. Traffic Counter Surveillance. SCDOT will provide electronic access to counter data to include vehicle count and speed data to the ESF-1 and ESF-16.
- G. Aerial Surveillance. ESF-16 will utilize State and local aircraft to monitor traffic flow. During air operations, reports will be submitted hourly, or as the situation may require, to ESF-16 and SCHP District Troop Commanders. Pilots will report any observed incident that impedes the flow of traffic. ESF-16 will monitor radio traffic, and may periodically request situation reports in areas of evacuation routes not visible by the SCDOT closed-circuit television cameras.
- H. Monitoring Critical Roadway Segments. Roadway segments with the highest evacuation vehicles to roadway capacity ratio are considered to be critical links for an efficient evacuation. These congested areas control the flow of evacuation traffic during a hurricane evacuation, and are key areas for traffic control and monitoring. Supporting local law enforcement should pay special attention to these areas. The following list shows the roadway segments in each county that control the flow of evacuation traffic in the Southern Coastal Conglomerate.
  - 1. Beaufort County: (South of Broad River): U.S. 278 from Cross Island Parkway to S.C. Highway 170, Cross Island Parkway and William Hilton Parkway interchange, Hilton Head connector I-95 interchange in Jasper County, and I-16 westbound on ramp from I-95 (in Savannah).
  - 2. Beaufort County: (North of Broad River): U.S. 21 and Lady's Island Drive, U.S. 21 and U.S. 17 intersection at Gardens Corner, U.S. 21 through Beaufort, and U.S. 21 and S.C. 280 intersection.
  - 3. Jasper County: Hilton Head connector I-95 interchange, U.S. 278 through Ridgeland, and U.S. 17-I-95 interchange.
  - 4. Colleton County: Alt. 17 through Walterboro, S.C. 64 through Walterboro, and S.C. 174 and U.S. 17 intersection (in Charleston County)

5. Inland Counties: U.S. 278 through Hampton (in Hampton County), U.S. 278 and S.C. 64 intersection in Barnwell (in Barnwell County), U.S. 21 through Orangeburg (in Orangeburg County), U.S. 301 and U.S. 278 intersection (in Allendale County), and S.C. 68 and U.S. 278 intersection (in Hampton County).

- I. Comfort Stations. Not applicable to the Southern Conglomerate.
- J. Highway Advisory Radios (HARs). HARs are used to disseminate information to the public during emergency conditions. SCDOT presently has 12 HARs in their inventory that will be used in critical areas identified by ESF-16.
- K. TCP Staffing. The TCP Staffing for each TCP in the Southern Conglomerate follows:

Traffic Control Point Staffing (normal lane usage)			
County	TCP Location	Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
AIKEN COUNTY			
3-1	US 278 @ SC 125 (Beech Island)	Aiken SO (monitor)	Aiken SO (monitor)
3-2	US 278 @ SC 302	Aiken SO (1)	Aiken SO (2)
3-3	US 278 @ SC 19	SC Highway Patrol (1)	SC Highway Patrol (2)
3-4	US 1 @ SC 125	Aiken SO (1)	Aiken SO (2)
3-5	US 78 @ SC 118 Bypass	SC Highway Patrol (1) Aiken SO (1)	SC Highway Patrol (2) Aiken SO (2)
3-6	SC 302 @ SC 118 Bypass	SC Highway Patrol (1) Aiken SO (1)	SC Highway Patrol (2) Aiken SO (2)
3-7	SC 118 Bypass @ Beaufort St.	Aiken Public Safety (monitor)	Aiken Public Safety (monitor)
3-8	SC 118 Bypass @ Wire Rd.	Aiken SO (monitor)	Aiken SO (monitor)
3-9	US 1 @ SC 118 Bypass	Aiken Public Safety (1)	Aiken Public Safety (2)
AGENCY PERSONNEL TOTALS		Aiken SO (4) SCHP(3) Aiken Public Safety (1)	Aiken SO (8) SCHP(6) Aiken Public Safety (2)
ALLENDALE COUNTY			
5-1	US 301 @ SC 3	SC Highway Patrol (1) Allendale SO (1) SC National Guard (4)	SC Highway Patrol (2) Allendale SO (2) SC National Guard (8)
5-2	US 278 @ US 321	Fairfax PD (1)	Fairfax PD (2)
5-3	US 278/US 301 @ SC 125	Allendale PD (1)	Allendale PD (2)

Traffic Control Point Staffing (normal lane usage)			
County	TCP Location	Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
ALLENDALE COUNTY (continued)			
5-4	US 278/US 301 @ S 81	Allendale PD (1)	Allendale PD (2)
5-5	SC 3 @ SC 125	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
AGENCY PERSONNEL TOTALS		SCHP (2) Allendale SO (1) Allendale PD (2) Fairfax PD (1) SCNG (6)	SCHP (4) Allendale SO (2) Allendale PD (4) Fairfax PD (2) SCNG (12)
BAMBERG COUNTY			
9-1	US 78 @ SC 61	Bamberg SO (1) SC Highway Patrol (1)	Bamberg SO (2) SC Highway Patrol (2)
9-2	US 78 @ US 321	Denmark PD (1)	Denmark PD (2)
9-3	US 301 @ SC 64 (Barricade)	SC Highway Patrol (1) SC National Guard (3) (Barricade)	SC Highway Patrol (2) SC National Guard (6) (Barricade)
9-4	US 321 @ SC 64	SC Highway Patrol (1) Bamberg SO (1) SC National Guard (2)	SC Highway Patrol (2) Bamberg SO (2) SC National Guard (4)
9-5	US 21 @ SC 61	SC Highway Patrol (1) Bamberg SO (1) SC National Guard (2)	SC Highway Patrol (2) Bamberg SO (2) SC National Guard (4)
9-6	US 78 @ US 301	Bamberg PD (2)	Bamberg PD (4)
9-7	US 601 @ SC 64	Erhardt PD (1) Bamberg SO (1)	Erhardt PD (2) Bamberg SO (2)
AGENCY PERSONNEL TOTALS		Bamberg SO (4) SCHP (4) Denmark PD (1) SCNG (7) Bamberg PD (2) Erhardt PD (1)	Bamberg SO (8) SCHP (8) Denmark PD (2) SCNG (14) Bamberg PD (4) Erhardt PD (2)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
<b>BARNWELL COUNTY</b>			
11-1	US 278 @ SC 39	Barnwell SO (monitor)	Barnwell SO (monitor)
11-2	US 278 @ SC 3	Barnwell PD (1)	Barnwell PD (2)
11-3	US 278 @ SC 70	Barnwell PD (1)	Barnwell PD (2)
11-4	US 278 @ SC 64	Barnwell PD (1) SC Highway Patrol (1) SC National Guard (2)	Barnwell PD (2) SC Highway Patrol (2) SC National Guard (4)
11-5	SC 64 @ SC 3	Barnwell PD (2)	Barnwell PD (2)
11-6	SC 64 @ SC 70	Barnwell PD (2)	Barnwell PD (2)
11-7	US 278 @ SC 37	SC Highway Patrol (1) <b>(Barricade)</b>	SC Highway Patrol (2) <b>(Barricade)</b>
11-8	US 78 @ SC 3	Blackville PD (1)	Blackville PD (2)
11-9	US 78 @ SC 37	SC Highway Patrol (monitor)	SC Highway Patrol (monitor)
11-10	US 78 @ SC 39 N	Williston PD (1)	Williston PD (2)
11-11	US 78 @ SC 39 S	Williston PD (1)	Williston PD (2)
<b>AGENCY PERSONNEL TOTALS</b>		Barnwell PD (7) SCHP (2) SCNG (2) Blackville PD (1) Williston PD (2)	Barnwell PD (10) SCHP (4) SCNG (4) Blackville PD (2) Williston PD (4)
<b>BEAUFORT COUNTY</b>			
<u>North of Broad River</u>			
13-1	Sea Island Pkwy. @ Martin Luther King Dr.	Beaufort SO (2)	Beaufort SO (4)
13-2	Polawana Rd. @ Sea Island Pkwy.	Beaufort SO (2)	Beaufort SO (4)
13-3	US 21 @ SC 802	Beaufort SO (4)	Beaufort SO (8)
13-4	Lady's Island Dr. @ Meridian Rd. & Island Causeway @ Lady's Island Dr.	Beaufort SO (3)	Beaufort SO (6)
13-5	SC 802 @ Ribaut Rd.	Beaufort SO (4)	Beaufort SO (8)
13-6	Ribaut Rd. @ Mossy Oaks	Port Royal PD (1)	Port Royal PD (2)
13-7	Ribaut Rd. @ Parris Ave.	Port Royal PD (1)	Port Royal PD (2)
13-8	SC 802 @ Parris Island	Parris Island MP (2)	Parris Island MP (4)
13-9	SC 280 (Robert Smalls Pkwy.) @ SC 802 *Barricade turn to SC 802	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)



Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
BEAUFORT COUNTY(Continued)			
13-12	SC 280 @ SC 170	Beaufort PD (2)	Beaufort PD (4)
13-13	SC 802 @ SC 170 (Broad River Bridge) BARRICADES	Beaufort SO (4) One shift only	Beaufort SO (4) One shift only
13-14 (N/R)	US 21 @ SC 280 (Begin Lane Reversal)	SC Highway Patrol (2) SC National Guard (2)	SC Highway Patrol (4) SC National Guard (4)
13-15 (N/R)	US 21 @ SC 116	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-16 (N/R)	US 21 @ Grays Hill	Beaufort SO (4)	Beaufort SO (8)
13-17	US 17 (Gardens Corner) @ US 21	SC Highway Patrol (2) SC National Guard (4)	SC Highway Patrol (4) SC National Guard (8)
13-18	US 17 @ Sheldon Church Rd.	SC Highway Patrol (1)	SC Highway Patrol (2)
13-19	US 17Alt @ US 21 (Pocotaligo)	Beaufort SO (4)	Beaufort SO (8)
13-20	Bay St @ Carteret St.	Beaufort PD (1)	Beaufort PD (2)
13-21	Boundary St @ Charles St.	Beaufort PD (monitor)	Beaufort PD (monitor)
13-22	Ribaut Rd @ Boundary St.	Beaufort PD (1)	Beaufort PD (2)
13-23	US 21 @ SC 170	Beaufort PD (2)	Beaufort PD (4)
13-24	SC 280 @ S 20 (Broad River Blvd.)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-25	SC 280 @ Mink Point Rd.	SC Highway Patrol (1) SC National Guard (2) One Shift Only	SC Highway Patrol (1) SC National Guard (2) One Shift Only
Hilton Head			
13-26	Coligny Plaza @ Traffic Circle	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-27	Pope Ave @ Cordillo Pkwy.	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-28	US 278 @ Sea Pines Circle	Beaufort SO (2) SC National Guard (4)	Beaufort SO (4) SC National Guard (8)
13-29	US 278 @ Arrow Rd.	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
BEAUFORT COUNTY(Continued)			
13-30	US 278 @ Shipyard	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-31	US 278 @ Long Cove Club	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-32	US 278 @ Palmetto Dunes	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-33	US 278 @ Folly Field	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-34	US 278 @ Port Royal Plantation	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-35	US 278 @ Mathews Dr.	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-36	US 278 @ Beach City Rd.	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-37	US 278 @ Indigo Run / Hilton Head Plantation	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-38	Arrow Rd. @ Target Rd.	Beaufort SO (1)	Beaufort SO (2)
13-39	Archer Rd. @ Palmetto Bay Rd.	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-40	Target Rd. @ Palmetto Bay Rd.	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-41	Point Comfort Rd. @ Palmetto Bay Rd.	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-42	Marshland Rd. @ Cross Island Pkwy.	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-43	Spanish Wells Rd. @ Marshland Rd.	Beaufort SO (1)	Beaufort SO (2)
13-44	Cross Island Pkwy. @ ramp from Marshland Rd.	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-45 (N/R)	US 278 @ Spanish Wells Rd./Cross Island Pkwy.	SC Highway Patrol (5) SC National Guard (4)	SC Highway Patrol (10) SC National Guard (8)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
BEAUFORT COUNTY(Continued)			
13-46 (N/R)	US 278 @ Squire Pope Rd.	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-47 (N/R)	US 278 @ Jenkins Rd.	SC Highway Patrol (1) SC National Guard (1) One Shift Only	SC Highway Patrol (1) SC National Guard (1) One Shift Only
13-48 (N/R)	US 278 @ Windmill Harbor	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-49 (N/R)	US 278 @ Blue Herron Point	SC Highway Patrol (1) SC National Guard (1) One Shift Only	SC Highway Patrol (1) SC National Guard (1) One Shift Only
13-50 (N/R)	US 278 @ Buckingham Landing Rd.	SC Highway Patrol (1) SC National Guard (1) One Shift Only	SC Highway Patrol (1) SC National Guard (1) One Shift Only
13-51 (N/R)	US 278 @ The Gatherings	SC Highway Patrol (2) SC National Guard (3)	SC Highway Patrol (3) SC National Guard (6)
13-52 (N/R)	US 278 @ Moss Creek / Bridge Center	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-53 (N/R)	US 278 @ Tanger Outlet II @ Old South Econo Storage	SC Highway Patrol (1) SC National Guard (2) One Shift Only	SC Highway Patrol (1) SC National Guard (2) One Shift Only
13-54 (N/R)	US 278 @ Hilton Head National	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-55 (N/R)	US 278 @ Colleton River Plantation (Lowes)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-56 (N/R)	US 278 Heritage Lakes @ Malphrus Dr.	SC Highway Patrol (2) SC National Guard (2)	SC Highway Patrol (3) SC National Guard (4)
13-57 (N/R)	US 278 @ Sawmill Creek Rd. /Tanger Outlet I	SC Highway Patrol (2) SC National Guard (4)	SC Highway Patrol (3) SC National Guard (8)
13-58 (N/R)	US 278 @ Burnt Church Rd.	SC Highway Patrol (1) SC National Guard (4) One Shift Only	SC Highway Patrol (1) SC National Guard (4) One Shift Only
13-59 (N/R)	US 278 @ Home Depot Entrance	SC Highway Patrol (2) SC National Guard (3)	SC Highway Patrol (3) SC National Guard (6)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
BEAUFORT COUNTY(Continued)			
13-60 (N/R)	US 278 @ Kitties Crossing (shopping center)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-61 (N/R)	US 278 @ SC 46	SC Highway Patrol (2) SC National Guard (4)	SC Highway Patrol (3) SC National Guard (8)
13-62 (N/R)	US 278 @ Simmonsville Rd.	SC Highway Patrol (1) SC National Guard (2) Bluffton PD (1)	SC Highway Patrol (2) SC National Guard (4) Bluffton PD (2)
13-63 (N/R)	US 278 @ S 29 (Buck Island Rd.)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-64 (N/R)	US 278 @ Belfair Plantation	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-65 (N/R)	US 278 @ Rose Hill Plantation	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-66 (N/R)	US 278 @ Buck Walter Pkwy./Berkeley Hall	SC Highway Patrol (1) SC National Guard (2) One Shift Only	SC Highway Patrol (1) SC National Guard (2) One Shift Only
13-67 (N/R)	US 278 @ SC 170 @ McGarveys	SC Highway Patrol (2) SC National Guard (4)	SC Highway Patrol (4) SC National Guard (8)
12-68 (N/R)	US 278 @ Okatie Center (Beaufort County)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-69 (N/R)	SC 170 @ Gibblet Rd.	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-70 (N/R)	US 278 @ Sun City	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-71	Palmetto Bluff Rd @ Riverside Dr.	Beaufort SO (Monitor)	Beaufort SO (Monitor)
Bluffton - SC 46 (Maye River Rd)			
13-72	SC 46 @ Burnt Church Rd.	Beaufort SO (1)	Beaufort SO (2)
13-73	SC 46 @ Bluffton Rd./Maye River Rd.	Bluffton PD (1)	Bluffton PD (1)
13-74	SC 46 @ Simmonsville Rd.	SC Highway Patrol (2) SC National Guard (2)	SC Highway Patrol (4) SC National Guard (4)
13-75 (N/R)	SC 46 @ Buck Walter Pkwy.	SC Highway Patrol (2) SC National Guard (2) One Shift Only	SC Highway Patrol (2) SC National Guard (2) One Shift Only

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
BEAUFORT COUNTY(Continued)			
13-76	SC 46 @ Bartons Run Dr.	Beaufort SO (1)	Beaufort SO (2)
13-77	SC 46 @ Hampton Hall	Beaufort SO (1)	Beaufort SO (2)
13-78	SC 46 @ Rose Dhu Creek Plantation	Beaufort SO (Monitor)	Beaufort SO (Monitor)
13-79	SC 46 @ Old Miller Rd.	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-80 (N/R)	SC 46 @ SC 170 (Traffic Circle)	SC Highway Patrol (3) SC National Guard (3)	SC Highway Patrol (6) SC National Guard (6)
13-81	SC 46 @ New Riverside Heritage	Beaufort SO (1)	Beaufort SO (2)
Bluffton - (Bluffton Pkwy)			
13-82	Bluffton Pkwy. @ Burnt Church/Fern Lakes	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-83	Bluffton Pkwy. @ Burnt Church/Lake Lindon	Beaufort SO (1)	Beaufort SO (2)
13-84	Bluffton Pkwy. @ Burnt Church/Bluffton Pkwy	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-85	Bluffton Pkwy. @ Bridge Point	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-86	Bluffton Pkwy. @ The Lakes at Myrtle Pointe	Beaufort SO (1)	Beaufort SO (2)
13-87	Bluffton Pkwy. @ SC 46 (Bluffton Rd.)	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-88	Bluffton Pkwy. @ Goethe Rd.	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-89	Bluffton Pkwy. @ Red Cepan Rd.	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-90	Bluffton Pkwy. @ Simmonsville Rd.	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-91	Simmonsville Rd. @ Simmons Cay	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-92	Simmonsville Rd. @ Baywood	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-93	Simmonsville Rd. @ Bluffton House	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-94	Buck Island Rd. @ Windtree	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
BEAUFORT COUNTY(Continued)			
13-95	Buck Island Rd. @ Old Carolina	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-96	Buck Island Rd. @ Westbury Park	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-97	Bluffton Pkwy. @ Buck Island Rd	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-98	Bluffton Pkwy. @ Pine Crest Way	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-99	Bluffton Pkwy. @ Pine Crest	Bluffton PD (1)	Bluffton PD (1)
13-100	Bluffton Pkwy. @ Buckwalter South (Hampton Hall)	Bluffton PD (1)	Bluffton PD (1)
13-101	Bluffton Pkwy. @ Buckwalter North (The Townes)	Beaufort SO (1) SC National Guard (4)	Beaufort SO (2) SC National Guard (8)
13-102	Bluffton Pkwy. @ Hampton Pkwy. (NEW RD.)	Bluffton PD (1)	Bluffton PD (1)
13-103	SC 170 @ Sun City	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
13-104	Bluffton Pkwy. @ SC 170 (Okatie Highway)	Beaufort SO (1) SC National Guard (3)	Beaufort SO (2) SC National Guard (6)
Bluffton - (Buckwalter Pkwy)			
13-105	Buckwalter Pkwy. @ Woodbridge (Parkside Rd.)	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-106	Buckwalter Pkwy. @ Sandy Pointe (Lake Pointe Dr.)	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-107	Buckwalter Pkwy. @ Shell Hall	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-108	Buckwalter Pkwy. @ McCracken Cir. North	Bluffton PD (2) One Shift Only	Bluffton PD (2) One Shift Only
13-109	Buckwalter Pkwy. @ McCracken Cir. South (The Farm)	Bluffton PD (2) One Shift Only	Bluffton PD (2) One Shift Only
13-110	Buckwalter Pkwy. @ Old Bridge Dr. (The Farm)	Bluffton PD (2) One Shift Only	Bluffton PD (2) One Shift Only
Bluffton – SC 170 (Okatie Highway)			
13-111	SC 170 @ River Bend	Beaufort SO (1) SC National Guard (2)	Beaufort SO (2) SC National Guard (4)
13-112	SC 170 @ Rivers End	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
<b>BEAUFORT COUNTY(Continued)</b>			
13-113	SC 170 @ S 442 (Argent Way)	Beaufort SO (1) SC Highway Patrol (1) SC National Guard (2)	Beaufort SO (2) SC Highway Patrol (2) SC National Guard (4)
13-114	SC 170 @ Oldfield Plantation	Beaufort SO (1) SC National Guard (1)	Beaufort SO (2) SC National Guard (2)
13-115 (N/R)	SC 170 @ SC 462 @ The Tech School	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
13-116	SC 170 @ S 54 (Snake Rd. & Callawassie Rd.)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
PERSONNEL TOTALS (N/R) – These TCP's are staffed during Normal Lane Usage and during the U.S. 278 and/or U.S. 21 Lane Reversal Plans. SCHP and/or SCNG personnel totals remain the same for the U.S. 278 TCP's. During reversal operations on U.S. 21, SCHP personnel totals will remain consistent with Normal Lane Usage numbers; however, additional SCNG personnel as well as SLED/SCDNR personnel are contained in the U.S. 21 Reversal Plans.		SC Highway Patrol (52) SC National Guard (166) Beaufort SO (82) Parris Island MP (2) Port Royal PD (2) Beaufort PD (6) Bluffton PD (11)	SC Highway Patrol (90) SC National Guard (317) Beaufort SO (160) Parris Island MP (4) Port Royal PD (4) Beaufort PD (12) Bluffton PD (12)
<b>COLLETON COUNTY</b>			
29-1	US 21 @ 17 Alt.	Colleton SO (1)	Colleton SO (2)
29-2	I-95 @ US 21	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
29-3	US 17 @ SC 64 (Jacksonboro, SC)	Colleton SO (1)	Colleton SO (2)
29-4	US 17 Alt @ Robertson Blvd.	Colleton SO (1)	Colleton SO (2)
29-5	I-95 @ SC 64	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
29-6	I-95 @ SC 61	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
29-7	SC 64 @ Robertson Blvd.	Colleton SO (1)	Colleton SO (2)
29-8	US 15 @ Robertson Blvd.	Walterboro PD (2)	Walterboro PD (4)
29-9	Robertson Blvd. @ Bells Hwy.	Walterboro PD (2)	Walterboro PD (4)
29-10	US 15 @ SC 61	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
29-11	US 21 @ SC 64	Colleton SO (1)	Colleton SO (2)
29-12	US 21 @ SC 63	Colleton SO (1)	Colleton SO (2)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
<b>COLLETON COUNTY(Continued)</b>			
29-13	US 17 @ SC 303	Colleton SO (2)	Colleton SO (4)
29-14	SC 303 @ Rivers St.	Colleton SO (2)	Colleton SO (4)
29-15	SC 303 @ Jefferies Blvd.	Walterboro PD (2)	Walterboro PD (4)
29-16	SC 303 @ Ritter Rd.	Colleton SO (1)	Colleton SO (2)
29-17	SC 303 @ Clover Hill Rd.	Colleton SO (1)	Colleton SO (2)
29-18	US 17Alt @ SC 63	Walterboro PD (2)	Walterboro PD (4)
29-19	I-95 @ SC 63	SC Highway Patrol (2) SC National Guard (2)	SC Highway Patrol (4) SC National Guard (4)
29-20	SC 174 @ Palmetto Blvd. (Edisto Beach)	Colleton SO (1) Edisto PD (1)	Colleton SO (1) Edisto PD (2)
29-21	US 17Alt. @ SC 651 (Rehoboth Rd.)	Cottageville PD (1)	Cottageville PD (2)
29-22	SC 61 @ SC 651 (Rehoboth Rd.)	Cottageville PD (1)	Cottageville PD (2)
PERSONNEL TOTALS		SC Highway Patrol (6) SC National Guard (10) Colleton SO (12) Walterboro PD (8) Edisto PD (1) Cottageville PD (2)	SC Highway Patrol (12) SC National Guard (20) Colleton SO (23) Walterboro PD (16) Edisto PD (2) Cottageville PD (4)
<b>HAMPTON COUNTY</b>			
49-1	US 321 @ SC 119	SC Highway Patrol (1) Hampton SO (1) SC National Guard (1)	SC Highway Patrol (2) Hampton SO (2) SC National Guard (2)
49-2	US 321 @ SC 333	Hampton SO (1)	Hampton SO (2)
49-3	US 321 @ SC 3	Estill PD (1) <b>(Barricade)</b>	Estill PD (2) <b>(Barricade)</b>
49-4	SC 3 @ S 19	SC Highway Patrol (1) SC National Guard (1)	SC Highway Patrol (2) SC National Guard (2)
49-5	US 278 @ SC 68	SC Highway Patrol (1) SC National Guard (1)	SC Highway Patrol (2) SC National Guard (2)
49-6	US 278 @ SC 63	Varnville PD (1)	Varnville PD (2)
49-7	US 278 @ US 601	Hampton PD (1)	Hampton PD (2)
49-8	US 278 @ SC 363	Hampton PD (1)	Hampton PD (2)



Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
HAMPTON COUNTY(Continued)			
49-9	I-95 @ SC 68	Hampton SO (1)	Hampton SO (2)
49-10	US 17Alt @ Connelly Street	Yemassee PD (1)	Yemassee PD (2)
49-11	SC 68 @ Connelly Street	Yemassee PD (1)	Yemassee PD (2)
<b>AGENCY PERSONNEL TOTALS</b>		SCHP (3) Hampton SO (3) Estill PD (1) SCNG (3) Varnville PD (1) Hampton PD (2) Yemassee PD (2)	SCHP (6) Hampton SO (6) Estill PD (2) SCNG (6) Varnville PD (2) Hampton PD (4) Yemassee PD (4)
JASPER COUNTY			
53-01	US 17 @ SC 46	Hardeeville PD (1)	Hardeeville PD (2)
53-02	US 321 @ SC 46	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
53-03 (N/R)	US 278 @ New River Pkwy.	SC Highway Patrol (1) SC National Guard (1)	SC Highway Patrol (2) SC National Guard (2)
53-04 (N/R)	US 278 @ S 141 (Argent Blvd.)	SC Highway Patrol (2) SC National Guard (3)	SC Highway Patrol (3) SC National Guard (6)
53-05	SC 462 @ Old House	SC Highway Patrol (monitor)	SC Highway Patrol (monitor)
53-06	US 278 @ SC 336 in Ridgeland	Ridgeland PD (1)	Ridgeland PD (2)
53-07	SC 46 @ S 421 (I-95 Frontage Rd.)	Hardeeville PD (1)	Hardeeville PD (2)
53-08 (N/R)	US 278 @ USC Beaufort	SC Highway Patrol (2) SC National Guard (4)	SC Highway Patrol (4) SC National Guard (8)
53-09 (N/R)	SC 462 @ S 54 (Snake Rd.)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
53-10	SC 462 @ SC 336 (Coolers Store)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
53-11	US 278 @ US 17	SC Highway Patrol (2) SC National Guard (3)	SC Highway Patrol (3) SC National Guard (6)
53-12	US 278 @ SC 462	SC Highway Patrol (1)	SC Highway Patrol (2)

Traffic Control Point Staffing (normal lane usage)			
TCP Location		Responsible Agency	
		12 Hr Staffing	24 Hr Staffing
JASPER COUNTY(Continued)			
53-13	I-95 @ Exit 28	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
53-14	I-95 @ Exit 33 (Point South)	SC Highway Patrol (1) SC National Guard (2)	SC Highway Patrol (2) SC National Guard (4)
53-15 (N/R)	I-95 Exit 8 @ US 278	SC Highway Patrol (2) SC National Guard (4)	SC Highway Patrol (4) SC National Guard (8)
<b>PERSONNEL TOTALS</b> <b>(N/R)</b> – These TCP's are staffed during Normal Lane Usage and during the U.S. 278 Lane Reversal Plans. SCHP and/or SCNG personnel totals remain the same for either operation.		SC Highway Patrol (15) SC National Guard (25) Hardeeville PD (2) Ridgeland PD (1)	SC Highway Patrol (28) SC National Guard (50) Hardeeville PD (4) Ridgeland PD (2)

**ATTACHMENT D: U.S. HIGHWAY 21 COUNTER FLOW (Three Lane)****I. EXECUTION**

Implementation of the U.S. 21 Counter Flow Plan beginning with the taper of the traffic lanes on S.C. 280 approaching the intersection of U.S. 21 into one lane and all S.C. 280 traffic being directed onto the reversed side (southbound) of U.S. 21. Law enforcement personnel at this intersection will facilitate this concept. Normal southbound (inbound) traffic on U.S. 21 traveling toward downtown Beaufort will be alternated with traffic being directed to the reversed lane of U.S. 21 from S.C. 280.

- A. Additionally, no left turns from the normal traffic lanes on U.S. 21 northbound (outbound) will be allowed onto S.C. 280. This measure will ensure no traffic interruptions for the northbound traffic on U.S. 21 for the duration of this counter flow plan. See Diagram #1.
- B. Traffic approaching Gardens Corner in the normal (northbound) right lane will be directed onto U.S. 17 North. This traffic will continue to S.C. 303 to Walterboro. Traffic in the normal (northbound) left lane will utilize a paved median crossover and turn left onto the right lane of U.S. 17 southbound. This traffic will be alternated with traffic traveling on U.S. 17 from the Walterboro side of Gardens Corner toward I-95 that will be tapered to one lane.

As necessary, northbound traffic on U.S. 17 from the direction of Point South will be allowed to continue north or south on U.S. 21 towards Beaufort. See Diagram #2.

- C. Traffic cones will be placed along the center line of the southbound lanes of U.S. 21 to establish a barrier between the two opposing lanes of travel. Upon notification to execute this plan, an immediate one lane coned taper for traffic attempting to access U.S. 21 southbound (inbound) from U.S. 17 will be necessary. This design will create one lane inbound (right lane) on U.S. 21 toward Beaufort. This design is necessary to create a barrier between opposing traffic once the counter flow is implemented. Traffic in the left (inside) southbound lane of U.S. 21 would be flushed to the intersection of U.S. 21 & S.C. 280 prior to the execution of this plan.
- D. Wherever the roadway of U.S. 21 is divided by a paved median, the SCDOT will place cones to prevent vehicles from attempting to move from the reversed lanes to the normal northbound lane of U.S. 21. In other areas where U.S. 21 is divided by an earth median, SCDOT will place cones or drums in the median crossovers to prevent vehicles from crossing all lanes of U.S. 21.
- E. In order to facilitate the constant movement of traffic, all vehicles approaching U.S. 21 on the normal northbound (outbound) lanes and private driveways will be required to turn right. SCDOT will post "No Left Turn" signs at county roads. Traffic approaching U.S. 21 from the southbound (inbound) side of the roadway will be allowed to travel east or west only within the confines of the southbound U.S. 21 lanes.

- F. Each traffic control point has sufficient law enforcement/National Guard staffing to provide for control of vehicles approaching U.S. 21 on State and county roads. This additional staffing at each point can/will deploy to points along the shoulder of U.S. 21 wherever vehicles are likely to approach U.S. 21, and assist those motorists with entering the two-way traffic in the southbound lanes (reversed lanes).
- G. SCDPS will utilize two 4-wheel drive vehicles to respond to incidents that may occur during the evacuation. Personnel will clear any traffic obstructions that could impede the consistent flow of evacuating traffic. These vehicles will be equipped with 800 MHz radios, and personnel will remain in contact with SCDPS supervisory personnel, the local EOC, and the SEOC, and report any incidents as needed.
- H. Upon notification/verification from SCDOT that all necessary traffic safety devices are in place, traffic flushing procedures would be verified. A SCDPS officer will travel the length of the counter flow (approximately 15 miles) to verify the traffic on U.S. 21 inbound in the normal left lane has reached the intersection of U.S. 21 & S.C. 280. Redundant verification could occur utilizing the assigned aircraft to visually verify that no attempts to enter the confines of the southbound lanes in the wrong direction have occurred. The SCDPS officer will notify the local EOC (Beaufort) and inform the ESF-16 staff that verification procedures have been completed. This information will be relayed to the SCHP Beaufort Officer in Charge (OIC) and SCDOT Beaufort Command Personnel.
- I. This plan is designed to be implemented in phases as directed by the Governor based on all relevant factors. (i.e., size of storm, length of evacuation, and permanent/tourist population.) The possibility exists to begin a mandatory evacuation utilizing only the two (2) northbound lanes of U.S. 21, and to escalate to the three (3) lane Operations Plan as directed. However, circumstances may necessitate beginning with the three (3) lane Operations Plan, and escalating to the total four (4) lane configuration during an event. Therefore, all assets should be pre-staged in the event it becomes necessary to implement this plan during the voluntary/mandatory evacuation should traffic volumes and participation rates increase during this phase.
- J. Upon notification from the ESF-16 OIC (Director, Colonel, or designee), the order to implement this plan would be given. Verification to the SEOC via telephone and 800 MHz radios that this plan has been executed would be received. . This information will be provided to SCDOT personnel in the SEOC for redundant verification.

## II. STAFFING

Traffic Control Point Staffing (counter flow lane usage)		
County/Id	TCP Location	Responsible Agency (24 Hr Staffing)
<b>BEAUFORT COUNTY</b>		
1	US-21 & SC-280	Beaufort PD (4) SC Highway Patrol (2) SC National Guard (8)
2	US 21 & Shell Station (Salt Creek Drive & Toyota dealership)	SLED/SCDNR (2) SC National Guard (4)
3	US 21 & S 265 (Roseida Rd.)	SLED/SCDNR (2) SC National Guard (4)
4	US 21 & SC-116 (Block ramp from SC-116 to US-21)	SLED/SCDNR (4) SC National Guard (8)
5	US 21 & S 86 (Shanklin Rd.)	SLED/SCDNR (2) SC National Guard (4)
6	US 21 & Enmark (Fuel Vendor)	SLED/SCDNR (2) SC National Guard (2)
7	US 21 & S 543 (Parker Dr. Industrial Park)	SLED/SCDNR (2) SC National Guard (2)
8	US 21 & S 520 (Poppy Hill North)	SLED/SCDNR (2) SC National Guard (2)
9	US 21 & S 520 (Poppy Hill South)	SLED/SCDNR (2) SC National Guard (2)
10	US 21 & S 71 Clarendon Rd. (Gray Hills)	SLED/SCDNR (2) SC National Guard (4)
11	US 21 & Martin Road	SLED/SCDNR (2) SC National Guard (2)
12	US 21 & Seabrook Road North	SLED/SCDNR (2) SC National Guard (2)
13	US 21 & Seabrook Road South	SLED/SCDNR (2) SC National Guard (2)
14	US 21 & Dean Hill Road	SLED/SCDNR (2) SC National Guard (2)
Dirt Roads		
	Glass Road	SLED / SCDNR (2) SCNG (2) (Roving Patrols)
	Roberts Lane	

Traffic Control Point Staffing (counter flow lane usage)		
County/Id	TCP Location	Responsible Agency (24 Hr Staffing)
<b>BEAUFORT COUNTY (Continued)</b>		
	Jonesfield Road	
	Huspah Creek Road	
	Old Ranson Acres	
	Haynes	
	Jasmine Hall	
	River Oaks	
	Seigler Road	
12 Private Drives		
	<b>Total</b>	SLED / SCDNR      30 SCNG                      50

### III. EQUIPMENT

SCDOT will provide approximately 1,500 cones and/or traffic drums wherever needed and, upon availability, changeable message signs. Additional assets would be staged to meet mission requirements.

Additionally, SCDOT maintains a current list of resources needed to support/implement this plan. These resources will be pre-staged in advance of an order to execute this plan and steps taken to ensure all objectives are met prior to implementation.

### IV. DIAGRAMS

See diagrams illustrating traffic flow patterns beginning next page.

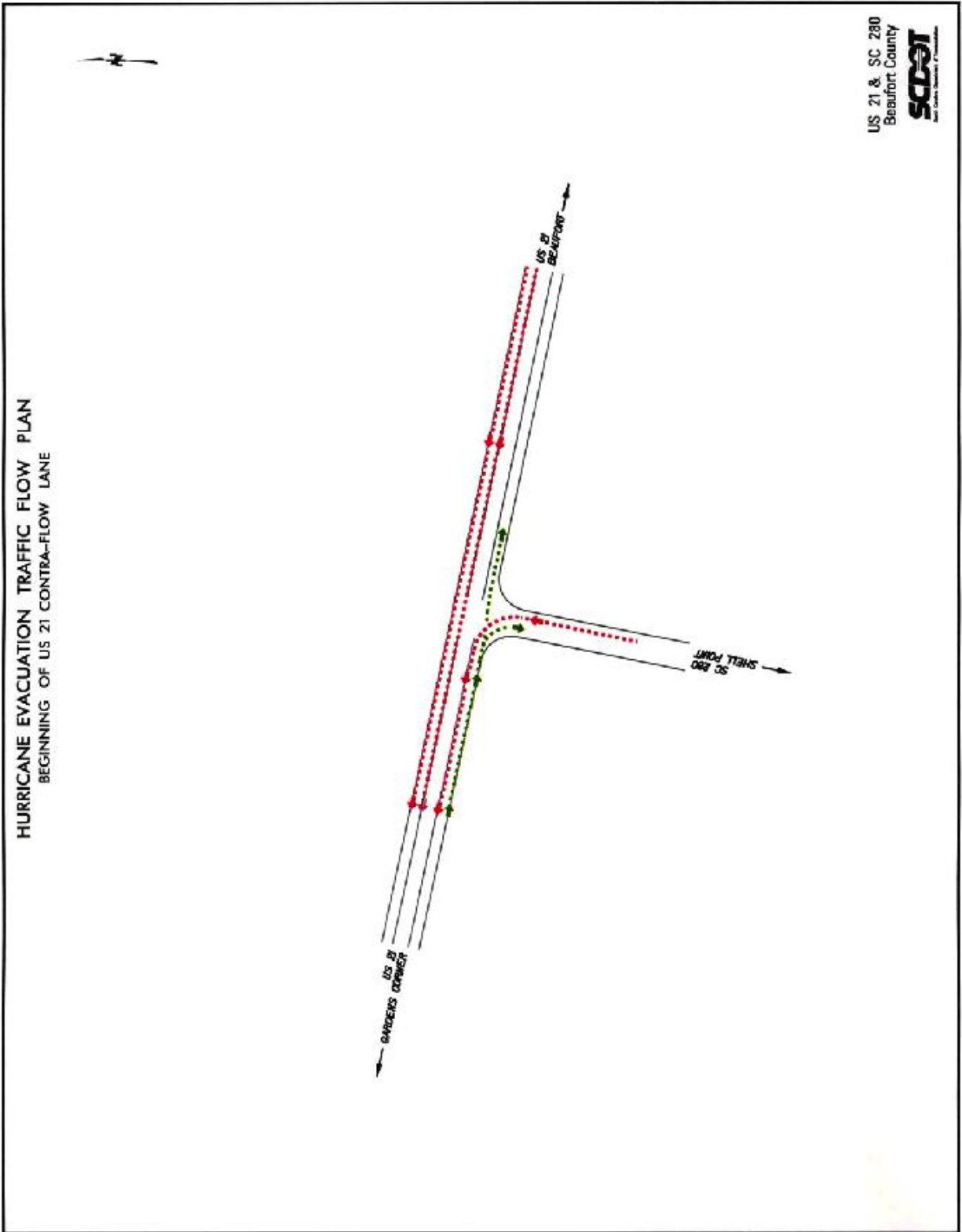


Diagram 1

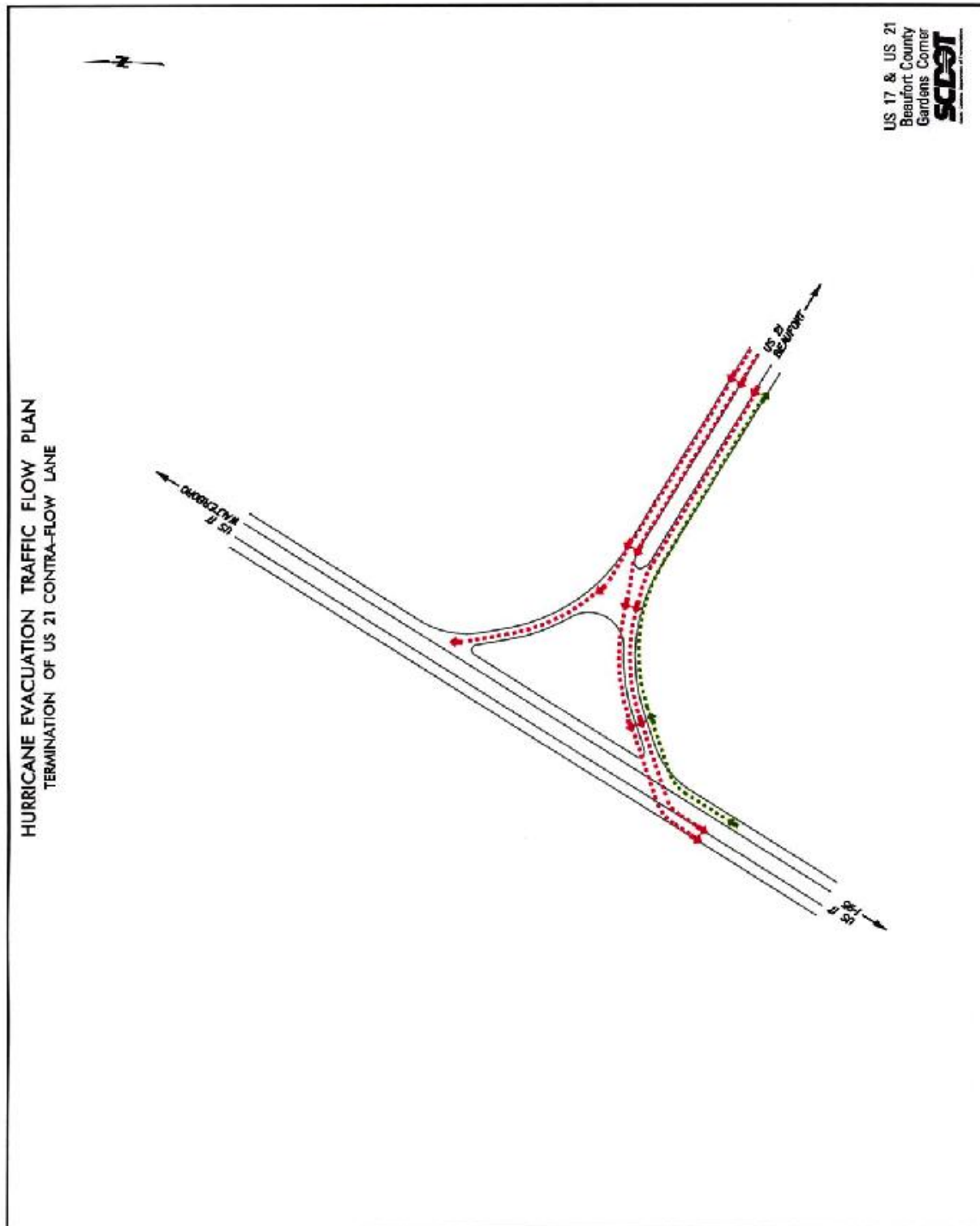


Diagram 2



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**ATTACHMENT E: U.S. HIGHWAY 21 REVERSAL (Four Lane)****I. EXECUTION**

- A. In the event this plan is implemented, several design changes will be mandated. Additional criteria to execute this plan would be based on a Governor's Executive Order. Local and State emergency management officials would base this Order on current traffic conditions, storm conditions, or other credible recommendations.
- B. Law enforcement and SCDOT pre-positioned assets will already be available to accommodate the counter flow (three-lane plan). These assets, along with additional personnel, would be utilized to complete this process. To implement a contra flow conversion, additional steps would be implemented.
- C. This contra flow plan would begin at the intersection of U.S. 21/S.C. 280 in the city of Beaufort, and end at the intersection of U.S. 21/U.S. 17 in Gardens Corner. To implement this contra flow plan, traffic on S.C. 280 approaching U.S. 21 would be directed to the reversed lanes of U.S. 21 (southbound lanes). Law enforcement personnel at this intersection would facilitate a double left turn onto U.S. 21 (southbound lane) to form a continuous two-lane turn operation. Traffic on the normal (northbound lanes) would be unaffected by this concept as it will continue uninterrupted for the duration of the contra flow plan. Additionally, no left turns from U.S. 21 northbound will be permissible. (There will be no left turns from U.S. 21 to S.C. 280 during the counter flow operation.) (See Diagram #1.)
- D. Traffic approaching Gardens Corner in the normal northbound lanes will be directed in the following manner: The right lane will exit onto U.S. 17 northbound toward Walterboro. The left lane of the normal northbound lane would be directed through a paved crossover to turn left onto U.S. 17 southbound. Traffic on the reversed lanes would be tapered into one lane and turn onto U.S. 17 southbound where it will be directed to I-95 at Point South. Additionally, traffic on U.S. 17 southbound approaching Gardens Corner would be alternated with the evacuation traffic on U.S. 21. Both lanes of U.S. 21 turning onto U.S. 17 South toward I-95 will have a sufficient amount of cones to facilitate this maneuver as to prevent vehicles from changing lanes until traffic has cleared this intersection. (See Diagram #2.)
- E. To implement this plan, traffic diversions and traffic flushing procedures by law enforcement personnel will be necessary. To ensure all southbound traffic on U.S. 21 has cleared Gardens Corner, this flushing procedure would begin at U.S. 21 & U.S. 17 in Gardens Corner and continue to U.S. 21 & S.C. 280 in Beaufort. To facilitate the flushing of traffic on U.S. 21, all traffic at the intersection of S.C. 280 on S.C. 280 will be stopped until the flushed traffic cleared this intersection.
- F. In order to facilitate the constant movement of traffic, all vehicles approaching U.S. 21 from the right side of the roadway will be required to turn right. Traffic approaching U.S. 21 from the left side of the roadway will be required to turn left only. SCDOT will place "No Right Turn Signs" at county roads. Each traffic control

post (TCP) will have sufficient law enforcement and soldiers to assist motorists that need to enter the roadway network from intersections on the southbound side.

- G. SCDPS will utilize two (2) 4-wheel drive vehicles to respond to incidents that may occur during the duration of the evacuation. Personnel will clear any traffic obstructions that could impede the consistent flow of evacuating traffic. These vehicles will be equipped with 800 MHz radios, and personnel will remain in contact with the SCDPS supervisory personnel, the local EOC, and SEOC staff to report any incidents as needed.
- H. Upon notification/verification from SCDOT that all necessary traffic safety devices are in place, traffic flushing procedures would be verified. A SCDPS officer will travel the length of the counter flow (approximately 15 miles) to verify the traffic on U.S. 21 inbound in the normal left lane has reached the intersection of U.S. 21 & S.C. 280. Redundant verification could occur utilizing the assigned aircraft to visually verify that no attempts to enter the confines of the southbound lanes in the wrong direction have occurred. The SCDPS officer will notify the local EOC (Beaufort) and inform ESF-16 staff that verification procedures have been completed. This information will be relayed to the SCHP Beaufort OIC and SCDOT Beaufort Command Personnel.
  - 1. In order for this plan to be consistent with procedures currently in place, it would be implemented at the beginning of mandatory evacuation or as ordered by the Governor. All assets will be pre-staged in the event it becomes necessary to implement this plan during the voluntary evacuation if traffic volumes and participation rates increase during this phase.
  - 2. Upon notification from the ESF-16 OIC (Director, Colonel. or designee), the order to implement this plan would be given. Verification to the SEOC via telephone and 800 MHz radio that this plan has been executed would be received. This information will be provided to SCDOT personnel in the SEOC for redundant verification.

## II. STAFFING

Traffic Control Point Staffing (reverse lane usage)		
County/Id	TCP Location	Responsible Agency (24 Hr Staffing)
<b>BEAUFORT COUNTY</b>		
1	US-21 & SC-280	SC Highway patrol (2) Beaufort PD (2) SCNG (4)

<b>Traffic Control Point Staffing (reverse lane usage)</b>		
<b>County/Id</b>	<b>TCP Location</b>	<b>Responsible Agency (24 Hr Staffing)</b>
<b>BEAUFORT COUNTY (Continued)</b>		
2	US 21 & Shell Station (Salt Creek Drive/ Toyota Dealership)	SLED/SCDNR (2) SC National Guard (4)
3	US 21 & S 265 (Roseida Rd.)	SLED/SCDNR (2) SC National Guard (4)
4	US 21 & SC-116 (Block ramp from SC-116 to US-21)	SLED/SCDNR (4) SC National Guard (8)
5	US 21 & S 86 (Shanklin Rd.)	SLED/SCDNR (2) SC National Guard (4)
6	US 21 & Enmark	SLED/SCDNR (2) SC National Guard (2)
7	US 21 & S 543 (Parker Dr./ Industrial Park)	SLED/SCDNR (2) SC National Guard (2)
8	US 21 & S 520 (Poppy Hill North)	SLED/SCDNR (2) SC National Guard (2)
9	US 21 & S 520 (Poppy Hill South)	SLED/SCDNR (2) SC National Guard (2)
10	US 21 & S 71 (Clarendon Rd. /Grays Hills)	SLED/SCDNR (2) SC National Guard (4)
11	US 21 & Martin Road	SLED/SCDNR (2) SC National Guard (2)
12	US 21 & S 42 (Seabrook Road North)	SLED/SCDNR (2) SC National Guard (2)
13	US 21 & S 42 (Seabrook Road South )	SLED/SCDNR (2) SC National Guard (2)
14	US 21 & Dean Hill Road	SLED/SCDNR (2) SC National Guard (2)
<b>Dirt Roads</b>		
	Glass Road	
	Roberts Lane	
	Jonesfield Road	
	Huspah Creek Road	
	Old Ranson Acres	

Traffic Control Point Staffing (reverse lane usage)		
County/Id	TCP Location	Responsible Agency (24 Hr Staffing)
<b>BEAUFORT COUNTY (Continued)</b>		
	Haynes	
	Jasmine Hall	
	River Oaks	
	Seigler Road	
12 Private Drives		
	<b>Total</b>	SLED/SCSCDNR: 30 SC National Guard: 50

### **III. EQUIPMENT**

- A. SCDOT will provide approximately 1,500 cones and/or traffic drums wherever needed and upon availability changeable message signs. Additional assets would be staged to meet mission requirements.
- B. Additionally, SCDOT maintains a current list of resources needed to support/implement this plan. These resources will be pre-staged in the advance of an order to execute this plan and steps taken to ensure all objectives are met prior to implementation.
- C. As previously indicated, this plan will be implemented when additional criteria has been met or during a Governor's Executive Order. All SCDOT assets that are staged/utilized for the three-lane counter flow will be in place and available to support this plan.

### **IV. DIAGRAMS**

See diagrams illustrating traffic flow patterns beginning next page.

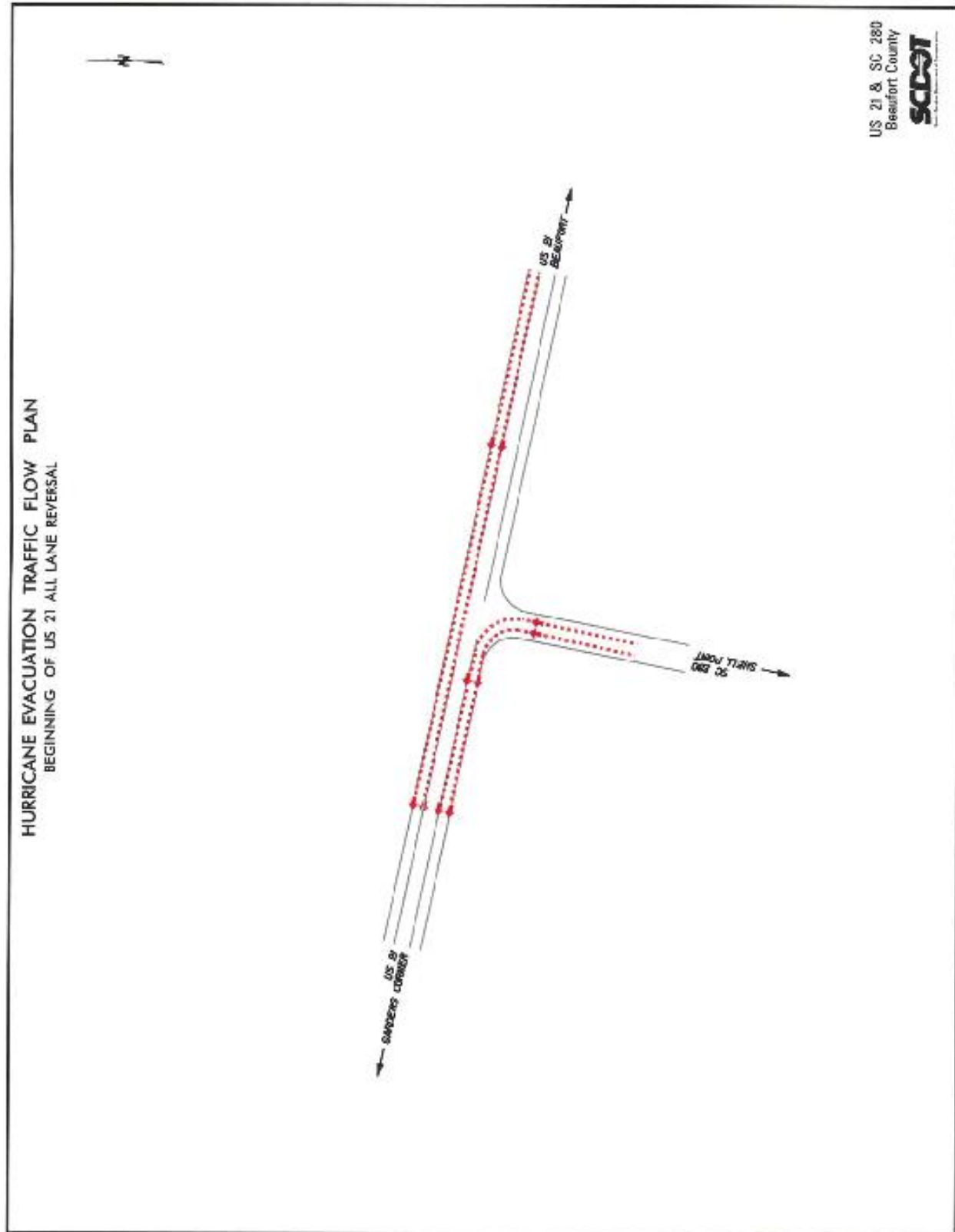


Diagram 1

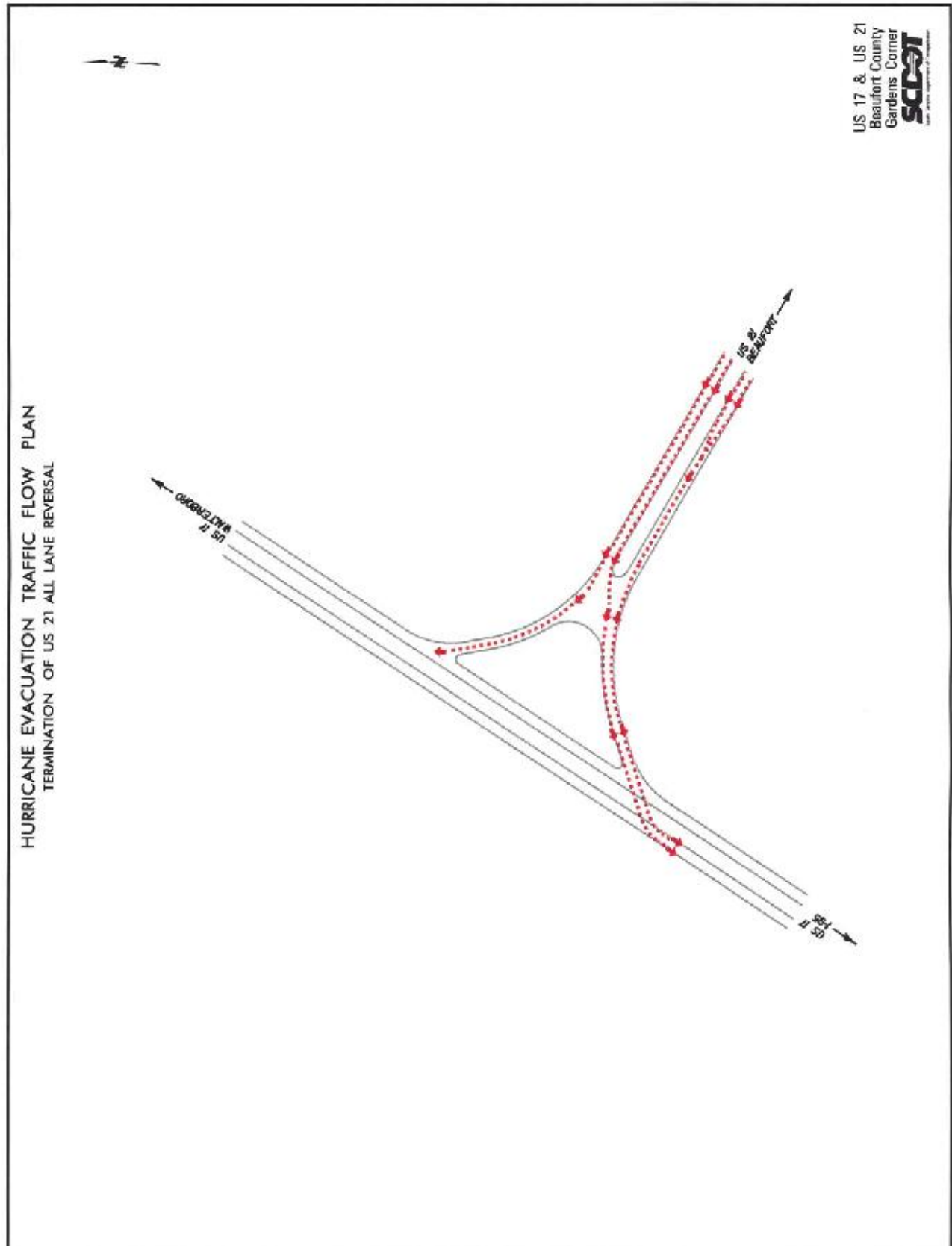


Diagram 2

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**ATTACHMENT F: U.S. HIGHWAY 278 REVERSAL (Four Lane)****I. EXECUTION**

- A. In the event this plan is implemented, several design changes will be mandated. Additional criteria to execute the contra-flow plan would be based on a Governor's executive order. This order would be based on current traffic conditions, storm conditions or other credible recommendations by local and state emergency management officials.
- B. Law enforcement personnel and SCDOT traffic control devices positioned to accommodate the counter-flow (three lane plan) will maintain their positions and adjust to the one-way reversal plan. Additional assets (personnel and equipment) will be utilized to complete this process. To implement the U.S. 278 contra- flow plan, the two traffic lanes westbound on the Cross Island Expressway will merge onto U.S. 278 westbound instead of one lane in normal manner. The single lane entrance ramp from the Cross Island Expressway to U.S. 278 is of sufficient width to accommodate two lanes of traffic. Prior to the intersection of Spanish Wells Road, both inside westbound lanes of U.S. 278 will be directed onto the reversed lanes of eastbound U.S. 278 utilizing a paved median crossover.(See Diagram #1.)
- C. All vehicles utilizing the reversed lane of eastbound U.S. 278 will travel to the intersection of U.S. 278 and S.C. 170 where the left reversed lane will exit onto S.C. 170 and the right lane of reversed U.S. 278 will continue to I-95. The reversed lane exiting onto S.C. 170 via the eastbound entrance ramp will turn right onto S.C. 170 and turn left onto S.C. 462 toward I-95. This right lane of traffic at this intersection would be split into two lanes to travel toward I-95. This will utilize both reversed lanes to travel toward I-95. (See Diagram #2.)
- D. Traffic traveling on the normal westbound lanes of U.S. 278 will continue to I-95. (See Diagram #2.)
- E. Traffic approaching I-95 would be diverted in the following sequence. The traffic in the normal westbound right lane would exit onto I-95 northbound at Exit #8. Traffic in the normal left lane of the westbound U.S.-278 will continue past the I-95 interchange and turn right onto U.S. 17/U.S. 278. Both lanes of traffic on the reversed side of U.S. 278 would be tapered into one lane. This traffic will be directed left to enter I-95 southbound at Exit #8. A traffic camera on I-95 at Exit #8 would be monitored in the Beaufort EOC for potential traffic problems. (See Diagram #3.)
- F. Initial preparatory actions to divert traffic would take place at several locations simultaneously. Additional law enforcement assets would be necessary to implement this plan. These assets would be pre-staged at the direction of the Beaufort SCHP A/O Commander and would be directed to report to assigned TPCs.

No traffic traveling north on I-95 will be allowed to exit on U.S. 278 toward Hilton

Head from Exit #8. This exit ramp from I-95 northbound to eastbound U.S. 278 (Exit #8) would be blocked immediately. Also, the ramp from I-95 southbound to U.S. 278 eastbound would be blocked to eastbound U.S. 278 traffic. Final preparatory actions at I-95 (Exit #8) would include blocking movements from U.S. 17 onto U.S. 278 eastbound. Initially, these diversions could be completed utilizing a police vehicle until SCDOT completes the deployment of traffic control devices.

- G. Additional measures would include blocking the loop for traffic traveling westbound on S.C. 170 from Beaufort at U.S. 278. Traffic approaching this intersection would be required to access U.S. 278 in the normal westbound lanes or continue traveling on S.C. 170 toward Bluffton. All eastbound traffic on U.S. 278 traveling between I-95 and S.C. 170 would be diverted onto S.C. 170. This traffic would travel toward Bluffton on S.C. 170. Law enforcement personnel at this intersection will facilitate the confluence traffic where it merges from S.C. 170 on the reversed lane, travels westbound on S.C. 170 from Beaufort, and will be flushed eastbound for the contra-flow.
- H. The one lane traffic taper on U.S. 278 west of S.C. 170 for the three lane plan would be removed which would allow for four lane access from S.C. 170 toward I-95 from S.C. 170.
- I. Traffic on U.S. 278 eastbound traveling between S.C. 170 and the Cross Island Parkway will be flushed past the Cross Island Parkway and U.S. 278.
- J. Wherever the roadway of U.S. 278 is divided by a paved median, the SCDOT will place cones to prevent vehicles from attempting to move from the reverted lanes to the normal westbound lane of U.S. 278. In other areas where U.S. 278 is divided by an earth median, SCDOT will place cones or drums in the median crossovers to prevent vehicles from crossing all lanes of U.S. 278.
- K. SCDOT will position a variable message board on I-95 northbound prior to Exit # 8 alerting motorists that access to Hilton Head via U.S. 278 is closed. Additional messages on Changeable Message Signs (CMS) would alert motorists to tune to a radio frequency for detailed instructions.
- L. Each TCP has staffing to provide for limited control of vehicles approaching U.S. 278 from private drives. The additional staffing at each post will deploy to points along the shoulder of U.S. 278 wherever vehicles are likely to approach U.S. 278, and assist those motorists entering traffic in the reversed eastbound lanes. Law enforcement officers will force all traffic approaching U.S. 278 on the normal eastbound side to turn left. No right turns will be allowed onto U.S. 278 during the total four lane contra-flow.
- M. SCDOT will utilize Incident Management vehicles to respond to traffic incidents that could affect the flow of evacuating traffic. These vehicles would be equipped with 800 MHz radios for direct contact with staged law enforcement officers,

SEOC, and the Beaufort County EOC where SCDOT personnel will be staged. The mission of these vehicles would be to assist and facilitate the removal of vehicles obstructing or impeding the evacuation travel lanes. Additionally, the National Guard (SCARNG) will pre-stage two heavy-duty wreckers on U.S. 278 to assist with this process. The first wrecker will be staged near U.S. 278 and the Cross Island Parkway. The second wrecker will remain in close proximity to U.S. 278 and I-95.

- N. The traffic taper on the Cross Island Parkway would be the last sequence of events for implementation of this plan. Upon visual verification by SCDPS personnel that all eastbound traffic has been flushed to the Cross Island Parkway, and upon verification by aerial surveillance, this information would be communicated to the SCHP Beaufort OIC. OIC would relay this information to the SEOC via 800 MHz radio and telephone to the ESF-16 OIC.

Upon notification from the ESF-16 OIC (Colonel or designee), the order to implement this plan would be given. The SCHP Supervisor in charge of the U.S. 278 Contra-Flow Plan shall verify to the SEOC via telephone and 800 MHz radio that this plan has been executed would be received. This information will be provided to the SCDOT personnel in the SEOC for redundant verification.

## **II. STAFFING**

See Three Lane Counter Flow Plan for specific staffing information.

## **III. EQUIPMENT**

- A. See Three Lane Counter-Flow Plan for specific SCDOT safety equipment.
- B. Additionally, SCDOT maintains a static list of resources needed to support/implement this plan. These resources will be pre-staged in advance of an order to execute this plan and steps taken to ensure all objectives are met prior to implementation.

## **IV. DIAGRAMS**

See attached diagrams for illustrations on traffic flow patterns.

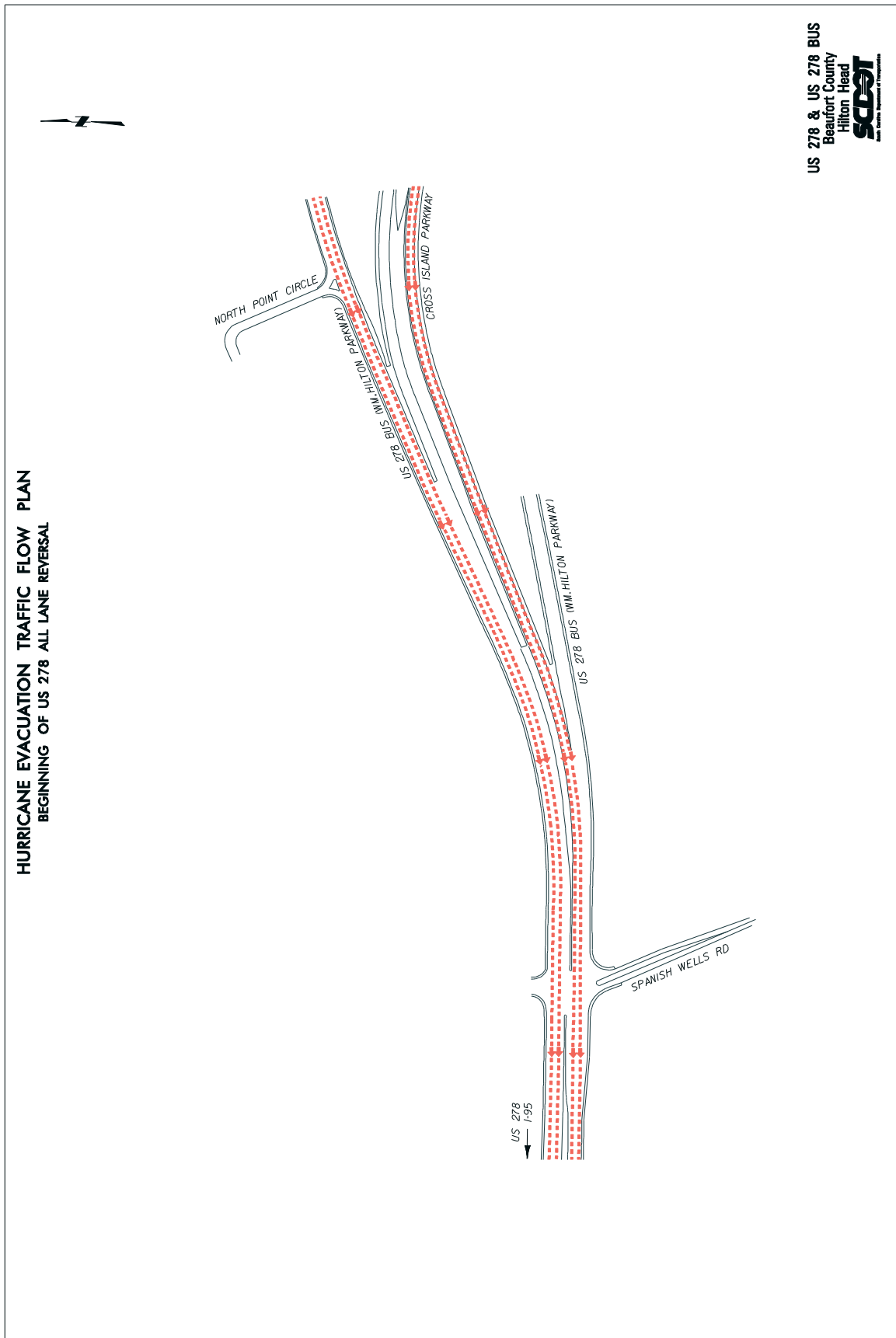


Diagram 1

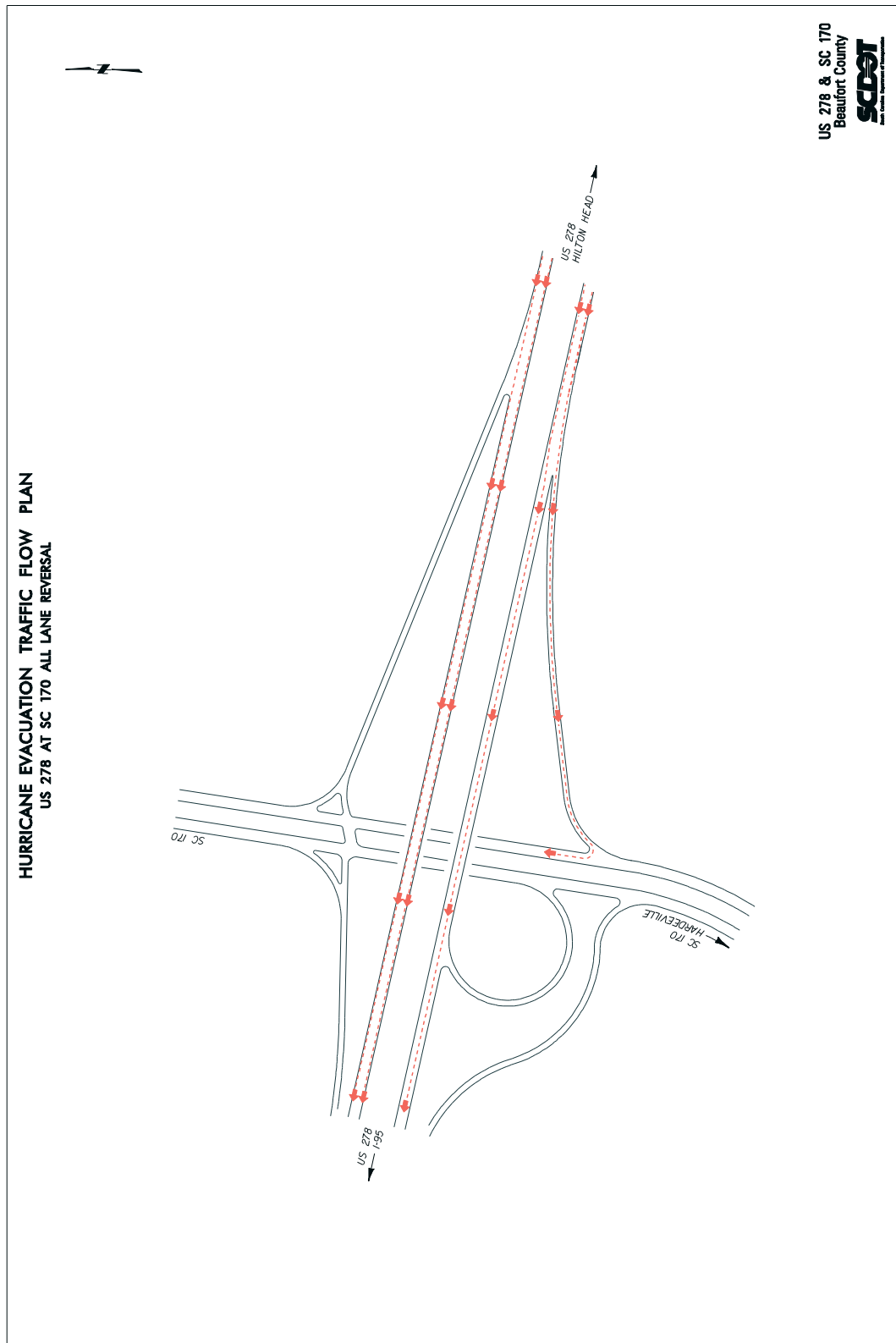


Diagram 2

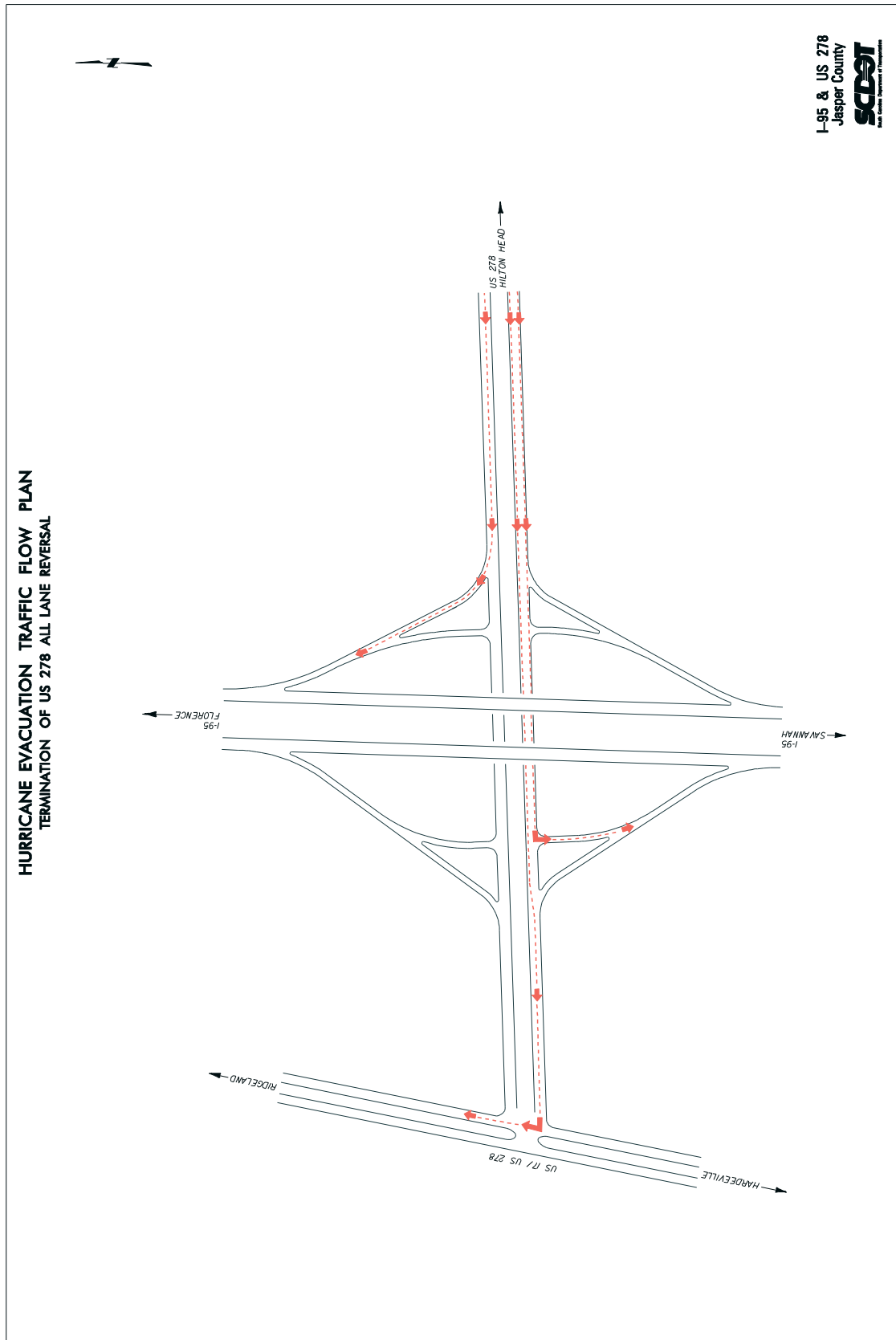


Diagram 3

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## ATTACHMENT G: SHELTER MANAGEMENT

### I. GENERAL

- A. Shelter management includes estimating the number of evacuees that may need sheltering, planning for shelter space, coordinating resources, and coordinating shelter openings. Hurricane evacuation shelter requirements are calculated using a percent of the vulnerable population. The conglomerate counties identify space to fulfill sheltering requirements.
- B. To coordinate shelter openings, public hurricane evacuation shelters are identified as voluntary evacuation shelters, mandatory evacuation shelters, and reserve shelters.
- C. This Southern Conglomerate Operational Appendix contains a current shelter listing with individual shelters listed as mandatory (M), voluntary (V), reserve (R), and (P) post storm impact. County emergency management, SCEMD, and the ARC coordinate shelter locations. Shelter staffing and management is coordinated between the Department of Social Services (DSS), the Department of Health and Environmental Control (SCDHEC), and the ARC.
- D. Post-storm shelters are those designated by local emergency management to be used only in post-storm situations. These shelters will not be utilized until they undergo a post storm assessment, ensuring safety and structural soundness prior to use as a public shelter. Voluntary, Mandatory, and Reserve shelters may also be used as post-storm shelters. Currently, no post-impact shelters are planned in this Conglomerate.
- E. Special Medical Needs Shelters (SMNS) are provided for evacuees requiring special medical attention and their caregiver.

### II. PUBLIC SHELTER OPENING PROCEDURES AND PUBLIC NOTIFICATION

- A. If the Governor recommends a voluntary evacuation, the conglomerate will open voluntary evacuation shelters. If the Governor orders a mandatory evacuation, the conglomerate will open mandatory evacuation shelters.
- B. Once the Governor recommends a voluntary evacuation or orders a mandatory evacuation, a designated time by which shelters will open is determined. The shelter opening time for the voluntary evacuation recommendation and mandatory evacuation order is at least four (4) hours after the decision to open shelters is made.
- C. The ARC issues all public announcements about opening public shelters and the time the shelters will open. The public announcement will include the shelter(s) opening time and location. Shelters may open before the announced time. Local chapters will have primary responsibility for these announcements. The announcements will also

be consolidated and provided to major media outlets from the SEOC as the information becomes available.

- D. Reserve shelters will open as local officials consider it necessary. For larger storms, the resources for reserve shelters will be staged at the beginning of the mandatory evacuation order. County EOC officials will notify local mass care personnel of the requirement to open reserve shelters. Reserve shelters will be operational within four (4) hours of notification. The ARC, to minimize confusion, announces reserve shelter openings to the public. The reserve shelter public announcement will read to the effect, “The following additional shelters have opened and are now accepting evacuees.”

### **III. PUBLIC SHELTER CLOSING PROCEDURES**

The procedure for closing hurricane evacuation shelters is described in the “South Carolina Hurricane Evacuation Shelter Consolidation/Closing Procedure” agreed upon by SCEMD, SCDSS, and the ARC. A copy is located in Annex 7 of the Base Plan.

### **IV. PUBLIC SHELTERING REQUIREMENTS**

- A. To plan shelter space for evacuees, the vulnerable population for the Southern Conglomerate was analyzed and used to calculate shelter requirements. The vulnerable population consists of all residents and tourists within a Category 4/5 storm surge inundation area and residents living in structures susceptible to wind damage within the conglomerate. The Army Corps of Engineers determined the vulnerable population shelter requirements during the hurricane evacuation restudy.
- B. The shelter requirements are a planning goal for evacuation shelter emergency capacity. The ARC determines the emergency capacity using 15 sq. ft. per person for hurricane evacuation shelters. Shelter requirements change annually. This change is due to the increasing coastal population and to the increase of those living in vulnerable structures.

The following Table depicts the Southern Coastal Conglomerate vulnerable populations and sheltering requirements by county.



<b>SCC Vulnerable Population &amp; Sheltering Requirements &amp; Capacities</b>				
<b>County</b>	<b>Total Vulnerable Population</b>	<b>Shelter Requirement</b>	<b>2009 Shelter Capacity</b>	<b>2009 Capacity vs Requirement</b>
Aiken	45,374	6,806	5,248	- 1,558
Allendale	3,720	558	1,279	+ 721
Bamberg	6,927	1,039	2,660	+ 1,621
Barnwell	10,722	1,608	4,188	+ 2,580
Beaufort	206,307	20,631	3,808	-16,823
Colleton	27,967	3,915	4,156	+ 241
Hampton	8,692	1,304	2,201	+ 897
Jasper	16,118	1,773	4,207	+ 2,434
<b>SCC TOTAL</b>	<b>325,827</b>	<b>37,634</b>	<b>27,747 *</b>	<b>-9,887</b>

\* Coastal Conglomerate shelter shortfalls covered by other Conglomerate shelters.


#### **V. SPECIAL MEDICAL NEEDS SHELTERS (SMNS)**



- A. During a hurricane evacuation, Special Medical Needs Shelters (SMNS) will open in a county at the same time as public shelters. A SMNS will not close until the SEOC approves, and all shelter clients can return home or relocate to a suitable alternate location.
- B. SCDHEC, SCDSS, and the county emergency management agencies determined locations of shelters appropriate for those persons with special medical needs. SCDSS and SCDHEC have agreements with these facilities. Note these facilities are subject to change with/without notice.





<b>Special Medical Needs Shelters</b>	
<b>County</b>	<b>Facility Name</b>
Aiken	Aurora Pavilion Behavior Center 655 Medical Park Drive Aiken, SC 29801
Allendale	Allendale County Hospital 1787 Allendale Fairfax Hwy Fairfax, SC 29827
Bamberg	Bamberg County Hospital 509 North Street Bamberg, SC 29003







<b>Special Medical Needs Shelters</b> (continued)	
Barnwell	Barnwell County Hospital 811 Reynolds Road Barnwell, SC 29812
Beaufort	McCracken Middle School 250 H. E. McCracken Circle Bluffton, SC 29910  Beaufort Elementary School 1800 Prince Street Beaufort, SC 29902
Colleton	Colleton Medical Center 501 Robertson Blvd. Walterboro, SC 29488
Hampton	Wade Hampton High School 410 Pine Street Varnville, SC 29944
Jasper	Jasper County High School Highway 278 West Ridgeland, SC 29936

## VI. HURRICANE EVACUATION SHELTER TABLES

The following tables list the Southern Coastal Conglomerate hurricane evacuation shelters by county and shelter category. Note the categories are (V) for voluntary shelter, (M) for mandatory shelter, (R) for reserve shelter, and (P) post storm shelter. Note these shelters are subject to change with/without notice. The generator symbol  in the county shelter type block denotes the presence of a Generator Transfer Switch installed to facilitate the connection of a service generator in an emergency.

County/ Shelter Type	#	Shelter	Emergency Capacity (15 sq. ft.)
<b>Aiken County</b>			
M 	1	South Aiken High School 232 East Pine Log Road Aiken, SC 29803	1,000
M 	2	North Augusta High School 2000 Knobcone Avenue N. Augusta, SC 29841	130
R	3	Paul Knox Middle School 1804 Wells Road North Augusta, SC 29841	650

County/ Shelter Type	#	Shelter	Emergency Capacity (15 sq. ft.)
R 	4	Silver Bluff High School 64 DeSoto Drive Aiken, SC 29803	1,000
<b>Aiken County</b> (continued)			
R 	5	Midland Valley High School 227 Mustang Drive Langley, SC 29834	1,000
R	6	Aiken Middle School 101 Gator Lane Aiken, SC 29801	220
R	7	Schofield Middle School 224 Kershaw Street, NE Aiken, SC 29801	312
R	8	New Ellington Middle School 814 Main Street South Aiken, SC 29809	200
R	9	Town Creek Baptist Church 250 Town Creek Road Aiken, SC 29803	236
R	10	AL Corbett Middle 10 AL Corbett Avenue Wagener, SC 29164	500
<b>Allendale County</b>			
M 	1	Allendale Primary School 4561 Allendale-Fairfax Highway Allendale, SC 29810	533
R	2	Fairfax Elementary School 734 14 <sup>th</sup> Street East Fairfax, SC 29827	353
R	3	Allendale Fairfax Middle School 3305 Allendale Fairfax Highway Fairfax, SC 29827	393
<b>Bamberg County</b>			
M 	1	Bamberg-Ehrhardt High School 267 Red Raider Drive Bamberg, SC 29003	1,200
R 	2	Denmark-Olar High School 197 Viking Circle Denmark, SC 29042	800
R 	3	Bamberg-Ehrhardt Middle School 897 North Street Bamberg, SC 29003	330

County/ Shelter Type	#	Shelter	Emergency Capacity (15 sq. ft.)
<b>Bamberg County</b> (continued)			
R 	4	Denmark-Olar Middle School 45 Green Street Denmark, SC 29042	330
<b>Barnwell County</b>			
M 	1	Barnwell Elementary School 10524 Marlboro Avenue Barnwell, SC 29812	2,988
R	2	Williston High School 12233 Main Street Williston, SC 29853	600
R 	3	Blackville- Hilda High School 76 Atkins Circle Blackville, SC 29817	600
<b>Beaufort County</b> (shelters will not open for a Category 2 storm or higher)			
R	1	Battery Creek High School 1 Blue Dolphin Drive Beaufort, SC 29906	1,128
R	2	Bluffton High School 12 H.E. McCracken Circle Bluffton, SC 29910	1,086
R	3	Bluffton Elementary School 160 H.E. McCracken Circle Bluffton, SC 29910	439
R	4	Beaufort Elementary School 1800 Prince Street Beaufort, SC 29902	407
R	5	Okatie Elementary School 53 Cherry Point Road Okatie, SC 29909	390
R	6	H.E. McCracken Middle School 250 H.E. McCracken Circle Bluffton, SC 29910	358
<b>Colleton County</b>			
V 	1	Colleton County High School 1379 Mighty Cougar Drive Walterboro, SC 29488	2,542
M 	2	Ruffin Middle School 155 Patriot Lane Ruffin, SC 29475	740
P 	3	Northside Elementary School 1929 Industrial Blvd. Walterboro, SC 29488	874

County/ Shelter Type	#	Shelter	Emergency Capacity (15 sq. ft.)
<b>Hampton County</b>			
V 	1	Varnville Elementary School 395 Pine Street East Varnville, SC 29944	308
V 	2	Wade Hampton High School 201 Airport Road Varnville, SC 29944	349
V 	3	Estill High School 1450 Columbia Highway North Estill, SC 29918	509
M 	4	Hampton Elementary School 505 South Hoover Street Hampton, SC 29924	310
R	5	Ben Hazel Primary School 628 West Railroad Ave. Hampton, SC 29924	246
R	6	Estill Middle School 555 West Third Street Estill, SC 29918	245
R	7	Estill Elementary School 318 Fourth Street East Estill, SC 29918	234
<b>Jasper County</b>			
V 	1	Jasper County High School US Hwy. 278 W (Old Grays Rd.) Ridgeland, SC 29936	1,122
M	2	Ridgeland High/ Junior / Elementary School 250 Jaguar Trail Ridgeland, SC 29936	1,505
R 	3	Ridgeland Elementary School 250 Bees Creek Road Ridgeland, SC 29936	378
R 	4	Ridgeland Middle School 250 Bees Creek Road Ridgeland, SC 29936	757
R	5	Robertville Community Center US Hwy. 321 Robertville, SC 29922	205

County/ Shelter Type	#	Shelter	Emergency Capacity (15 sq. ft.)
<b>Jasper County</b> (continued)			
R	6	Coosawhatchie Community Ctr. SC Highway 462 West Coosawhatchie, SC 29940	240

## **ATTACHMENT H: MASS TRANSPORTATION**

### **I. INTRODUCTION**

Catastrophic hurricane impacts may over extend counties' capabilities to evacuate substantial numbers of local residents who do not possess the means to evacuate themselves. Residents without access to personal transportation rely on their government (local, State, or Federal) to provide the means to move them out of harm's way. This attachment delineates the status of county mass transportation plans and the role/responsibilities of State government to assist when/if requested.

### **II. SITUATION**

The State of South Carolina is susceptible to the impact of tropical systems. These systems produce four (4) major hazards: storm surge, high winds, rainfall-induced flooding, and tornadoes.

### **III. CONCEPT OF OPERATIONS**

A. The transportation of local populations out of an evacuation zone is the responsibility of the county. The State will assist the counties in locating assets to help reduce identified shortfalls. Individuals will be transported to destinations in or out of the county, and will be offered return transportation when reentry has been approved for that jurisdiction.

B. Preparedness

The county plans are summarized as follows:

1. Beaufort County: The County will use local rapid transit authority assets to move 1,500 individuals per trip, and has the increased capacity to 1,700 per trip to Hampton County.
2. Colleton County: Colleton County School District and the Veolia Transportation Company transportation provide evacuation transportation to "special needs" personnel and other citizens needing transportation to designated shelters.
3. Jasper County: The county plans include use of school and church buses for transport to shelters.
4. Counties will pre-coordinate known mass transportation shortfalls with State ESF-1, who in turn will pre-identify State-owned transportation assets to fill county mass transportation needs.

5. State government will assist counties through pre-impact loss estimation modeling to identify population segments and areas potentially in need of mass transportation.

C. Response

Prior to the execution of mass transportation plans, counties will coordinate transportation needs with State ESF-1. ESF-1 will ensure assets are in place at county destinations prior to or coincidentally with county plan execution. ESF-1 will monitor county mass transportation operations, and assist with additional assets as requested. Transportation assistance will continue into reentry and recovery as required.

D. Recovery

State ESF-1 monitors county mass transportation operations (if on-going), and provides assistance as requested.

#### IV. RESPONSIBILITIES

A. SC Emergency Management Division (SCEMD)

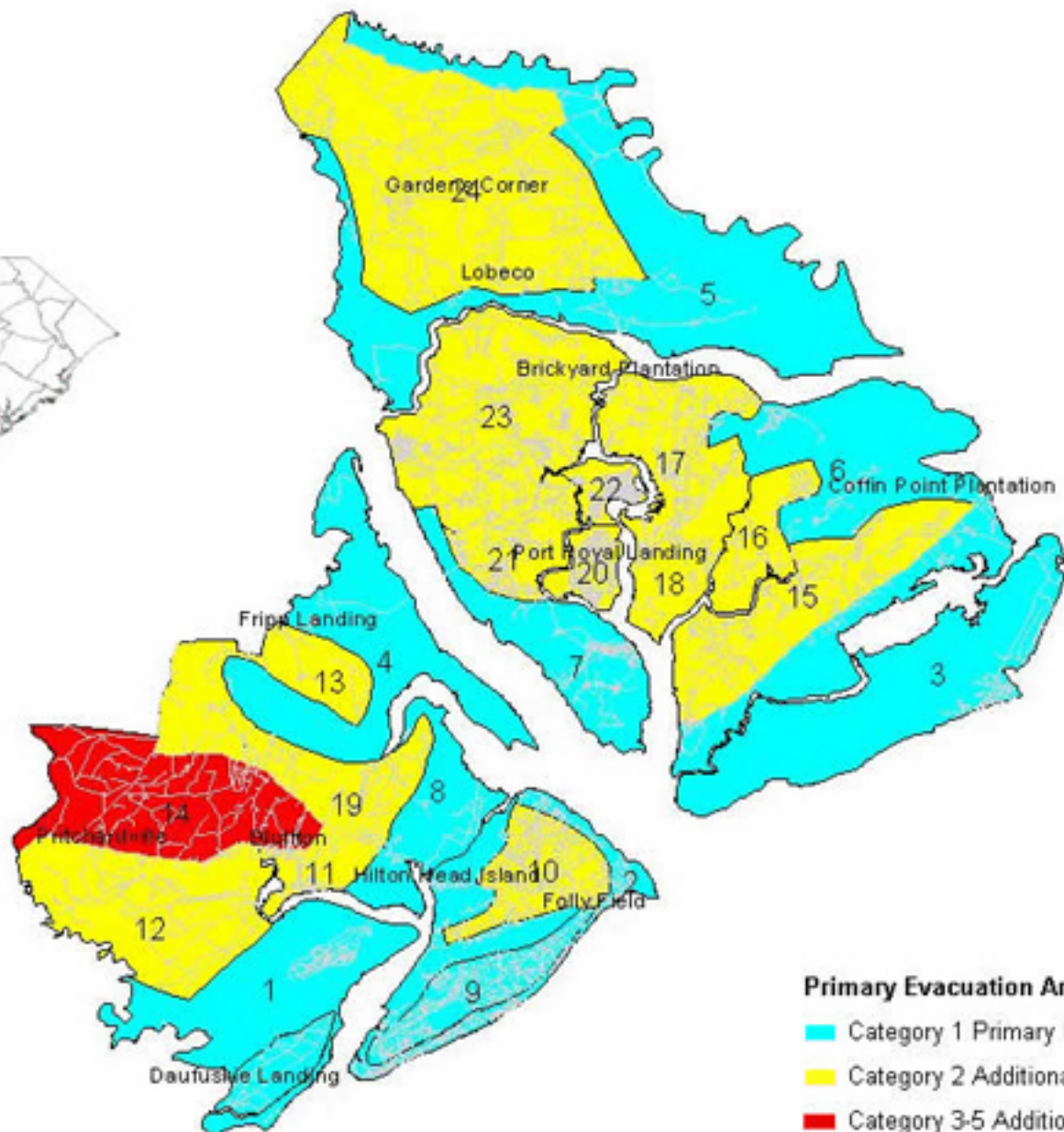
1. Maintain and operate the WebEOC or other similar system to assign and monitor the status of requests from the counties.
2. Through application of loss estimation software, assist counties in identifying population segments and/or areas potentially requiring emergency transportation.
3. Annually coordinate with county agencies regarding updates/enhancements to county mass transportation plans.

B. SC Department of Education (SCDOE)

1. Through ESF 1, will maintain lists of sources of additional transportation assets and drivers to meet the shortfall requirements identified by the counties.
2. Coordinate additional transportation resources on a pre-planned basis to meet pre-identified needs from counties experiencing shortfalls.
3. Coordinate, dispatch, and monitor mass transportation resources during response and recovery operations as requested.



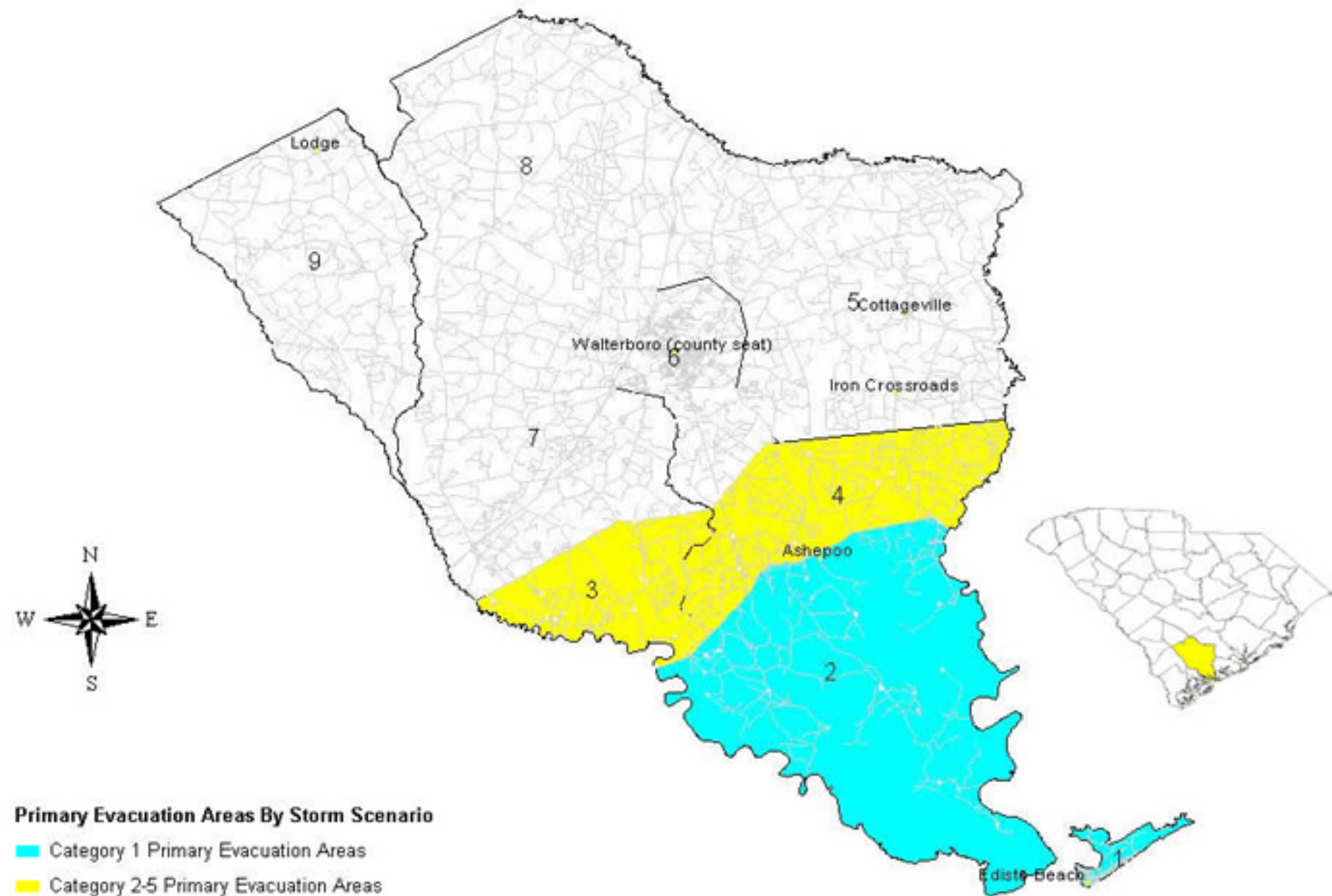
# Beaufort County Evacuation Zones



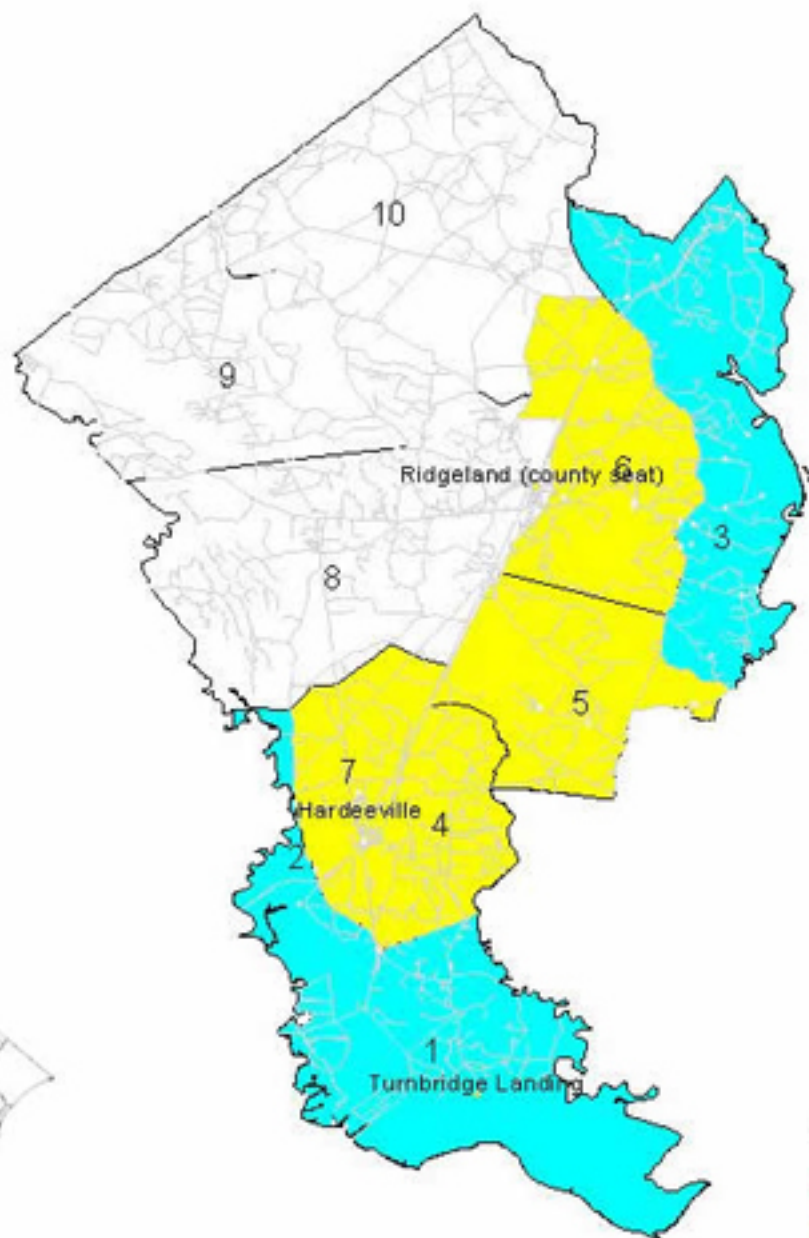
## Primary Evacuation Areas By Storm Scenario

- Category 1 Primary Evacuation Areas
- Category 2 Additional Primary Evacuation Areas
- Category 3-5 Additional Primary Evacuation Areas

# Colleton County Evacuation Zones



# Jasper County Evacuation Zones



## Primary Evacuation Areas By Storm Scenario

■ Category 1-2 Primary Evacuation Areas

■ Category 3-5 Additional Primary Evacuation Areas