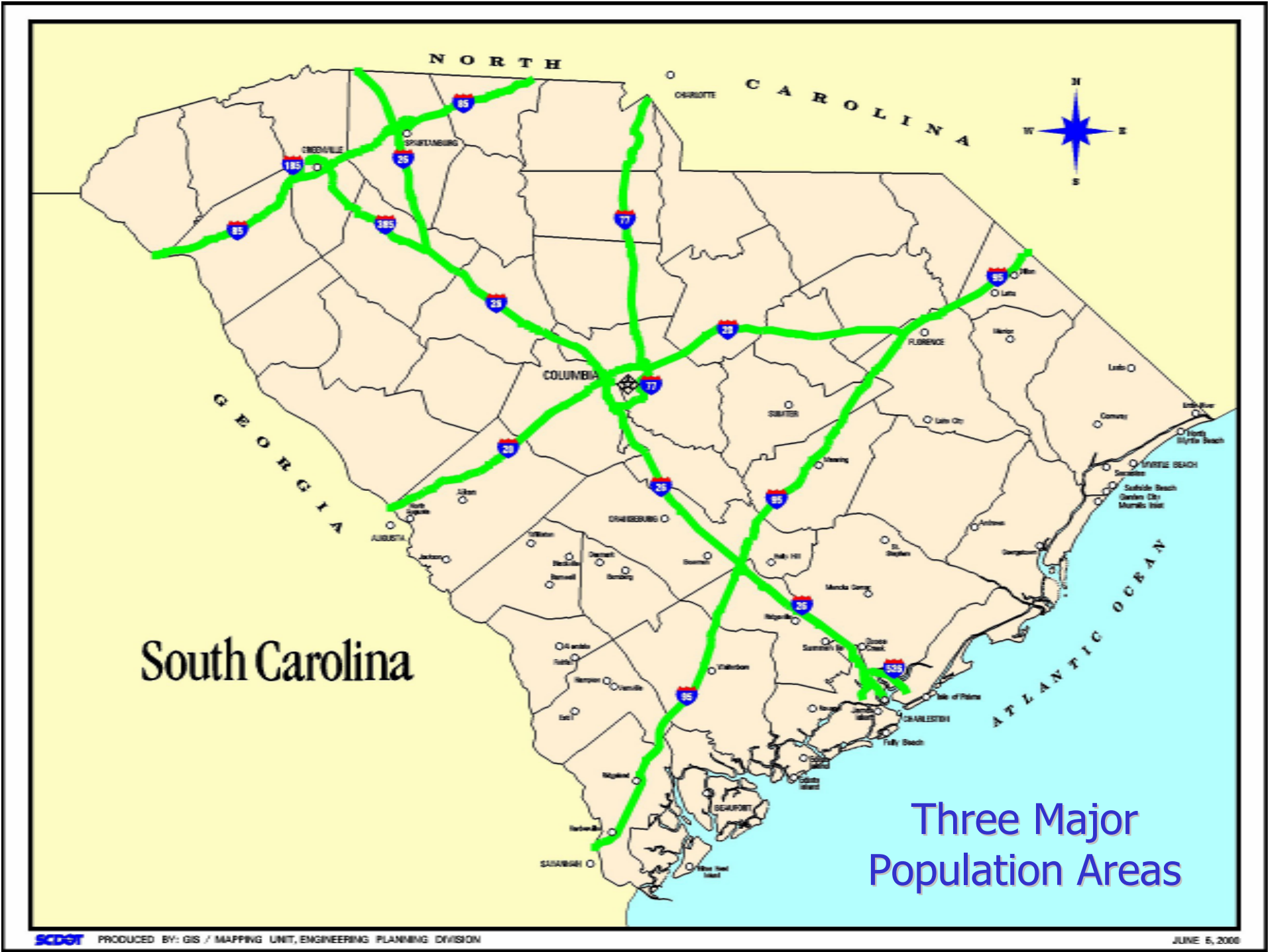
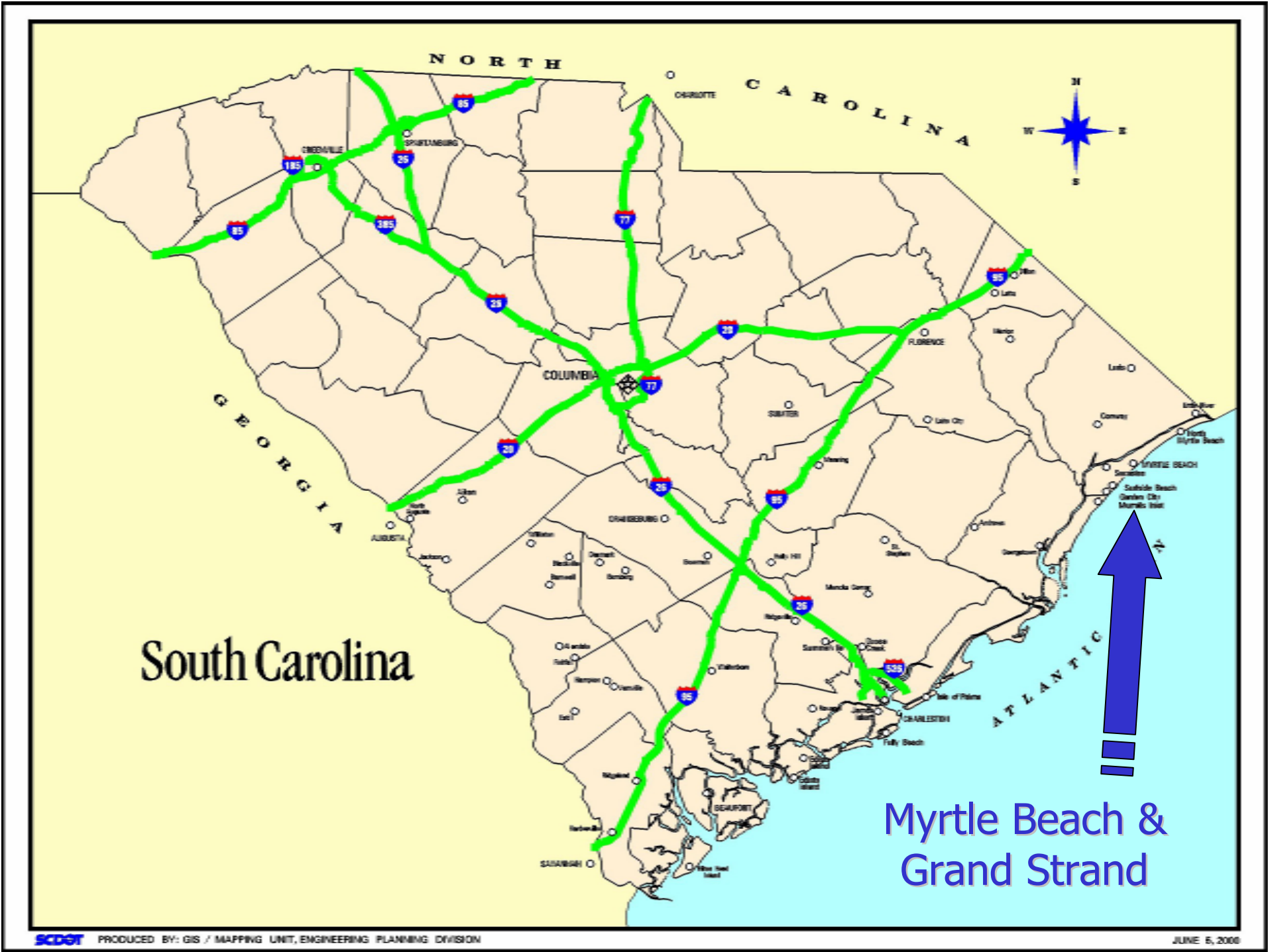


SCDOT



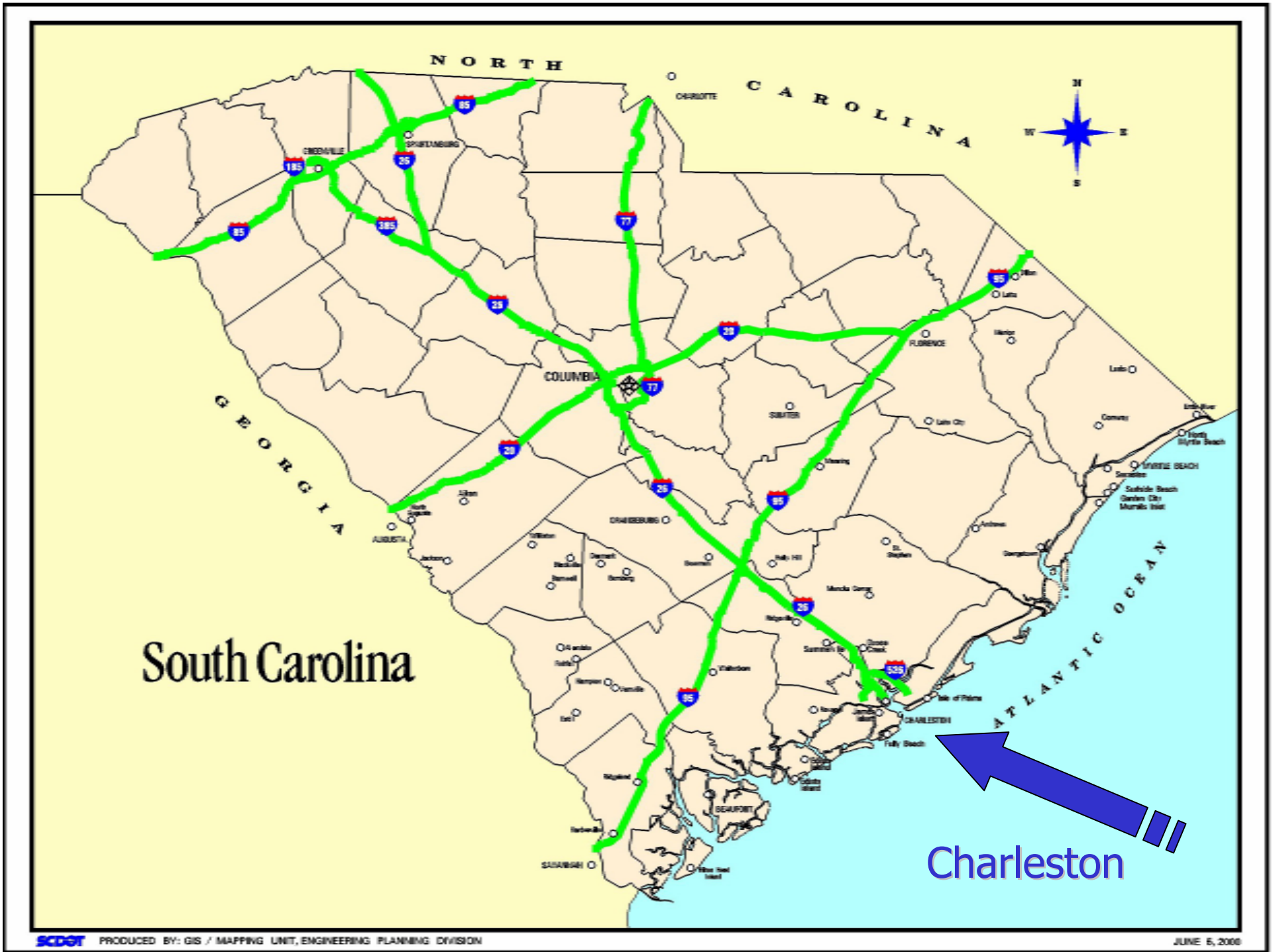
South Carolina

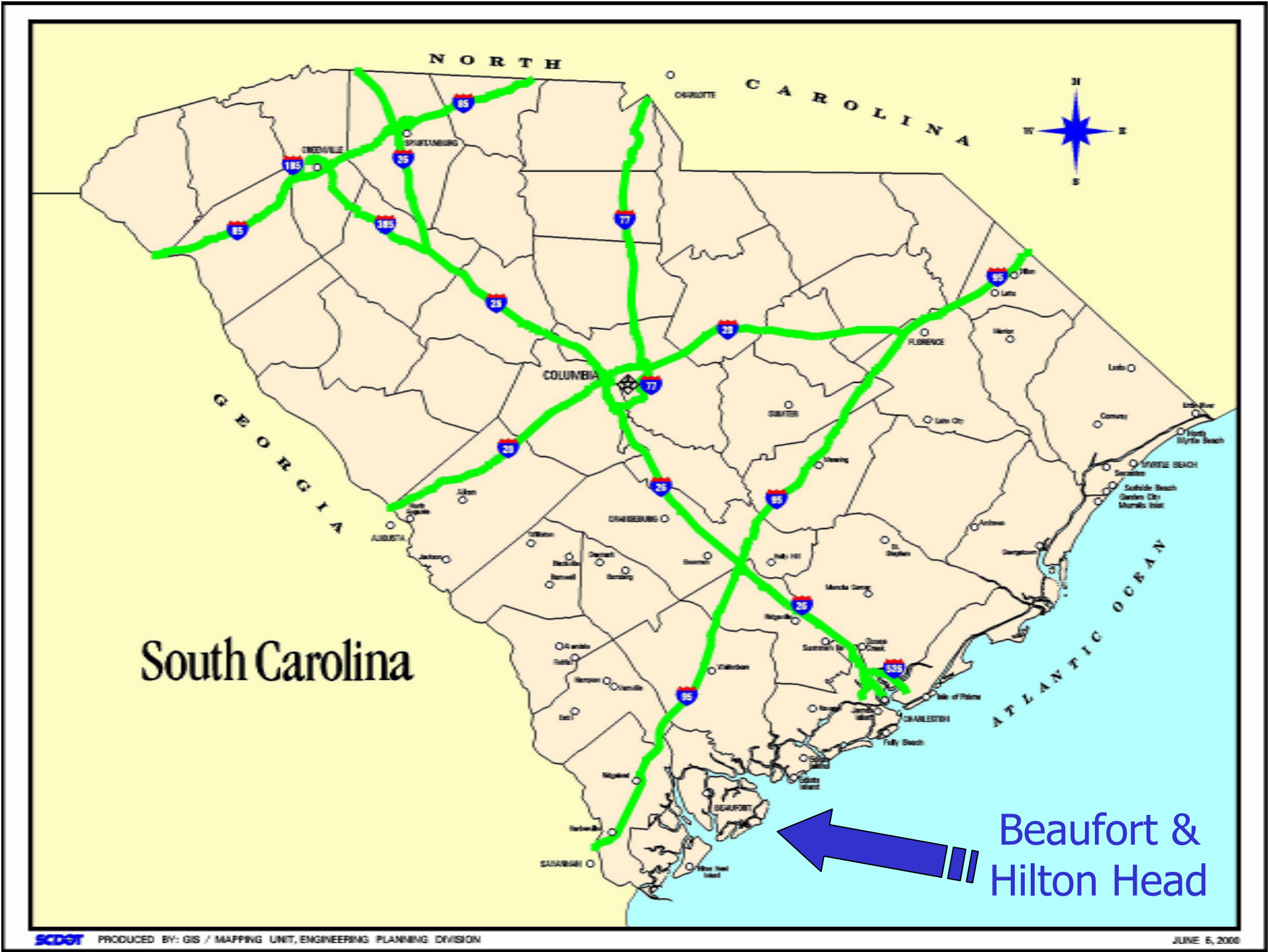
Three Major Population Areas



South Carolina

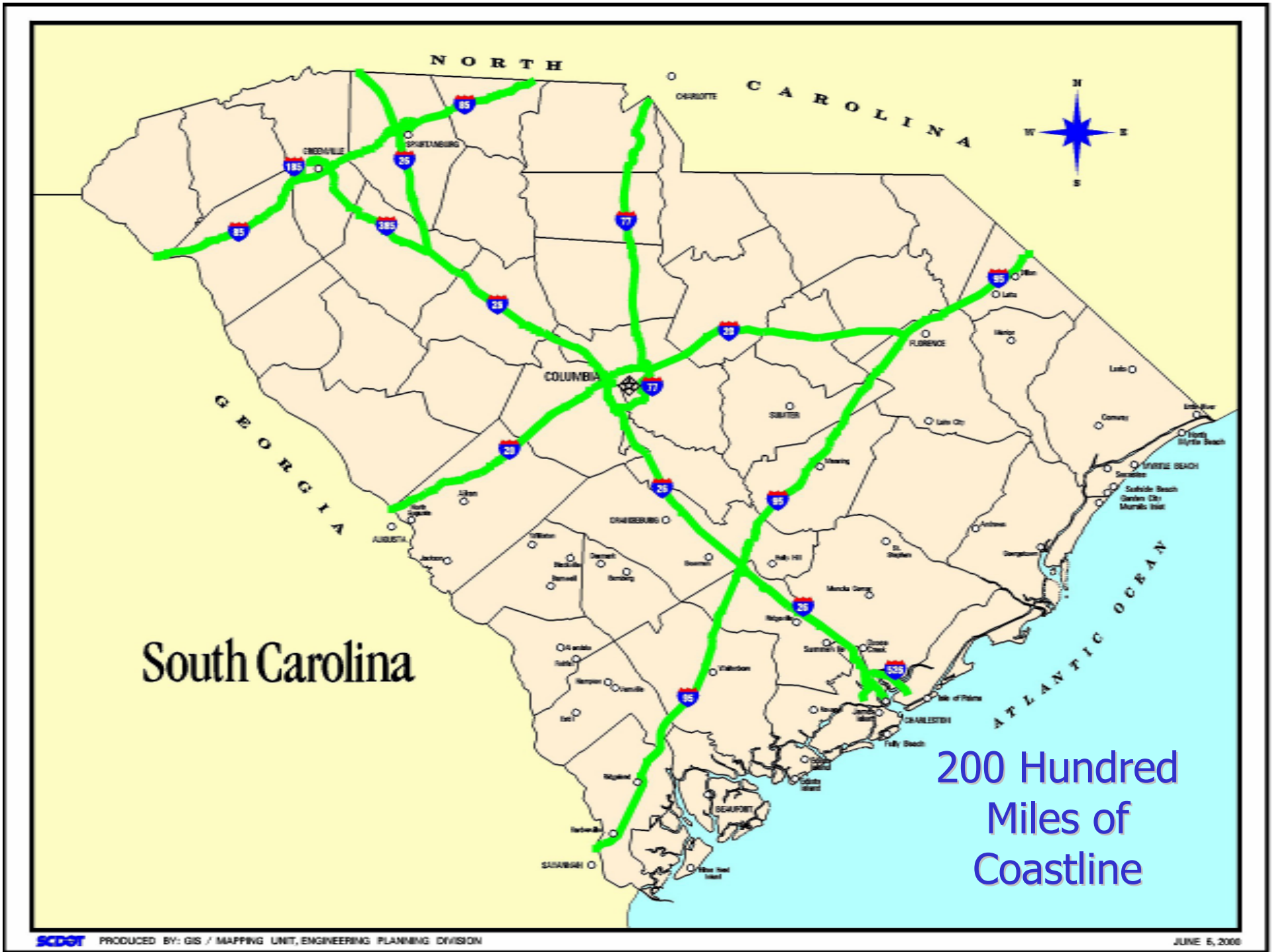
Myrtle Beach & Grand Strand

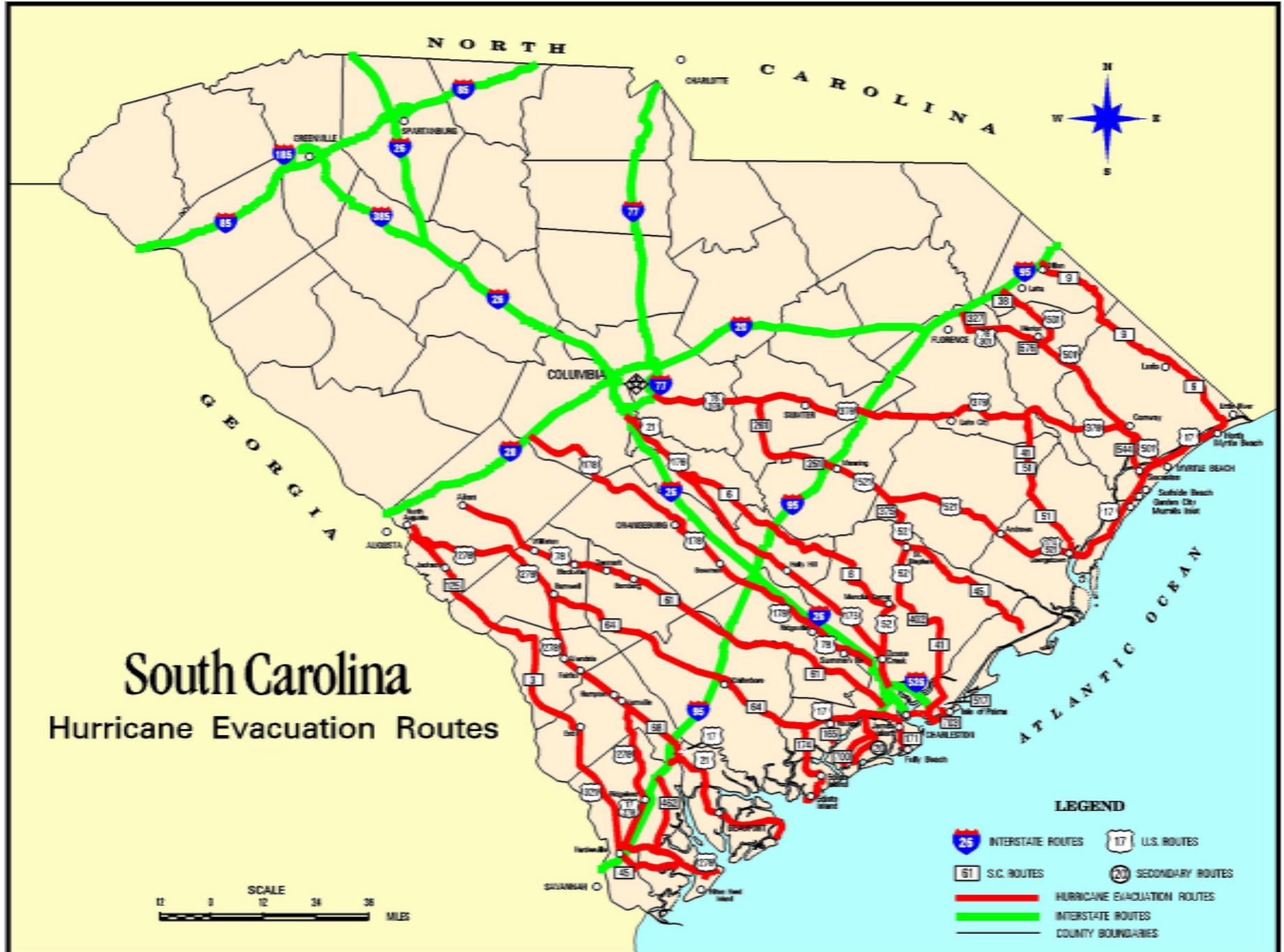




South Carolina

Beaufort & Hilton Head





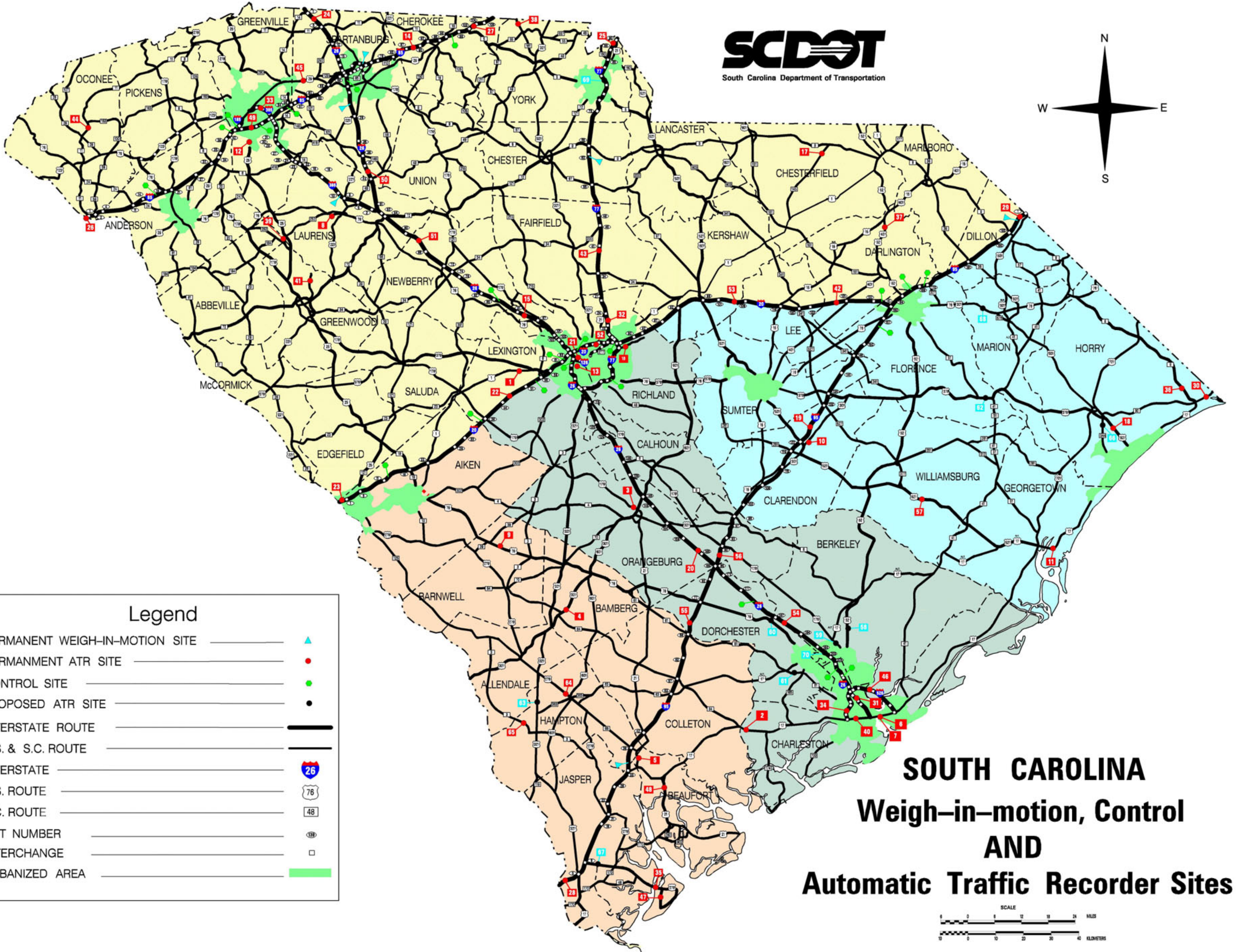
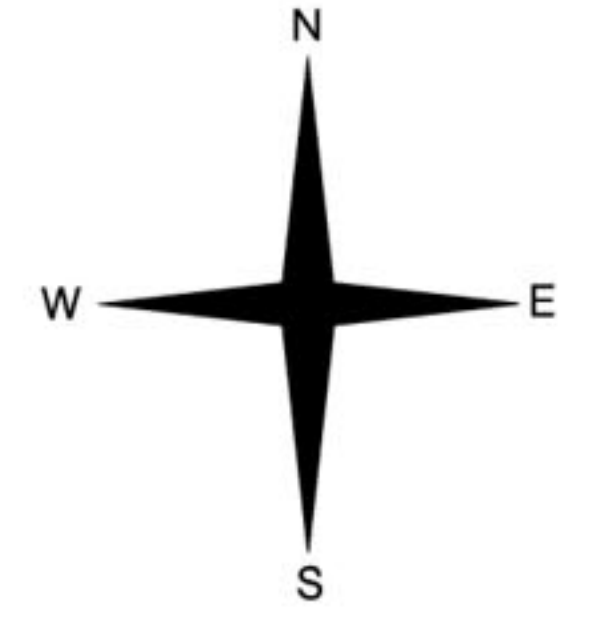
South Carolina

Hurricane Evacuation Routes

LEGEND

- INTERSTATE ROUTES
- U.S. ROUTES
- S.C. ROUTES
- SECONDARY ROUTES
- HURRICANE EVACUATION ROUTES
- INTERSTATE ROUTES
- COUNTY BOUNDARIES

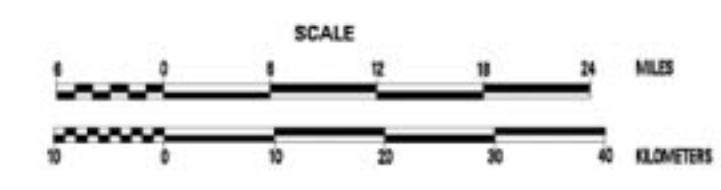
SCALE
0 12 24 36
MILES



Legend

- PERMANENT WEIGH-IN-MOTION SITE ▲
- PERMANENT ATR SITE ●
- CONTROL SITE ●
- PROPOSED ATR SITE ●
- INTERSTATE ROUTE 26
- U.S. & S.C. ROUTE 76
- INTERSTATE 26
- U.S. ROUTE 76
- S.C. ROUTE 48
- EXIT NUMBER 19
- INTERCHANGE
- URBANIZED AREA

SOUTH CAROLINA
Weigh-in-motion, Control
AND
Automatic Traffic Recorder Sites



Four Evacuation Scenarios

- Individual evacuation for each major area
- All three areas evacuated simultaneously

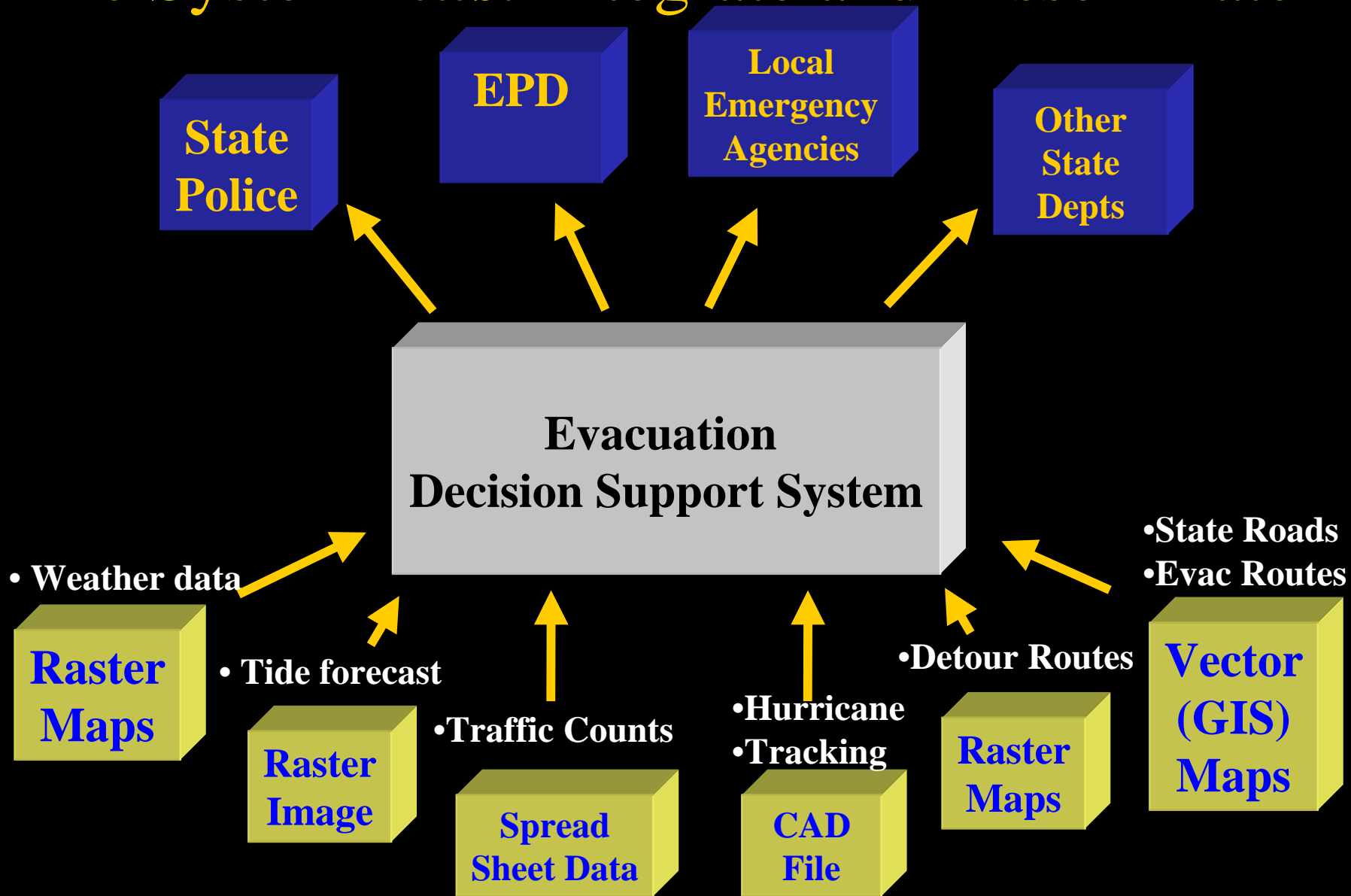


June 1999

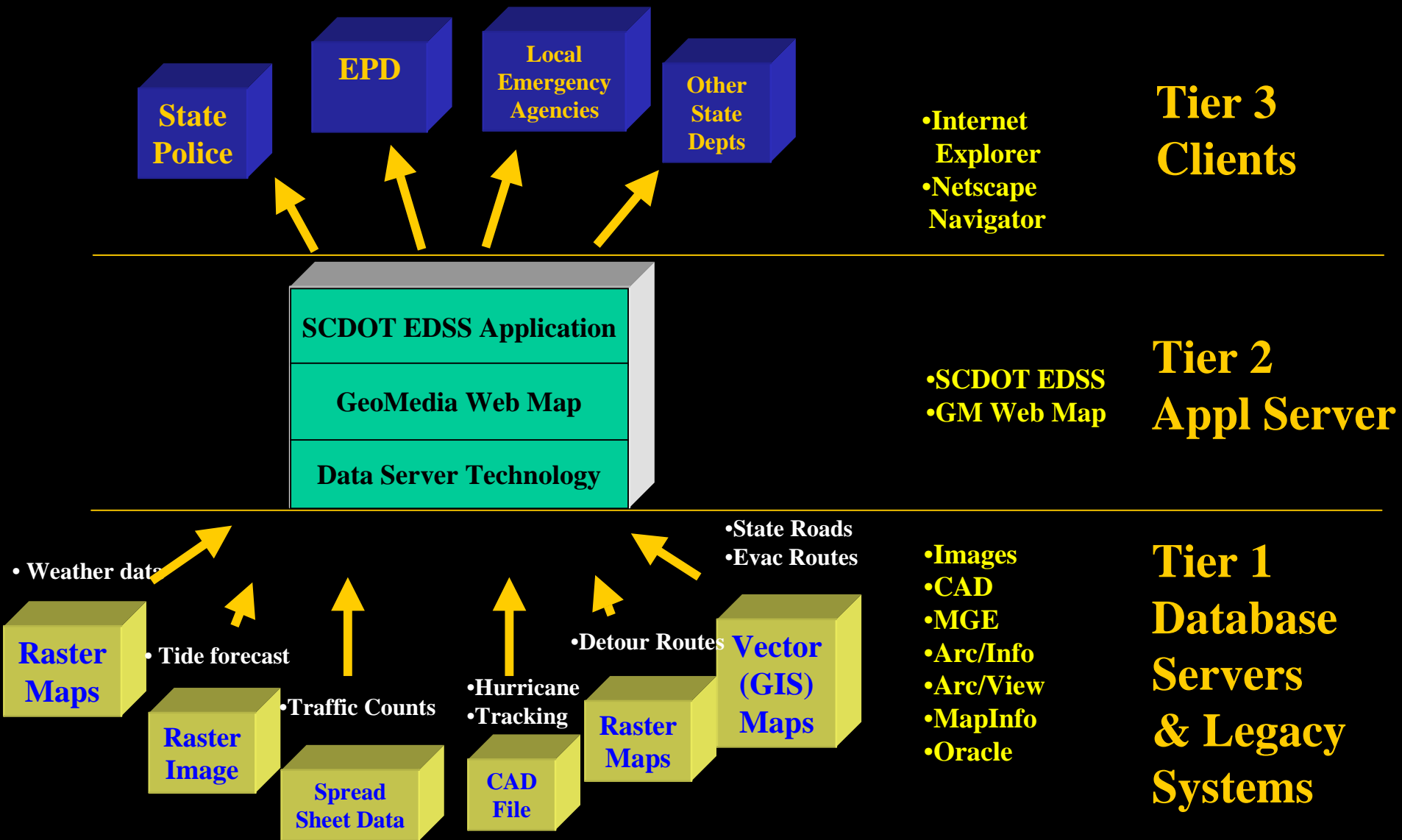
- SCDOT's Emergency Preparedness Division (EPD) investigated technology – *time critical*
- The System must:
 - Provide access to all appropriate departments
 - Provide efficient integration and display of:
 - Maps of evacuation routes
 - Real-time traffic counts
 - Weather conditions
 - Require little or no training
 - Provide access to multiple legacy systems – changing these systems was not an option

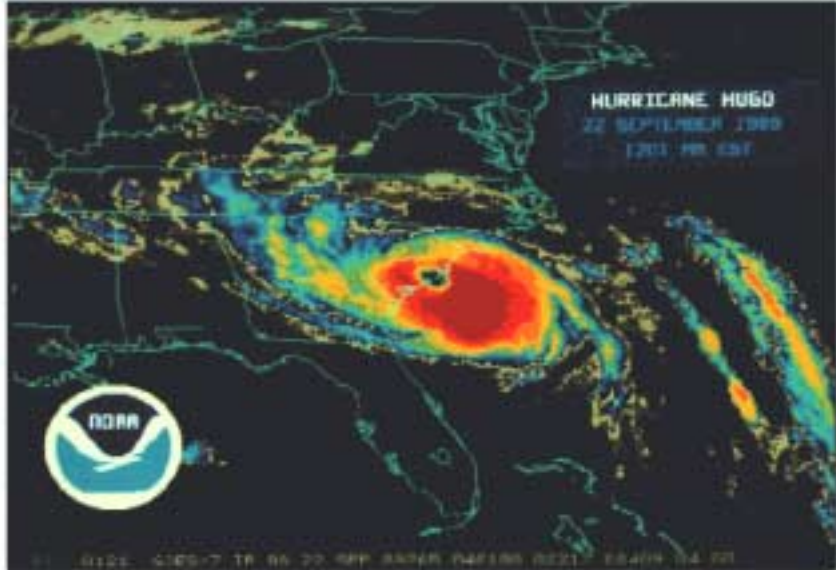


The System *must* Integrate and Disseminate



The System *is* 3 Tier





[Standard Layout](#) / [Full Page Map](#)

[One-time Setup for Internet Explorer](#)
[Download the Netscape Plug-in](#)



Please Login:

User ID:

Password:





Last Updated: 8/24/00 9:37:56 AM



Evacuation Information System

- [Northern Traffic Region Information](#)
- [Central Traffic Region Information](#)
- [Southern Traffic Region Information](#)

Instructions

Move your cursor across map features. Intelligent features will highlight. Click the highlighted feature to get more information.

Zoom Out Zoom In or Switch to [Full Screen](#)

Update Interval: 15:00 Next Update: -- N/A --

[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)

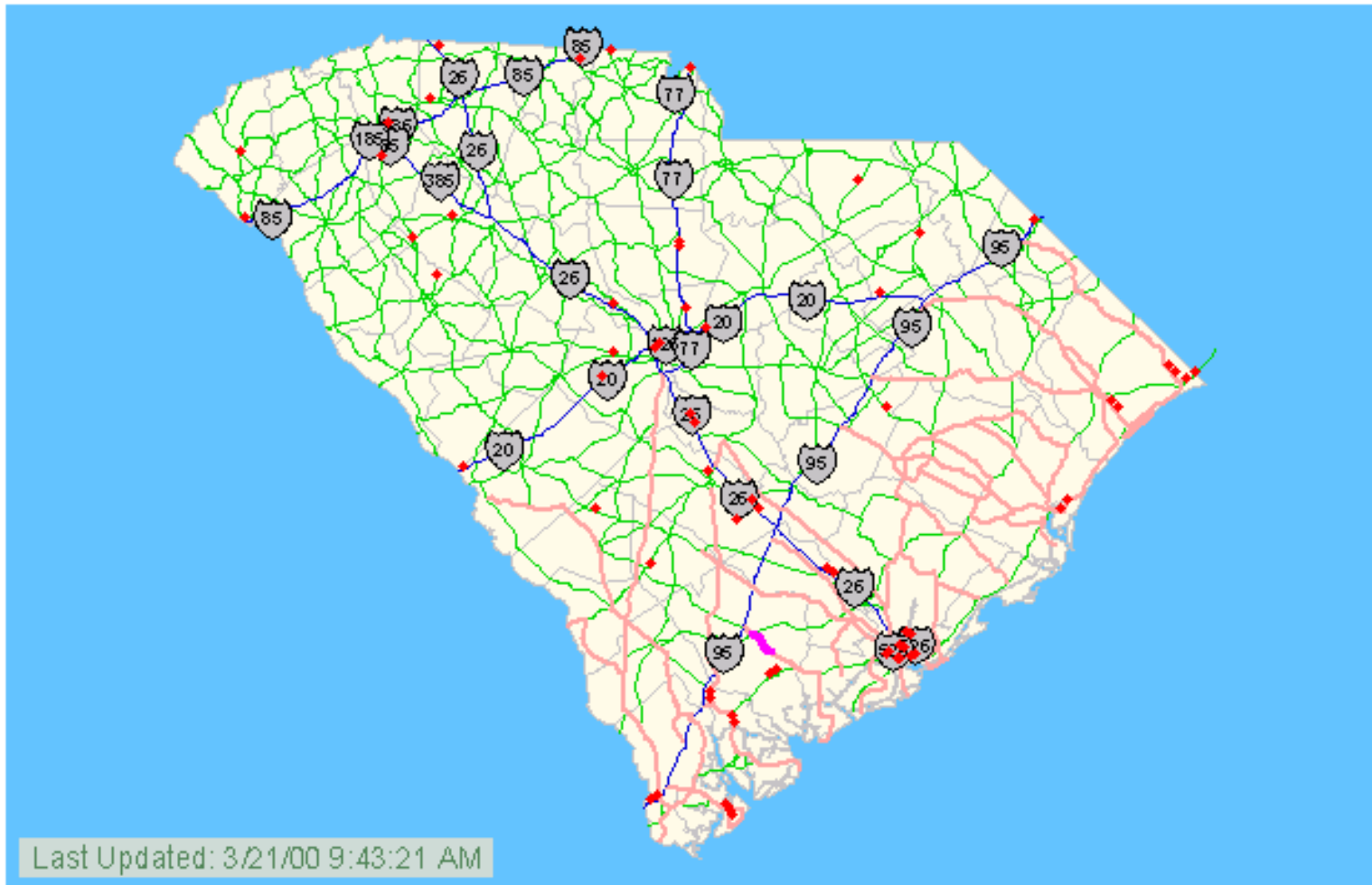


Legend	
	Interstate Hwy.
	SC State Hwy.
	Evacuation Route
	Closed Route
	Automated Traffic Recorder
Click on RED Features for More Info.	

Emergency Contacts - Last Updated: 2/1/00 3:28:36 PM

Bill Beck, Chief of Data Services	(803) 737-1468	Angela Hance, Assistant Chief of Data Services	(803) 737-1466
Stacy Eargle, Transportation Planner III	(803) 737-1673	Donald McElveen, GIS Manager I	(803) 737-1677
Rick Abbott, GIS Manager I	(803) 737-3103	Fax	(803) 737-1858





Zoom Out ◀◀●▶▶▶▶▶▶▶▶ Zoom In or Switch to [Full Screen](#)

Update Interval: 15:00 ▾ Next Update: -- N/A -- Start Stop Update Now

[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)





Evacuation Information System

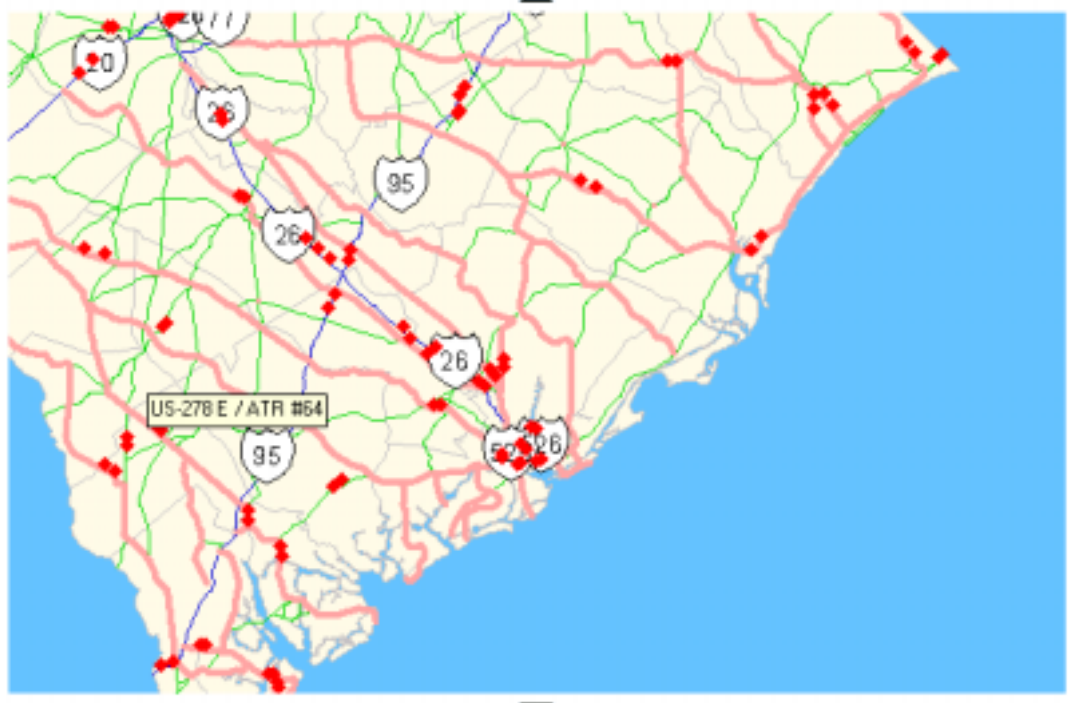
[Northern Traffic Region Information](#)

[Central Traffic Region Information](#)

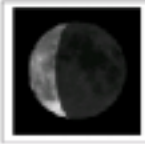
[Southern Traffic Region Information](#)

[Instructions](#)

Move your cursor across map features. Intelligent features will highlight. Click the highlighted feature to get more information.



[Zoom Out](#) [Zoom In](#) or [Switch to Full Screen](#)
 Update Interval: Next Update:
[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)



Legend	
	Interstate Hwy.
	SC State Hwy.
	Evacuation Route
	Closed Route
	Automated Traffic Recorder
Click on RED Features for More Info.	

US-278 W Hampton Co. (W of the city of Hampton)

Date		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total
8/17/00	Thu	27	10	7	10	20	73	150	169	139	151	160	206	261	223	186	274	249	263	224	151	117	97	65	57	3297
8/18/00	Fri	27	17	12	13	17	55	154	167	140	143	###	208	230	210	217	314	307	306	266	199	131	98	95	80	3406
8/19/00	Sat	47	17	20	23	34	69	49	84	79	114	186	222	207	214	201	170	184	217	195	187	158	126	121	103	3027
8/20/00	Sun	45	21	15	15	14	18	26	35	60	103	168	156	179	189	202	206	211	208	170	161	136	91	63	71	2503
8/21/00	Mon	22	10	15	19	20	80	161	162	159	153	165	182	169	153	185	243	242	273	187	145	106	76	47	62	3036
8/22/00	Tue	16	13	2	10	20	81	150	177	147	153	144	152	178	174	158	223	217	269	198	149	138	103	50	47	2987





Evacuation Information System

- [Northern Traffic Region Information](#)
- [Central Traffic Region Information](#)
- [Southern Traffic Region Information](#)

Instructions

Move your cursor across map features. Intelligent features will highlight. Click the highlighted feature to get more information.

Zoom Out Zoom In or Switch to [Full Screen](#)
 Update Interval: Next Update:
[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)



Legend

- Interstate Hwy.
- SC State Hwy.
- Evacuation Route
- Closed Route
- Automated Traffic Recorder

Click on **RED** Features for More Info.

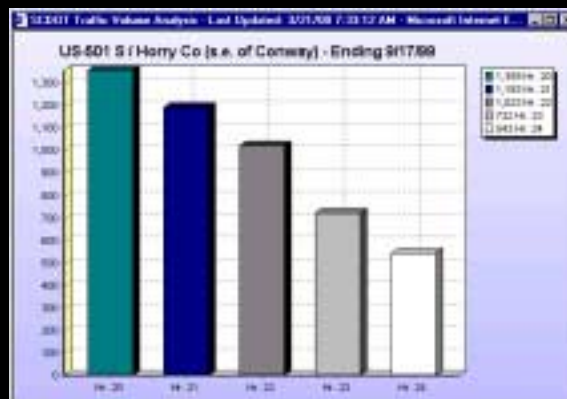
8/21/00	Mon	22	10	15	19	20	80	161	162	150	153	165	182	169	163	165	243	242	273	187	145	105	76	47	62	3036
8/22/00	Tue	16	13	3	10	20	81	150	177	147	153	144	152	178	174	158	223	217	269	198	149	138	103	50	47	2957
8/23/00	Wed	17	15	5	14	22	64	151	166	166	138	149	178	201	160											1447

Charts: [Click to Enlarge](#)
[Printable Copy](#)

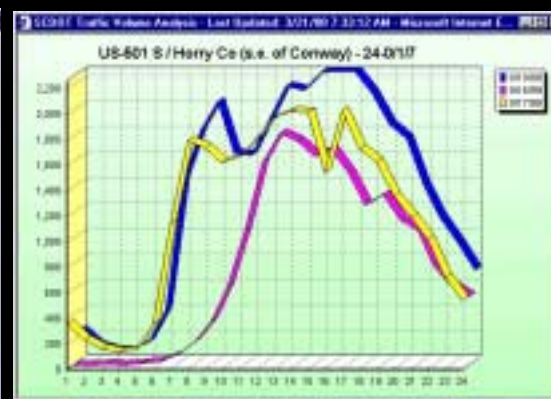
Evac Routes - Traffic Counters

Sta. 28 - I-95 (NB) Jasper (WC)

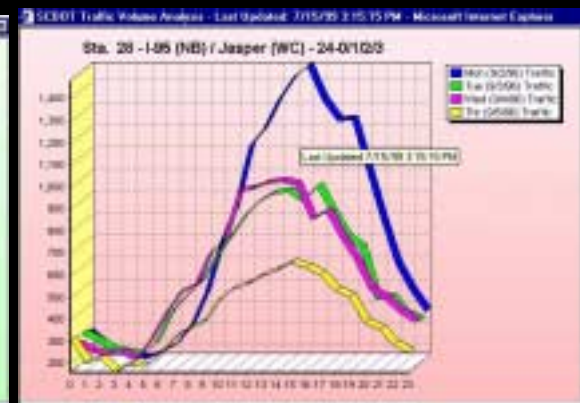
Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mon (8/26/96) Traffic	244	190	204	176	157	200	374	431	485	579	697	767	867	847
Tue (8/27/96) Traffic	248	229	182	200	189	238	380	469	494	611	692	777	821	890
Wed (8/28/96) Traffic	290	215	184	198	206	271	370	493	615	693	790	876	952	972
Thr (8/29/96) Traffic	355	266	234	215	213	262	405	540	628	770	915	1013	1152	1146
Fri (8/30/96) Traffic	509	409	342	319	292	341	532	722	812	938	1241	1286	1482	1499
Sat (8/31/96) Traffic	693	511	392	350	346	321	462	592	893	1115	1402	1468	1562	1530



Last 5 hours



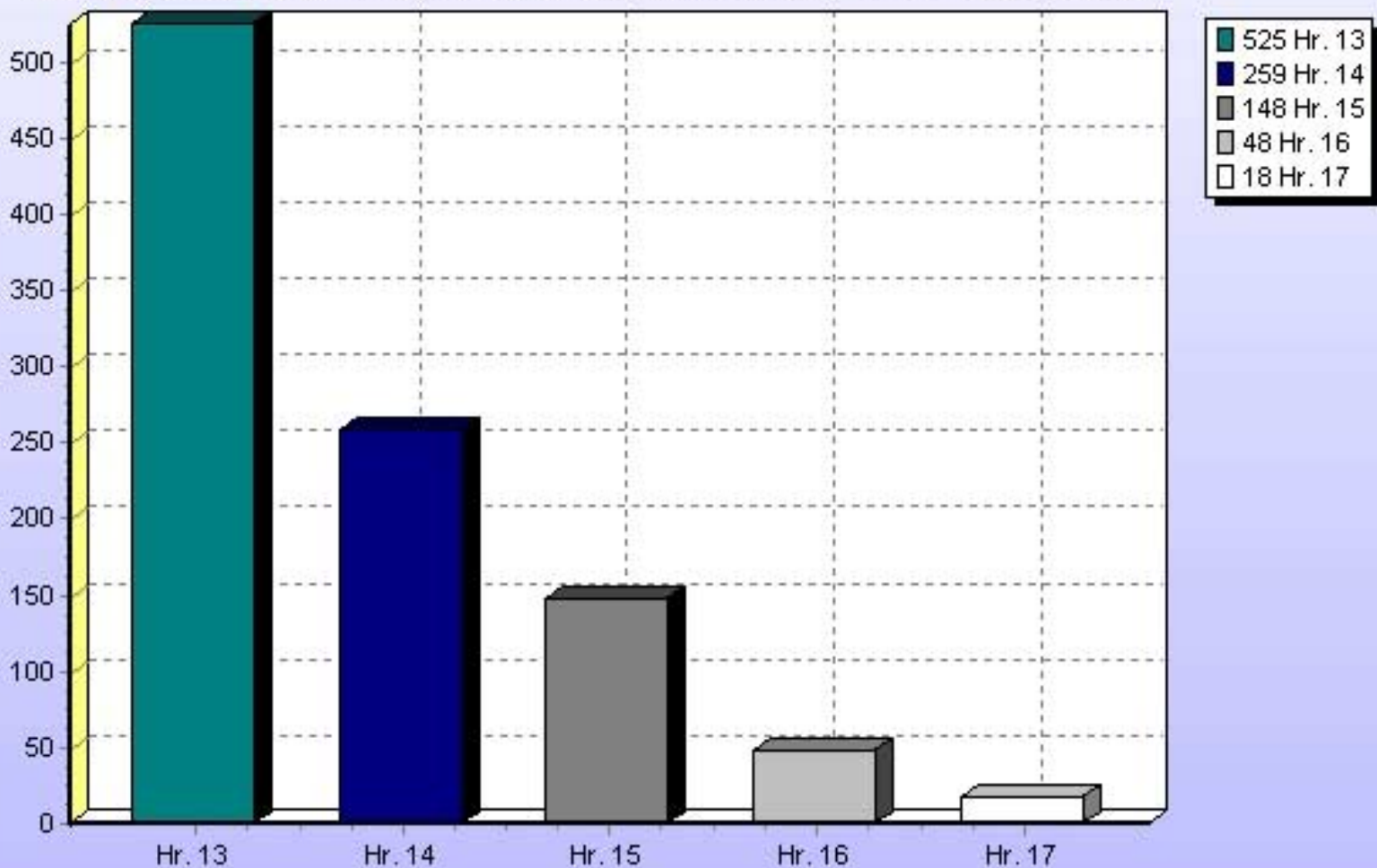
**Today, Yesterday,
1 week ago**



Last 4 days

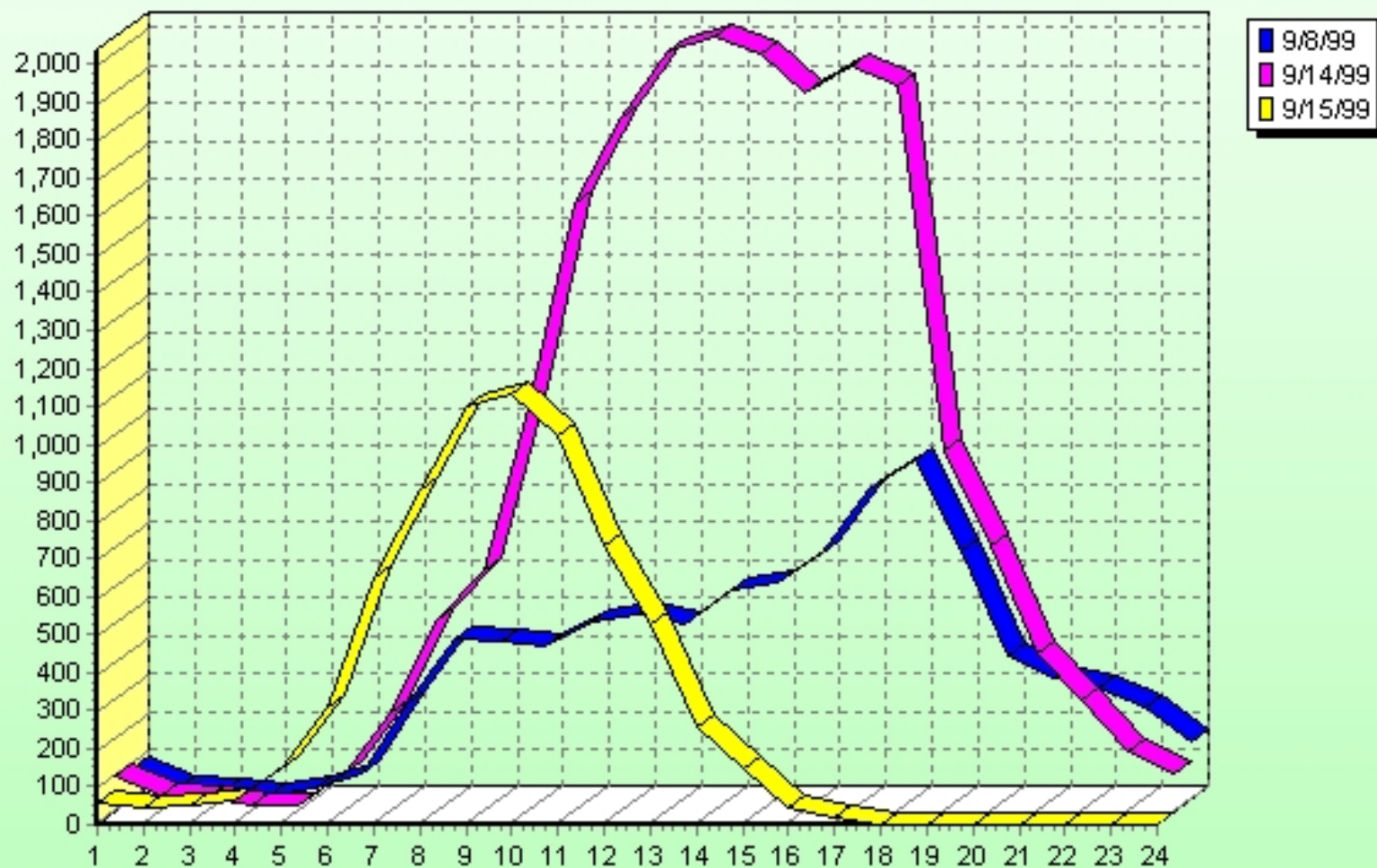
Traffic Counters – Near Real-Time

SC-9 N / Horry County (n.e. of Myrtle Beach) - Ending 9/15/99

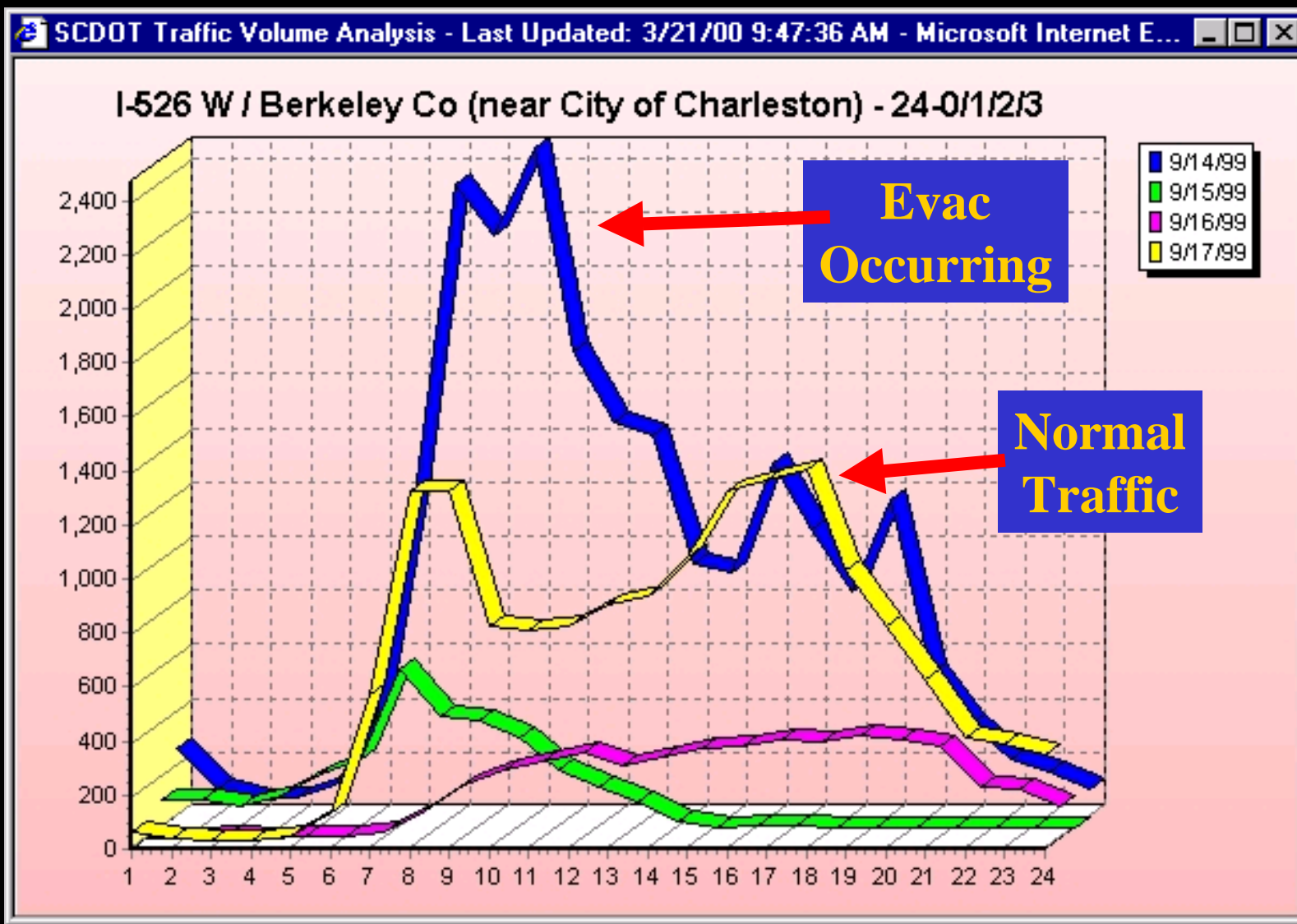


Traffic Counters – Near Real-Time

SC-9 N / Horry County (n.e. of Myrtle Beach) - 24-0/17



Traffic Counters – Near Real-Time



Weather Map – Auto Update – Tide Forecast

Last Updated: 3/21/09 9:45:00 AM

Evacuation Information System

[OTHER SCDOT DETOURS](#)

Instructions

Move your cursor across map features. Intelligent features will highlight. Click the highlighted feature to get more information.

Legend

- Interstate Hwy.
- SC State Hwy.
- Evacuation Route
- Closed Route
- Automated Traffic Recorder

Click on RED Features for More Info.

Help - Mouse Buttons

011209	Mon	270	260	190	190	210	247	691	700	700	957	915	871	669	827	837	207	356	300	237	184	189	131	114	85	10206
3/14/09	Tue	228	250	190	196	218	247	691	700	700	957	915	871	669	827	837	207	356	300	237	184	189	131	114	85	10206
3/15/09	Wed	128	157	143	99	100	80	105	133	150	184	105	103	92	0	50	86	121	100	75	60	73	76	73	140	2489
3/16/09	Thu	118	142	109	106	164	283	772	9803	1818	2088	3758	4008	4047	4000	2904	4183	2798	3588	3228	3419	1883	1483	1083	906	51419
3/17/09	Fri	785	622	391	257	292	405	646	946	1217	1718	2478	2728	2908	2807	2784	2903	2703	2842	2118	1527	1334	1007	800	487	35607

Zoom Out Zoom In or Switch to [Full Screen](#)

Update Interval: Next Update:

[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)

Charts: [Click to Enlarge](#)

[Printable Copy](#)



Evacuation Information System

Instructions

Move your cursor across map features. Intelligent features will highlight. Click the highlighted feature to get more information.

Legend

- Interstate Hwy.
- SC State Hwy.
- Evacuation Route
- Closed Route
- Automated Traffic Records

[Click on RED Features for More Info.](#)

Zoom Out Zoom In

Update Interval: 15:00 Next Update: N/A Start Stop Update Now

[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Evacuation Routes](#)

Charleston Region Charleston Count Totals

Date	1	2	3	4	5	6	7	8	9	10
9/14/99 Tue	1293	1062	2374	2747	3256	4479	8218	15167	22805	31895
9/15/99 Wed	69041	69042	69092	69744	70333	71117	72786	74259	75704	77021

Charts: [Click to Enlarge](#)
[Printable Copy](#)

Active Detours

- [I-26 Closure Cooper River Bridge Closed \(Full Size / Printable\)](#)
- [Grace Bridge Closed \(Full Size / Printable\)](#)
- [I-26 Closure \(Full Size / Printable\)](#)

[Show Detour List](#)

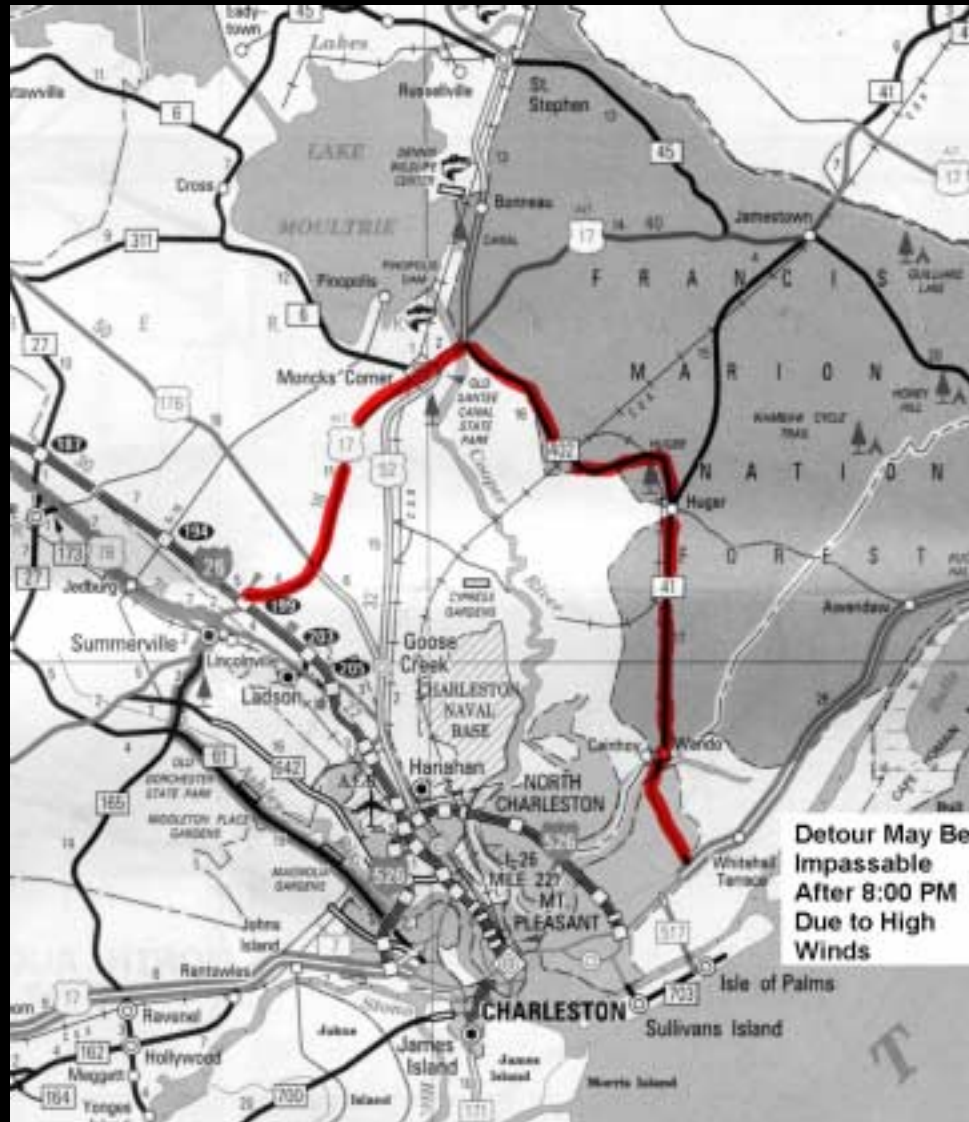
Hurricane Tracking Chart - CAD

[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)

01/1/00	01/02	01/03	01/04	01/05	01/06	01/07	01/08	01/09	01/10	01/11	01/12	01/13	01/14	01/15	01/16	01/17	01/18	01/19	01/20	01/21	01/22	01/23	01/24	01/25	01/26	01/27	01/28	01/29	01/30
01/14/00	Tue	330	250	180	190	210	347	591	703	708	507	915	871	889	827	537	397	390	300	237	184	189	131	114	95	10206			
01/15/00	Wed	528	157	143	90	100	80	905	133	190	184	105	113	92	8	90	98	121	109	75	50	73	78	73	140	2480			
01/16/00	Thu	118	140	100	308	164	363	773	1603	1818	2680	3750	4038	4047	4000	3004	4160	3790	3588	3229	3419	1883	1483	1063	935	51410			
01/17/00	Fri	709	522	391	287	292	409	646	948	1217	1710	2476	2728	2808	2607	2784	2903	2703	2842	2119	1527	1334	907	800	487	25007			

Charts: [Click to Enlarge](#) [Printable Copy](#)

Flooding Detours – Scanned Images





Last Updated: 8/24/00 9:37:56 AM



Evacuation Information System

- [Northern Traffic Region Information](#)
- [Central Traffic Region Information](#)
- [Southern Traffic Region Information](#)

Instructions

Move your cursor across map features. Intelligent features will highlight. Click the highlighted feature to get more information.

Zoom Out Zoom In or Switch to [Full Screen](#)

Update Interval: 15:00 Next Update: --N/A--

[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)



Legend	
	Interstate Hwy.
	SC State Hwy.
	Evacuation Route
	Closed Route
	Automated Traffic Recorder
Click on RED Features for More Info.	

Emergency Contacts - Last Updated: 2/1/00 3:28:36 PM

Bill Beck, Chief of Data Services	(803) 737-1468	Angela Hance, Assistant Chief of Data Services	(803) 737-1466
Stacy Eargle, Transportation Planner III	(803) 737-1673	Donald McElveen, GIS Manager I	(803) 737-1677
Rick Abbott, GIS Manager I	(803) 737-3103	Fax	(803) 737-1858



O19 =

ATR 35 BEAUFORT US 278 AT JARVIS CREEK WEST OF HILTON HEAD

FILE DATE:	8/23/00	Speed Limit:											Site: 35
HOUR	HOUR COUNT	LANE/DIR			S	P	E	E	D	(MPH)			hr
% Capacity	AVG SPEED	SPEED %	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	>90	
12-1 AM	79	Lane 1-2 EB-			1	1	10	52	15				1
2.8%	56	Speed %-			1.3%	1.3%	12.7%	65.8%	19.0%				
	138	Lane 3-4 WB-				3	32	94	9				
4.9%	53	Speed %-				2.2%	23.2%	68.1%	6.5%				
1-2 AM	60	Lane 1-2 EB-				1	8	38	13				2
2.1%	56	Speed % -				1.7%	13.3%	63.3%	21.7%				
	77	Lane 3-4 WB-					27	46	4				
2.8%	53	Speed %-					35.1%	59.7%	5.2%				
2-3 AM	45	Lane 1-2 EB-				1	9	24	11				3
1.6%	56	SPEED % -				2.2%	20.0%	53.3%	24.4%				
	42	Lane 3-4 WB-					16	23	3				
1.5%	52	Speed %-					38.1%	54.8%	7.1%				
3-4 AM	48	Lane 1-2 EB-					11	27	10				4
1.7%	55	Speed %-					22.9%	56.3%	20.8%				
	52	Lane 3-4 WB-					14	37	1				
1.9%	53	Speed %-					26.9%	71.2%	1.9%				
4-5 AM	132	Lane 1-2 EB-					25	89	17	1			5
4.7%	55	Speed %-					18.9%	67.4%	12.9%	0.8%			
	63	Lane 3-4 WB-					17	41	5				
2.3%	54	Speed %-					27.0%	65.1%	7.9%				
5-6 AM	388	Lane 1-2 EB-			1	1	54	283	49				6
12.0%	55	Speed %-											

SCDOT EDSS - Results

- Access/information dissemination goals met!
- Data integration goals met!
- Integration to legacy systems goals met!
- No training required - goals met!
- SCDOT *Very Pleased* with results - see demo at:
 - <http://maps.intergraph.com/sc>
- SCDOT continuing work to improve the system
- Contact SCDOT GIS Manager for more info:
 - **Don McElveen** – mcelveende@dot.state.sc.us
 - Intergraph Contact:
 - David Kingsbury – djkingsb@intergraph.com



State TMC



District TMC



SCDOT

CCTV

Closed Circuit Television Cameras

Images will be transmitted to SCDOT, SCDPS, EPD, and the Governor



SCDOT



CMS

Changeable Message Signs



HAR

Highway Advisory Radio



SCDOT

VSD

Vehicle Speed Detectors & Counters

Temporary count sites will be accessed by cell phones

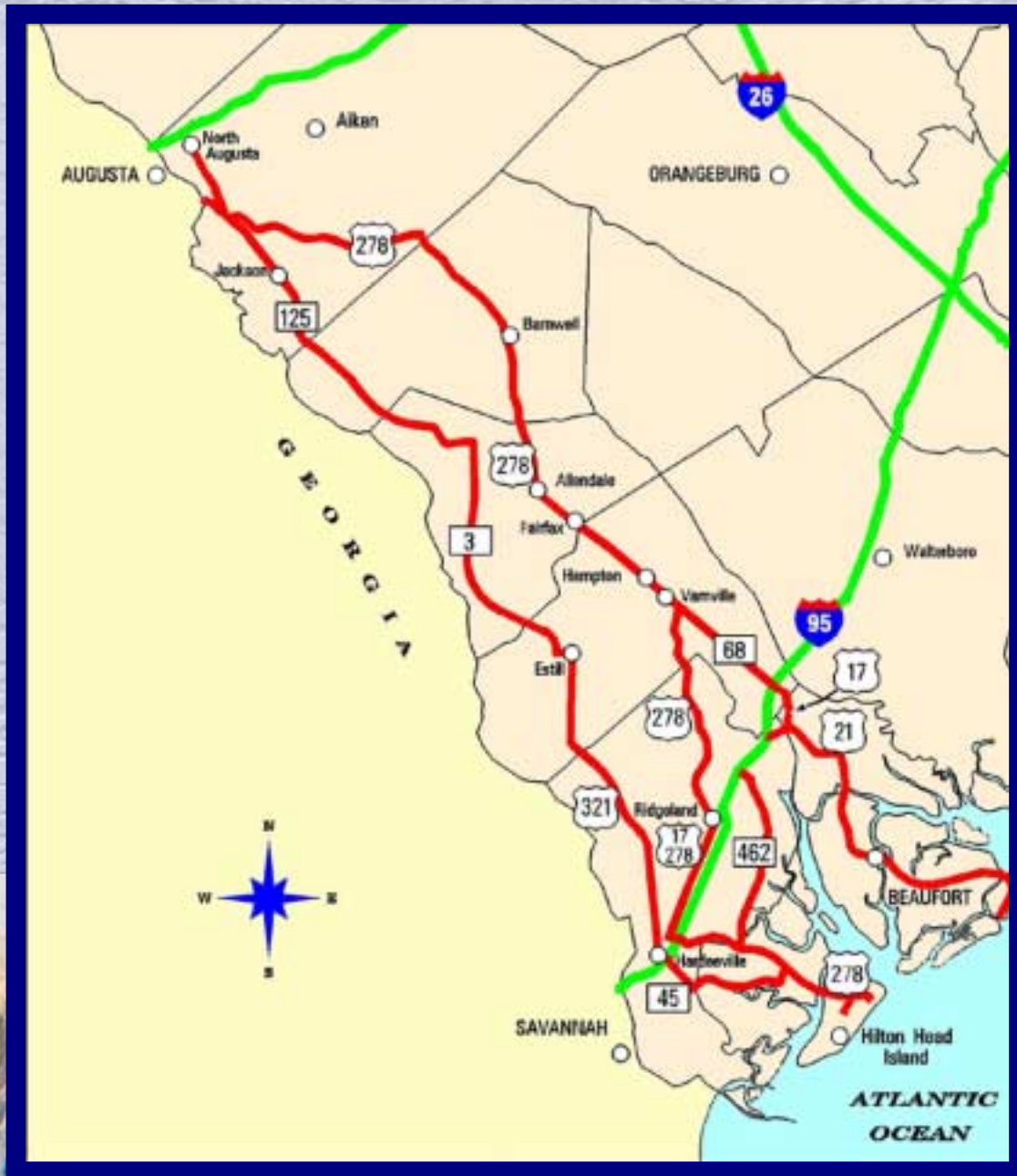


Thank you for attending!





SCDOT



 EVACUATION ROUTE



**EVACUATION
ROUTE**

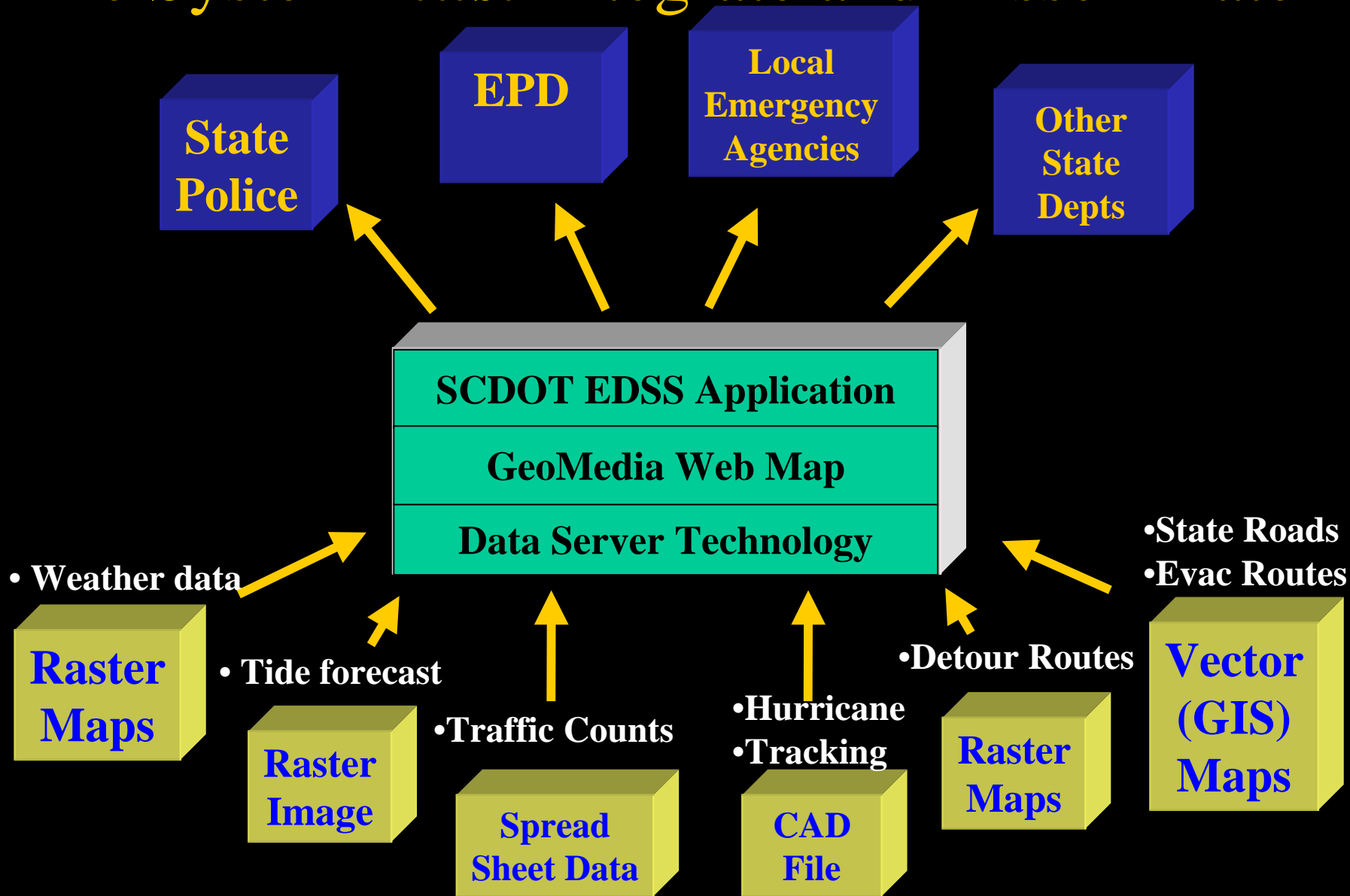




**EVACUATION
ROUTE**

SC

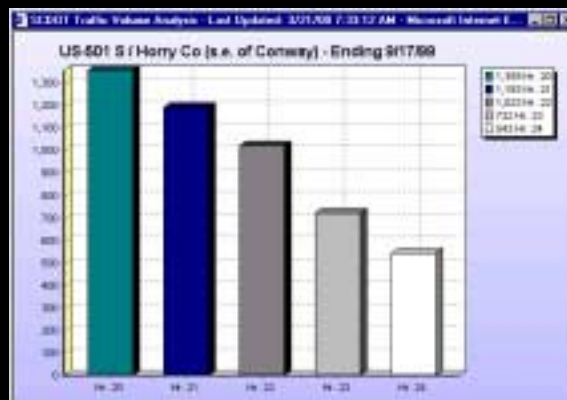
The System *must* Integrate and Disseminate



Evac Routes - Traffic Counters

Sta. 28 - I-95 (NB) Jasper (WC)

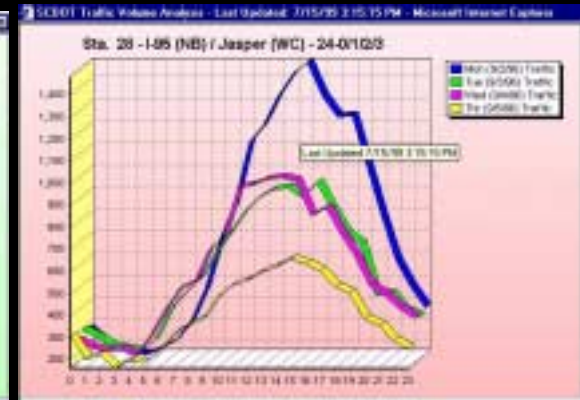
Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mon (8/26/96) Traffic	244	190	204	176	157	200	374	431	485	579	697	767	867	847
Tue (8/27/96) Traffic	248	229	182	200	189	238	380	469	494	611	692	777	821	890
Wed (8/28/96) Traffic	290	215	184	198	206	271	370	493	615	693	790	876	952	972
Thr (8/29/96) Traffic	355	266	234	215	213	262	405	540	628	770	915	1013	1152	1146
Fri (8/30/96) Traffic	509	409	342	319	292	341	532	722	812	938	1241	1286	1482	1499
Sat (8/31/96) Traffic	693	511	392	350	346	321	462	592	893	1115	1402	1468	1562	1530



Last 5 hours



Today, Yesterday,
1 week ago

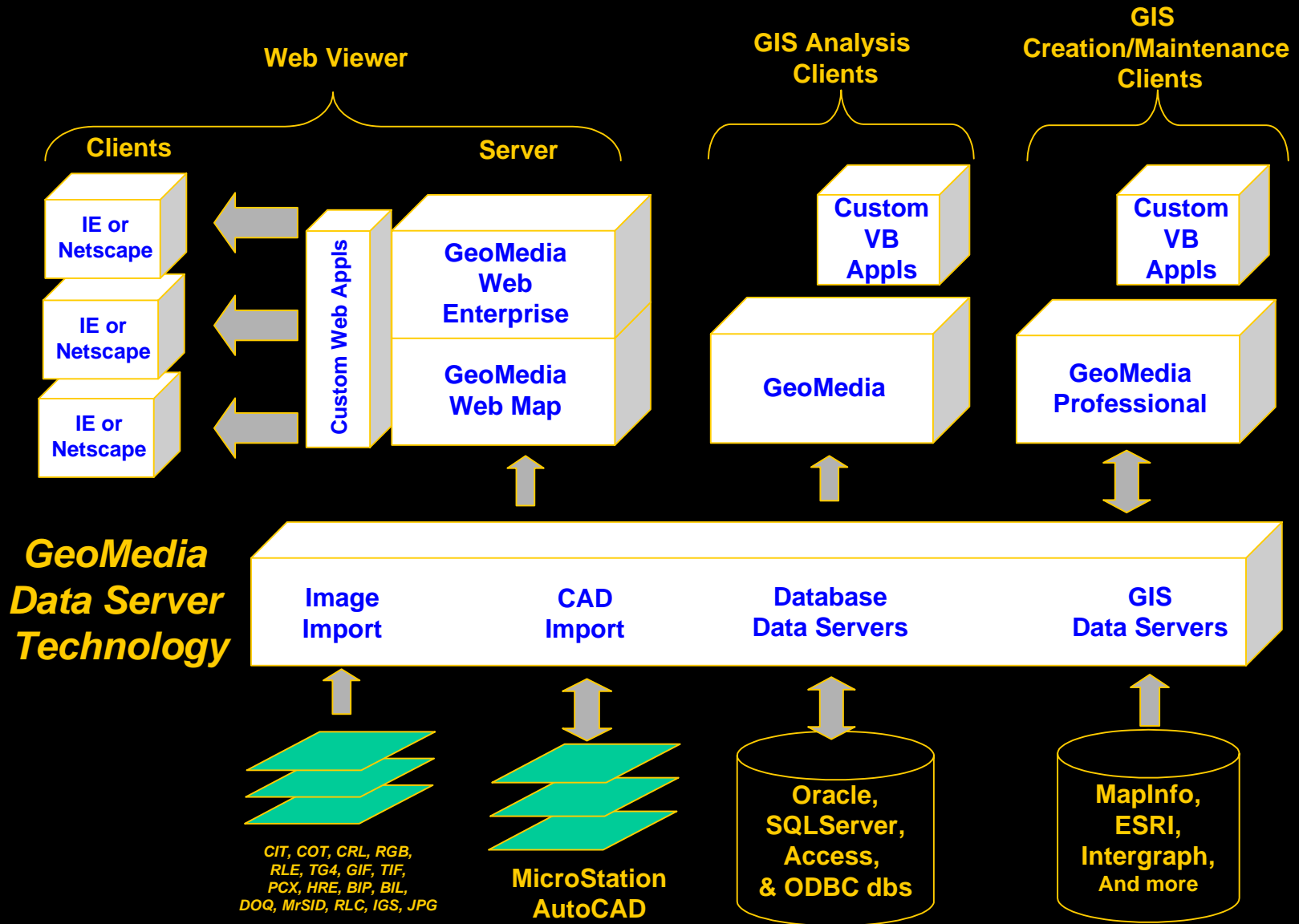


Last 4 days

September 1999: Hurricane Floyd

- “As millions fled the wrath of Hurricane Floyd, the South Carolina Department of Transportation relied on Web-based smart maps to monitor the largest evacuation in U.S. History.” GeoInfo Systems Nov 99
- SCDOT was prepared this time

GeoMedia - Product Architecture





South Carolina
Department of
Transportation



Evacuation Information System

OTHER SCDOT DETOURS

Instructions

Move your cursor across map features. Intelligent features will highlight. Click the highlighted feature to get more information.

Legend

- Interstate Hwy.
- SC State Hwy.
- Evacuation Route
- Closed Route
- Automated Traffic Recorder

Click on RED Features for More Info.

Help - Mouse Buttons



Last Updated: 8/23/03 9:44:55 AM

Zoom Out Zoom In or Switch to [Full Screen](#)

Update Interval: 15:00 Next Update: N/A --

[Base Map](#) / [Weather Map](#) / [Tracking Map](#) / [Active Detours](#) / [Emergency Contacts](#)



Emergency Contacts - Last Updated: 2/1/00 3:28:36 PM

Bill Beck, Chief of Data Services (803) 737-1468
 Stacy Eangle, Transportation Planner III (803) 737-1673
 Rick Abbott, GIS Manager I (803) 737-3103

Angela Hance, Assistant Chief of Data Services (803) 737-1466
 Donald McElveen, GIS Manager I (803) 737-1677
 Fax (803) 737-1858

EVACUATION
ROUTE



Traffic Counters – Near Real-Time

