

Hall County Crash Profile

Prepared by
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GHMPO

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Introduction

The Hall County Crash Profile describes crash locations and statistics, including total crash numbers, crash rates, severity, injuries and fatalities, hotspots, and comparison with neighboring counties. The information reported in this profile is intended to be used for evaluating the safety of transportation facilities and identifying priorities for improvement. The Georgia Department of Transportation (GDOT) is currently in the process of establishing a system for project prioritization to be used throughout the state. Safety is a vital component of project prioritization and is measured by the types of crash data presented here.

These tables and maps are derived from Critical Analysis Reporting Environment (CARE) software, which compiles data from GDOT. Vehicle miles traveled (VMT) data are obtained directly from GDOT. All data covers the eight-year period of 2000-2007 unless otherwise stated. Due to understandable imperfections in data reporting, about five percent of the 49,528 total crash points in Hall County have location errors, meaning they cannot be mapped.

Regional Statistics

Table 1. Regional Crash Statistics

Statistic	Forsyth	Gwinnett	Jackson	Hall	Region Total	Georgia
Total Crashes	32,099	205,100	12,833	49,528	299,560	2,664,709
Fatal Crashes	126	560	122	221	1,029	11,877
Injury Crashes	7,712	46,741	3,550	12,779	70,782	698,455
PDO* Crashes	24,261	157,799	9,161	36,528	227,749	1,954,377
Crashes Per 10,000 VMT*	13.04	16.53	6.72	15.18	14.95	11.17
Total Fatalities	136	602	145	241	1,124	13,146
Total Injured Persons	11,361	67,837	5,740	19,681	104,619	1,071,460
Intersection Crashes	14,818	102,641	5,256	26,631	149,346	1,239,715
Pedestrian Crashes	78	901	35	279	1,293	19,390
Bike Crashes	16	286	19	76	397	7,341
Commercial Vehicle Crashes	1,589	8,551	952	1,853	12,945	122,456

Sources: 2000-2007 Georgia Crash Data, CARE; Report 445, GDOT.

*Vehicle miles traveled (VMT) data is only available through the year 2006, therefore all VMT statistics cover years 2000-2006.

*Property Damage Only (PDO)

Figure 1. Regional Crash Rates

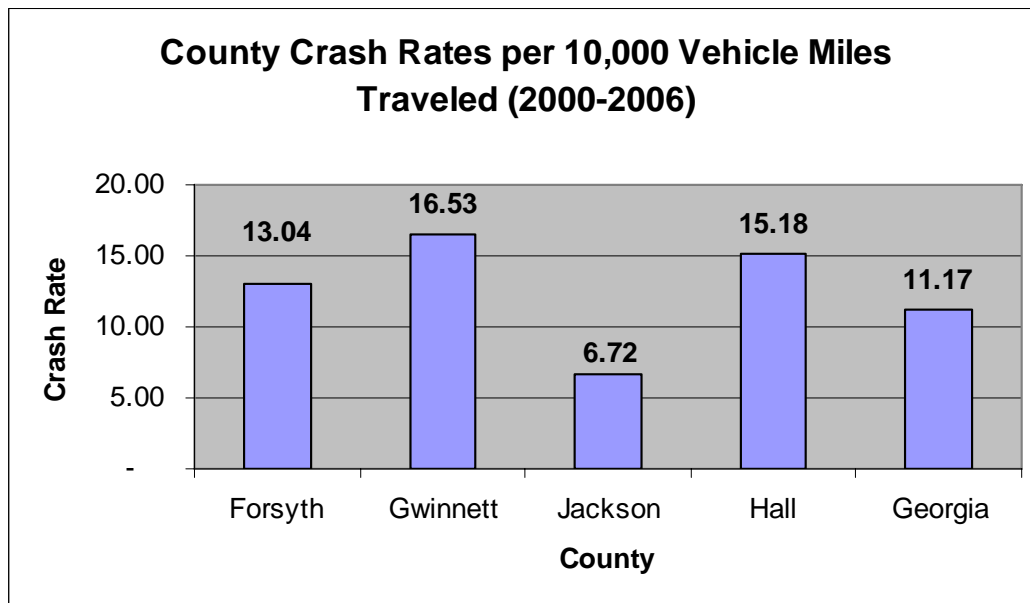


Table 1 displays summary crash data for Hall County compared to its three neighboring counties, Forsyth, Gwinnett, and Jackson, and the state of Georgia. Figure 1 uses the crash rate to relate each county's number of crashes to the number of vehicle miles traveled.

Total Crash Summary

Table 2a: Hall County Summary

Statistic	Annual Average (2000-2007)	Total (2000-2007)	Regional** Total (2000-2007)	% of Regional Total
Total Crashes	6,191	49,528	299,560	16.5%
Fatal Crashes	28	221	1,029	21.5%
Injury Crashes	1,597	12,779	70,782	18.1%
PDO Crashes	4,566	36,528	227,749	16.0%
Crashes Per 10,000 VMT (00-06)*	1.90	15.18	14.95	101.6%
Total Fatalities	30	241	1,124	21.4%
Total Injured Persons	2,460	19,681	104,619	18.8%
Intersection Crashes	3,329	26,631	149,346	17.8%
Pedestrian Crashes	35	279	1,293	21.6%
Bike Crashes	10	76	397	19.1%
Sources: 2000-2007 Georgia Crash Data, CARE; Report 445, GDOT.				

Table 2b: Top 10 Crash Hotspot Description

Facility	Limits	Number of Total Crashes (2000-2007)	% of County Total Crashes	Fatal Crashes	Injury Crashes	POD Crashes
SR 53 - Washington Street	Pearl Nix Parkway to Shallowford Road	767	1.55%	0	162	605
SR 60 - Jesse Jewell Parkway	Bank Street to Bradford Street	695	1.40%	0	139	556
SR 11 - Jesse Jewell Parkway	Cleveland Highway to Summit Street	656	1.32%	0	168	488
SR 53 - Mundy Mill Road	Mundy Mill Drive to Old Flowery Branch Road	646	1.30%	1	138	507
SR 53 - McEver Road	McEver Corner to The Retreat Apartments	576	1.16%	0	116	460
SR 13 - Atlanta Highway	Winder Highway to Atkins Drive	478	0.97%	0	111	367
SR 11 - E. E. Butler Parkway	Chestnut Street to MLK Blvd	459	0.93%	0	95	364
SR 13 - Atlanta Highway	Hospital Drive to Browns Bridge Road	450	0.91%	1	113	336
I-985	Mile 13.6 to 14.1	434	0.88%	0	134	300
SR 11 - E. E. Butler Parkway	Mile 8 to Chestnut Street	431	0.87%	1	97	333
Source: 2000-2007 Georgia Crash Data, CARE.						

Crash hotspots are defined as half mile segments that have at least five total crashes between 2000 and 2007. There are 1,264 road segments in Hall County that meet these criteria. The table above displays the top ten hotspots, ranked by number of total crashes.

Figure 2a: Total Crashes 2000-2007

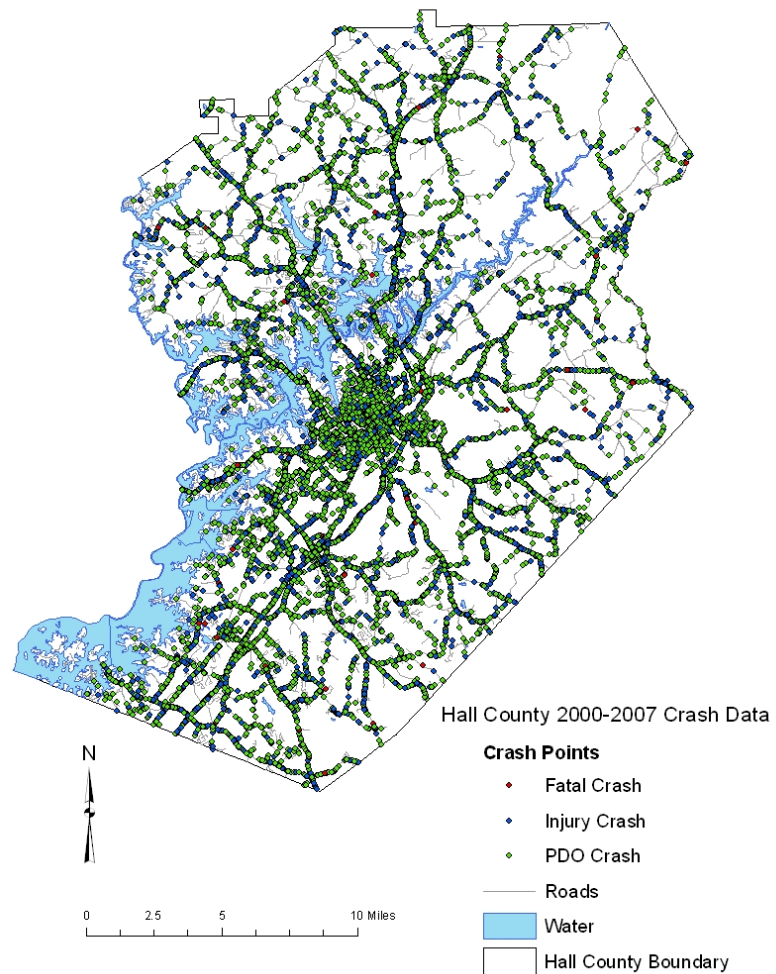
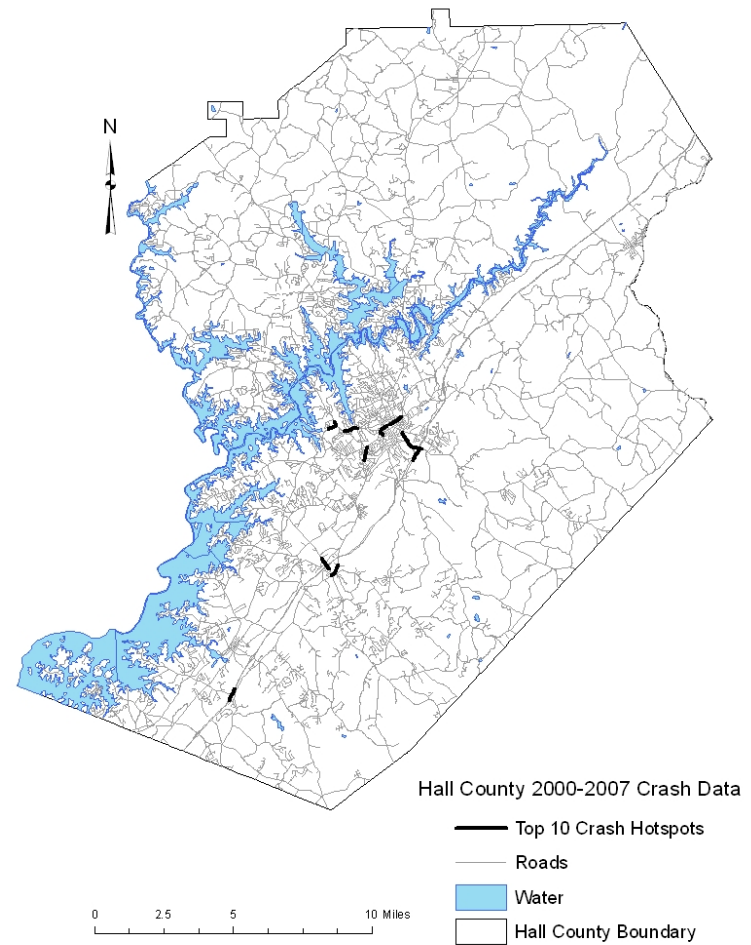


Figure 2b: Top 10 Crash Hotspots



Source: 2000-2007 Georgia Crash Data, CARE.

Fatal Crashes

Table 3a: Fatal Crash Statistics

Statistic	Hall 2000-2007	Hall Annual Average	Region	% of Regional Total
Total Fatal Crashes	221	28	1,029	21.5%
Total Fatalities	241	30	1,124	21.4%
Rate per 10,000 VMT	0.074	0.009	0.056	131.7%
Total Pedestrians Killed	16	2.000	99	16.2%
Rate per 10,000 VMT	0.005	0.001	0.005	99.3%
Fatalities Involving Commercial Vehicles	36	4.500	146	24.7%

Sources: 2000-2007 Georgia Crash Data, CARE; Report 445, GDOT.

Table 3b: Fatal Crash Hotspots

Facility	Limits	Number of Fatal Crashes (2000-2007)	% of County Total Fatal Crashes
Thompson Mill Road	Mile 9.7 to Celebration	3	1.36%
Thompson Bridge Road	Price Road to Mile 17.0	3	1.36%
Athens Highway	Squires Road to Gillsville Highway	3	1.36%
Atlanta Highway	Radford Road to Cantrell Road	3	1.36%

Source: 2000-2007 Georgia Crash Data, CARE.

Fatal crash hotspots are defined as half mile segments that have a minimum of three fatal crashes between the years 2000 and 2007. Only four segments in Hall County meet these criteria.

Figure 3a: Fatal Crash Locations

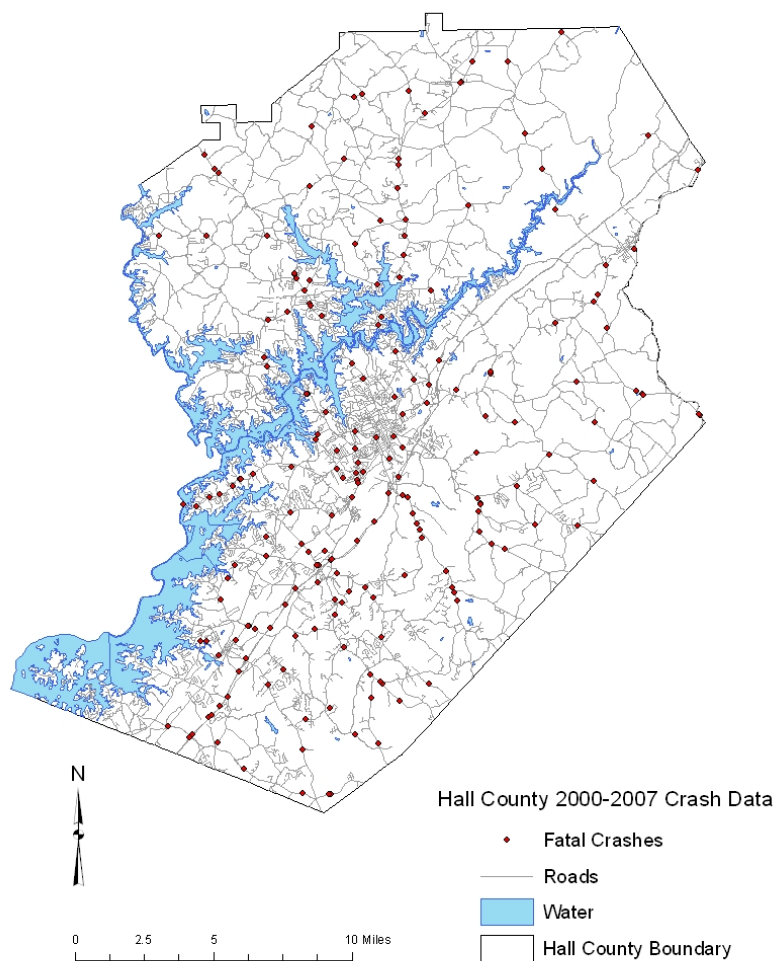
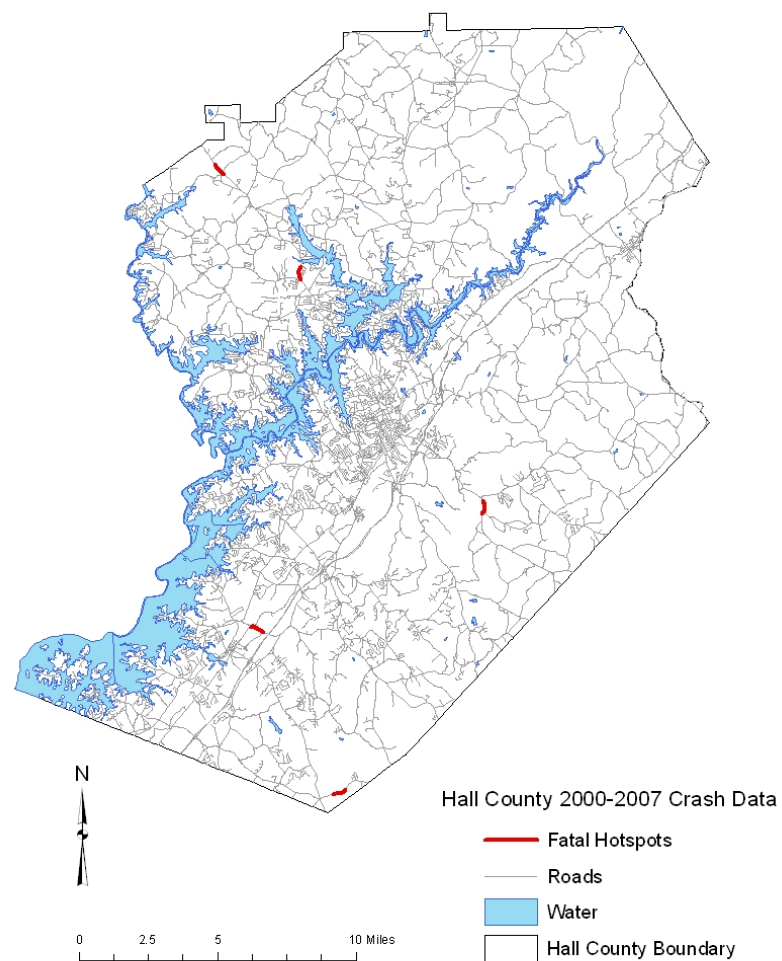


Figure 3b: Fatal Crash Hotspots



Source: 2000-2007 Georgia Crash Data, CARE.

Injury Crashes

Table 4a: Injury Crash Statistics

Statistic	Hall 2000-2007	Hall Annual Average	Region	% of Regional Total
Total Injury Crashes	12,779	1,597	70,782	18.1%
Total Injuries	19,681	2,460	104,619	18.8%
Injuries per 10,000 VMT	6.03	0.75	4.48	134.5%
Total Pedestrians Injured	241	30	1,112	21.7%
Rate per 10,000 VMT	0.074	0.009	0.055	133.1%
Injuries Involving Commercial Vehicles	713	89	3,863	18.5%
Rate per 10,000 VMT	0.219	0.027	0.193	113.4%
Sources: 2000-2007 Georgia Crash Data, CARE; Report 445, GDOT.				

Table 4b: Injury Crash Hotspots

Facility	Limits	Number of Injury Crashes (2000-2007)	% of County Injury Crashes
SR 53	Washington Street to Lakemont Drive	208	1.63%
SR 11/Athens Highway	Jesse Jewel Parkway to Spring Street	167	1.31%
SR 53	Beechwood Blvd to Dawsonville Highway	145	1.13%
SR 60/Jesse Jewell Parkway	W Academy Street to Washington Street	138	1.08%
SR 53	Mundy Mill Drive to Flat Iron Drive	136	1.06%
SR 11/Myrtle Street	MLK Blvd to Jesse Jewel Parkway	135	1.06%
SR 13/Atlanta Highway	Flat Creek Road to Browns Bridge Road	134	1.05%
SR 11/ E. E. Butler Parkway	Ridge Road West to MLK Blvd	116	0.91%
I-985	Mile 8.2 to 8.7	108	0.85%
SR 53	Lakemont Drive to Green Hill Circle	100	0.78%
Source: 2000-2007 Georgia Crash Data, CARE.			

Injury hotspots are defined as half mile road segments which have a minimum of five injury crashes during 2000 to 2007. Hall County contains 528 road segments that meet these criteria. The table above displays the top ten injury hotspots, ranked by number of injury crashes.

Figure 4a: Injury Crash Locations

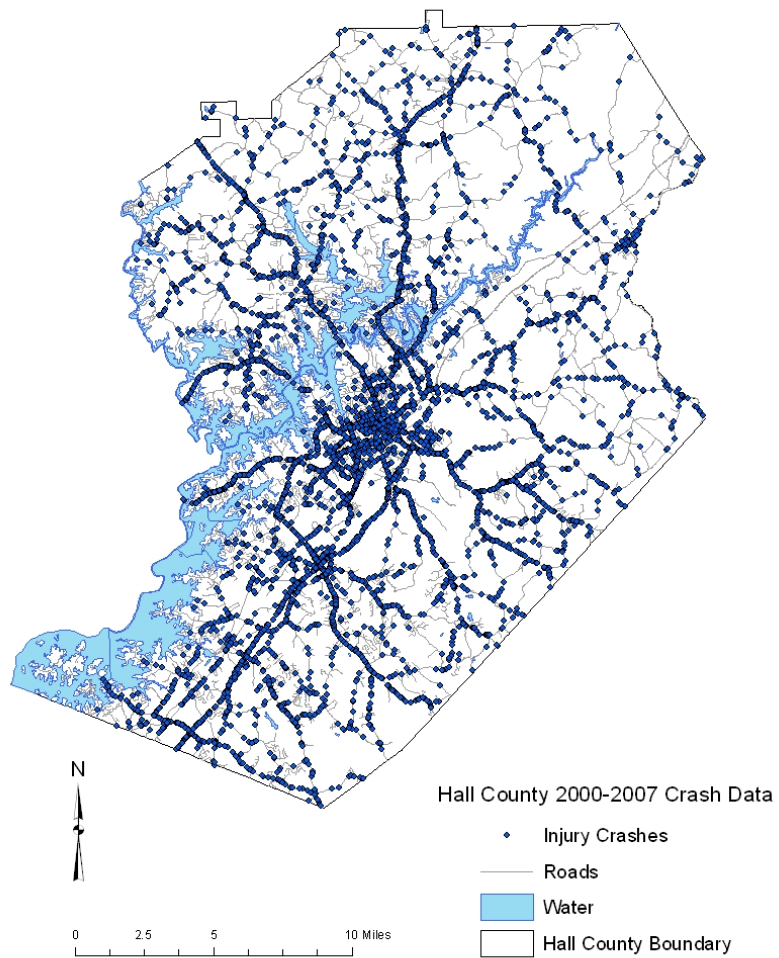
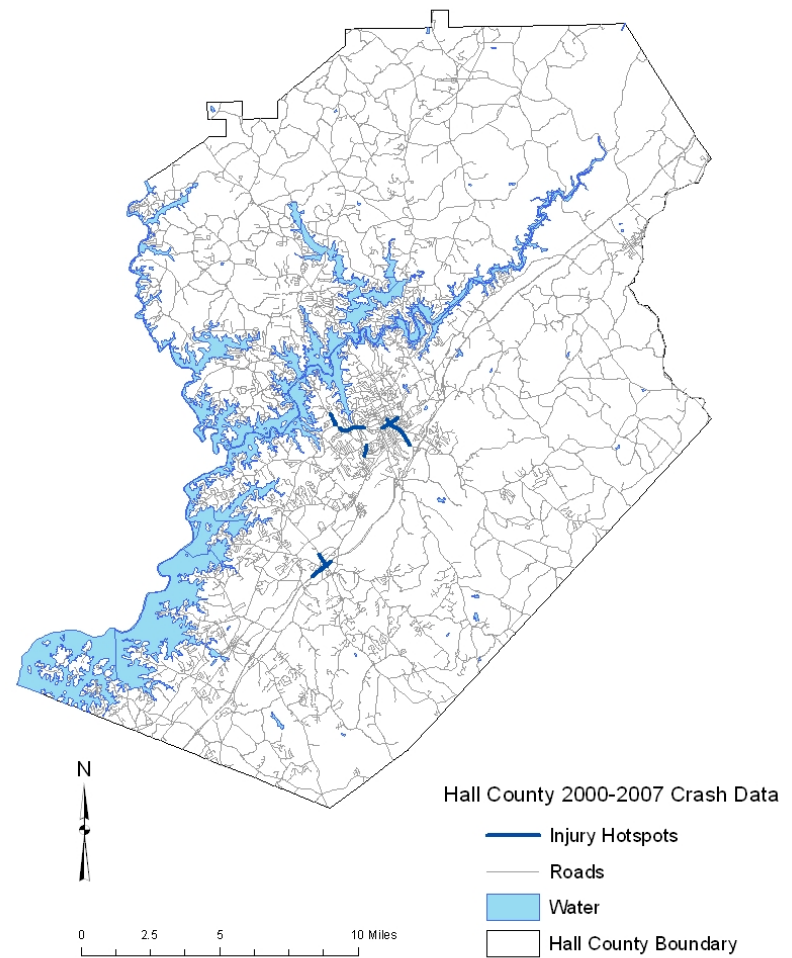


Figure 4b: Injury Crash Hotspots



Source: 2000-2007 Georgia Crash Data, CARE.

Intersection Crashes

Table 5a: Intersection Crash Statistics

Statistic	Hall 2000-2007	Hall Annual Average	% of County Crashes	Region Total	% of Region Total
Total Intersection Crashes	26,631	3,329	53.77%	149,346	17.83%
Fatal Crashes	59	7	26.70%	281	21.00%
Injury Crashes	6,616	827	51.77%	35,495	18.64%
PDO Crashes	19,956	2,495	54.63%	113,570	17.57%
Source: 2000-2007 Georgia Crash Data, CARE.					

Table 5b: Intersection Crash Hotspots

Route	Crossroad 1	Crossroad 2	Number of Crashes			Total Crashes 2000-2007
			Fatal	Injury	PDO	
SR 53	Pearl Nix Parkway	Lakeshore Drive	0	118	458	576
SR 11	Race Street	Prior Street	0	102	288	390
SR 11	Ridge Road West	Chestnut Street	1	84	278	363
SR 11	Jesse Jewell Parkway	Jesse Jewell Parkway	0	81	281	362
SR 13	Pearl Nix Parkway	Lyman Street	0	83	212	295
SR 13	Winder Highway	Winder Highway	0	67	227	294
SR 53	Dawsonville Highway	Dawsonville Highway	0	51	233	284
SR 11	MLK Blvd	MLK Blvd	0	57	216	273
SR 52	Cornelia Highway	Cornelia Highway	0	66	197	263
SR 53	Mundy Mill Drive	Frontage Road	0	50	170	220
Source: 2000-2007 Georgia Crash Data, CARE.						

Intersection crash hotspots are defined as one tenth mile road segments that have a minimum of five intersection crashes during 2000 to 2007. Hall County contains 587 road segments that meet these criteria. The table above shows the top ten intersection hotspots, ranked by number of crashes occurring at an intersection. **These intersection hotspots are not actual intersection points, but road segments that contain at least one intersection.** A shorter length is used pinpoint a smaller area for intersection hotspots than for other hotspots.

Figure 5a: Intersection Crash Locations

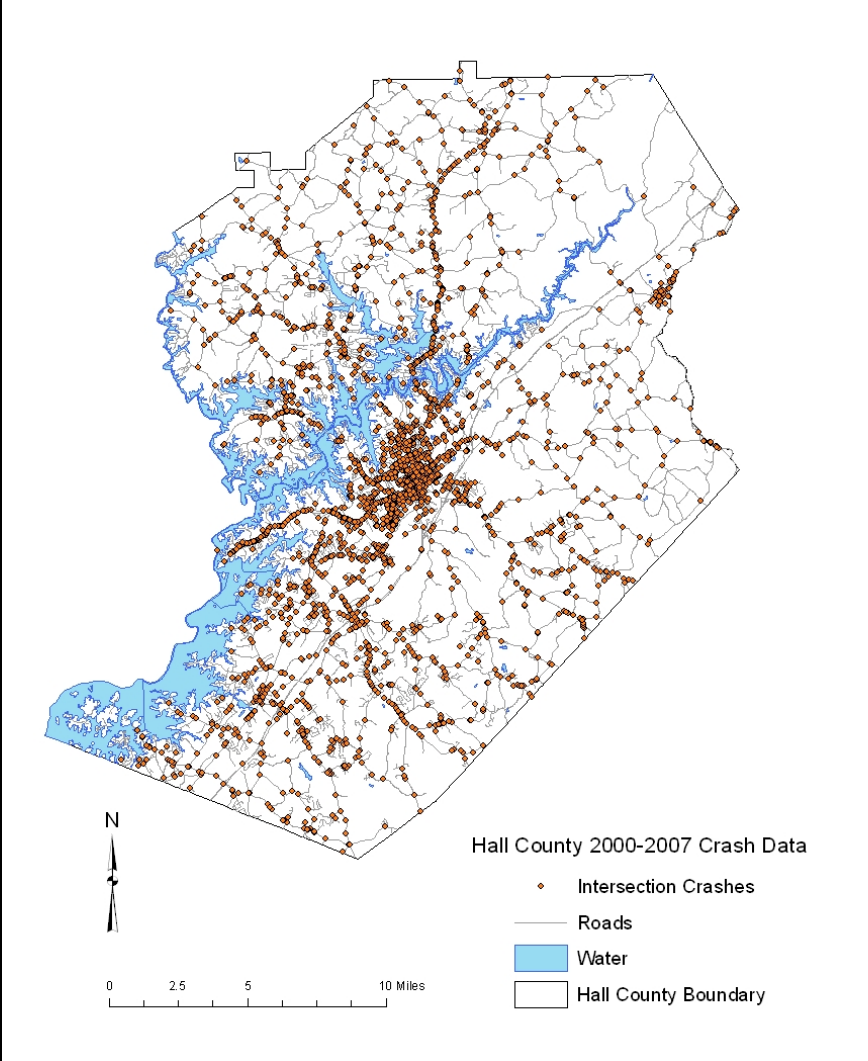
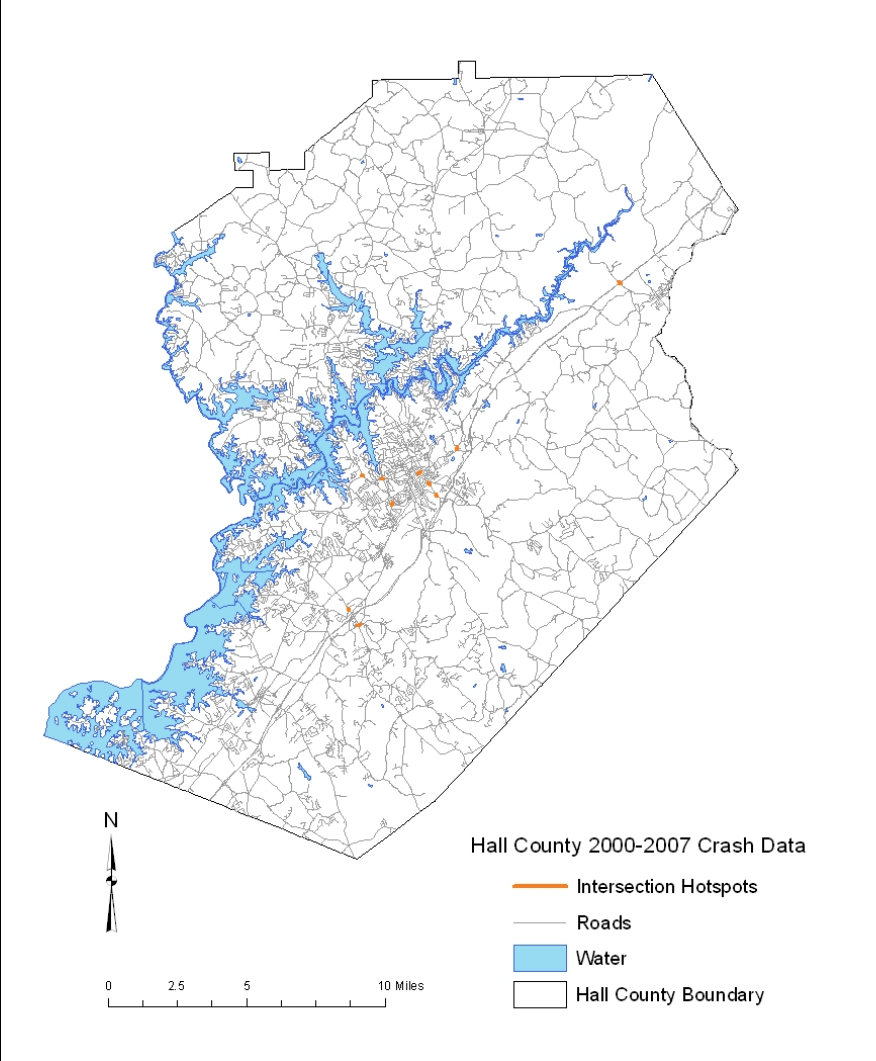


Figure 5b: Intersection Crash Hotspots



Source: 2000-2007 Georgia Crash Data, CARE.

Pedestrian Crashes

Table 6a: Pedestrian Crash Statistics

Statistic	Hall 2000-2007	Hall Annual Average	Region Total	% of Regional Total
Total Crashes Involving Pedestrians	279	35	1,293	21.6%
Fatal Crashes	17	2	99	17.2%
Injury Crashes	243	30	1,090	22.3%
PDO Crashes	19	2	104	18.3%
Pedestrians Involved in Crashes	286	36	1,356	21.1%
Killed	16	2	99	16.2%
Serious Injury	37	5	212	17.5%
Visible Injury	127	16	555	22.9%
Complaint Injury	77	10	345	22.3%
Not Injured	29	4	145	20.0%
Source: 2000-2007 Georgia Crash Data, CARE.				

Table 6b: Pedestrian Crash Hotspots

Facility	Limits	Number of Crashes			Total Pedestrian Crashes (2000-2007)	% of County Pedestrian Crashes (12,779)
		Fatal	Injury	PDO		
Jesse Jewell Parkway	Maple Street to Brenau Ave	0	6	1	7	2.5%
Myrtle Street	MLK Blvd to Jesse Jewel Parkway	0	7	0	7	41.2%
Skelton Road	Spring Road to Browns Bridge Ave	1	4	0	5	2.1%
Atlanta Highway	Central Ave to Banks Street	0	5	0	5	26.3%
Source: 2000-2007 Georgia Crash Data, CARE.						

Pedestrian crash hotspots are defined as half mile road segments containing a minimum of five pedestrian crashes during 2000 to 2007. Only four road segments in Hall County meet these criteria. Table 6b shows these four hotspots, ranked by number of pedestrian crashes. This table also describes the severity of each pedestrian crash. The occurrence of a fatal or injury crash involving a pedestrian does not necessarily imply that the pedestrian was the individual who was killed or injured during the crash. Table 6a describes the amount of crashes involving pedestrians and the severity of those crashes versus the amount of pedestrians involved in crashes and their type of injury.

Figure 6a: Pedestrian Crash Locations

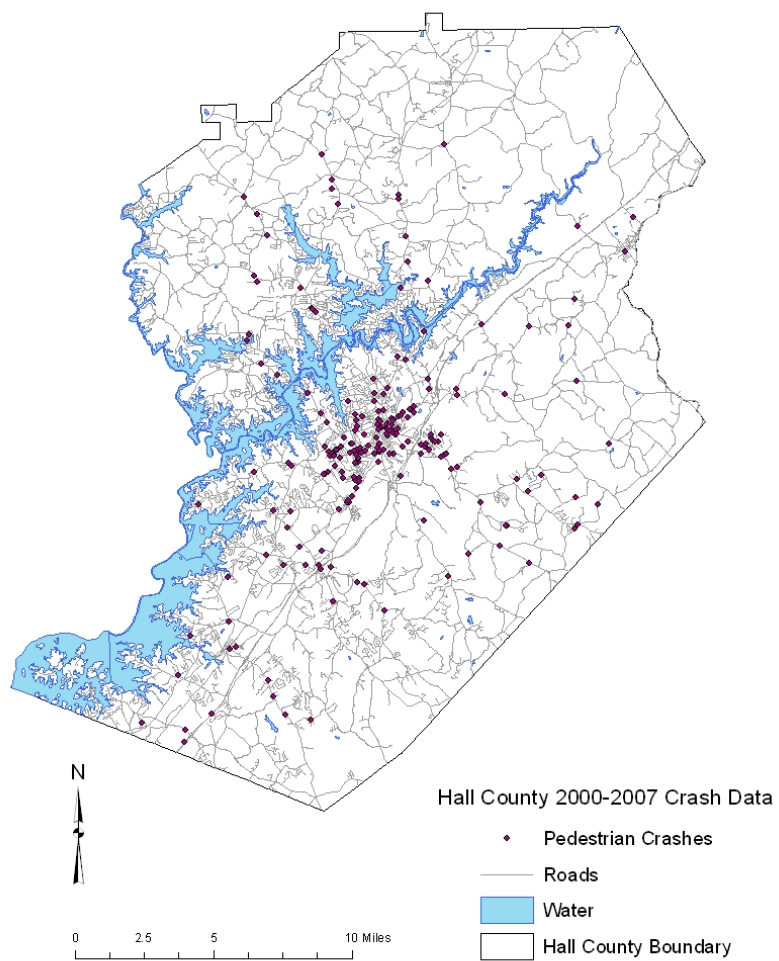
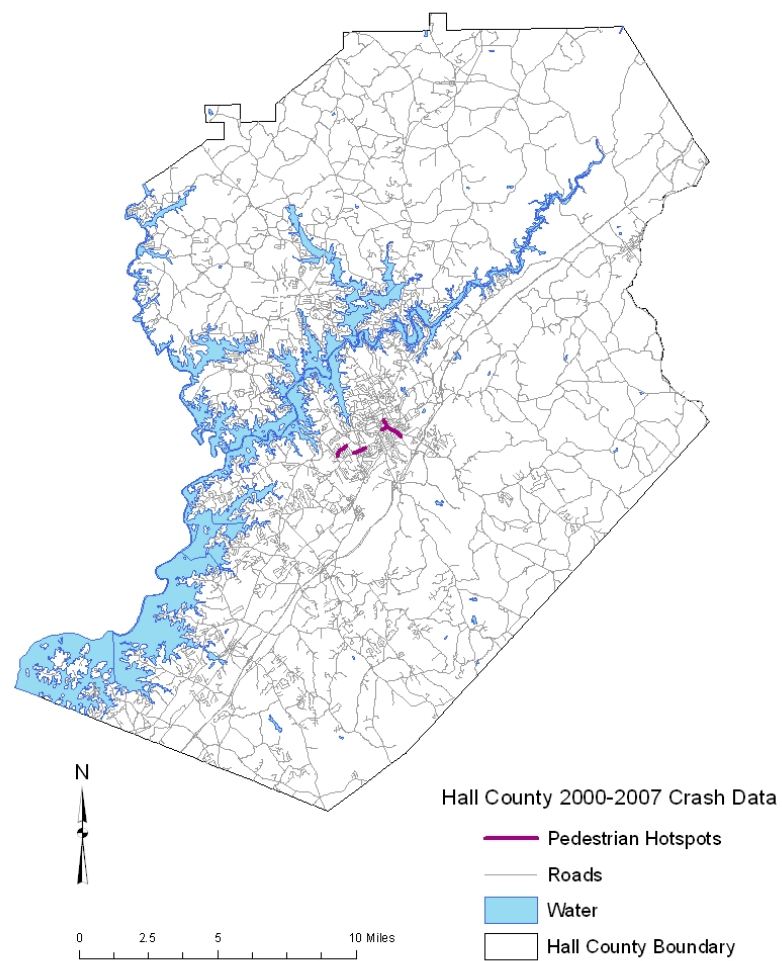


Figure 6b: Pedestrian Crash Hotspots



Source: 2000-2007 Georgia Crash Data, CARE.

Bicycle Crashes

Table 7a: Bicycle Crash Statistics

Statistic	Hall 2000-2007	Hall Annual Average	Regional Total	% of Regional Total
Total Crashes Involving Bicycles	76	10	397	19.1%
Fatal Crashes	1	0.13	9	11.1%
Injury Crashes	56	7	300	18.7%
PDO Crashes	19	2	88	21.6%
Source: 2000-2007 Georgia Crash Data, CARE.				

Table 7b: Bicycle Crash Hotspots

Facility	Limits	Number of Crashes			Total Bicycle Crashes	% of County Total Bikes Crashes (76)
		Fatal	Injury	PDO		
SR 60 - Candler Road	MLK Blvd. to Green Street	0	3	2	5	6.6%
SR 11 – E. E. Butler Parkway	Ridge Road W to Jesse Jewell Parkway	0	3	0	3	3.9%
SR 53 - Queen City Parkway	Mile 1 to Jesse Jewell Parkway	1	2	0	3	3.9%
SR 11 - Green Street	Thompson Bridge Road to Moreland Drive	0	3	0	3	3.9%
Source: 2000-2007 Georgia Crash Data, CARE.						

Bicycle crash hotspots are defined as one mile road segments that contain a minimum of three bike crashes between the years 2000 and 2007. Hall County has only four road segments that meet these criteria, which are displayed in the table above.

Figure 7a: Bicycle Crash Locations

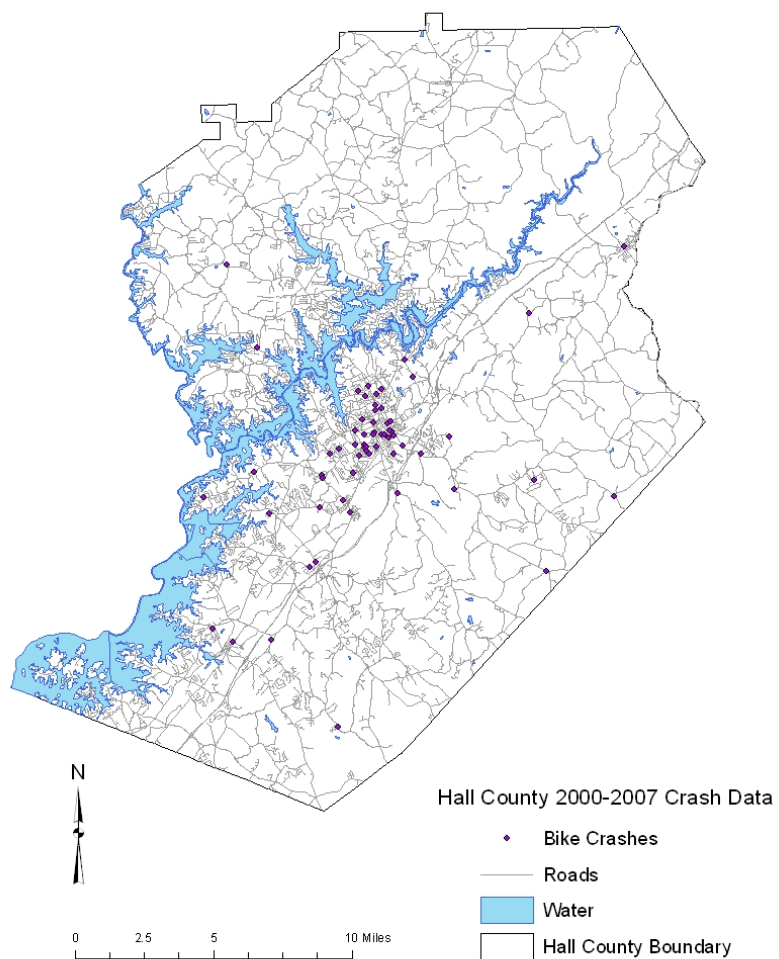
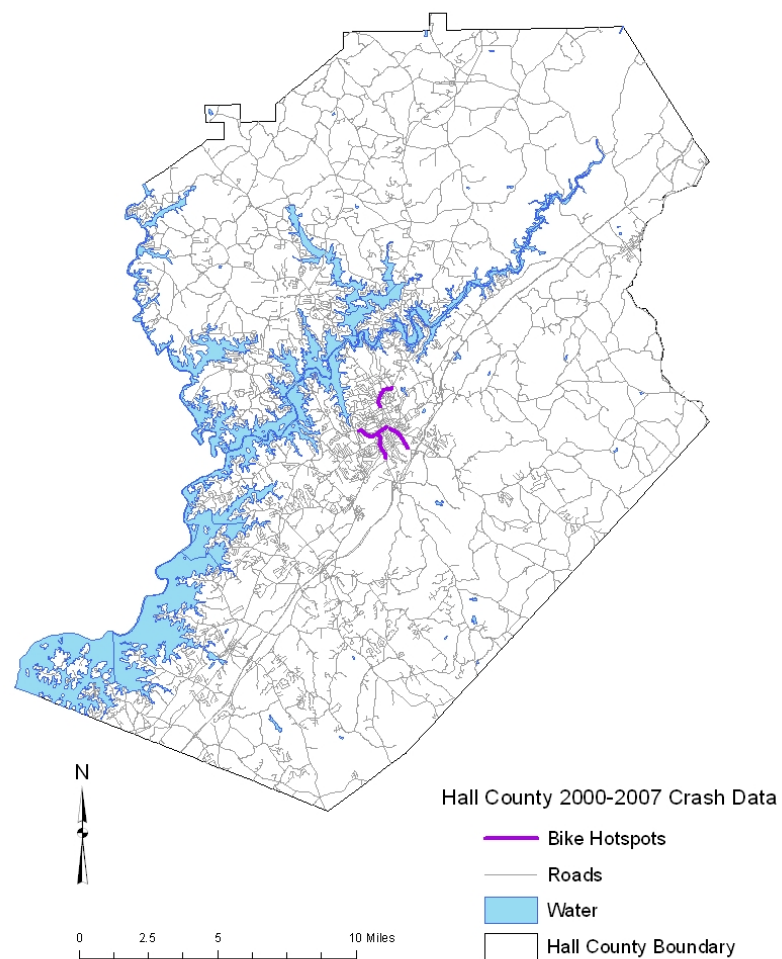


Figure 7b: Bicycle Crash Hotspots



Source: 2000-2007 Georgia Crash Data, CARE.

Commercial Vehicle Crashes

Table 8a: Commercial Vehicle Statistics

Statistic	Hall 2000-2007	Hall Annual Average	% of County Crashes	Regional Total	% of Regional Total
Total Crashes Involving Commercial Vehicles	1,853	232	3.74%	12,945	14.31%
Fatal Crashes	32	4	14.48%	129	24.81%
Injury Crashes	457	57	3.58%	2,692	16.98%
PDO Crashes	1,364	171	3.73%	10,130	13.46%
Source: 2000-2007 Georgia Crash Data, CARE.					

Table 8b: Commercial Vehicle Hotspots

Facility	Limits	Number of Crashes			Total CMV Crashes (2000- 2007)	% of County Total
		Fatal	Injury	PDO		
SR 11	Ridge Road West to MLK Blvd	0	8	30	38	2.05%
I-985	Mile 13.6 to 14.1	0	12	18	30	1.62%
SR 53	Mundy Mill Drive to Old Flowery Branch Road	0	3	23	26	1.40%
I-985	Mile 12.0 to 12.5	0	6	20	26	1.40%
SR 11	Cleveland Highway to Summit Street	0	3	21	24	1.30%
SR 53	Washington Street to Lakemont Drive	0	6	18	24	1.30%
SR 53	McEver Corner to The Retreat Apartments	0	4	18	22	1.19%
SR 52	Cornelia Highway to Burton Drive	0	8	13	21	1.13%
I-985	Mile 7.9 to 8.4	0	6	14	20	1.08%
SR 60	Calvary Church Road to I-985	0	2	17	19	1.03%
Source: 2000-2007 Georgia Crash Data, CARE.						

Commercial Vehicle (CMV) crash hotspots are defined as half mile road segments that had at least five crashes involving CMV's between 2000 and 2007. Hall County contains 110 road segments that meet these criteria. The top 10 CMV hotspots ranked by number of CMV crashes are displayed in the table above.

Figure 8a: CMV Crash Locations

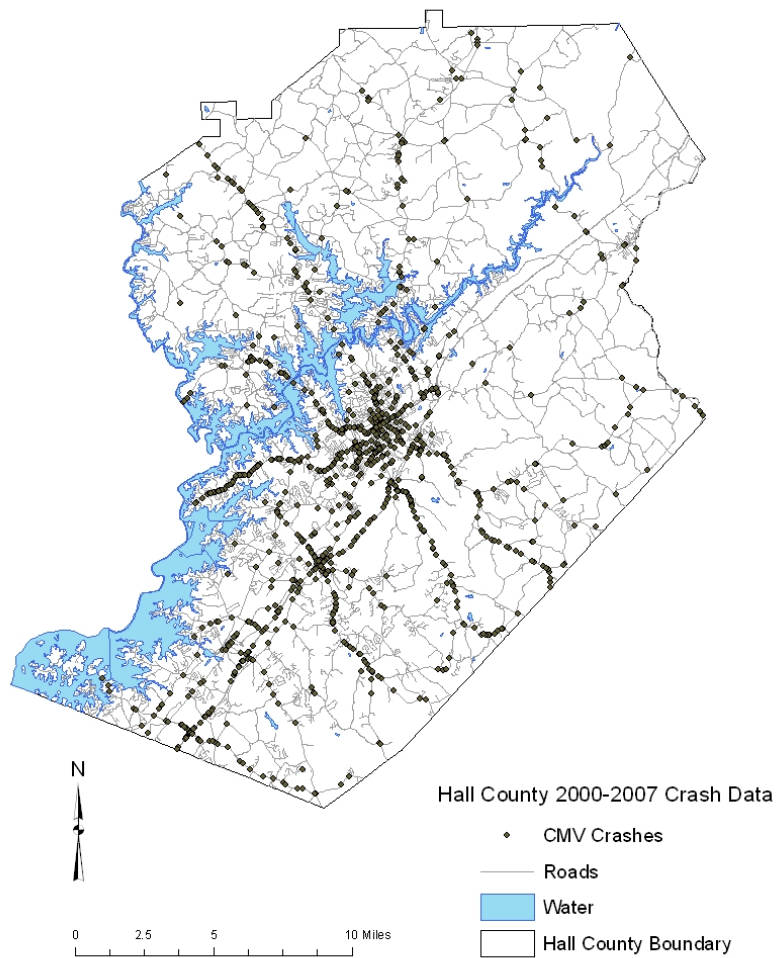
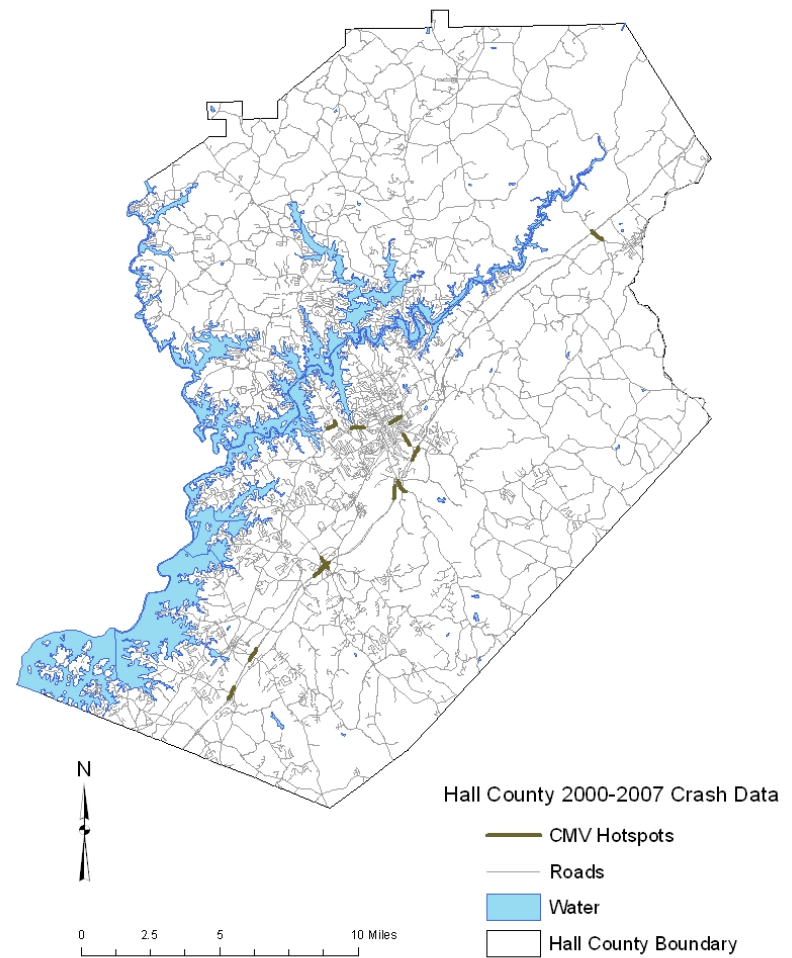


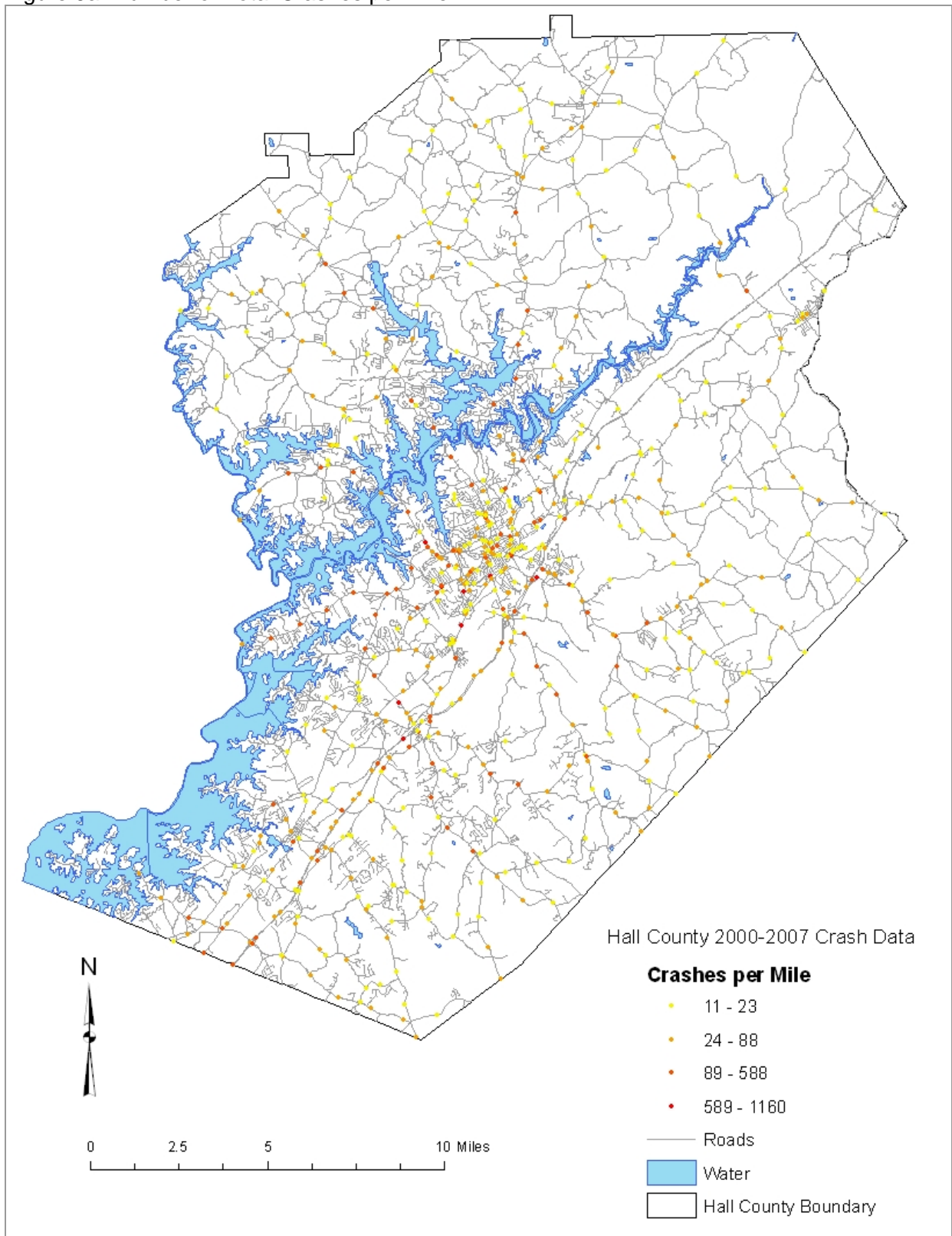
Figure 8b: CMV Crash Hotspots



Source: 2000-2007 Georgia Crash Data, CARE.

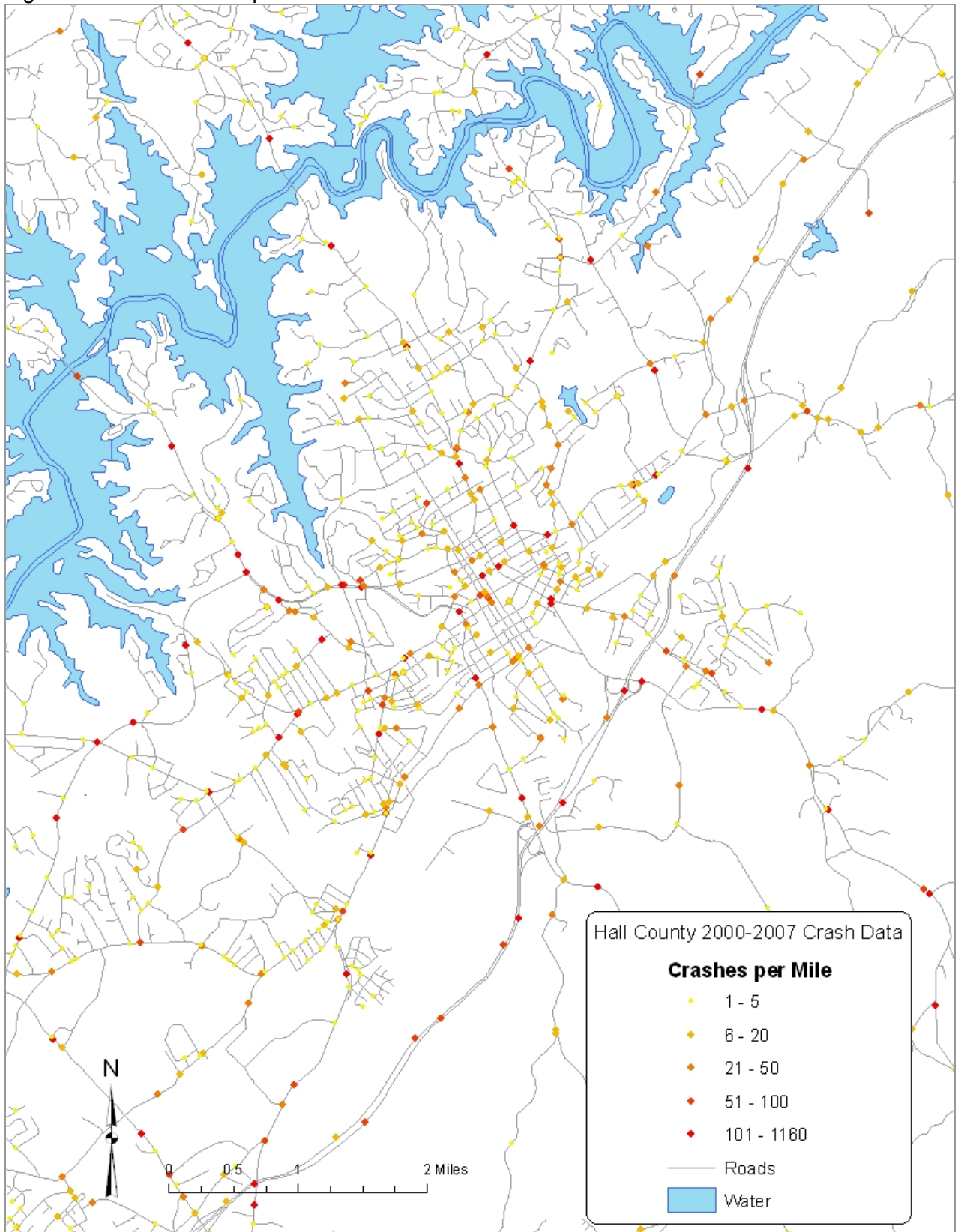
Additional Maps

Figure 9a: Number of Total Crashes per Mile



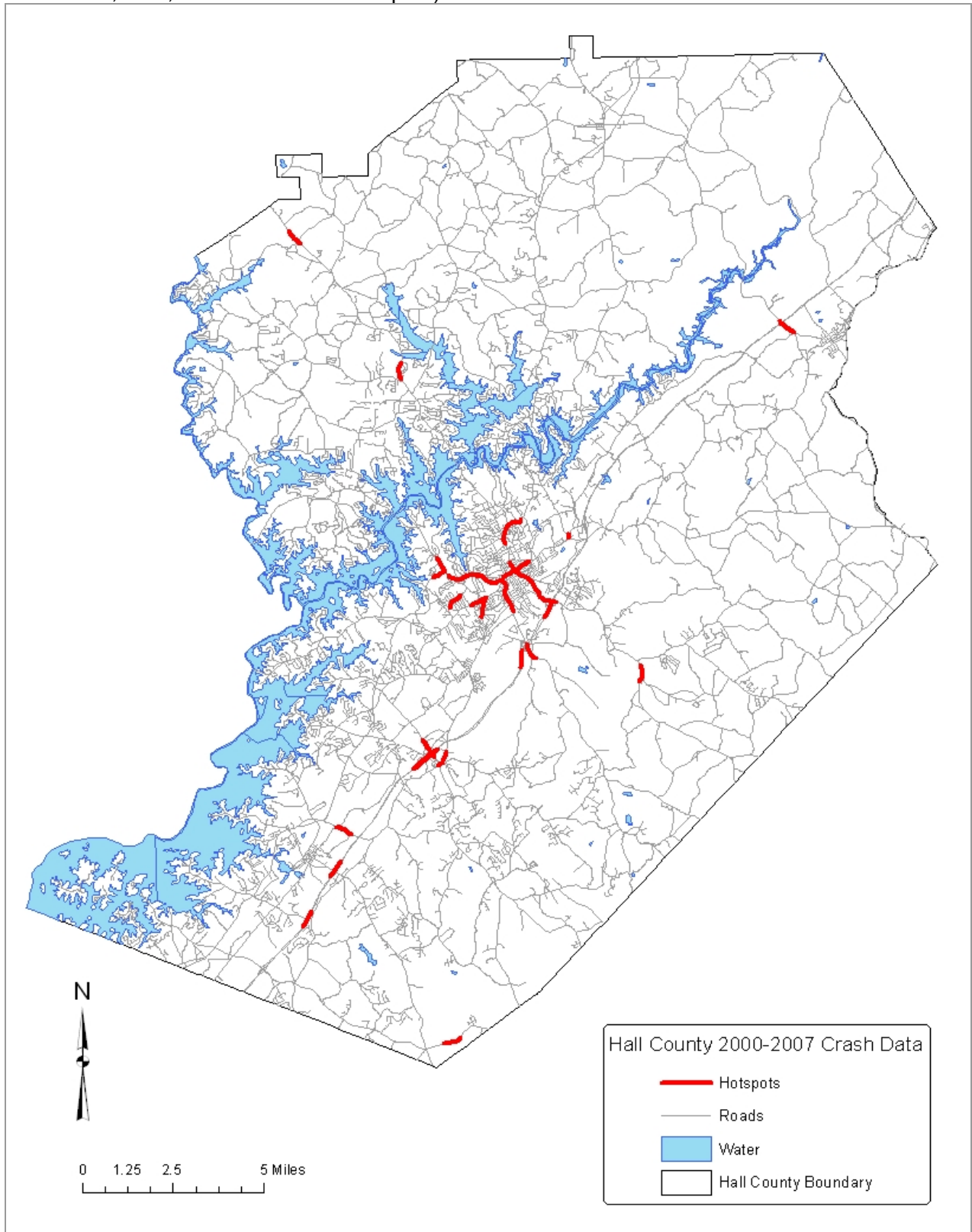
Source: 2000-2007 Georgia Crash Data, CARE.

Figure 9b: Total Crashes per Mile – Gainesville View



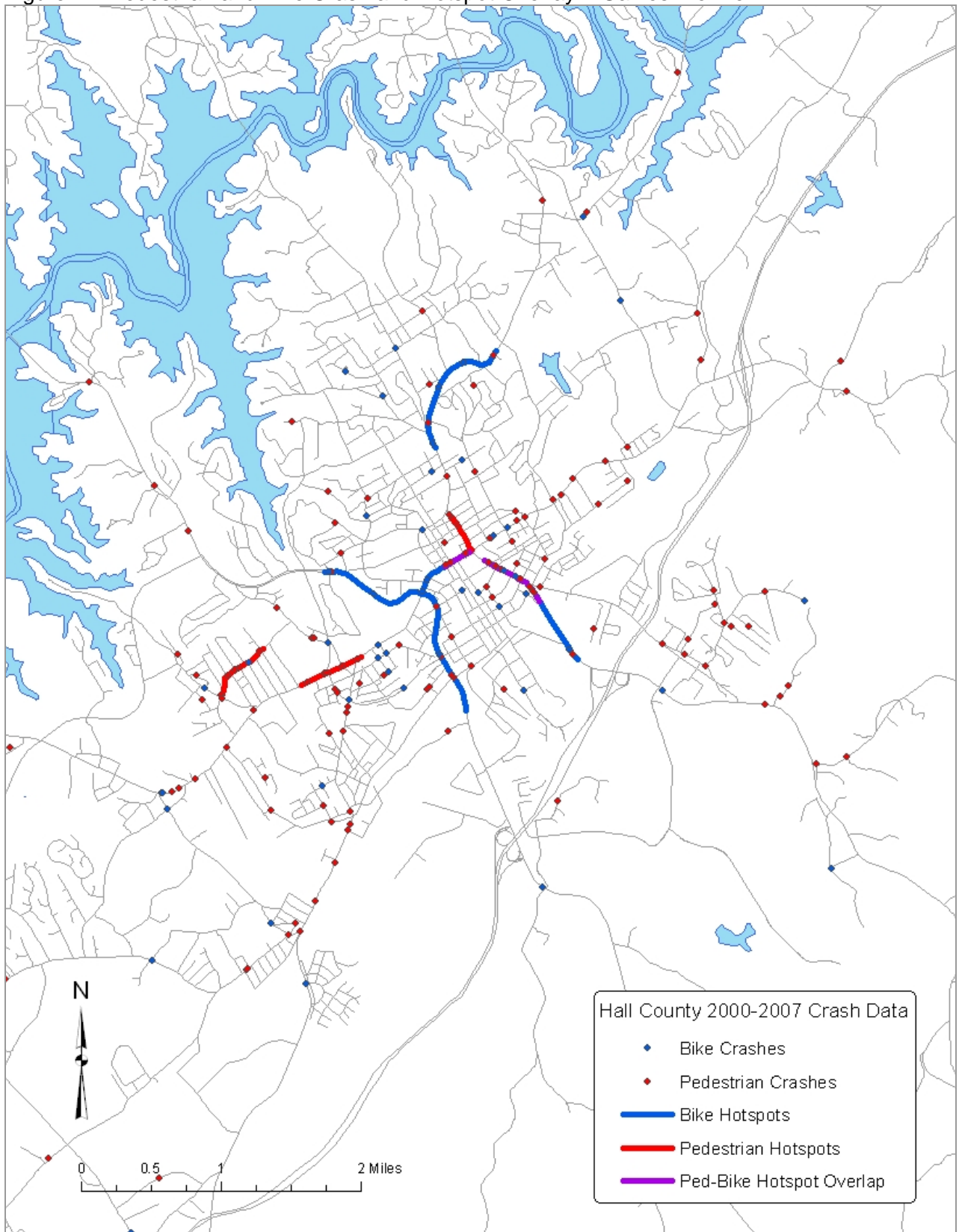
Source: 2000-2007 Georgia Crash Data, CARE.

Figure 10: Composite Hotspots (Composite of Total, Fatal, Injury, Intersection, Pedestrian, Bike, and CMV Crash Hotspots)



Source: 2000-2007 Georgia Crash Data, CARE.

Figure 11: Pedestrian and Bike Crash and Hotspot Overlay – Gainesville View



Source: 2000-2007 Georgia Crash Data, CARE.

Sources

CARE – Crash Data

University of Alabama, College of Engineering, Department of Computer Science

<http://care.cs.ua.edu/caresoftware.aspx>

GDOT – VMT Data

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Report 445 - Mileage by Route Type and Functional Classification (2000-2006)

<http://www.dot.state.ga.us/statistics/RoadData/Pages/400Series.aspx>