2014-2018 Annual Crash Report

Valdosta-Lowndes Metropolitan Planning Organization



June 2019

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Introduction

Since 2007, the Valdosta-Lowndes Metropolitan Planning Organization (VLMPO) has produced an annual Vehicle Crash Report examining infrastructure and behavioral safety concerns within the urban and rural portions of Lowndes County. The report is used to supplement the development of the VLMPO transportation plans and to identify infrastructure projects to improve the safety of the traveling public.

This year's report, like the previous year's, includes data from a five-year period. The timeframe covered by this report is January 1, 2014 to December 31, 2018.

This report will continue to be used to inform local public agencies of crash-related data in the community, and to identify causes of crashes and possible safety improvements either through law enforcement, engineering, or education.

This report examines various characteristics of crash data to determine temporal patterns in crashes, crash frequency, crash locations, and contributing factors, among other variables. In the end, we will identify the highest-frequency crash locations in the VLMPO area.

This report will be used by the VLMPO and local jurisdictions to evaluate projects in the 2045 Transportation Vision Plan and annual Transportation Improvement Program updates. It will help identify future safety-related infrastructure projects and make data available to the MPO and local jurisdictions to allow analysis of the most beneficial projects and actions based on past crashes at specific locations.

Local jurisdictions, agencies, and other groups can also use this report to target education and

enforcement efforts to help reduce crashes of all types on the roadways of the VLMPO area. The past Annual Crash Reports have identified particular geographic areas of concern, population groups, and crash types that are prevalent in the region. This report continues to evaluate particular areas of concern and works to determine crash causes and what can be done to improve these areas.

This report is designed to be consistent with the Georgia Governor's Office of Highway Safety (GOHS) Highway Safety Plan¹, which outlines education and enforcement measures to reduce highway crashes on Georgia roads.

The GOHS Highway Safety Plan utilizes the "4-E" approach to reduce crashes in Georgia. Crash prevention and response is not the duty of just one agency, but of many different agencies with different priorities and responsibilities. Each agency must respond accordingly to crash reduction efforts in their own areas of expertise. The 4 E's of Highway Safety -- Education, Engineering, Enforcement and Emergency Medical Services, -- are where those many different responsible agencies come together to each do their own part in reducing crash frequency and severity.²

Education includes working with young and old people alike to educate drivers, pedestrians, bike riders, and passengers of the rules of the road and other important safety factors. Education includes: diversion programs for underage drinking; general public education campaigns; safety belt and child seat inspections; and expanded and improved driver training courses and materials.

Engineering includes working with local and state public works, and highway and transportation departments to improve the physical characteristics of the roadway and right-

¹ 2018 Georgia Highway Safety Plan , Georgia Governor's Office of Highway Safety

https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/georgia fy2018 hsp.pdf

² Developing a Transportation Safety Plan, Federal Highway Safety Administration

https://www.fhwa.dot.gov/planning/processes/tribal/planning modules/safety/chapter02.cfm

of-way. The Engineering 'E' focuses on improving the basic infrastructure of intersections and roadway corridors.

Enforcement includes working with law enforcement agencies to educate drivers to prevent crashes, as well as efficient response and analysis of crash sites. The Enforcement 'E' includes: employing checkpoints for DUI or seatbelt usage; enforcement of laws for underage and excessive drinking; targeted speed and intersection use enforcement; and proper data collection for future analysis.

Emergency Medical Services includes all first responders to crash sites and the medical treatment victims receive immediately after a crash. The Emergency Medical Services (EMS) 'E' includes: efficient response by medical personnel to crash sites, rapid evacuation of victims to trauma centers, and education of the public on proper usage of safety restraints.

Each of the 4 E's is not mutually exclusive to the various agencies described above. For example, education is spread out between all of the different agency partners, like law enforcement agencies, highway departments, and EMS responders. Also, engineers may get ideas from suggestions from law enforcement agencies or schools about concerns with children walking to school. Each of the various agencies has their own role to play, as well as an interconnected role with other agencies to reduce crash frequency and severity on our roadways.

MPO Performance Safety Measures

In March 2016, the Federal Highway Administration (FHWA) published regulations outlining performance safety measure targets in accordance with the Highway Safety Improvement Program (HSIP) along with MAP-21.³ This final rule went into effect in April 2016 and requires all state DOTs and MPOs to

establish safety performance measure targets by August 2017 and February 2018, respectively. The safety performance measures are consistent with national highway planning goals aimed to reduce fatalities and injuries along the nation's highways and shall examine the following based on 5-year rolling averages:

- a. Number of fatalities
- b. Rate of fatalities per 100 Million VMT
- c. Number of serious injuries
- d. Rate of serious injuries per 100 Million VMT
- e. Number of non-motorized fatalities and non-motorized serious injuries

The VLMPO can fulfill this new federal requirement either through programming projects that support the state of Georgia's safety performance measure targets, developing independent safety performance measure targets, or a combination of these two options. In February 2018, the VLMPO chose to support the state's targets and has continued to do so.

Statistics for the VLMPO area

It should be noted that the most recent published Georgia Highway Safety Plan (the 2018 plan, dated 6/30/2017) does not call for any specific numeric reduction in most of the metrics listed. Most of the state goals merely consist of maintaining the average numbers of various types of fatalities under the projected 5-year moving average. Specific percentage reduction levels are identified only for unhelmeted motorcyclist fatalities and for seatbelt use. In an era when an increasing number of communities are adopting Vision Zero goals and

https://www.federalregister.gov/documents/2016/03/15/2016-05202/national-performance-management-measures-highway-safety-improvement-program

³ National Performance Management Measures: Highway Safety Improvement Program, Federal Highway Administration

policies⁴, Georgia's goals do not aim for any substantial or specific reduction in the overall number of road deaths, but just to continue the reduction in crashes and fatalities each year.

The state goals, along with the relevant statistics to show the VLMPO's attainment of those goals, are shown in Table 1.

- C-1: To maintain the 5-year moving average traffic fatalities under the projected 1,593 (2014-2018) 5-year average by December 2018.
- C-2: To maintain the 5-year moving average serious traffic injuries under the projected 19,643 (2014-2018) 5-year average by December 2018.
 - C-2a: To maintain the 5-year moving average serious traffic injuries for every 100 million vehicle miles travelled under the projected 16.32 (2014-2018) 5-year average by December 2018.
- C-3: To maintain the 5-year moving average traffic fatalities per 100M VMT under the projected 1.32 (2014-2018) 5-year average by December 2018.
- C-4: To maintain the 5-year moving average unrestrained traffic fatalities under the projected 483 (2014-2018) 5-year average by December 2018.
- C-5: To maintain the 5-year moving average alcohol related fatalities under the projected 407 (2014-2018) 5-year average by December 2018.
- C-6: To maintain the 5-year moving average speed related fatalities under the projected 292 (2014-2018) 5-year average by December 2018.
- C-7: To maintain the 5-year moving average motorcyclist fatalities under the projected 177 (2014-2018) 5-year average by December 2018.
- C-8: To reduce the 5-year moving average unhelmeted motorcyclist fatalities by 11% from baseline 9 (2011-2015) 5-year average to 8 (2014-2018) 5-year average by December 2018.
- C-9: To maintain the 5-year moving average young drivers involved in fatal crashes under the

- projected 225 (2014-2018) 5-year average by December 2018.
- C-10: To maintain the 5-year moving average pedestrian fatalities under the projected 228 (2014-2018) 5-year average by December 2018.
- C-11: To maintain the 5-year moving average bicyclist fatalities under the projected 29 (2014-2018) 5-year average by December 2018.
- B-1: Increase the 5-year moving average seatbelt usage rate from 94.9% (2011-2015) to 96.6% (2014-2018) 5-year average by December 2018.

In order to calculate the VLMPO's attainment for these performance measures, 2017 estimates (the most recent available) of daily vehicle miles traveled (VMT) were used for all of the VLMPO area. The VLMPO area consists of all of Lowndes County (including the five cities of Dasher, Hahira, Lake Park, Remerton, and Valdosta), plus small portions of Berrien, Brooks, and Lanier Counties (the portion of Lanier County also includes a small area that is within the city limits of Ray City).

To estimate VMT in those portions of Berrien, Brooks, and Lanier Counties, the total VMT for those counties was multiplied by the percentage of the total mileage of roads for each county that is within the VLMPO portion of those counties, broken down by road functional classification. For example, the estimated total 2017 VMT on minor arterial roads in all of Brooks County was 172,614; 7.15% of the total mileage of minor arterial roads in Brooks County are within the MPO area; therefore, the estimated VMT on minor arterial roads in the portion of Brooks County that lies within the VLMPO area is 12,343. Table 2 shows the VMT and road miles in the VLMPO area.

http://www.dot.ga.gov/DriveSmart/Data/Document s/400%20Series/445/DPP445 2017.pdf (accessed 5/23/2019).

⁴ Vision Zero Network. Vision Zero Cities Map. https://visionzeronetwork.org/resources/visionzero-cities/ (accessed 5/23/2019).

⁵ Georgia Department of Transportation. Mileage by Route and Road System Report 445 for 2017.

Table 1. 2018 State Highway Safety Plan Goals and VLMPO Attainment Measures				
Goal	Metric	Statewide figure	VLMPO figure	VLMPO percentage of statewide
C-1: To maintain the 5-year moving average traffic fatalities under the projected 1,593 (2014-2018) 5-year average by December 2018.	Average annual traffic fatalities	1,410.6	18.2	1.12%
C-2: To maintain the 5-year moving average serious traffic injuries under the projected 19,643 (2014-2018) 5-year average by December 2018.	Average annual serious traffic injuries	21,954	324	1.48%
C-2a: To maintain the 5-year moving average serious traffic injuries for every 100 million vehicle miles travelled under the projected 16.32 (2014-2018) 5-year average by December 2018.	Serious injuries per 100 million VMT	17.38	19.88	n/a
C-3: To maintain the 5-year moving average traffic fatalities per 100M VMT under the projected 1.32 (2014-2018) 5-year average by December 2018.	Traffic fatalities per 100 million VMT	1.12	1.12	n/a
C-4: To maintain the 5-year moving average unrestrained traffic fatalities under the projected 483 (2014-2018) 5-year average by December 2018.	Average annual unrestrained traffic fatalities	3,290	42	1.28%
C-5: To maintain the 5-year moving average alcohol related fatalities under the projected 407 (2014-2018) 5-year average by December 2018.	Average annual alcohol-related fatalities	2,844	60	2.11%
C-6: To maintain the 5-year moving average speed related fatalities under the projected 292 (2014-2018) 5-year average by December 2018.	Average annual speed-related fatalities	590	2	0.34%
C-7: To maintain the 5-year moving average motorcyclist fatalities under the projected 177 (2014-2018) 5-year average by December 2018.	Average annual motorcyclist fatalities	714	10	1.40%
C-8: To reduce the 5-year moving average unhelmeted motorcyclist fatalities by 11% from baseline 9 (2011-2015) 5-year average to 8 (2014-2018) 5-year average by December 2018.	Average annual un- helmeted motorcyclist fatalities	324	4	1.23%
C-9: To maintain the 5-year moving average young drivers involved in fatal crashes under the projected 225 (2014-2018) 5-year average by December 2018.	Average annual fatal crashes involving drivers under 21	1,380	13	0.94%
C-10: To maintain the 5-year moving average pedestrian fatalities under the projected 228 (2014-2018) 5-year average by December 2018.	Average annual pedestrian fatalities	1,154	10	0.87%
C-11: To maintain the 5-year moving average bicyclist fatalities under the projected 29 (2014-2018) 5-year average by December 2018.	Average annual bicyclist fatalities	60	1	1.67%

Table 2. VLMPO Area Daily Vehicle Miles Traveled			
and Road Miles, 2017.			
County	Road	Miles	Daily VMT
Berrien	Local	0.75	187
berrien	Total	0.75	187
	Minor	5.65	12,343
	Arterial	5.05	12,545
Brooks	Collector	3.41	2,723
	Local	15.74	3,851
	Total	24.79	18,916
	Minor	2.70	7.262
	Arterial	2.79	7,263
Lanier	Collector	0.41	582
	Local	21.49	4,950
	Total	24.68	12,795
	Interstate	31.34	1,602,673
	Principal	61.57	652,466
	Arterial	01.57 052,400	032,400
Lowndes	Minor	102.64	873,625
Lowinges	Arterial	102.04	673,023
	Collector	234.34	443,450
	Local	886.30	861,868
	Total	1,316.19	4,434,082
VLMPO Area	Total	1,366.42	4,465,980
Georgia	Total	125,428	346,052,944
VLMPO as of state to	percentage tal	1.089%	1.291%

Several other local plans and policies also aspire to improve the safety of the transportation system in the VLMPO area, including the 2014 Common Community Vision (CCV). The CCV's Aspirational Goal and Transportation Objective 18 is to provide regional connectivity through an efficient, safe, accessible, and affordable multimodal transportation system that is developed through a fully funded transportation plan that identifies multi-modal transportation options. The VLMPO's Transportation Vision Plan and the Lowndes County Joint Comprehensive Plan also identify road safety as a priority item.

The crash information presented will examine how our local communities are doing at reducing crashes.

On the following pages, the State Highway Safety Plan goals are presented along with local crash analysis and statistics to show progress made locally towards achieving those goals. VLMPO safety performance measures will be presented alongside related GOHS goals.

Note: GDOT has changed the way in which it reports data to planning agencies, the data here was accessed through the Georgia Electronic Accident Reporting System (GEARS) Portal⁶ and through raw crash data provided by GDOT, and may be slightly inconsistent with previous year's data. We are also not looking at crashes on private property.

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Highway Safety Plan

⁶ Georgia Electronic Accident Reporting System (GEARS). <u>www.gearsportal.com</u>

C-1: To maintain the 5-year moving average traffic fatalities under the projected 1,593 (2014-2018) 5-year average by December 2018.

Between Jan. 1, 2014 and Dec. 31, 2018, there were 81 fatal crashes in the VLMPO area, causing a total of 91 deaths. This is an average of 18.2 road deaths per year, or approximately one fatality every 20 days.

The total daily Vehicle Miles Traveled (VMT) in the VLMPO area is estimated to be 1.291% of the state total VMT (see Table 2). In this report, we use this figure to calculate the percentage of traffic crashes, fatalities, and other metrics that represent the VLMPO area's proportional share of state-level indicators. If the state target is 1,593, the VLMPO area target would be 1,593 * 1.291%, which is 20.56 (see Table C-1).

Table C-1. VLMPO area traffic fatalities compared to state target	
Total Fatalities 2014-2018	91
Annual Average	18.2
State Target	1,593
VLMPO share of state target (proportional per VMT)	20.56

At 18.2 fatalities per year, the VLMPO is under the proportional (measured by VMT) state target of 20.56 per year. However, the annual number of fatal crashes in the VLMPO area increased steadily during the five-year timeframe examined (see Figure C-1).

The road class with the largest share of fatal crashes was the collector road (see Figure C-1a). Interstate highways had the highest fatality rate per road mile, but collector roads (which includes both major and minor collectors since VMT data are not available broken down by major/minor collector category) had by far the highest fatality rate per vehicle mile traveled (see Table C-1a). Locations of fatal crashes are shown on Map 1.

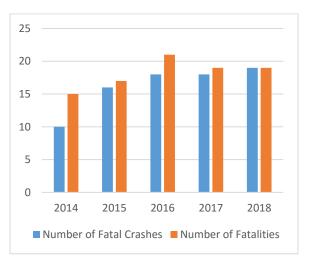


Figure C-1. Total fatal crashes and total deaths by year in the VLMPO area, 2014-2018.

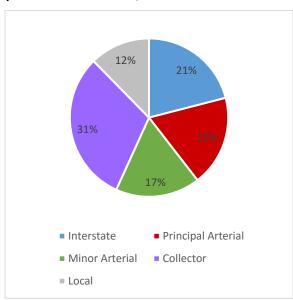


Figure C-1a. Fatal crashes by road functional classification, 2014-2018.

Table C-1a. Fatality rates per road mile and per million VMT, 2014-2018.			
Functional Classification	Fatalities per road mile	Fatalities per million VMT	
Interstate	0.67	13.10	
Principal Arterial	0.28	26.05	
Minor Arterial	0.15	17.17	
Collector (both major and minor)	0.12	60.89	
Local	0.01	12.76	

From 2014 to 2018, 1.15% of the fatal crashes in Georgia and 1.12% of traffic fatalities occurred in the VLMPO area. Therefore, the VLMPO area's percentage of statewide fatal crashes and fatalities is slightly lower than the VLMPO area's share of statewide VMT. These percentages are shown year by year in Figure C-1b.

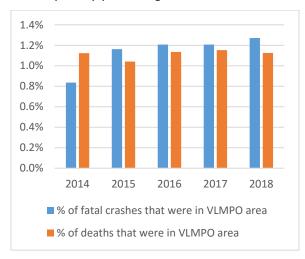


Figure C-1b. Percentage of statewide fatal crashes and fatalities that occurred in the VLMPO area.

C-2: To maintain the 5-year moving average serious traffic injuries under the projected 19,643 (2014-2018) 5-year average by December 2018.

From 2014 to 2018, in the VLMPO area, there were 927 crashes in which the injury was recorded as "Suspected Serious Injury," with a total of 1,620 people injured.

Based on the VLMPO area VMT, the VLMPO's share of the state figure would be 1.291% of 19,643, equal to 254. The number of serious injuries in the VLMPO area is well above this threshold (see Table C-2).

Table C-2. VLMPO area serious injuries compared to state target	
Total Serious Injuries 2014-2018	1620
Annual Average	324
State Target	19,643
VLMPO share of state target (proportional per VMT)	254

Similarly to fatalities, interstate highways have the highest rate per road mile of crashes involving a serious injury, but collector roads have the highest rate per vehicle mile traveled (see Table C-2a).

Table C-2a. Serious injury rates per road mile and per million VMT, 2014-2018.		
Functional Classification	Serious injury crashes per road mile	Serious injury crashes per million VMT
Interstate	5.23	102.33
Principal Arterial	2.84	268.21
Minor Arterial	2.41	282.73
Collector	0.84	444.24
Local	0.16	167.08

Minor arterials had the largest proportion of serious injury crashes among road types, but these crashes were fairly evenly distributed among the road types (see Figure C-2). Locations of serious injury crashes are shown on Map 2.

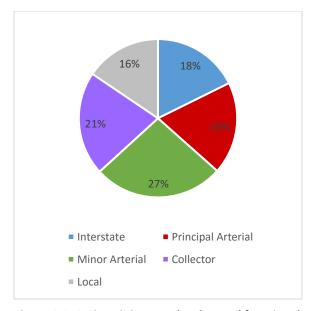


Figure C-2. Serious injury crashes by road functional classification, 2014-2018.

From 2014 to 2018, 1.47% of statewide serious injury crashes and 1.48% of statewide serious injuries occurred in the VLMPO area. Therefore, the VLMPO area has a higher share of statewide

serious injuries relative to its VMT as a share of the state total.

C-2a: To maintain the 5-year moving average serious traffic injuries for every 100 million vehicle miles travelled under the projected 16.32 (2014-2018) 5-year average by December 2018.

The daily Vehicle Miles Traveled in the VLMPO area for 2017 was estimated at 4,465,980. With an average of 324 serious injuries per year from 2014 to 2018, the rate per 100 million annual VMT is 19.88, which is higher than the goal in the 2018 Georgia Highway Safety Plan.

C-3: To maintain the 5-year moving average traffic fatalities per 100M VMT under the projected 1.32 (2014-2018) 5-year average by December 2018.

With an average of 18.2 fatalities occurring per year from 2014 to 2018, the rate per 100 million VMT in the VLMPO area is 1.12, below the Highway Safety Plan goal.

C-4: To maintain the 5-year moving average unrestrained traffic fatalities under the projected 483 (2014-2018) 5-year average by December 2018

Of 18,038 crashes in the data available in the VLMPO area from 2014 to 2018, 2,419 (13.4%) were recorded as involving no restraint or improperly used restraints. This included 36 fatal crashes, which caused a total of 42 deaths. Thus, unrestrained or improperly restrained vehicle occupants made up 46% of fatalities during the timeframe examined.

Proportional to VMT, the VLMPO area's share of the projected 483 statewide unrestrained traffic fatalities would be 6.24 per year (see Table C-4). At 8.4 such fatalities on average per year, the VLMPO is above the state target. Over the five-year period examined, the VLMPO area had 1.28% of statewide crashes involving no restraint or improperly used restraints. This is slightly

above the VLMPO's 1.291% share of statewide VMT. This problem could be addressed through educational programs to inform drivers about the benefits of seatbelt use, combined with law enforcement efforts to ticket unbelted drivers. A data collection effort, such as a visual survey of seat belt use, could help to identify categories of drivers to target for educational efforts (for example, senior drivers, young drivers, drivers of certain vehicle types, etc.).

Table C-4. VLMPO area unrestrained or improperly restrained fatalities compared to state target	
VLMPO area unrestrained/improperly restrained fatalities 2014-2018	42
Annual Average	8.4
State Target	483
VLMPO share of state target (proportional per VMT)	6.24

C-5: To maintain the 5-year moving average alcohol related fatalities under the projected 407 (2014-2018) 5-year average by December 2018.

Of the 18,038 crashes included in the database for this report, 468 (2.6%) were recorded as involving alcohol. In 51 of these crashes, at least one person was killed. There were a total of 60 fatalities. Therefore, 63% of fatal crashes and 65.9% of road deaths in the VLMPO region have involved at least one person under the influence of alcohol.

Proportional to VMT, the VLMPO area's share of the projected 407 statewide alcohol-related fatalities would be 5.25 per year. With an average of 12 such deaths per year, the VLMPO area is at over twice the state target. This problem could be addressed in the VLMPO area through educational campaigns combined with increased enforcement.

Table C-5. VLMPO area alcohol-related fatalities	
compared to state target	
VLMPO area alcohol-related fatalities	60
2014-2018	60
Annual Average	12

State Target	407
VLMPO share of state target	5.25
(proportional per VMT)	3.23

Alcohol-related crashes show slightly different geographic patterns from other crashes. More were on local roads and fewer were on the Interstate (see Figure C-5). The highest rate per VMT is on collector roads (see Table C-5a). The locations are shown on Map 3.

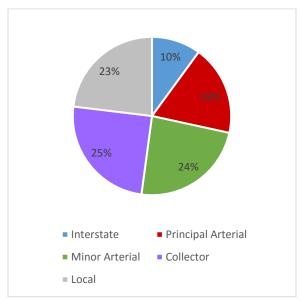


Figure C-5: Alcohol-related crashes by road functional classification, 2014-2018.

Table C-5a. Alcohol-related crashes per road mile and per million VMT, 2014-2018.		
Functional Classification	Alcohol- related crashes per road mile	Alcohol- related crashes per million VMT
Interstate	1.50	29.33
Principal Arterial	1.40	131.81
Minor Arterial	1.08	127.06
Collector	0.50	261.59
Local	0.12	125.31

The proximity of alcohol-related crash locations to liquor establishments was examined; however, it was found that during this time frame 48.2% of all crashes occurred within 1 mile of a bar, and 31.6% of alcohol-related crashes occurred within 1 mile of a bar. The location of

alcohol-related crashes is likely influenced by a wide range of different factors.

From 2014 to 2018, according to the data available, there were 2,844 alcohol-related traffic deaths in Georgia. 2.11% of these deaths were in the VLMPO area.

C-6: To maintain the 5-year moving average speed related fatalities under the projected 292 (2014-2018) 5-year average by December 2018.

According to the data available, the contributing factors of "exceeding the speed limit", "racing", or "too fast for conditions" were implicated in only two fatal crashes in the VLMPO area. With an average of 0.4 such fatalities per year, the VLMPO is well below the state threshold (proportional to VMT, this would be 1.291 percent of 292, which is 3.77). Using this metric, the VLMPO had 0.34% of statewide speed-related fatalities from 2014 to 2018.

C-7: To maintain the 5-year moving average motorcyclist fatalities under the projected 177 (2014-2018) 5-year average by December 2018.

From 2014 to 2018, there were 228 crashes in the VLMPO area involving motorcyclists, 216 injuries, and 10 fatalities. Thus, 11% of all those killed in traffic crashes in the VLMPO area during that time frame were motorcyclists. The annual average of 2 per year is lower than the state target, proportional to VMT, of 2.29.

Table C-7. VLMPO area motorcyclist fatalities	
compared to state target	
VLMPO motorcyclist fatalities 2014-	10
2018	10
Annual Average	2
State Target	177
VLMPO share of state target	2 29
(proportional per VMT)	2.23

All of the motorcyclist fatalities during this time frame occurred on local, collector, or minor arterial roads. The locations of motorcycle crashes are shown on Map 4. Alcohol was recorded as a factor in 16 of the 228 motorcycle crashes (7.0%) and in 6 out of the 10 fatalities (60%).

The VLMPO's share of statewide motorcyclist fatalities in 2014-2018 was 1.40%.

C-8: To reduce the 5-year moving average un-helmeted motorcyclist fatalities by 11% from baseline 9 (2011-2015) 5-year average to 8 (2014-2018) 5-year average by December 2018.

4 out of the 10 motorcyclists (40%) who died in the VLMPO are from 2014 to 2018 were recorded as not wearing a helmet. Alcohol was reported as a factor in two of these crashes.

Helmets were reported as being used by the motorcyclists in 119 of the 228 crashes during this time period, meaning that 47.8% of motorcyclists involved in crashes were presumably un-helmeted.

According to the GEARS data, there were 3 motorcyclist fatalities in the VLMPO area during the 5 year period from 2011 to 2015, and 1 was un-helmeted. Therefore, unfortunately, the VLMPO area has seen a 400% increase in unhelmeted motorcyclist fatalities from the 2011-2015 period to the 2014-2018 period. Future fatalities of this kind may be prevented through educational campaigns, including statistics on the benefits of helmet use (for example, helmets are estimated to reduce the risk of head injury by 69% and the risk of death by 42%⁷) and increased enforcement of Georgia's helmet law (Sec. 40-6-315). Studies⁸ have shown that in motorcycle crashes involving a perception failure or a

decision failure, more crashes are caused by the driver of another vehicle than by the motorcyclist. Therefore, outreach campaigns to increase driver awareness of motorcyclists (for example, the USDOT's "Share The Road" initiative⁹) should be continued.

During 2014-2018, the VLMPO area had 1.23% of the total statewide un-helmeted motorcyclist fatalities.

C-9: To maintain the 5-year moving average young drivers involved in fatal crashes under the projected 225 (2014-2018) 5-year average by December 2018.

From 2014 to 2018 in the VLMPO area, 11 out of 81 fatal crashes (13.6%) and 13 out of 91 deaths (14.3%) involved drivers under the age of 21. This was 0.94% of such fatalities statewide.

C-10: To maintain the 5-year moving average pedestrian fatalities under the projected 228 (2014-2018) 5-year average by December 2018.

From 2014 to 2018 there were 10 pedestrian fatalities in the VLMPO area. Six of these (60%) were on US Highway 84 in rural Lowndes County. Two other victims (20%) were on Interstate 75 in southern Lowndes County. These 10 deaths are 0.87% of total statewide pedestrian deaths between 2014 and 2018.

Among all crashes involving pedestrians, 54.6% occurred on roads without a sidewalk, and 66%

⁷ Advocates for Highway & Auto Safety. "Motorcycle Helmets." https://saferoads.org/issues/motorcycle-helmets/ (accessed 6/10/2019).

⁸ For example: National Transportation Safety Board. "Select Risk Factors Associated with Causes of Motorcycle Crashes." https://www.ntsb.gov/safety/safety-

studies/Documents/SR1801.pdf (accessed 6/10/2019).

⁹ U.S. Department of Transportation. "Motorcycle Safety: Share The Road." https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/share-road (accessed 6/10/2019).

occurred within the City of Valdosta. The locations of crashes involving pedestrians are shown on Map 5.

C-11: To maintain the 5-year moving average bicyclist fatalities under the projected 29 (2014- 2018) 5-year average by December 2018.

It should be noted that this metric includes only crashes that involved both a bicyclist and a motor vehicle operator. Crashes involving only bicyclists are not reported, nor are crashes involving a collision of a bicyclist with a pedestrian.

Between 2014 and 2018 there was one bicyclist fatality in the VLMPO area. This occurred on Madison Highway, a 4-lane major collector road, around 10:30 p.m. on 7/14/2015. The driver of a tractor-trailer struck the bicyclist from behind.

There were 60 bicyclist fatalities statewide during the same time frame, and therefore the single death in the VLMPO area represents 1.67% of statewide bicyclist fatalities.

Among crashes involving bicyclists overall, during the time frame examined, 69 out of 73 events (94.5%) occurred within the City of Valdosta. 10 (13.7%) of the 73 crashes occurred on principal arterial roads, 34 (46.6%) on minor arterials, 14 (19.1%) on collector roads, and 15 (20.5%) on local roads. The locations of crashes involving bicyclists are shown on Map 6.

B-1: Increase the 5-year moving average seatbelt usage rate from 94.9% (2011-2015) to 96.6% (2014-2018) 5-year average by December 2018.

The VLMPO has not directly collected data on the percentage of vehicle drivers or occupants using seatbelts. However, data on seatbelt use in crashes are available from the GEARS database.

From 2014 to 2018, 2,419 of 18,038 crashes (13.4%) involved a motor vehicle driver or other occupant who was unrestrained or improperly restrained. Thus, the rate of seat belt use for

vehicle occupants involved in crashes can be estimated at 86.6%.

These unrestrained/improperly restrained crashes included a total of 1,925 injuries (51.1% of these crashes resulted in injury, compared to only 28.6% of crashes in which occupants were properly restrained), and a total of 42 deaths. 1.49% of unrestrained crashes resulted in one or more fatalities, while only 0.29% of crashes in which proper restraints were used resulted in one or more fatalities.

With these statistics, the benefits of proper seat belt use are clear and it is recommended that belt usage be increased through a combination of educational campaigns and enforcement of existing laws.

High-crash Locations

To identify high-crash locations, a geographic analysis was conducted in which a 250-foot radius was drawn around each intersection point in the VLMPO area. The number of crashes within that radius was then calculated. For each intersection, the ADT listed is the ADT of the highest-ADT road that travels through the intersection, per current data provided by the Georgia Department of Transportation.¹⁰

The top 20 high-crash locations in the City of Valdosta are shown in Table 3 and on Map 7.

Table 4 and Map 8 show the top 20 high-crash locations in the VLMPO area outside of the City of Valdosta. These top 20 locations are located in only two jurisdictions: Lowndes County and the City of Hahira.

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¹⁰ GDOT, "Traffic Counts in Georgia." https://gdottrafficdata.drakewell.com/publicmultinodemap.asp (last accessed 6/17/2019).

Table 7. High-crash Locations in the City of Valdosta, 2014-2018.										
Location	Max. ADT	Crashes 2014- 2018	Fatal Crashes	Serious Injury Crashes	Overall Rank, 2014- 2018	2013-2017 Rank	Crashes per 1,000 ADT	Rank weighted by ADT	Planned Improvements	
St. Augustine Rd. & Norman Dr.	14400	208		1	1	1	14.44	2	Intersection Improvements	
North Valdosta Rd. & Country Club Dr.	34100	184			2	T7	5.40	13	Added Travel Lanes	
St. Augustine Rd. & Gornto Rd.	11535	168		2	3	2	14.56	1	Intersection Improvements	
Inner Perimeter Rd. & Bemiss Rd.	27500	160		1	4	5	5.82	11		
Inner Perimeter Rd. & N. Oak St. Ext.	24000	154		1	5	4	6.42	10	Added Travel Lanes	
N. Ashley St. & E. Northside Dr.	19900	151		1	6	6	7.59	7		
Baytree Rd. & Jerry Jones Dr. / Melody Ln.	15900	144		1	7	3	9.06	3	Intersection Improvements	
E. Northside Dr. & Bemiss Rd.	23200	134			8	10	5.78	12		
N. Valdosta Rd. / N Ashley St. & N. Oak St. Ext.	19900	128		1	9	Т7	6.43	9	Intersection Improvements	
W. Hill Ave. & Norman Dr.	19400	127	1		10	13	6.55	8		
Baytree Rd. & Norman Dr.	14400	119			11	11	8.26	4	Intersection Improvements	
Gornto Rd. & Baytree Rd.	14000	110		1	12	9	7.86	5	Intersection Improvements	
Gornto Rd. & Jerry Jones Dr.	20800	96		1	13	14	4.62	16	Added Travel Lanes	
Smithbriar Dr. & N. Patterson St. & N. Ashley St.	19900	89		1	14		4.47	17	Intersection Improvements	
St. Augustine Rd. & Ellis Dr. / Club House Dr.	11535	88	1		T15		7.63	6		
Inner Perim Rd. & Lake Laurie Dr. / Brookfield Rd.	21200	88		1	T15	T18	4.15	19		
N. Valdosta Rd. & Inner Perimeter Rd.	34100	85			17		2.49	20		
W. Hill Ave. & St. Augustine Rd.	19400	84	1		18	20	4.33	18		
Country Club Dr. & Jerry Jones Dr. / Eager Rd.	15850	82			19	T15	5.17	14	Added Travel Lanes	
N Patterson St. & Northside Dr.	15500	79			20		5.10	15		

Table 8. High-crash Locations in the VLMPO Area Outside the City of Valdosta, 2014-2018.									
Location	Max. ADT	Crashes 2014- 2018	Fatal Crashes	Serious Injury Crashes	Overall Rank, 2014-2018	2013- 2017 Rank	Crashes per 1,000 ADT	Rank weighted by ADT	Planned Improvements
N. Valdosta Rd. & Val Del Rd. / Old U.S. 41 N.	29100	95		12	1	1	3.26	10	Intersection Improvements
Bemiss Rd. & N. Oak St. Ext. / Mt. Zion Church Rd.	27500	87		4	2	2	3.16	12	
N. Valdosta Rd. & Old U.S. 41 N.	29100	82		14	3		2.82	15	Added Travel Lanes
Lakes Blvd. & Mill Store Rd.	9800	77		2	4	4	7.86	4	
N. Valdosta Rd. & Coleman Rd. N.	18400	68		8	5	3	3.7	9	Interchange improvements (underway)
Shiloh Rd. & I-75 Southbound Ramp	5260	61		8	6	T6	11.6	1	Interchange improvements (underway)
N. Valdosta Rd. & I-75 Northbound Ramp	18400	45		4	7		2.45	17	Interchange improvements (underway)
Madison Hwy. & Carroll Dr.	4580	37		2	8		8.08	3	
W. Main St. & I-75 Northbound Ramp (HAHIRA)	6100	35			9	10	5.74	5	Interchange improvements (underway)
Main St. & Church St. (HAHIRA)	6050	33			10	9	5.45	6	
Inner Perimeter Rd. & South Patterson St.	9290	30	1	11	11		3.23	11	
Shiloh Rd. & Val Tech Rd. / Shiloh Tr.	3250	28		4	12	T19	8.62	2	Interchange improvements (underway)
Madison Hwy. & I-75 Southbound Ramp	6100	27		4	13	T14	4.43	8	Interchange improvements
Madison Hwy. & I-75 Northbound Ramp	9200	26		1	14	T14	2.83	14	Interchange improvements
Bemiss Rd. & Davidson Rd.	21900	25		7	T15	T14	1.14	20	
Bemiss Rd. & Cherry Creek Church Rd.	16300	25		1	T15		1.53	19	
Madison Hwy. & Clyattville Lake Park Rd. / Oakdale	4785	24	_	3	17	T16	5.02	7	
W. Marion Ave. & Lakes Blvd.	7320	22		2	18		3.01	13	
Lakes Blvd. & Jewell Futch Rd.	8200	21		2	T19		2.56	16	
US Route 84 & James Rd.	9660	21		1	T19	_	2.17	18	

Distracted Driving Crashes

GEARS data show 416 crashes in the VLMPO area in which distracted driving was listed as a contributing factor during 2014-2018. This represents 2.3% of all crashes. It is possible that the true number is higher due to the difficulty of determining whether a driver was distracted in cases where the law enforcement officer did not witness the conditions leading up to the crash.

The Georgia Hands-Free Law became effective July 1, 2018. The law prohibits drivers from having a phone in their hand and from writing or reading messages while driving, among other things. Prior to the law taking effect (from Jan. 1, 2014 to June 30, 2018), there were on average 0.21 distracted driving crashes per day in the VLMPO area. After the law (July 1, 2018 to Dec. 31, 2018), there were 0.40 distracted driving crashes per day on average. A possible explanation for this increase is that law enforcement officers became more vigilant for drivers distracted by mobile devices after the law took effect, and therefore became more likely to record distraction as a contributing factor.

Times of the Year

In the past, it has been noted that the VLMPO area sees a higher rate of crashes during the third week in March, which corresponds to spring-break-related travel for many college students. These are younger drivers (many are under 21), and anecdotally, most are traveling on I-75 heading to or from coastal areas of Florida. Figures 3 and 4 show average crashes by the week of the year.

Looking at crashes overall, there is not a noticeable spike during at around week 12 of the year (which corresponds roughly to the third week in March).

Looking at crashes involving drivers under age 21, there is a spike around week 16 of the year (the third week in April). There are lower rates of crashes involving drivers under 21 during weeks 22 to 26 of the year (approximately the month of June), a spike in crashes around weeks 37 and 38 (mid-September), and the highest spike in crashes during week 49 (the first week in December).

The summer and early December effects are visible for all crashes (see Figure 4).

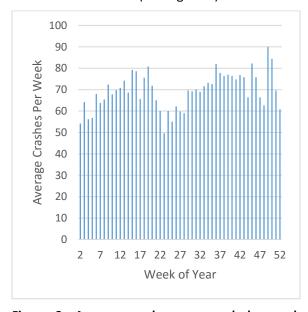


Figure 3. Average crashes per week by week number, 2014-2018.

From 2014 to 2018, 18.9% of crashes involving drivers under 21 occurred within half a mile of Interstate 75. These crashes show a different pattern, with a high point at weeks 29 and 30 (mid to late July), as well as the same spike at week 49 observed for crashes overall.

https://www.gahighwaysafety.org/highwaysafety/hands-free-law/

¹¹ Governor's Office of Highway Safety. "Georgia's Hands-Free Law."

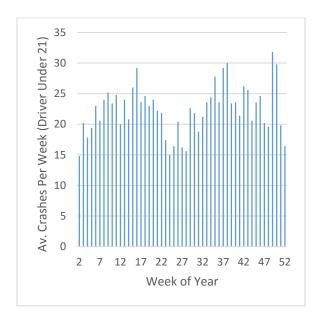


Figure 4. Average crashes per week by week number, drivers under 21, 2014-2018.

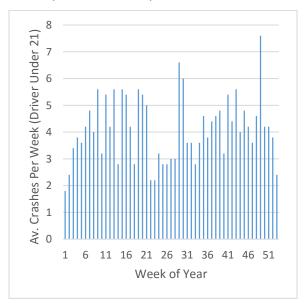


Figure 5. Average crashes per week, drivers under 21, within ½ mile of I-75, 2014-2018.

Proximity to Schools

From 2014 to 2018, 3,841 crashes occurred within half a mile of a public K-12 school. Of

these crashes, 1,557 (40.5%) involved a driver under age 21. (Overall, 32.1% of crashes in the same period involved a driver under 21.)

Out of the total crashes involving drivers under 21, 26.9% occurred within half a mile of a public K-12 school.

The number of crashes spiked during week 16 of the year (mid-April), and again in weeks 37 and 38 (mid-September). This is shown in Figure 6.

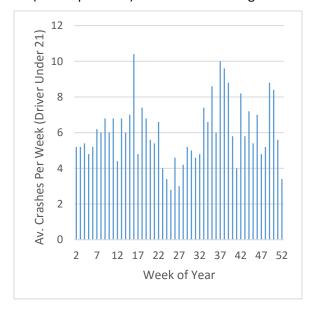
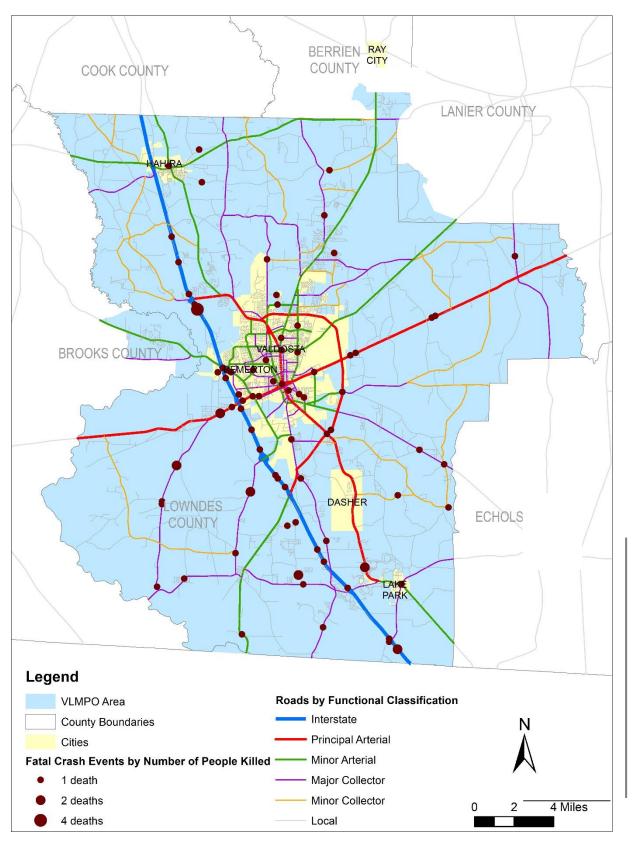
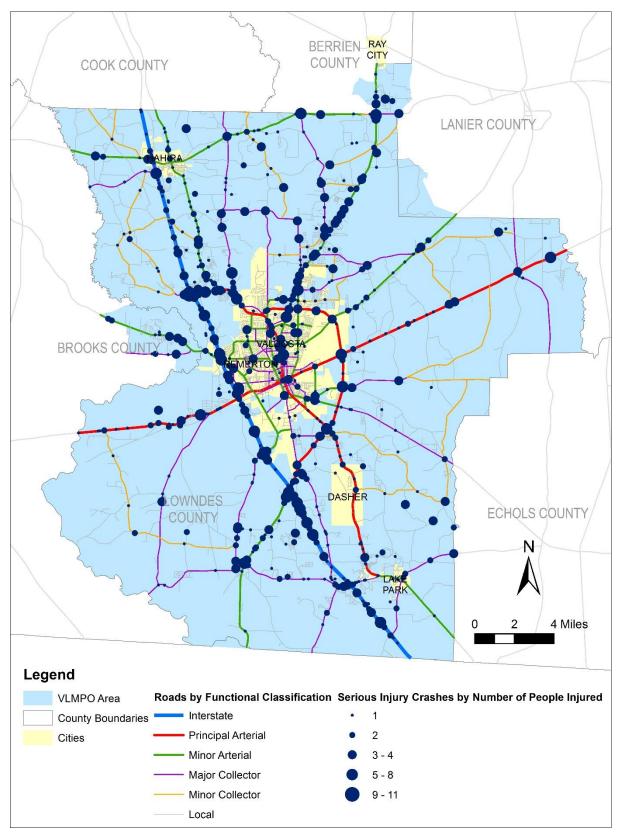


Figure 6. Average crashes per week, drivers under 21, within 1 mile of public schools, 2014-2018.

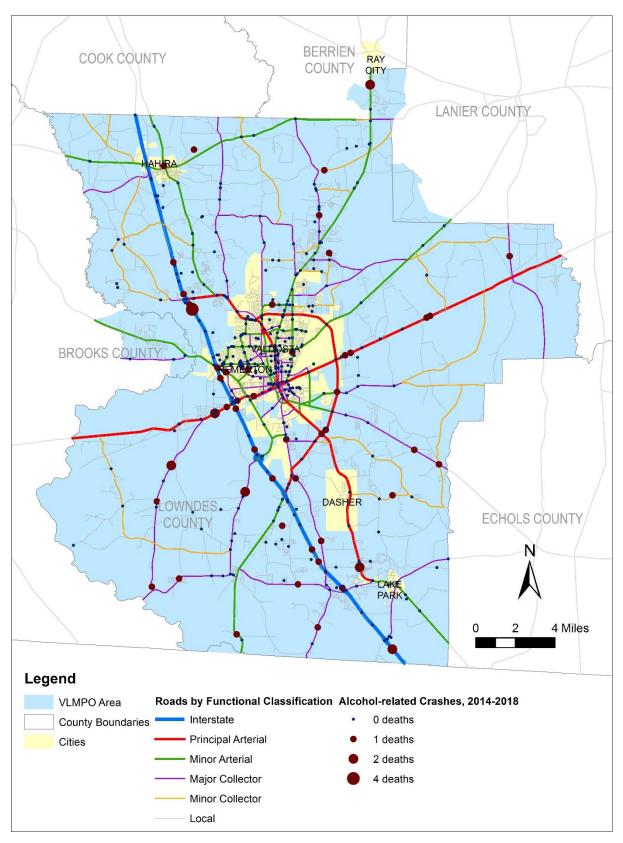
Maps



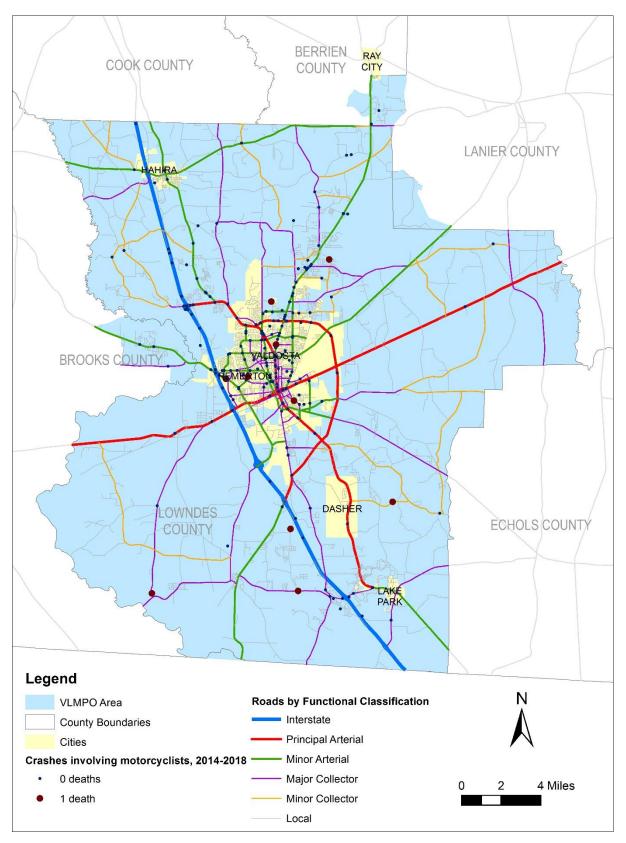
Map 1. Fatal crashes in the VLMPO area, 2014-2018.



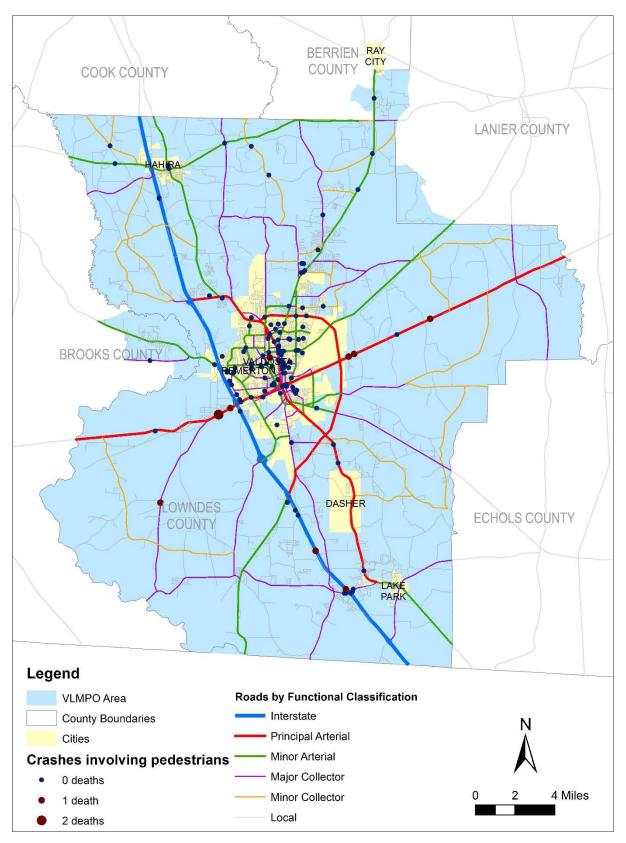
Map 2. Serious injury crashes in the VLMPO area, 2014-2018.



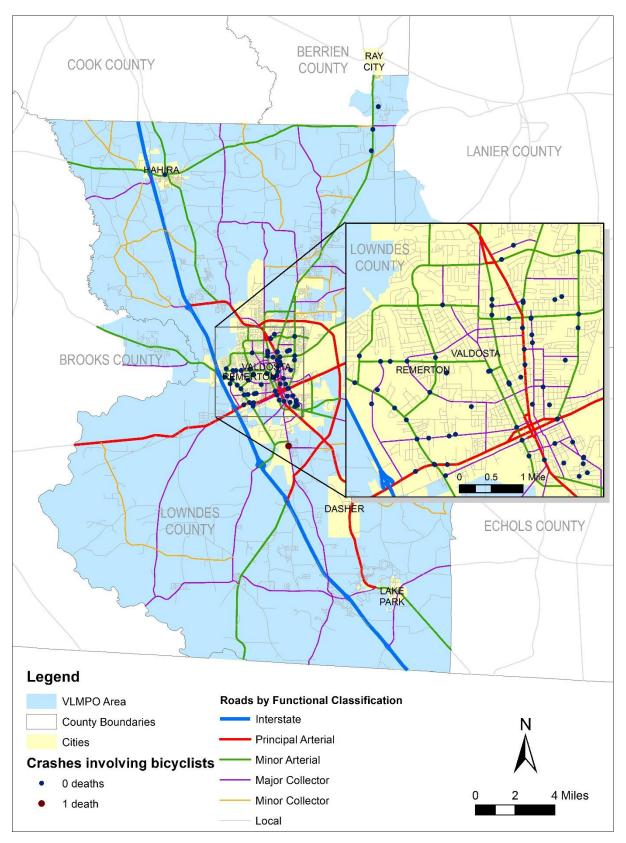
Map 3. Alcohol-related crashes in the VLMPO area, 2014-2018.



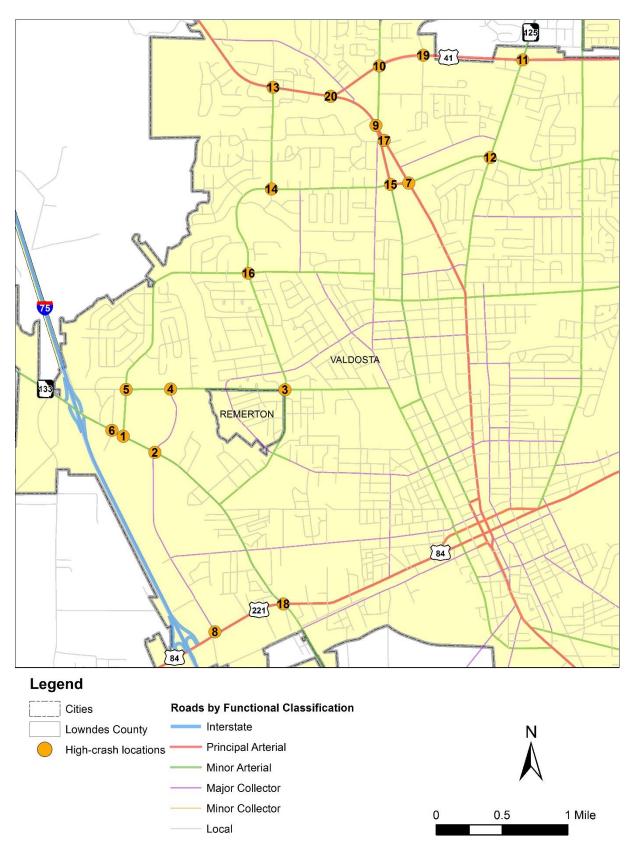
Map 4. Crashes involving motorcycles in the VLMPO area, 2014-2018.



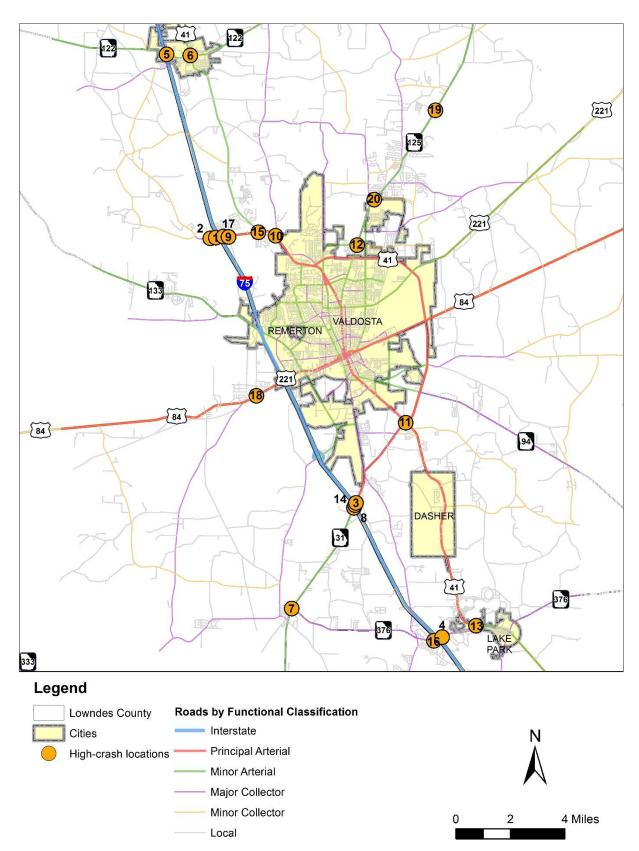
Map 5. Crashes involving pedestrians in the VLMPO area, 2014-2018.



Map 6. Crashes involving bicyclists in the VLMPO area, 2014-2018.



Map 7. High-crash Locations in the City of Valdosta, with rank weighted by ADT.



Map 8. High-crash Locations in the VLMPO area outside of Valdosta, with rank weighted by ADT.