

## **MEMORANDUM**

To: Dr. Jeff LaMondia, Civil Engineering, Auburn University

From: Lan Liu, Bo Zhang

Date: March 10, 2017

RE: The impact of the 'school run' on pedestrian-vehicle crashes in Atlanta, GA

### **I. Purpose**

This memo is made to identify data sources which will be used in this project. Students need to make preparation by searching and collecting data source to create a map with adequate information.

### **II. Process of collecting data source**

A folder was created to contain well organized datasets.

- First, designers would determine what kind of datasets they want to use. Based on the subjects (pedestrian crash and school run), they picked randomly 5 schools for each type of public schools in Atlanta, GA. (School names, address, and station id were presented in Appendices Table 1)
- Second, to analyze the influence of 'school run' on pedestrian crash, traffic volume with specific time range is needed to show the difference between 'school run' and 'non school run' time. In GDOT, it provides a lot of traffic volume datasets with different collection sites in different time range. As additional information, road network dataset was found in Atlanta Regional Commission, which supplemented traffic datasets.
- Third, some projects were concerned as a factor that could influence pedestrian crash too, the 'Honorarium Locator' in GDOT provides the road locations and construction time, which would provide a time-period for designers to compare the situations before and after projects. The specific locations for the collecting sites is shown below in Table 1.
- Forth, the crash data was found according to the picked school locations. As the most important data, it will be imported into ArcGIS by conducting combination datasets.
- Fifth, the census for Atlanta was found in Tiger Census. Shapefiles were collected in this website such as school district national geodatabase which would present the distribution of public schools. After this step, all datasets collection work was finished.

### **III. Appendices**

Road network---Atlanta Regional Commission

<http://www.atlantaregional.com/>

Crash 2015---City Data.com

<http://www.city-data.com/accidents/acc-Atlanta-Georgia.html>

Traffic Volume---Traffic Counts in Georgia

<http://geocounts.com/gdot/>

Block groups, Road tracts, school district---Tiger Census

<https://www.census.gov/geo/maps-data/data/tiger.html>

<b>Elementary School</b>	Buford Academy	Garden Hills Elementary School	Springdale Park Elementary School	Brandon Elementary School	Due West Elementary School
School Address	2705 Robert Bell Parkway, Buford, GA 30518 (1350067; 1350101; 1358413)	285 Sheridan Dr NE, Atlanta, GA 30305 (121-5110; 1215423; 1217257)	1246 Ponce De Leon Ave Ne, Atlanta, GA 30306 (1218455; 1210087; 0897177)	2741 Howell Mill Rd NW, Atlanta, GA 30327 (1218301; 1216074; 1215025)	3900 Due West Rd Nw, Marietta, GA 30064 (0670809)
<b>Middle School</b>	Inman Middle School ()	Duluth Middle School	Chamblee Middle School	East Cobb Middle School	Campbell Middle School
School Address	774 Virginia Ave Ne, Atlanta, GA 30306 (1216142)	3200 Pleasant Hill Rd, Duluth, GA 30096 (1350568)	3601 Sexton Woods Dr, Chamblee, GA 30341 (089-3438)	380 Holt Rd Ne, Marietta, GA 30068 (0672174)	3295 Atlanta Rd SE, Smyrna, GA 30080 (0672049)
<b>High School</b>	Lassiter High School	Arabia Mountain High School - Academy Of Engineeri	Peachtree Ridge High School	North Cobb High School	Meachern High School
School Address	2601 Shallowford Rd, Marietta, GA 30066 (067223)	6610 Browns Mill Rd, Lithonia, GA 30038 (0898083)	1555 Old Peachtree Rd Nw, Suwanee, GA 30024 (1350538)	3400 Old 41 Hwy Nw, Kennesaw, GA 30144 (0670636)	2400 New Macland Rd, Powder Springs, GA 30127 (0670581)
<b>Charter School</b>	Amana Academy	Kipp South Fulton Academy School	North Springs Charter High School	Kennesaw Charter Science & Math Academy	Sedalia Park Elementary School
School Address	285 South Main Street, Alpharetta, GA 30009 (1210140)	1286 Washington Ave, Atlanta, GA 30344 (1216342)	7447 Roswell Rd Ne, Atlanta, GA 30328 (121-0124)	3010 Cobb Parkway North, Kennesaw, GA 30144 (0670012)	2230 Lower Roswell Rd, Marietta, GA 30068 (0672941)