

August 2014

# Safe Routes to School Audit Report Gilchrist Elementary School



Leon County  
Public Schools



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## Acknowledgements

Renaissance Planning Group and Wendy Grey Land Use Planning, LLC would like to thank the following organizations for their input, guidance, and resources in developing this Safe Routes to School Audit report for Gilchrist Elementary School.

### Capital Region Transportation Planning Agency (CRTPA)



### Safe Routes to School (SRTS) National Partnership



### Leon County Public Schools (LCS)



### Florida Department of Transportation (FDOT)



### Leon County Sheriff's Office (LCSO)



### Prepared By:



RENAISSANCE PLANNING GROUP

WENDY GREY LAND USE PLANNING LLC



## **Chapter 1: Introduction**

### **Project Purpose**

The purpose of this Safe Routes to School (SRTS) audit report is to provide recommendations to improve student walking and bicycling rates to and from school. In addition, this report addresses other enhancements to improve the overall travel safety and convenience for students, parents and the school. Improvement recommendations are provided in the following categories: infrastructure, programs, and polices. This SRTS audit includes an array of considerations formulated from a range of research and analytical tools employed to better understand and comprehend the issues and concerns affecting current walking and bicycling rates of student to and from school. This report highlights a summary of students' school travel patterns through in-class student travel surveys, parent self-reported surveys, on-site meetings with school officials, and field reviews.

### **School Overview**

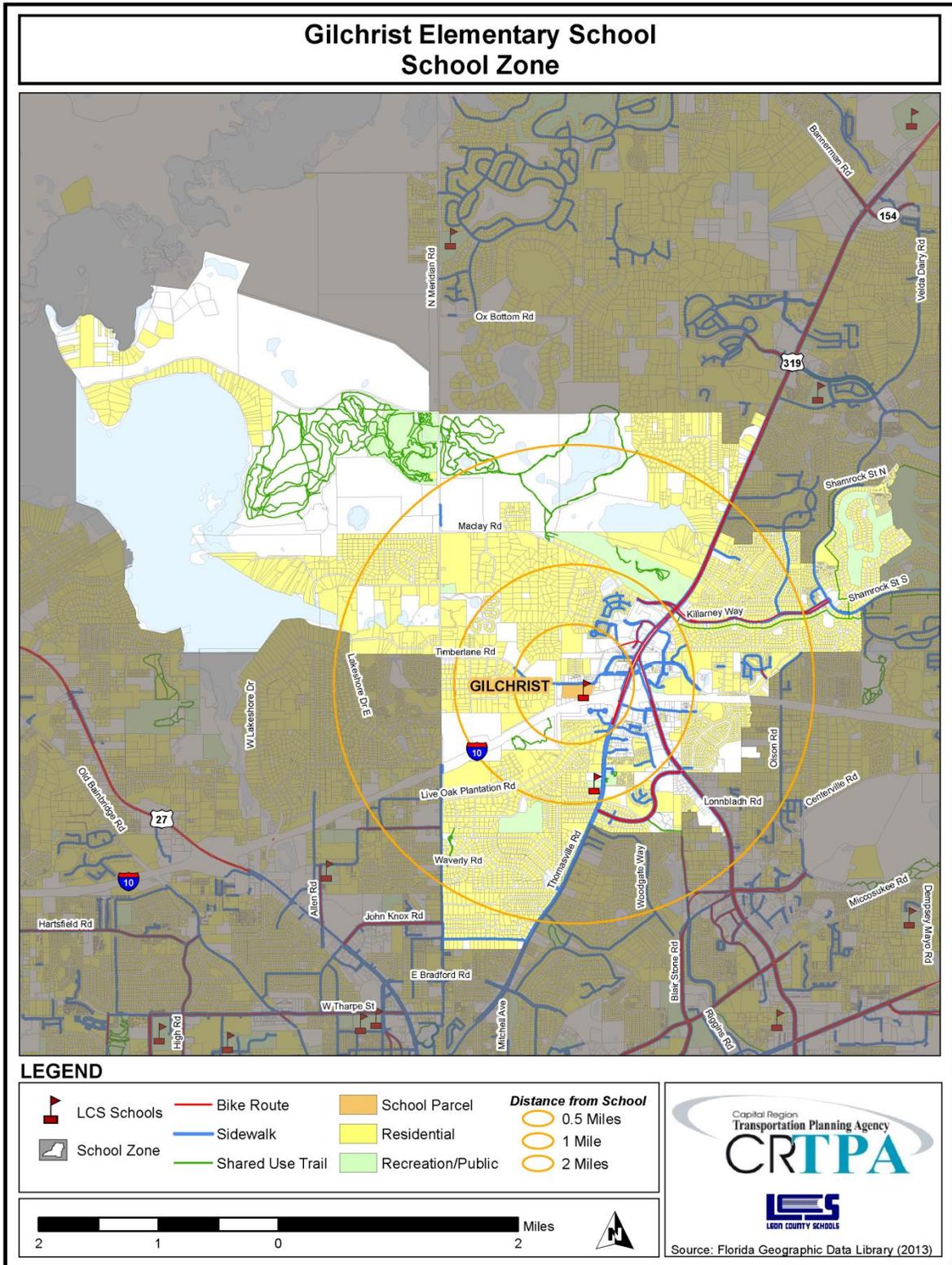
Gilchrist Elementary School is located at 1301 Timberlane Road, Tallahassee, 32312 in Leon County, Florida. It is part of the Leon County Public Schools system. The school was established in 1966, under the original name of Timberlane School. However, in 1979 the name of the school was changed to Gilchrist Elementary, in honor of the retiring principal at the time, Mr. James Gilchrist. Regular school hours are from 8:30am to 2:50pm. A before school program is available from 6:45am to 7:45am. Additionally, an after school program is available from the end of the school day until 6:00pm.

The number of students enrolled at the school, for the 2013 school year was 881. The school has a current capacity for 1,001 students. The school includes grade levels Kindergarten to 5<sup>th</sup> grade.

Students attending this school feed into Cobb, Raa, or Montford Middle Schools and either Leon or Lincoln High Schools.

### **School Zone**

The Gilchrist Elementary school zone encompasses the neighborhoods of Live Oak Plantation, Woodland, Rose Hollow, Eastgate, Waverly Hills, Sawgrass Plantation, Hawks Nest, Maclay Hammock, and Killlearn Estates. Land uses within the school zone consist of mostly residential and recreational uses. Additionally, Lake Jackson borders the western border of the zone. The Gilchrist school zone includes three major roadways. Interstate-10 runs east to west and bisects the zone into north and south. Thomasville Road runs southwest to northeast and bisects the zone into east and west. Capital Circle Northeast runs northwest to southeast near the eastern portion of the zone. Important recreational facilities within the school zone include Alfred B. Mclay State Gardens, Phipps Park, Dorothy B. Oven Park, as well as, the Killlearn Estates golf course.



## Chapter 2: On-Site Meeting and Inventory

### Date and Weather Conditions

The on-site inventory meeting was conducted on April 2<sup>nd</sup>, 2013 with temperatures in the 70 degrees Fahrenheit.

### Highlights and Key Observations of On-Site Meeting

During this visit, Gilchrist Elementary School representatives provided insight about students' travel to and from school and discussed what was working, or not working well. The meeting began by discussing current policies, programs, and administration related to students' travel to and from school. Examples of safety education programs discussed include crossing guards, safety patrols, and traffic education. Additionally, before- and after-school programs provided for students were discussed.

It was noted that the school incorporates bicycle and pedestrian safety into its regular curriculum. Activities include "Stranger/Danger" training and an annual bike rodeo put on through the Parent/Teacher Organization (PTO), local paramedics, and the local fire department. During the site visit, the school was being renovated and it was noted that the existing dual parent pick-up system with four lanes is being changed to a traditional two lane design once construction is completed. Students arrive as early as 6:45am and there is an after-school program available until 6:00pm. Additionally, there are several after-school program and church vans that pick up students. School staff and administrators serve as ushers for students at both the automobile drop-off/pick-up and school bus zones. The student safety patrol assists with these functions as well. It was also noted that the school is within the City's Market District: Placemaking Project area which may provide a mechanism for implementing bicycle and pedestrian projects.

### Circulation

During a tour of the school, school representatives provided explanations of school circulation patterns as to where and how children were entering and exiting school grounds via walking or bicycle and arriving and departing by automobile or school bus.

Due to a school choice program, many students select to attend the school but live outside the school's zone. Additionally, there is very limited housing within walking distance for elementary students and the closest is down a fairly steep hill. As such, there is a shuttle bus for students living within two miles of the school, particularly for those living in the Eastgate neighborhood. As a result, there are almost no students that walk or bicycle to/from school, as many must rely heavily on school busing and automobile rides. It was noted that there has been one bicyclist in the past four years and there are no bicycle racks present at the school.

The school bus drop-off and pick-up mostly functions adequately and the area is covered which helps during times of inclement weather. There are ushers to help guide students arriving and departing school with minimal difficulty and conflict. There are five school buses, including a bus shuttle for students living within two miles of the school. After the school buses depart, after school program and church vans enter the zone. Each van is supervised by a school staff "Van Captain."

The parent drop-off and pick-up zone is currently being renovated from a four-lane to a two-lane pick-up system. Once construction is complete, the school may consider a parent walk-up site. The renovation is intended to improve automobile circulation and safety. Students sit under a covered awning, by grade level, when waiting to be picked-up. Parents must have car identification tags with their child's name on it in order to pick-up their child. There have been numerous observances of drivers not obeying the rules and directions for student drop-off/pick-up daily, which further aggravates the situation. Some drivers park their vehicles off-site and pick-up/drop-off their children in undesignated areas. According to school administrators, over 100 parents use Market Square Shopping Center, east of the school along Timberlane Road, as a park-and-walk location.

### **Inventory Map**

An aerial photograph showing Gilchrist Elementary School is located on the following page. As shown in the photo, the school fronts Timberlane Road. Students can access campus from this street from either the east or west direction.

Standard width sidewalks are located along the school-side of Timberlane Road. Additionally, standard width sidewalks are located along the non-school side of Martin Hurst Road from Timberlane Road to just north of the school bus zone. There is then a midblock crosswalk that connects directly to a sidewalk that enters onto campus.

The automobile pick-up and drop-off zone is located directly in front of the school's main entrance. Automobiles both enter and exit the zone at separate driveways along Timberlane Road. Visitor and staff parking spaces are located in this area as well. The bus drop-off and pick-up zone is separately located along the side of the school along Martin Hurst Road. Buses both enter and exit the zone at separate driveways along Martin Hurst Road.



### Issues and Opportunities

School-specific issues, opportunities, and impediments concerning the SRTS program were discussed.

Geography appears to be the primary issue with students' ability to walk and bicycle to school. Since the school is part of a school-choice program, there are many students that live outside of the school zone and outside of a reasonable walk/bike distance. Furthermore, those that live near the school are faced with severe grades in the landscape that make walking or bicycling difficult. These kind of external factors are often difficult to overcome, at least in the short-term.

With what opportunities that do exist to increase walking and bicycling, including student safety, considerations should be given to constructing the parent walk-up, planned at the school, to encourage parents to park and walk their children to campus and improving bike/ped infrastructure on routes to bus stops, where feasible. School-related and supportive committees such as the Parent/Teacher Organization (PTO) can be used to help educate parents on the opportunities and benefits of having their children walk or bicycle to school, even if it is just to a parent walk-up or bus stop.

These same groups can also help get the word out to parents concerning appropriate protocol for dropping-off and picking up students, especially to those parents who are parking off-site in the Market Square shopping center. Education and enforcement during the morning and afternoon commuting hours are critical. Furthermore, the school should continue to monitor the success of the reconfigured parent drop-off/pick-up zone, once constructed, to make sure it is functioning as intended and increases safety, where possible.

### Chapter 3: Student Travel Survey – Summary of Results

School administrators carried out a school-wide travel survey to evaluate the ways in which students from Kindergarten through 5<sup>th</sup> Grade traveled to their school from home during a one week period. (A copy of the student travel survey can be found in **Appendix A.**)

Student travel survey results were counted and grouped by grade level. They were analyzed for the school as a whole as well as by grade level groupings of Kindergarten through 2<sup>nd</sup> Grade, and 3<sup>rd</sup> Grade through 5<sup>th</sup> Grade, respectively. (A detailed description of the analysis by mode for the two grade level groupings can be found in **Appendix B.**)

The survey indicates that the vast majority of students from Gilchrist Elementary School – approximately four of out five students – are dropped off at school by car. The percentage rises slightly for younger aged children, which is understandable. Riding a school bus ranked a distance second at approximately 18 percent. Of those commuting by school bus, the percentage rises slightly for older-aged children. A low percentage of students, less than one percent each reported walking or biking to school and none reported arriving to school by public bus. (To note, there are no public bus stops within a reasonable distance to the school.) The number of students walking and/or biking to school could potentially be increased with the right combination of programs, policies, and infrastructure upgrades.

#### SUMMARY OF SCHOOL-WIDE RESULTS

	Walk	Bicycle	Automobile	School Bus	Public Bus
<b>Average Overall</b>	<1 %	<1 %	81 %	18 %	0 %

## Chapter 4: Parent Survey – Summary of Results

School administrators carried out a school-wide survey to better understand the neighborhood safety issues and concerns of parents and the factors influencing their decision to allow their children to walk or bicycle to school. (A copy of the parent survey can be found in **Appendix C.**)

Parent survey results were counted and analyzed by grade level groupings of Kindergarten through 2<sup>nd</sup> Grade and 3<sup>rd</sup> Grade through 5<sup>th</sup> Grade, respectively. (A detailed description of the parent surveys for the two grade level groupings can be found in **Appendix D.**)

The surveys of students living within two miles from the school indicate that a greater percentage of Gilchrist Elementary School students are dropped off by car in the morning, while fewer return home by the same modes in the afternoon. In the afternoon, there are greater percentages of students returning home by school bus, walking, or another mode not described specifically in the survey such as an after-school program van. Overall, a combined total of approximately 1% of students commutes to and from school by walking and none commute by bicycle.

With regard to neighborhood safety, the concerns were generally agreed upon by parents from both Kindergarten through 2<sup>nd</sup> and 3<sup>rd</sup> through 5<sup>th</sup>. Survey respondents overall showed concerns for the lack of sidewalks and bicycle lanes, as well as the behavioral patterns of automobile drivers, generally, in terms of excessive driving speeds. Additionally, parents were concerned with transportation issues outside of the school zones, dealing mostly with complex intersections and high volumes of traffic, and issues with the parent pick-up/drop-off areas of the school. As for speeding complaints, specific problem locations cited include Killlearn Center Boulevard, Timberlane Road, Live Oak Plantation Road, Thomasville Road, and the Eastgate Neighborhood Subdivision.

With regard to factors that might influence their decision to allow their child to walk or bike to school, factors such as having continuous and separate bicycle/pedestrian pathways from traffic, accompanying children (by themselves/other parents), and the availability of crossing guards were mutually agreed upon by parents from both Kindergarten through 2<sup>nd</sup> and 3<sup>rd</sup> through 5<sup>th</sup>.

## Chapter 5: Neighborhood Field Review

A neighborhood field review was conducted on April 25<sup>th</sup>, 2013. The review consisted of an assessment of accessibility, connectivity and safety along neighborhood roadways within proximity to Gilchrist Elementary School. On the day of the field review, the weather was overcast with some light rain and temperatures in the 70's Fahrenheit. Following the field review, a walk/bike shed area was delineated on a map within the school zone, surrounding the school. This chapter includes a Walk/Bike Shed section describing the approach to defining the area and an associated map for Gilchrist Elementary School.

### Character of Neighborhood Area

Gilchrist Elementary is located in an area comprised of mostly retail commercial and office uses to the east and large lot, single-family homes with a few areas of condominiums and medium density single family homes to the south and west directions. The neighborhood street pattern throughout the area includes mostly cul-de-sacs and curved streets that connect in a semi-gridded manner. Bike-ped infrastructure is available on Timberlane Road, Market Street, and near the Village Commons Shopping Center. However, sidewalks and bicycle lanes are unavailable with the exception of major roadways. While bike-ped infrastructure is available on Thomasville Road and Capital Circle, the width and high traffic volumes on these roadways make them a barrier for young bicyclists and pedestrians. The Alfred B. Maclay Gardens State Park multi-use Trail is located north of the school near the neighborhoods of Bobbin Brook and Maclay Hammock.

Major roadways in the school zone include:

- Interstate 10, a heavily traveled six-lane roadway with a posted speed limit of 70mph.
- Thomasville Road, also a heavily travelled 4-5 lane roadway, south of I-10, that transitions to up to 8 or more lanes north of Timberlane Road with a posted speed limit between 40-45mph.
- Capital Circle Northeast, a 6-7 lane roadway, south of I-10, that transitions down to 2-3 lanes north of I-10 with a posted speed limit between 40-45 mph.

### Crash Data

Crash data were collected from the Florida Department of Transportation's (FDOT) State Safety Office for years 2009-2011. Crashes reported include any crashes within Leon County and on any local and major roadways. The data were collected for a typical school year, August 15<sup>th</sup> to May 30<sup>th</sup>. Additionally, only bicycle and pedestrian crashes that occurred during typical school commute hours, 7:00am to 9:30am and 1:50pm to 4:20pm, and school days, Monday to Friday, were examined.

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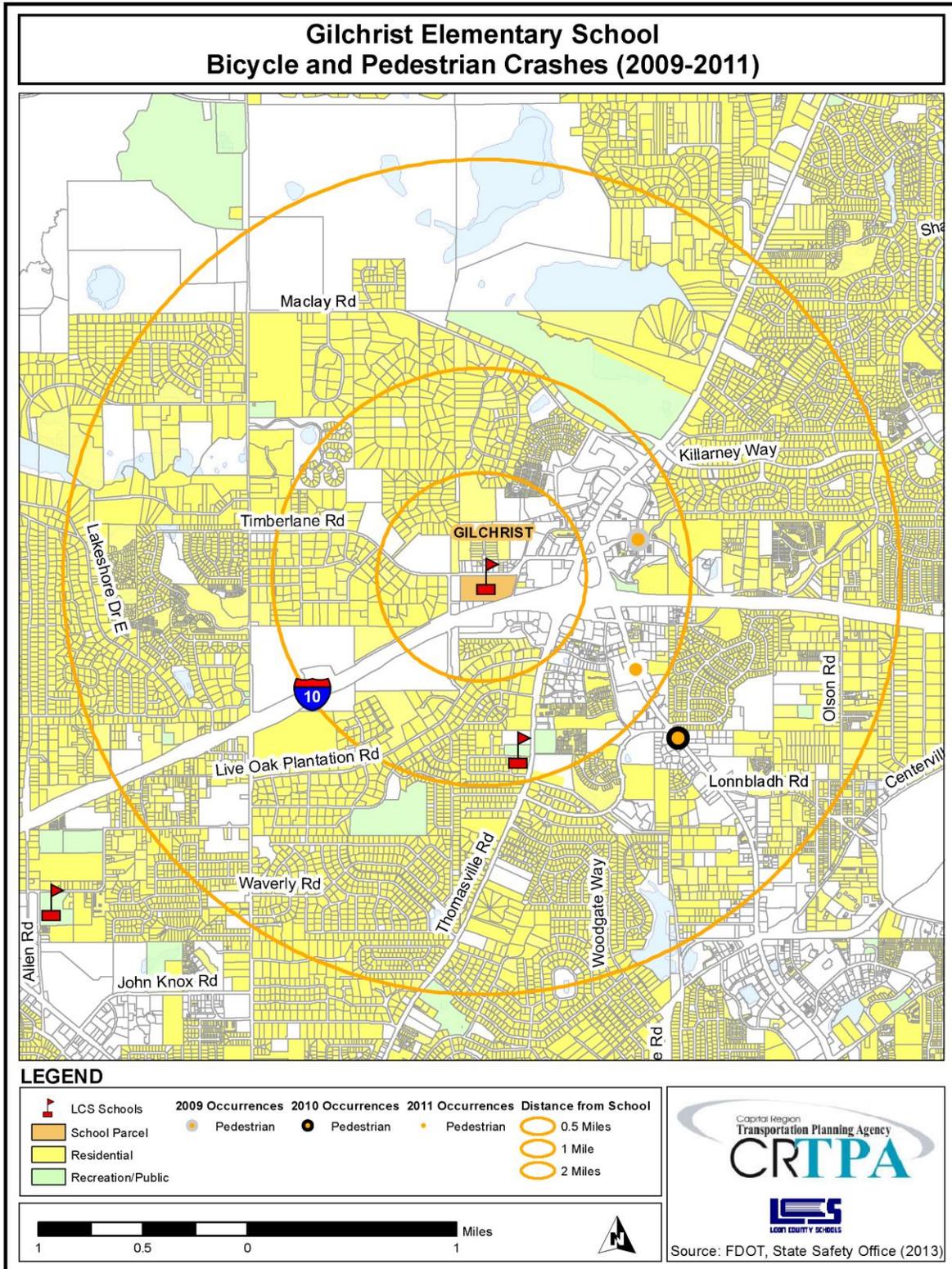
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There were a total three pedestrian crashes that occurred within the theoretical two-mile walk/bike radius of Gilchrist Elementary School. All crashes occurred during the afternoon hours and involved adults. Injuries were reported in all crashes.

All crashes occurred approximately ½ mile to 2 miles east of Gilchrist Elementary School. Streets where crashes were a problem are Capital Circle Northeast, Killearn Center Boulevard and Village Green West.

### SUMMARY OF CRASH REPORTS (2009-2011)

<b>Date</b>	<b>Time</b>	<b>Day</b>	<b>On Road</b>	<b>Nearest Intersection</b>	<b>Injury or Fatality?</b>	<b>Type of Crash</b>	<b>Person(s) Involved</b>
11/02/09	2:29pm	Monday	Village Sq. Blvd.	Killearn Center Blvd.	Injury	Pedestrian	Adult
09/09/10	3:28pm	Thursday	Remington Green N	Capital Circle NE	Injury	Pedestrian	Adult
08/30/11	2:36pm	Tuesday	Capital Circle NE	Village Green W	Injury	Pedestrian	Adult



## Neighborhood Assessment

The overall neighborhood layout surrounding Gilchrist Elementary School does not lend itself particularly well to walkability. A major interstate highway near the school greatly limits the potential for walking and biking to areas south of the school. However, there is an opportunity to connect the school to residences south of Interstate 10 via Timberlane School Road, a two-lane roadway with a speed limit of 35mph. With added bike/ped infrastructure, this roadway would greatly expand the potential for walking and biking to/from the school. Additionally, there are a wide variety of commercial land uses just north and east of the school property which limit the amount of residential housing within a walkable/bikeable distance to/from school. There is existing sidewalk infrastructure along the south side of Timberlane Road near the school; however, it only extends westward approximately one-half mile to Woodley Road and then terminates. Further east, away from Gilchrist, the sidewalk network generally continues on at least one side of the road uninterrupted throughout the commercial land uses. However, sidewalks along the north side of Timberlane Road from Martin Hurst Road to Market Street lack a curb and can pose a safety concern for elementary-aged children walking and bicycling. While the width of the sidewalks is adequate along this stretch of roadway, the bend in the roadway design can encourage vehicles to go faster than the posted 35mph speed limit. As mentioned in the parent survey results, speeding vehicles tend to be a problem along Timberlane Road.

Project-specific recommendations can be found in the Findings and Recommendations chapter of this report.

## Walk/Bike Shed

As mentioned previously, a walk/bike shed area was delineated on a map within the school zone, surrounding the school. The Gilchrist Elementary School walk/bike shed map is included at the end of this chapter.

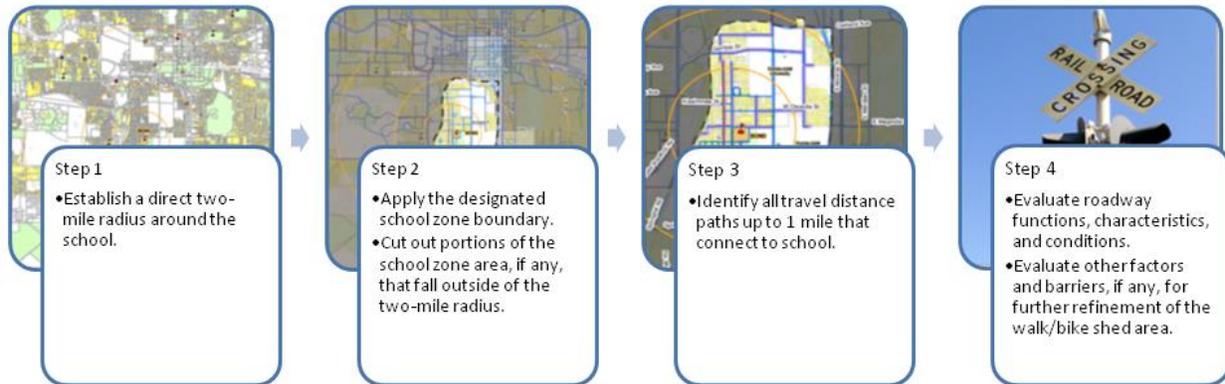
The walk/bike shed area and associated map are not meant to suggest that elementary school students of all ages, maturity level, and experience should commute to and/or from school within the area delineated. Certainly, younger children such as kindergarten students are not expected to walk or bike to school from practically any distance without the accompaniment of either a parent or much older sibling. Also, older children such as 5<sup>th</sup> graders without the appropriate experience or maturity level will likewise be more limited in their accessibility to school. Therefore, the walk/bike shed map functions more as a guide for parents, school administrators and students to evaluate and identify areas potentially commutable and conducive to walking and bicycling to school. The final decision to walk or bicycle to school is still at the discretion of the parents.

The walk/bike shed for Gilchrist Elementary School extends entirely to the west of the school where there are local, neighborhood streets. The presence of Interstate-10 and lack of bike/ped facilities just south of the school contribute to the southern limits of the walk/bike shed. Additionally, the presence of Thomasville Road with its high number of travel lanes, high speeds, and large volumes of traffic form the eastern limits of the walk/bike shed. The lack of pedestrian and bicyclists accommodations north of Timberlane Road and west of North Meridian Road, combine to form the northern and western limits of the walk/bike shed.

It should be noted that certain improvement recommendations could potentially expand the potential walk/bike shed area, due to improved conditions for walking and bicycling.

### Methodology

Many factors were evaluated to ultimately determine the limits of the walk/bike shed area. The general methodology for identifying the shed included the following steps:



### Evaluating Roadways

Four types of safety hazards were evaluated pertaining to roadways. They include:

- Sidewalks along roadways
- Roadways without sidewalks
- Roadway crossing points
- Railroad crossing points (along roadways)

Primary hazard conditions include, but are not necessarily limited to factors such as:

- Sidewalk width (where present)
- Separation between the walking/bicycling space and the vehicular travel space
- Intersection control measures for crossing
- Number of rail tracks (for railroad crossings)
- Traffic volume
- Traffic speed
- Roadway geometry
- Length of a hazardous condition present

Multiple factors are no doubt present for each hazard. And no two factors or situations are the same. This makes evaluation as much of an art as a science. Nonetheless, there are certain conditions in and of

themselves that are considered decisive limitations to elementary school children walking and/or bicycling to school. Such conditions where walking and/or bicycling are deemed hazardous include the following. It should be noted that only one condition from either table needs to be met for a situation to be deemed hazardous.

Travel Along Roadways				
Sidewalk Type	Hazardous Conditions			
	Type of Road	Posted Speed Limit	Peak Hour Traffic	Length
< 2' wide sidewalk OR without sidewalk	All roadways other than local, neighborhood streets	N/A	N/A	Exceeding 0.5 miles in length
<= 3' wide sidewalk OR <= 4' separation from traffic	More than 2 travel lanes	Greater than 35 mph	Greater than 2,000	Exceeding 1 mile in length
> 4' wide sidewalk AND >= 4' separation from traffic	More than 4 travel lanes	Greater than 45 mph	Greater than 3,500	Exceeding 2 miles in length

Roadway Crossing Points				
Crosswalk Type	Hazardous Conditions			
	Type of Road	Posted Speed Limit	Peak Hour Traffic	Length
Unmarked Crosswalk	More than 2 travel lanes	Greater than 25 mph	Greater than 1,500	N/A
Unsignalized Crosswalk				
Marked Crosswalk	Greater than 4 travel lanes	Greater than 40 mph	Greater than 2,000	N/A
Signalized Crosswalk				

**Hazardous Walking Conditions, as defined per Florida Statute**

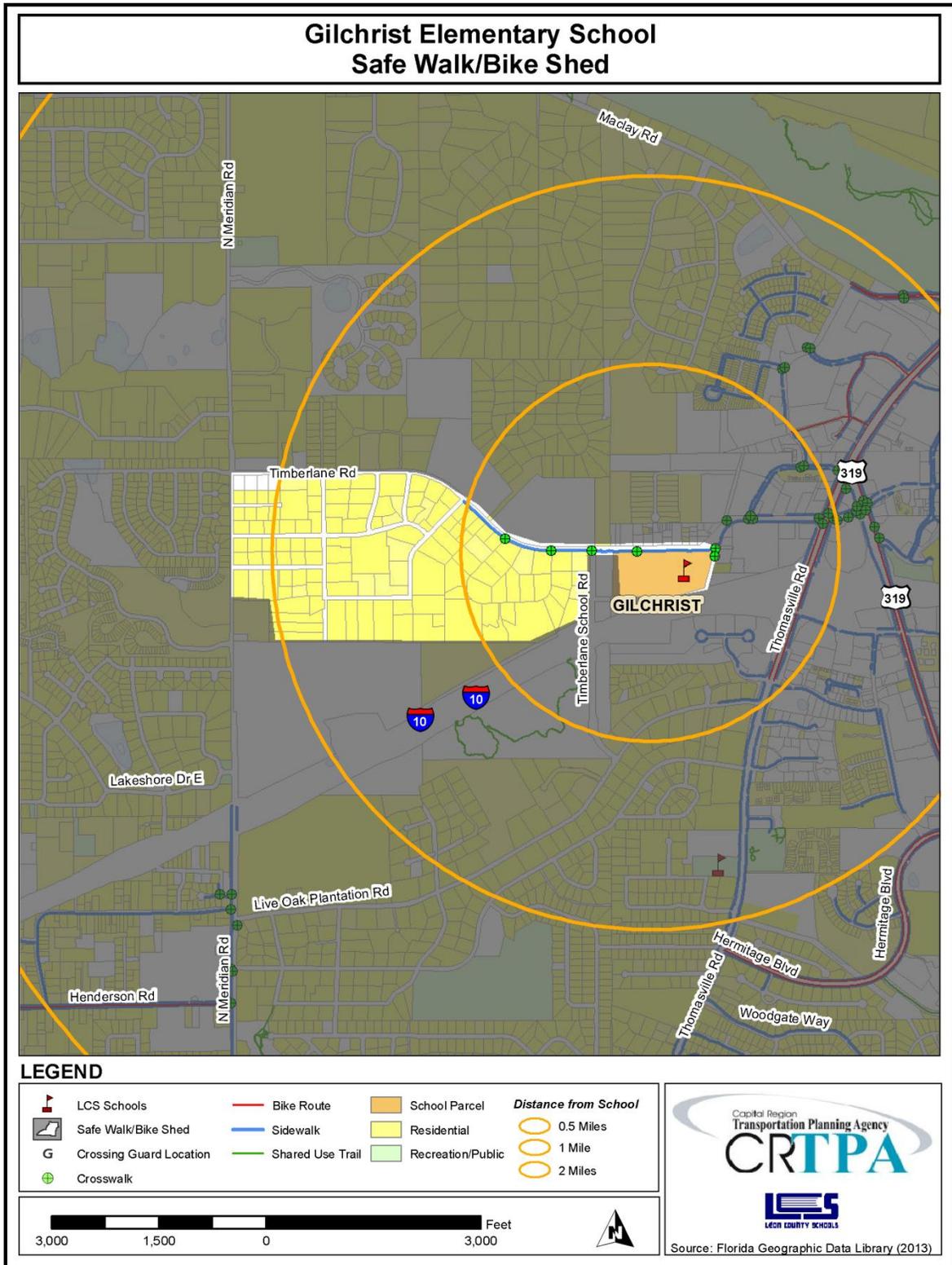
Section 1006.23 of the Florida Statutes defines hazardous walking conditions for elementary school-aged students commuting to and from school. While these guidelines are useful, the scope and intent of the State’s language are fairly general and broad. The standards are mostly liberally applied to extreme situations. For example, a four-foot wide ‘surface sufficient for walking’ that is only three feet in distance from the edge of a curb-less roadway with a 55 mph posted speed limit would likely not meet the required criteria, per State Statute, for hazardous walking conditions for elementary-aged students walking to or from school. Most experts would agree that such conditions as described are likely too challenging for elementary students to handle.

In determining a safe walking and bicycling area, this report applies a methodology and criterion that is more stringent than State standards and more in line with existing studies, research and opinions collected from numerous experts in the fields of pedestrian and bicycle transportation and safe routes to school planning. In addition, this report goes much further than simply identifying sidewalk/pathway deficiencies; it also considers intersection conditions, pavement markings, signage, and a number of other attributes that can impact safe routes to school.

### **Evaluating Other Factors and Barriers**

In addition to that identified above, information collected from the field review, anecdotal comments from parent surveys, discussions with school administrators and staff, and general research findings were applied to determine the ultimate walk/bike shed area commuting limits for the school. Such additional information evaluated included the following:

- Barriers such as water bodies and high-speed, restricted access highways
- Historic travel accident patterns
- Poor quality pedestrian infrastructure along routes
- Pathways of excessive length through nonresidential areas as well as excessive intersecting vehicular access drives



## **Chapter 6: Findings and Recommendations**

Walking and bicycling to Gilchrist Elementary School can be difficult due to the lack of bicycle/pedestrian connections near residential land uses west and south of the school. However, there are a number of infrastructure recommendations that would provide much benefit toward improving the existing conditions. For those requiring automobile access to school, the school is currently renovating the parent drop-off and pick-up zone from a four-lane to a two-lane system which will improve the circulation in the zone while also making it safer for students. Additionally, the school is considering a parent walk-up that would allow parents to park and then walk their students a short-distance to the main campus. Additional policy and programmatic recommendations that might help to increase safe walking and bicycling to and from school (and likewise provide some relief to both the car line and bus zone) are also included for the school's consideration.

### **Infrastructure Improvements**

The following recommendations supplement the current walk/bike shed area as delineated on the map, addressing infrastructure needs and improvements that would enhance walking and bicycling safety and convenience to and from Gilchrist Elementary School. They include both on- and off-site improvements as follows:

### Gilchrist Elementary School On- and Off-Site Recommendations

Improvement: On-Site		Location	From	To	Geography	Direction	Length	Comments
A1	Install bicycle rack	Just west of main school entrance	N/A		N/A	N/A	N/A	
A2	Crosswalk	In front of main school entrance	N/A		North side of parent drop-off/pick-up zone	N/A	N/A	Align with bike/ped gate and sidewalk
A3	Extend parent pick-up/drop-off canopy	In front of main school entrance	N/A		N/A	N/A	N/A	

Improvement: Off-Site		Location	From	To	Geography	Direction	Length	Comments
B1	Sidewalk Extension	Timberlane Road	Woodley Road	Meridian Road	South side of Timberlane Road	W - E	Approx 3,375feet	Included in County's sidewalk list
B2	Add raised curb separator adjacent to sidewalk	Timberlane Road	Martin Hurst Road	Market Street	North side of Timberlane Road	E-W	Approx 285 feet	Minimal separation betwn roadway and sidewalk in the curve
B3	Add Pedestrian Signal and Crosswalk	Timberlane Road & Hawks Glen	N/A	N/A	East of Hawks Glen	SW – NE	N/A	
B4	New sidewalk	Timberlane School Road	Timberlane Road	Live Oak Plantation Road	East side of Timberlane School Road	N - S	Approx 3,100 feet	
B5	Install Lighting Fixtures	Timberlane School Road	N/A	N/A	Under I-10 Overpass	N/A	N/A	
B6	New sidewalk	Live Oak Plantation Road	Timberlane School Road	Martin Hurst Road/Fontaine Drive	North side of Live Oak Plantation	W- E	Approx 1,500 feet	
B7	New sidewalk	Live Oak Plantation Road	Meridian Road	Timberlane School Road	North side of Live Oak Plantation	W-E	Approx 6,040 feet	Recommendation based on public comment. See description.

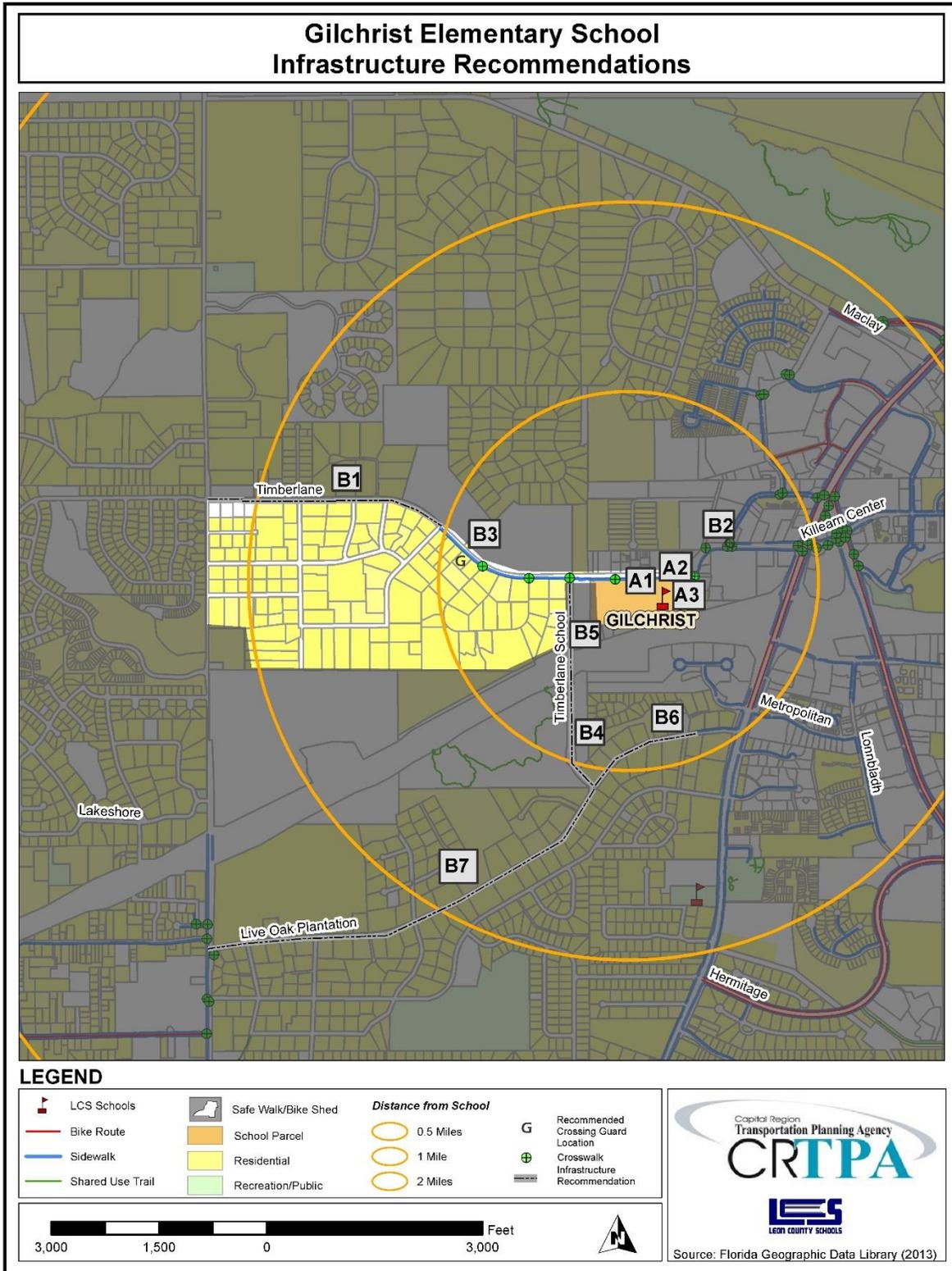
The table, above, corresponds to an infrastructure recommendations map on the following page.

### On-Site Recommendations

- A1) Install bicycle rack – Currently, there is no bicycle parking available at the school. As such, this can create inconveniences for those students riding their bicycle to/from school. Installing a bicycle rack, similar to those found at many other Leon County elementary schools, can create a safe place for students to secure their bicycle during school hours.
- A2) Add a crosswalk through parent drop-off/pick-up zone in front of school – There is a sidewalk and ped/bike gate that leads from Timberlane Road to the front of the main school entrance; however, there is no crosswalk currently available to allow a bike/ped identified path through the current parent drop-off/pick-up zone.
- A3) Extend parent pick-up/drop-off canopy – An existing canopy currently allows students entering/exiting vehicles directly in front of the main school entrance to be protected from inclement weather; however, vehicles just east and west of the main canopy are unprotected.

### Off-Site Recommendations

- B1) Extend sidewalk on the south side of Timberlane Road from west of Woodley Road to Meridian Road
- B2) Add a raised curb separator adjacent to sidewalk along Timberlane Road from Martin Hurst Road to Market Street. This will help provide better protection and separation from traffic for students walking or bicycling.
- B3) Add a flashing pedestrian signal and crosswalk on the east side of the Timberlane Road & Hawks Glen intersection
- B4) Add a new sidewalk on the east side of Timberlane School Road from Timberlane Road to Live Oak Plantation
- B5) (In conjunction with **Off-Site Recommendation B4**) Install lighting fixtures under the I-10 overpass on Timberlane School Road
- B6) (In conjunction with **Off-Site Recommendation B4**) Add a new sidewalk on north side of Live Oak Plantation from Timberlane School Road to Martin Hurst/Fontaine Drive
- B7) Add a new sidewalk on the north side of Live Oak Plantation from Meridian Road to Timberlane School Road. This segment of Live Oak Plantation Road did not originally fall within the strict evaluation criteria for the Safe Routes to School recommendations. However, it is being identified as a recommendation needing further consideration within the context of Safe Routes to School based on public comment, the volume of traffic on the road and connection to neighborhoods between Timberlane School Road and Meridian Road.



## Programs

- C1) Walk and bicycle encouragement literature – Send home literature to parents, as well as make it available on the school website, about the benefits of children walking and bicycling to school. Information and statistics from the National Safe Routes to School organization can be used to highlight health and safety benefits. The literature provided to parents should highlight some specific examples of how parents and the community can make walking and bicycling to school safe and fun. Examples of programs to promote walking and bicycling include encouraging parents to coordinate with other parents to establish walking and bicycling groups (i.e. buddy programs and walking school buses) to help ease safety concerns; participating in Walk/Bike to School Days; creating a mileage club where students or entire classrooms keep track of how much they walk or bike to school to compete for prizes or certificates; and encouraging families who normally drive to school to look for ways to safely and legally park in a parking lot away from school, but within walking distance, and then walk to school from the lot.
- C2) Bicycle safety and accessibility workshop – Organize and hold a workshop or a bike rodeo that demonstrates bicycle safety topics, catered to younger children, such as bicycle hand signals, how to properly wear a bicycle helmet, and properly obeying traffic signs/signals. Parents and students should be reminded that under Florida Law, anyone under the age of 16 must wear a bicycle helmet. An on-campus bicycle obstacle course that covers skills such as avoiding obstacles, balancing at slow speeds, turning, and making emergency stops can be very helpful for young riders. Additionally, a group bicycle ride, through the neighborhoods west of the school, can be a safe and fun way to get children more comfortable with their built environment and any obstacles they may encounter en route to school. Local community groups, as well as, Florida Agricultural & Mechanical University, Leon County Sheriff’s Office, and Leon County Public Schools may be willing to donate time and/ or supplies such as bikes, helmets, and locks for workshops and rodeos if contacted.
- C3) Parent drop-off/pick-up zone protocol encouragement– Send home literature to parents, as well as make it available on the school website, about the proper drop-off and pick-up process for the school, particularly at the start of a new school year or after an extended school break. Maps of the drop-off/pick-up zone, as well as, the traffic flow pattern can be very helpful to parents. The literature available to parents should remind them to be patient and courteous to other parent drivers and clearly discourage parents from letting children out in the parking lot before the drop zone, releasing them on the side of the road, or parking on the side of the road (to wait for their child). Providing small rewards, such as stickers or pencils, to students whose parents follow the proper drop-off/pick-up process is typically more beneficial than punishing improper behavior. If necessary, educational flyers could be placed on the windshields of vehicles illegally parked to remind parents of the proper rules and procedures.
- C4) Car seat restraints (e.g. seat belts, booster seats, etc.) – Send home literature to parents, as well as make it available on the school website, about the proper use and type of car seat restraints needed by children of different ages and weights. Remind parents that car crashes are the leading

cause of death for children 1 to 13 years old in the United States.<sup>1</sup> Ideally, children should remain in the back seat at least until age 12. Periodically, send out reminders on this important issue and possibly get the Parent-Teacher Organization (PTO) involved to further spread the message to parents.

- C5) Crossing Guards – Providing crossing guards at key intersections near the school will allow safer crossings for students walking or bicycle to school. Currently, there are no existing crossing guard locations. It is recommended that crossing guards be available at the intersection of Timberlane Road & Martin Hurst Road as well as Timberlane Road & Timberlane School Road.

## Policies

- D1) Bike check and security – (In conjunction with **On-Site Recommendation A1**) School policies to discourage theft and encourage bicycle riding could include having a school official or parent volunteer at the bike rack in the morning and afternoon to check-in and check-out students parking their bikes. The adult assigned to handle check-in and check-out will assist with locking the bike in the morning and will unlock the bike for the students in the afternoon. The school should consider investing in basic, school-owned bike locks that can be applied when students check-in. By having locks available at school, students do not need to remember to bring one each day. Basic locks can be purchased fairly cheap.
- D2) Parent drop-off/pick-up zone protocol – Setting protocol for the parent drop-off/pick-up process improves the traffic conditions and creates a safer environment for automobiles, as well as, pedestrians and bicyclists.

### Drop-Off Procedures

- Please stay in vehicle and pull forward to the front of the parent drop-off/pick-up zone.
- Please continue to queue the line for parent drop-off along Timberlane Road, but please do not block driveways.
- Please be prepared to promptly help your child(ren) exit the vehicle with their belongings upon arriving at the drop-off point. Someone will be outside to assist and direct children into school each morning.
- If you must enter the school, please park your vehicle in the parking lot out front. Do not park in the parent drop-off/pick-up zone as this will delay others trying to drop-off their children.

### Pick-Up Procedures

- Please stay in vehicle and pull forward to the front of the parent drop-off/pick-up zone.
- Please continue to queue the line for parent pick-off along Timberlane Road, but please do not block driveways.
- It is suggested that parents clearly and boldly write their child's name, classroom teacher, and grade level on a letter-sized sheet of paper and place it on the dash of their vehicle

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<sup>1</sup> <http://www.nhtsa.gov/Safety/CPS>

to assist staff and others in the parent pick-up zone. Please be prepared to promptly assist your child(ren) entering your vehicle at the pick-up point.

- As soon as your child(ren) are securely in the car with their belongings, pull forward and exit the drop-off/pick-up zone so that other cars may pull forward and pick up their children.
- If you must enter the school, please park your vehicle in the parking lot out front. Do not park in the parent drop-off/pick-up zone as this will delay others trying to pick-up their children.

D3) Increased enforcement during drop-off/pick-up times – To assist parents in the drop-off/pick-up zone, school staff or others such as parent volunteers or safety patrols should be available to help open curb-side doors for students in both the morning and afternoon. This helps ensure that parents do not need to get out of their vehicles to assist students with their belongings. Ideally, it is best to have three or four assistants at a time to speed up the drop-off/pick-up process in a safe manner. Additionally, assistants should consider wearing bright vests or belts to help identify themselves to parents and assistants should also make sure they are at the drop-off/pick-up zone at their assigned times.

### Planning-Level Cost Estimates

Planning-level cost estimates are included in the table, below. They are intended to be used as a guide. Specific, detailed cost estimates for individual projects will require closer assessment of project conditions and constructability at the time of improvement.

**General Unit Cost Estimates<sup>2</sup>**

Item	Assumptions	Unit	Average Unit Cost (\$)
sidewalk	concrete sidewalk (5' wide)	linear foot	32
sidewalk	concrete sidewalk + curb (5' wide)	linear foot	150
shared-use path	multi-use trail – paved (at least 8' wide)	mile	481,140
shared-use path	multi-use trail – unpaved (at least 8' wide)	mile	121,390
pavement symbol	pedestrian crossing	Each	360
pavement symbol	shared lane/bicycle marking	each	180
pavement symbol	school crossing	each	470
paved shoulder	asphalt material	square foot	5.56
crosswalk	high visibility crosswalk (ladder or zebra striping)	each	2,540
crosswalk	standard parallel lines crosswalk	each	770
signage	bike route sign	each	160
signage	stop/yield sign	each	300
signage	no turn on red (standard metal sign)	each	220
signage	no turn on red (electronic sign)	each	3,200
signage	trail regulation sign	each	160
flashing beacon	standard beacon (system + labor/materials)	each	10,010
flashing beacon	rectangular rapid flashing beacon (system + labor/materials)	each	22,250
ped hybrid beacon	high intensity activated crosswalk (HAWK) signal	each	57,680
ped/bike detection	push button	each	350
signal	audible pedestrian signal	each	800
signal	countdown timer module	each	740
lightning	underpass lighting	each	1,875 <sup>3</sup>

<sup>2</sup> Bushell, M. A., Poole, B. W., Zegeer, C. V., & Rodriuez, D. A. (2013). *Costs for Pedestrian and Bicyclist Infrastructure Improvements: A Resource for Researchers, Engineers, Planners, and the General Public*. Federal Highway Administration.

<sup>3</sup> Median estimated price based upon range of \$350 to \$3,400

## Chapter 7: Conclusion

Currently, Gilchrist Elementary School does not have high walking and bicycling commuting rates for students. Overall, less than one percent of students commute to and from school by walking; likewise, less than one percent of students bicycle to and from school. There appears to be two primary reasons. First, many of the land uses near the school are non-residential and so there is limited housing in the area. Housing west of the school is down a severe grade which can make it difficult to walk and bike. Additionally, Gilchrist is part of a school-choice program so many students that elect to attend the school live further away from the school, outside of a safe, reasonable walking and bicycling distance. This is more of a system-wide transportation and geography issue outside the purview of this analysis. However, the issue could be further explored during any future school district boundary change considerations.

The second reason for low walking and bicycling rates to school was revealed from information garnered from the parent survey results as well as meetings with school representatives. Overall, when it comes to allowing their children to walk or bicycle to school, parents primarily expressed concerns for the lack of sidewalks and bicycle lanes as well as speeding vehicles in the area. However, parents indicated that having continuous and separate bicycle/pedestrian pathways from traffic, the presence of adults, as well as having crossing guards available during school commuting times were factors that might influence their decision to allow their children to walk or bicycle to school.

For those students within a relatively safe walking and bicycling distance to school, opportunities to improve student walking and bicycling rates are rooted primarily in infrastructure improvements including but not limited to sidewalk projects and adding a crosswalk. Additionally, informational and educational programmatic solutions as well as policies that encourage walking and bicycle commuting have been provided. For students who will continue to commute by automobile as well as those outside of a safe walking and bicycling distance, policy suggestions are included in this audit report to address better management and enforcement within the parent drop-off/pick-up area.

While Gilchrist Elementary School has a sizeable student population outside of a safe, reasonable walking and bicycling distance, there are measures for which the school can take that will help to improve walking and bicycling safety and increase non-motorized commuting rates.

# Appendices

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## Appendix A: Student Travel Survey

### Leon County Schools

#### STUDENT TRAVEL SURVEY

NAME OF SCHOOL: \_\_\_\_\_

**Dear Teacher:**

Your help is needed to assist with a school-wide survey of how students travel to and from school each day. Beginning Monday, for each day of that week, please record the number of children in your class that came to school by school bus, city bus, car, bicycle, or by walking. Please send the results back to the office on this form, along with your name and class grade, and number of students present each day.

Please follow the script below to gather the information from your students. (The students should only be raising their hands for one mode of travel):

- 1) If you walked to school today, raise your hand.
- 2a) If you rode a bicycle to school today, raise your hand.
  - b) If you used a bicycle helmet today, raise your hand.
- 3a) If you came in a car, with either your parents or with someone else, raise your hand.
  - b) If you used your seat belt in a car today, raise your hand.
- 4) If you came by school bus, raise your hand.
- 5) If you came by city bus, raise your hand.

Day of Week	Number of Students				
	Question 1	Question 2a/b	Question 3a/b	Question 4	Question 5
Day 1					
Day 2					
Day 3					
Day 4					
Day 5					

TEACHER'S NAME: \_\_\_\_\_ GRADE: \_\_\_\_\_

DATE: \_\_\_\_\_ NUMBER OF STUDENTS IN CLASS TODAY: \_\_\_\_\_

Please complete and return this form to the principal's office FRIDAY. This information will allow us to better plan ways for our children to get to and from school each day.

**Note to Principals:**

Please reproduce and distribute this form to all homeroom or 1st period teachers at your school. It is important that **all classes are surveyed on the same day**. Project consultants will collect all survey forms the following week. THANK YOU.

**Capital Region Transportation Planning Agency**

## Appendix B: Student Travel Survey – Detailed Analysis

The survey consisted of a one-page sheet with a script of questions for homeroom teachers to read to students as they took morning attendance. Surveys were conducted each morning during a typical week of the school year for a total of five straight days, Monday to Friday. The script prompted teachers to ask and record the number of children in their class that came to school by walking, bicycling, car, school bus, or city bus. The student travel survey was conducted in February, 2013. Forty-five classrooms participated in the survey for a total of 850 student responses recorded. In a few instances, surveys were conducted within overlapping multiple grade level classrooms. Those instances are noted where relevant to the data results.

### SUMMARY OF STUDENT TRAVEL SURVEY POPULATION

<b>Total Number of Participating Classrooms</b>	45
<b>Total Students Surveyed (K-5<sup>th</sup>)</b>	850
<b>Total K-2<sup>nd</sup> Students Surveyed</b>	435
<b>Total 3<sup>rd</sup>-5<sup>th</sup> Students Surveyed</b>	415

### Walking and Bicycling

Students were first asked if they walked to school. Then students were asked if they rode a bicycle to school. Students that rode their bike to school were further asked if they wore a bicycle helmet.

### Walking and Bicycling School-Wide Travel Patterns

The school-wide student travel surveys indicate that the walk-to-school average for the week ranged from <1% to <1%, with an overall average of less than one percent. Overall, the bike-to-school average for the week ranged from <1% to <1%, with an overall average of less than one percent. Of the students that bike to school, an overall average of 100% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from <1% to <1%, with an overall average of less than one percent.

### SUMMARY OF WALKING AND BICYCLE SCHOOL-WIDE TRAVEL PATTERNS

	<b>Walk</b>	<b>Bicycle</b>	<b>Helmet Use</b>	<b>Total Walk + Bike</b>
<b>Average Overall</b>	<1 %	<1 %	100 %	<1 %
<b>Highest Day</b>	<1 %	<1 %	100 %	<1 %
<b>Lowest Day</b>	<1 %	<1 %	100 %	<1 %

**Walking and Bicycling Travel Patterns of Younger-Aged Children (K – 2<sup>nd</sup> Grade)**

The younger-aged (K-2<sup>nd</sup>) children student travel surveys indicate that the walk-to-school average for the week ranged from <1% to <1%, with an overall average of less than one percent. Overall, the bike-to-school average for the week ranged from <1% to <1%, with an overall average of less than one percent. Of the 5 students that bike to school, an overall average of 100% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from <1% to 1%, with an overall average of less than one percent.

**SUMMARY OF YOUNGER-AGED CHILDREN WALKING AND BICYCLE TRAVEL PATTERNS (K-2<sup>nd</sup>)**

	Walk	Bicycle	Helmet Use	Total Walk + Bike
<b>Average Overall</b>	<1 %	<1 %	100 %	<1 %
<b>Highest Day</b>	<1 %	<1 %	100 %	1 %
<b>Lowest Day</b>	<1 %	<1 %	100 %	<1 %

**Walking and Bicycling Travel Patterns of Older-Aged Children (3<sup>rd</sup> – 5<sup>th</sup> Grade)**

The older-aged (3<sup>rd</sup>-5<sup>th</sup>) children student travel surveys indicate that the walk-to-school average for the week ranged from <1% to <1%, with an overall average of less than one percent. None of the students surveyed reported riding a bike to school. In total, the combined walk-bike average for the week ranged from <1% to <1%, with an overall average of less than one percent.

**SUMMARY OF OLDER-AGED CHILDREN WALKING AND BICYCLE TRAVEL PATTERNS (3<sup>rd</sup>-5<sup>th</sup>)**

	Walk	Bicycle	Helmet Use	Total Walk + Bike
<b>Average Overall</b>	<1 %	0%	N/A	<1 %
<b>Highest Day</b>	<1 %	0 %	N/A	<1 %
<b>Lowest Day</b>	<1 %	0 %	N/A	<1 %

**Bus and Automobile Drop-Off**

Students were asked if they arrived to school by automobile, with either their parents or someone else. Students that arrived by automobile to school were further asked if they had wore their seat belt. Additionally, students were asked if they arrived to school by bus, including either Leon County School buses or Star Metro public transit buses.

**Bus and Automobile School-Wide Travel Patterns**

The school-wide travel surveys indicate that the automobile-to-school average for the week ranged from 79% to 83%, with an overall average of 81%. Of the students that ride to school in an automobile, an

overall average of 93% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 17% to 20%, with an overall average of 18%. None of the students surveyed reported riding a public bus to school. (To note, there are no public buses within a reasonable distance to the school.)

**SUMMARY OF BUS AND AUTOMOBILE DROP-OFF SCHOOL-WIDE TRAVEL PATTERNS**

	<b>Automobile</b>	<b>Seat Belt</b>	<b>School Bus</b>	<b>Public Bus</b>
<b>Average Overall</b>	81 %	93 %	18 %	0 %
<b>Highest Day</b>	83 %	94 %	20 %	0 %
<b>Lowest Day</b>	79 %	91 %	17 %	0 %

**Bus and Automobile Travel Patterns of Younger-Aged Children (K – 2<sup>nd</sup> Grade)**

The younger-aged (K-2<sup>nd</sup>) children student travel surveys indicate that the automobile-to-school average for the week ranged from 83% to 87%, with an overall average of 85%. Of the students that ride to school in an automobile, an overall average of 89% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 12% to 17%, with an overall average of 15%. None of the students surveyed reported riding a public bus to school.

**SUMMARY OF YOUNGER-AGED CHILDREN BUS & AUTOMOBILE DROP-OFF TRAVEL PATTERNS (K-2<sup>nd</sup>)**

	<b>Automobile</b>	<b>Seat Belt</b>	<b>School Bus</b>	<b>Public Bus</b>
<b>Average Overall</b>	85 %	89 %	15 %	0 %
<b>Highest Day</b>	87 %	93 %	17 %	0 %
<b>Lowest Day</b>	83 %	86 %	12 %	0 %

**Bus and Automobile Travel Patterns of Older Children (3<sup>rd</sup> – 5<sup>th</sup> Grade)**

The older-aged (3<sup>rd</sup>-5<sup>th</sup>) children student travel surveys indicate that the automobile-to-school average for the week ranged from 76% to 78%, with an overall average of 77%. Of the students that ride to school in an automobile, an overall average of 96% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 21% to 24%, with an overall average of 23%. None of the students surveyed reported riding a public bus to school.

**SUMMARY OF OLDER-AGED CHILDREN BUS & AUTOMOBILE DROP-OFF TRAVEL PATTERNS (3<sup>rd</sup>-5<sup>th</sup>)**

	<b>Automobile</b>	<b>Seat Belt</b>	<b>School Bus</b>	<b>Public Bus</b>
<b>Average Overall</b>	77 %	96 %	23 %	0 %
<b>Highest Day</b>	78 %	99 %	24 %	0 %
<b>Lowest Day</b>	76 %	93 %	21 %	0 %

## Appendix C: Parent Survey

### Leon County Schools

#### PARENT SURVEY

**Dear Parents:** In an effort to improve traffic safety in and around our schools, we are looking for ways to reduce the amount and speed of cars, improve walking and bicycling conditions and encourage enforcement and safety education programs. Please help us by providing your opinions to the following questions. **The name of my child's school is:** \_\_\_\_\_.

1. Please provide the sex, age and grade of your child:

**Sex:** Male    Female

**Age:** \_\_\_\_\_

**Grade:** \_\_\_\_\_

2. Approximately how far do you live from your child's school? (*circle closest answer*):

1. 1/2 mile or less

2. 1/2 mile to 1 mile

3. between 1 and 2 miles

4. over 2 miles

**If you live over two miles from the school, please stop here and turn in your survey. Thank you for participating.** If you live within two miles of the school, please help us by completing the questions on the following pages.

3. How does your child usually go to and from school: (*place a check on the appropriate line*)

	In the morning?	In the afternoon?
a. School bus	_____	_____
b. Car	_____	_____
c. Walk	_____	_____
d. Bicycle	_____	_____
e. City bus	_____	_____
f. Other (please explain)	_____	_____

4. Please identify specific safety problems of concern to you in your neighborhood or around your child's school (*i.e. broken sidewalks, crime areas, high-speed vehicles, etc.*) and indicate the street locations:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Capital Region Transportation Planning Agency**

### **Leon County Schools**

5. Which of the following factors would influence your decision to allow your child to walk or bicycle to school. On a scale of 1 to 5 (1= not important to 5= very important), please rate each statement's importance as it applies to your child. If the statement does not apply, circle "NA".

I would allow my child to walk or bicycle to school more often if:	Not Important			Very Important		Not Applicable
	1	2	3	4	5	
a) Accompanied by other children	1	2	3	4	5	NA
b) Accompanied by myself or other parents	1	2	3	4	5	NA
c) Schools provided more walking and bicycling safety training for students	1	2	3	4	5	NA
d) Additional crossing guards were provided at busy intersections	1	2	3	4	5	NA
e) Crossing guards were more effective	1	2	3	4	5	NA
f) There were continuous sidewalks or bike paths from my neighborhood to school	1	2	3	4	5	NA
g) There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school	1	2	3	4	5	NA
h) We lived closer to school	1	2	3	4	5	NA
i) Speed limits were strictly enforced in school speed zones	1	2	3	4	5	NA
j) School speed zones were marked with flashing signs	1	2	3	4	5	NA
k) School speed zones were a greater distance surrounding school	1	2	3	4	5	NA
l) The school provided a secure place for storing bicycles	1	2	3	4	5	NA
m) There was a greater adult presence of parent volunteers or police officers along walk routes to school	1	2	3	4	5	NA
n) There was better street lighting along walk routes to school	1	2	3	4	5	NA
o) Please write below any additional factors that might influence you to let your child walk or bicycle to school more often:						

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## Appendix D: Parent Survey – Detailed Analysis

The survey consisted of a one-page double-sided sheet of paper with five questions for parents to answer. Survey copies were sent home with students early in the week. They were instructed to deliver the survey to their parents (or guardians), asking them to complete the survey and send it back with their children by the end of the week.

Parents were first asked general demographic questions pertaining to the sex and age of their child, as well as grade level. Then, parents were asked approximately how far they lived from their child’s school. Families living over two miles from school were instructed to return the survey without completing the remainder of questions pertaining to walking and bicycling to school. Those claiming to reside within two miles were asked, next, how their child typically gets to and from school (for morning and afternoon, respectively). Then, they were asked to identify any safety problems of concern in their neighborhood. Finally, parents were asked to consider a range of safety and convenience factors, and how each factor might influence their decision to allow their child to walk or bike to school.

The parent surveys were conducted during the winter/spring semester of 2013. There were 254 parent surveys returned. Of those, 113 (44%) claimed to reside within the theoretical two-mile walk/bike radius of the school. Surveys from families residing within the theoretical two-mile walk/bike radius were split nearly 50/50 by grade level grouping, with 61 students representing Kindergarten through 2<sup>nd</sup> Grade, and 52 students representing 3<sup>rd</sup> Grade through 5<sup>th</sup> Grade.

### SUMMARY OF PARENT SURVEY PARTICIPATION

<b>Total Enrollment</b>	881
<b>Total Number of Parent Surveys</b>	254
<b>Total Number within 2 Miles (K-2<sup>nd</sup> Grade)</b>	61
<b>Total Number within 2 Miles (3<sup>rd</sup>-5<sup>th</sup> Grades)</b>	52
<b>Percentage of Surveys within 2 Miles</b>	44 %

### Commuting to/from School

Parents were asked how their child usually traveled to and from school, in the morning and afternoon. Choices of travel modes included: school bus, car, walk, bicycle, public bus, and other (where they were asked to explain).

**SUMMARY OF SCHOOL-WIDE COMMUTING RESULTS**

<b>Morning</b>	<b>Average Overall</b>
Car	79 %
School Bus	21 %
Walk	0 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
<b>Afternoon</b>	
Car	59 %
School Bus	30 %
Other	4 %
Walk	1 %
Bicycle	0 %
Public Bus	0 %

[Commuting Patterns of Younger-Aged Children \(K – 2<sup>nd</sup> Grade\)](#)

The surveys of parents of younger-aged (K-2<sup>nd</sup> grade) indicate that the car-to-school average for a typical week is 80% in the morning and decreases to 64% in the afternoon. The school bus-to-school average for a typical week is 20% in the morning and increases to 23% in the afternoon. None of the student walked, rode a bicycle, rode a public bus, or used an alternative commute mode in the morning. However, approximately 3% used an alternative mode in the afternoon.

**COMMUTING PATTERNS OF YOUNGER-AGED CHILDREN (K-2<sup>nd</sup>)**

<b>Morning</b>	<b>Average Overall</b>
Car	80 %
School Bus	20 %
Walk	0 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
<b>Afternoon</b>	
Car	64 %
School Bus	23 %
Other	3 %
Walk	0 %
Bicycle	0 %
Public Bus	0 %

**Commuting Patterns of Older-Aged Children (3<sup>rd</sup> – 5<sup>th</sup> Grade)**

The surveys of parents of older-aged (3<sup>rd</sup>-5<sup>th</sup> grade) indicate that the car-to-school average for a typical week is 77% in the morning and decreases to 54% in the afternoon. The school bus to-to-school average for a typical wee is 23% in the morning and increases to 38% in the afternoon. None of the students walked, rode a bicycle, rode a public bus, or used an alternative commute mode in the morning. However, approximately 4% used an alternative and 2% walked in the afternoon.

**COMMUTING PATTERNS OF OLDER-AGED CHILDREN (3<sup>rd</sup>-5<sup>th</sup>)**

<b>Morning</b>	<b>Average Overall</b>
Car	77 %
School Bus	23 %
Walk	0 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
<b>Afternoon</b>	
Car	54 %
School Bus	38 %
Other	4 %
Walk	2 %
Bicycle	0 %
Public Bus	0 %

**Neighborhood Safety Concerns**

Parents were asked to identify specific safety problems of concern in their neighborhood or around their child’s school including problems such as broken sidewalks, crime areas, high speed vehicles, etc.). They were also asked to indicate specific street locations, where possible. Parents provided answers anecdotally. Summaries of the top neighborhood safety concerns are provided. The table below includes the top neighborhood safety concerns expressed by survey respondents.

**SUMMARY OF TOP RANKING NEIGHBORHOOD SAFETY CONCERNS**

<b>Neighborhood Safety Concern</b>	<b>Number of Comments</b>
Issues with Sidewalks/Walking	29
Speeding Vehicles	23
Issues with Transportation Outside of School Zone	13
Issues with Parent Pick-Up/Drop-Off Areas	6

**Neighborhood Safety Concerns For Younger-Aged Children (K – 2<sup>nd</sup> Grade)**

Neighborhood safety concerns for parents of younger-aged (K-2<sup>nd</sup>) children include three main concerns including issues with sidewalks/walking, speeding vehicles, and issues with the parent pick-up/drop off area of the school. There were approximately 19 comments of concern regarding issues with sidewalks and walking. General concerns include the lack of sidewalks and bike lanes, unsafe crossings, and steep hills on walk routes to school. Specific locations where sidewalks and bicycle lanes tend to be a problem are Killlearn Center Boulevard, Capital Circle NE, Thomasville Road, and Live Oak Plantation Road. Additionally, there were 12 comments of concern regarding speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are Killlearn Center Boulevard, Raymond Diehl Road, Timberlane Road, Live Oak Plantation Road, and Thomasville Road. Lastly, there were six comments of concern regarding the parent pick-up/drop-off area of the school. General concerns include the blinding sunlight in the morning drop-off line, the long lines of vehicles obstructing traffic, and the overcrowding of cars during the morning and afternoon.

**SUMMARY OF TOP NEIGHBORHOOD SAFETY CONCERNS (K-2<sup>nd</sup> Grade)**

Neighborhood Safety Concern	Number of Comments
Issues with Sidewalks/Walking	19
Speeding Vehicles	12
Issues with Parent Pick-Up/Drop-Off Areas	6

**Neighborhood Safety Concerns For Older-Aged Children (3<sup>rd</sup> – 5<sup>th</sup> Grade)**

Neighborhood safety concerns for parents of older-aged (3<sup>rd</sup>-5<sup>th</sup>) children also include issues with transportation outside of the school zone, speeding vehicles, and sidewalks/walking. There were approximately 13 comments of concern regarding transportation outside of the school zone. General concerns include too much traffic for safe crossings, no coverage at bus stops, bus stops located on blind curves, and the complexity of the Thomasville Road/Capital Circle NE/Timberlane Road intersections. Additionally, there were 11 comments of concern regarding speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are Killlearn Center Boulevard and the Eastgate Neighborhood Subdivision. Lastly, there were approximately 10 comments of concern regarding issues with sidewalks and walking. General concerns include the lack of sidewalks and bicycle lanes and missing sidewalk links. Specific locations where sidewalks and bicycle lanes tend to be a problem are Timberlane Road, Raymond Diehl Road, and the Eastgate Neighborhood Subdivision.

**SUMMARY OF TOP NEIGHBORHOOD SAFETY CONCERNS (3<sup>rd</sup>-5<sup>th</sup> Grade)**

Neighborhood Safety Concern	Number of Comments
Issues with Transportation Outside of School Zone	13
Speeding Vehicles	11
Issues with Sidewalks/Walking	10

**Factors Influencing Decisions to Allow Students to Walk or Bicycle to School**

Parents were asked about 15 different factors related to their children walking or biking to school. Parents rated each statement’s importance on a scale of 1 to 5 (1=Not Important to 5=Very Important), as it applied to their child, to determine what influenced their decision to allow their child to walk or bike to school. If statements did not apply, parents marked N/A (Not Applicable).

**Summary of Influential Factors**

Influential factors such as having continuous and separate bicycle/pedestrian pathways from traffic, accompanying children (by themselves/other parents), and the availability of crossing guards were mutually agreed upon by parents from both Kindergarten through 2<sup>nd</sup> and 3<sup>rd</sup> through 5<sup>th</sup>. However, parents of younger-aged children showed more concern with enforcing speed limits in school zones while parents of older-aged children showed more concern with having a great adult presence along walk routes to school.

**SUMMARY OF TOP RANKING SCHOOL-WIDE INFLUENTIAL FACTORS RESULTS**

	SCALE	1	2	3	4	5	N/A
<b>I would allow my child to walk or bicycle to school more often if:</b>							
<i>#1 There were continuous sidewalks or bike paths from my neighborhood to school</i>		4	3	3	9	49	23
<i>#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school</i>		4	1	5	13	47	21
<i>#3 Accompanied by myself or other parents</i>		3	2	7	9	46	26
<i>#4 Additional crossing guards were provided at busy intersections</i>		4	0	7	10	42	29

**Influential Factors for Younger-Aged Children (K – 2<sup>nd</sup> Grade)**

Parents of children in Kindergarten through 2<sup>nd</sup> grade agreed that the top five influential factors to allow their child to walk or bicycle to school more often included factors related to having continuous and

separate bicycle/pedestrian pathways from traffic, accompanying children (by themselves/other parents), enforcing speed limits in school zones, and the availability of crossing guards.

**TOP RANKING INFLUENTIAL FACTORS FOR YOUNGER-AGED CHILDREN (K-2<sup>nd</sup>)**

	SCALE	1	2	3	4	5	N/A
<b>I would allow my child to walk or bicycle to school more often if:</b>							
<i>#1 There were continuous sidewalks or bike paths from my neighborhood to school</i>		2	0	0	5	28	15
<i>#2 Accompanied by myself or other parents</i>		2	2	4	2	27	14
<i>#3 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school</i>		2	0	0	8	26	14
<i>#4 Speed limits were strictly enforced in school speed zones</i>		1	0	5	7	25	12
<i>#5 Additional crossing guards were provided at busy intersections</i>		1	0	2	6	21	20

**Influential Factors for Older-Aged Children (3<sup>rd</sup> – 5<sup>th</sup> Grade)**

Parents of children in 3<sup>rd</sup> through 5<sup>th</sup> grade agreed that the top five influential factors to allow their child to walk or bicycle to school more often included factors related to having a greater adult presence along routes to school, having continuous and separated bicycle/pedestrian pathways from traffic, availability of crossing guards, and accompanying children (by themselves/other parents).

**TOP RANKING INFLUENTIAL FACTORS FOR OLDER-AGED CHILDREN (3<sup>rd</sup>-5<sup>th</sup>)**

	SCALE	1	2	3	4	5	N/A
<b>I would allow my child to walk or bicycle to school more often if:</b>							
<i>#1 There was a greater adult presence of parent volunteers or police officers along walk routes to school</i>		1	1	4	6	22	8
<i>#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school</i>		2	1	5	5	21	7
<i>#2 Additional crossing guards were provided at busy intersections</i>		3	0	5	4	21	9
<i>#2 There were continuous sidewalks or bike paths from my neighborhood to school</i>		2	3	3	4	21	8
<i>#3 Accompanied by myself or other parents</i>		1	0	3	7	19	12