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# Safe Routes to School Audit Report W.T. Moore Elementary School



Leon County  
Public Schools



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



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## 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 policies. 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

W.T. Moore Elementary School is located at 1706 Dempsey Mayo Road, Tallahassee, 32308 in Leon County, Florida. It is part of the Leon County Public Schools system. The school opened in 1968 and its name was chosen to honor Walter Taylor Moore Jr., an attorney, judge, and former Chairman of the School Board in Leon County. Regular school hours are from 8:30am to 2:50pm. A before school program is available from 7:00am to 8:30am. Additionally, an after school program is available from the end of the school day until 6:00pm.

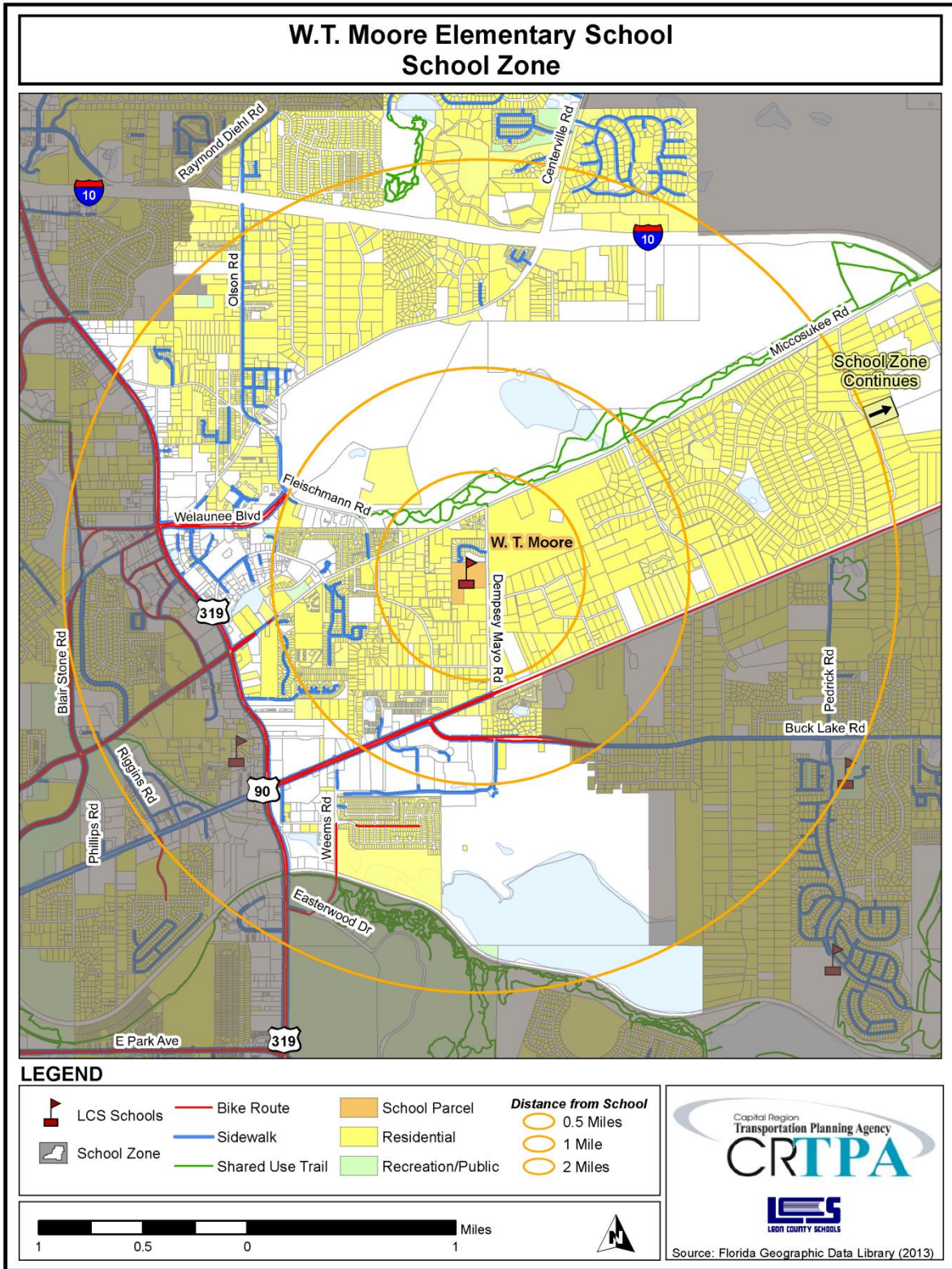
The number of students enrolled at the school, for the 2013 school year, was 540. The school has a current capacity for 713 students. The school includes grade levels Pre-Kindergarten to 5<sup>th</sup> grade.

Students attending this school feed into Cobb, Montford, or Swift Creek and into Lincoln High School.

### School Zone

The W.T. Moore Elementary school zone, located in eastern Leon County, encompasses the neighborhoods of Perkins, Buckwood, Brewster Estates, Sweetwater Oaks, Lafayette Oaks, Midyette Plantation, Hidden Valley, Whitfield and Sawgrass Plantation. Additionally, a CSX railroad line borders the zone to the south. Land uses within the school zone consist of almost entirely residential with some areas of recreation. The W.T. Moore school zone includes three major roadways. Interstate-10 runs east to west in the northern portion of the zone. Mahan Drive runs southwest to northeast through the southern portion of the zone. Capital Circle Northeast runs mostly north to south and borders the zone on the west. Recreational facilities within the school zone include the Miccosukee Canopy Road Greenway and the A.J. Henry Park.





## Chapter 2: On-Site Meeting and Inventory

### Date and Weather Conditions

The on-site inventory meeting was conducted on Friday, February 22, 2013. The weather was mostly overcast and rainy with temperatures in the mid 60 degrees Fahrenheit.

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

During this visit, W.T. Moore 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 flashing lights (i.e. school zone warning lights) are located along Dempsey Mayo Road. Students are permitted to arrive as early as 8:00am and there are after school programs on campus available until 6:00pm. Approximately 200 students participate in the after school programs. School representatives noted that there are no crossing guards available on roadways near the school.

### 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.

The school is located in a fairly rural area with few streets and is closely constrained by two major roadways. As such, hardly any students are known to walk to school and zero students are known to commute via bicycle. Additionally, the school is located near a retirement community with older, established residents who do not have school-aged children. The few students who do walk to school may enter campus from along Dempsey Mayo Road. It was noted that there are no bicycle parking racks available at the school.

The school bus drop-off and pick-up zone functions adequately. There are nine school buses arriving and departing the school on a daily basis. Additionally, there are 13 day care vans that use the school bus zone in the afternoons. The arrival and departure area is covered and leads directly a walking facility.

The parent drop-off and pick-up zone functions adequately to accommodate the large volume of automobiles entering and exiting the site daily. Like the school bus zone, the automobile zone is covered and leads directly to a walking facility. School representatives have expressed concern for student's safety within the short-term parking lot, located in the same area as the automobile zone. Teachers and school staff are there to provide assistance and usher students from the parking lot but only on half of the lot.

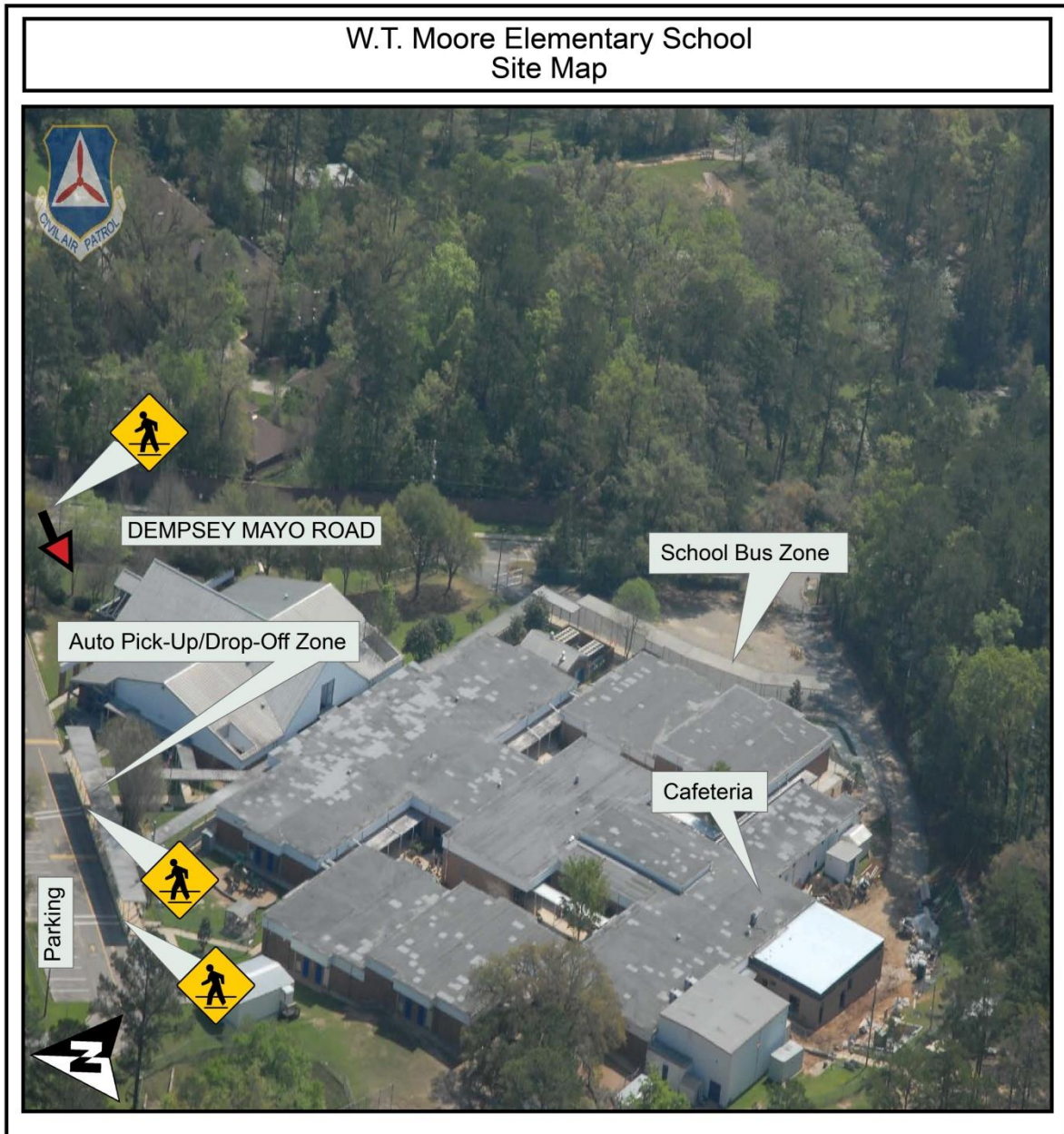
### Inventory Map

An aerial photograph showing W.T. Moore Elementary School is located on the following page. As shown in the photo, the school fronts Dempsey Mayo Road. Students can access campus from two points along Dempsey Mayo Road.

A standard width sidewalk is located along the non-school side of Dempsey Mayo Road and is separated from the street by reflective markers. Additionally, there is a midblock crosswalk near the parent pick-up/drop-off zone. It provides a direct connection to a sidewalk that enters onto campus.

The automobile pick-up and drop-off zone is located along the north side of the school. Automobiles both enter and exit the zone at a shared driveway along Dempsey Mayo Road. Parking spaces are located in this area as well. The bus drop-off and pick-up zone is separately located along the opposite side of the school. Buses both enter and exit the zone at separate driveways along Dempsey Mayo Road.





### Issues and Opportunities

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

Geography and demographics are the primary issues with students' ability to walk and bicycle to school. The neighborhood includes older, more established residents who are retired and tend to not have school-aged children. Additionally, school representatives noted that many students who formerly lived in the area near the school moved away to attend a new charter school. Further out from campus, a major roadway is present that may not be appropriate for crossing by elementary school children, especially those at lower grade levels. These kind of external factors are often too difficult to overcome, at least in the short term, and limit the ability of children to walk or bicycle to the school.

With what opportunities that do exist to increase walking and bicycling, including student safety, consideration should be given to Dempsey Mayo Road. Direct connections between the sidewalk along Dempsey Mayo and the school's main entrance should be explored. Traffic calming measures could also be explored to reduce automobile speeds and increase awareness of children in the area, especially during school commuting times. Also, school-related and –supportive committees such as the Parent and Teachers for Moore organization (PTM) can be used to help educate parents on the opportunities and benefits to having their children walk or bicycle to school, where such options are feasible.

These groups can also help get the word out to parents concerning on-campus issues, such as appropriate behavior and protocol within the parent drop-off/pick-up zone, especially in the parking lot where there are safety concerns. Furthermore, these groups could potentially explore alternative transportation modes such as carpooling students to reduce the number of automobiles in the area each morning and afternoon.

### 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 at W.T. Moore Elementary School – approximately three out of five students – are dropped-off at school by car. The percentage rises slightly for younger-aged students, which is not uncommon. Riding a school bus ranked a distant second place at approximately 36 percent of students. The percentage of older students riding a school bus was higher than that of younger students. A low percentage of students surveyed, only one percent each, reporting walking or arriving to school by public bus. (To note, there are no public buses within a reasonable distance to the school.) Surprisingly, of those walking, two times as many were younger students from Kindergarten, 1<sup>st</sup>, and 2<sup>nd</sup> grades. None of the students surveyed reported biking to school.

#### SUMMARY OF SCHOOL-WIDE RESULTS

	Walk	Bicycle	Automobile	School Bus	Public Bus
<b>Average Overall</b>	1 %	0 %	62 %	36 %	1 %

## 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 by 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 W.T. Moore Elementary School students are dropped off by car in the morning, while fewer return home by the same mode 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, only 2-3% of students commute to and from school by walking.

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 crosswalks, transportation outside of the school zone, as well as the behavioral patterns of automobile drivers, generally, in terms of excessive driving speeds. As for speeding complaints, specific problem locations cited include Mahan Drive, Miccosukee Road, and Dempsey Mayo Road.

With regard to factors that might influence their decision to allow their child to walk or bike to school, survey responses indicate that factors such as accompanying children (by themselves/other parents) and enforcing speed limits in school zones 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 February 22<sup>nd</sup>, 2013. The review consisted of an assessment of accessibility, connectivity and safety along neighborhood roadways within proximity to W.T. Moore Elementary School. On the day of the field review, temperatures were in the 60'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 W.T. Moore Elementary School.

### Character of Neighborhood Area

W.T. Moore Elementary is located in a suburban-style neighborhood comprised primarily of single family residences and retirement communities. There are not any very densely populated residential neighborhoods in close proximity to the school. Neighborhood areas with sidewalks on at least one side of the street are Sweetwater Oaks, Brewster Estates, the area just east of the school, and the area just south of Mahan Drive. Additionally, Dempsey Mayo Road, directly in front of the school, has good bike-ped infrastructure including a nice sidewalk, crosswalk, and flashing signs. However, the overall area is a difficult location to encourage bicycling and walking due to major roadways in the area such as Miccosukee Road and Mahan Drive that run parallel to each other and are wide, busy roadways.

Major roadways in the neighborhood include:

- Interstate-10, a mostly east-west, six roadway with a posted speed limit of 70mph.
- Capital Circle NE, a north-south, a six lane roadway with a posted speed limit between 40-45mph.
- Mahan Drive, a mostly east-west, 4-5 lane roadway, near the school, with a posted speed limit between 40-55mph.

### 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.

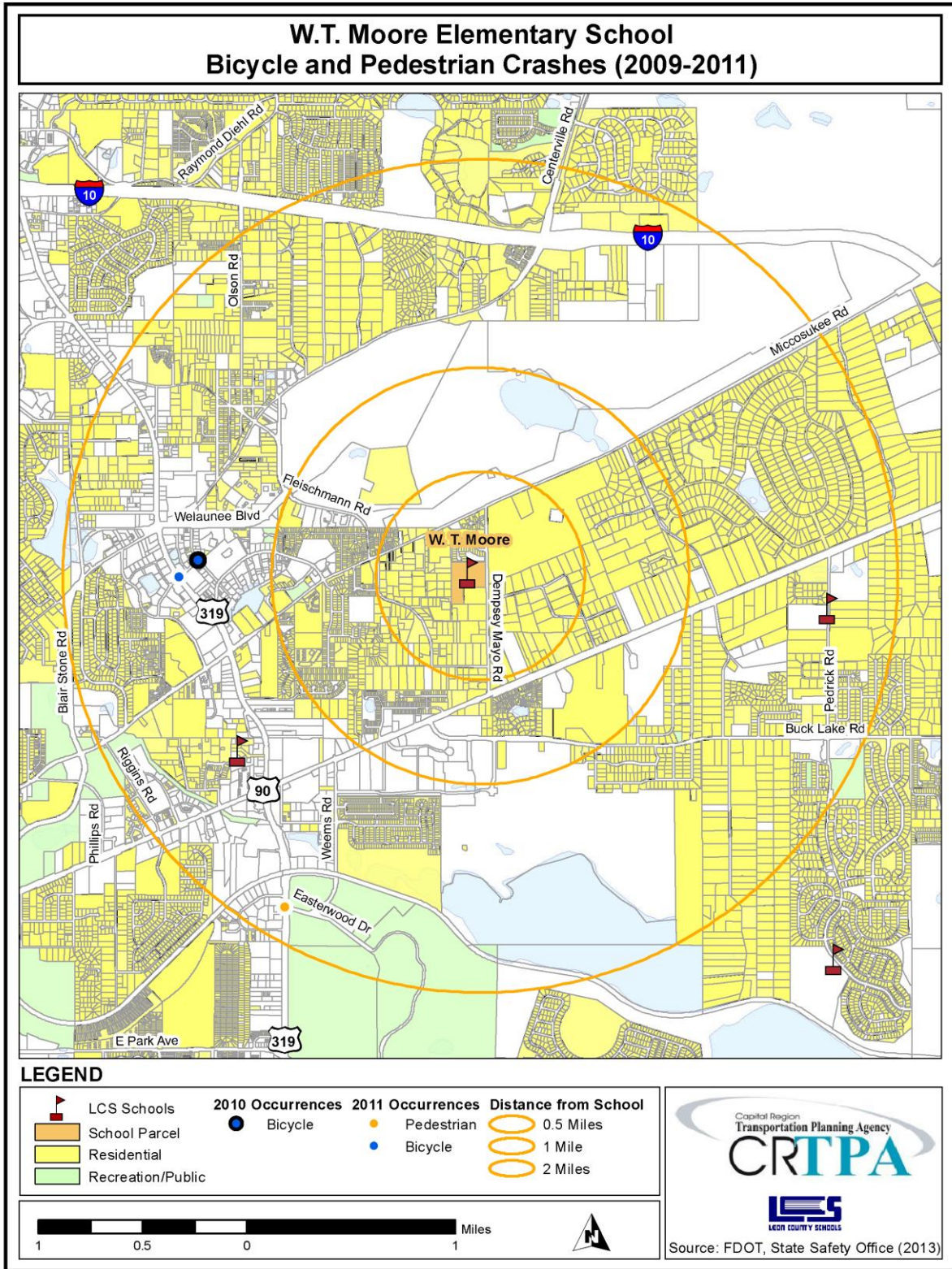
There were a total of three bicycle and pedestrian crashes that occurred within the theoretical two-mile walk/bike radius of W.T. Moore Elementary School. Of those total crashes, two occurred during the morning hours and one occurred during the afternoon hours. Injuries were reported in all of the crashes.

All three crashes occurred between one and two miles away from W.T. Moore Elementary School, two near the Capital Regional Medical Center and one near Tom Brown Park. The crashes occurred on Care Drive, Capital Circle Northeast, and Easterwood Drive.

**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>
11/30/10	9:30am	Tuesday	Care Dr.	Buford Blvd.	Injury	Bicyclist	Adult
05/12/11	2:18pm	Thursday	Capital Cir. NE	Care Dr.	Injury	Bicyclist	Adult
08/28/11	7:30am	Thursday	Easterwood Dr.	Capital Cir. NE	Injury	Pedestrian	Adult





## Neighborhood Assessment

The overall neighborhood layout surrounding W.T. Moore Elementary School does not lend itself particularly well to walkability. The area surrounding the school is not very densely populated by residences and those living nearest the school are older and tend to not have younger children. Streets are not well connected but there is good sidewalk infrastructure along Dempsey Mayo Road as well as neighborhoods just north of the school. Further away from W. T. Moore, there are few sidewalks and crosswalks; however, the Miccosukee Greenway trail is located just north of Miccosukee Road and has the potential to expand walk and bike – ability to neighborhoods further east and west of the school. A major roadway such as Mahan Drive, south of the school, pose safety concerns for elementary-aged children walking and bicycling.

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 W.T. Moore Elementary School walk/bike shed map is included at the end of this chapter.

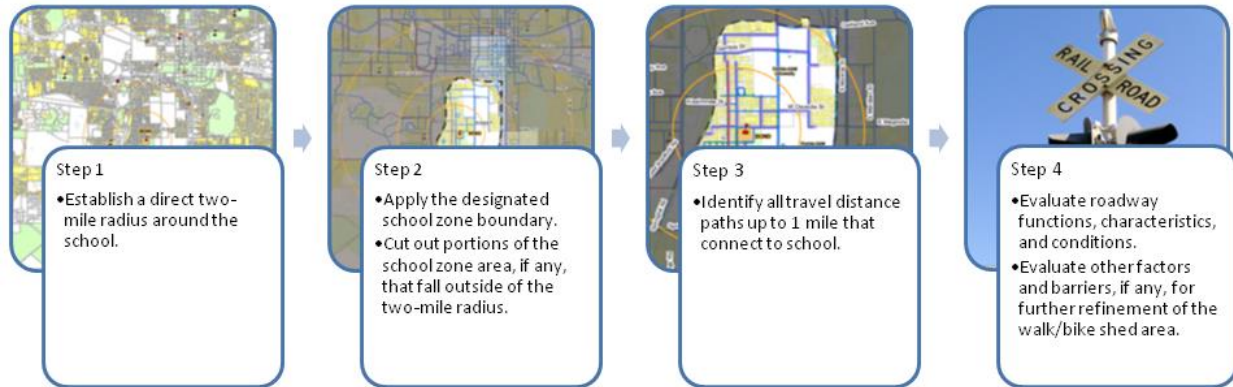
The walk/bike shed area and associated map are not meant to suggest that elementary school students of all ages, maturity level, and experience should commute to and/or from school within the area delineated. Certainly, younger children such as kindergarten students are not expected to walk or bike to 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 W.T. Moore Elementary School mostly extends east, west, and south of the school. Miccosukee Road with its minimal bicycle and pedestrian accommodations as well as few residential land uses nearby forms the northern limits of the walk/bike shed. Mahan Drive forms the southern limits of the walk/bike shed because it has high traffic volumes, four divided travel lanes, and provides minimal separation from traffic. The lack of thru streets to and from residential land uses more than one-half mile east and west of the school excludes those areas from 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

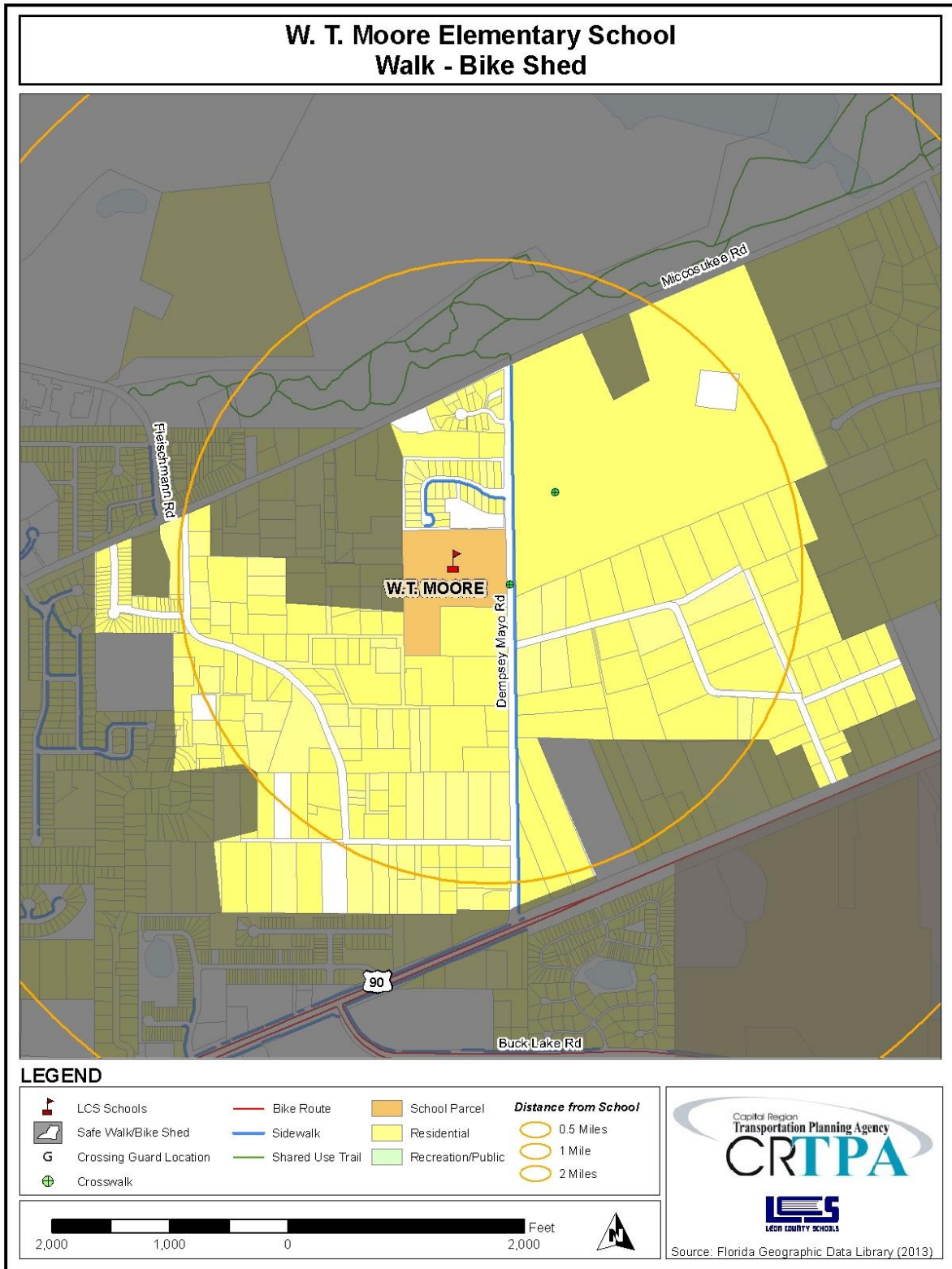


deficiencies; it also considers intersection conditions, pavement markings, signage, and a number of other attributes that can impact safe routes to school.

### **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 W.T. Moore Elementary School can be difficult due to the lack of bicycle/pedestrian connections to residential land uses near 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 existing automobile zone functions adequately to accommodate the volume of vehicles; however, there are some opportunities to make it safer for students. 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 W.T. Moore Elementary School. They include both on- and off-site improvements as follows:

### W.T. Moore Elementary School On- and Off-Site Recommendations

Improvement: On-Site		Location	From	To	Geography	Direction	Length	Comments
A1	Stripe existing crosswalks (2)	Parent Drop-Off/Pick-Up Zone	N/A	N/A	N/A	N-S	N/A	
A2	Add Pavement Markings	School Bus Zone	N/A	N/A	N/A	N/A	N/A	
A3	Install Benches	School Bus Zone	N/A	N/A	Under existing canopy	N/A	N/A	
A4	Install Bicycle Rack	West of Main Entrance of School	N/A	N/A	Adjacent to existing sidewalk	N/A	N/A	

Improvement: Off-Site		Location	From	To	Geography	Direction	Length	Comments
B1	Speed Enforcement Device	Dempsey Mayo Road	Near school zone warning lights		N/A	N/A	N/A	
B2	Add Striped Crosswalk	Dempsey Mayo Road	At Maylor Drive		East side of Dempsey Mayo Road	N-S	approx. 40'	
B3	Add Striped Crosswalk	Dempsey Mayo Road	At Miccosukee Road		East side of Dempsey Mayo Road	N-S	approx. 20'	Connect to Miccosukee Greenway Trail Opening
B4	Add new sidewalk	Lonnie Road	Torchmark Lane	Dempsey Mayo Road	North side of Lonnie Road	E-W	approx. 4,000'	

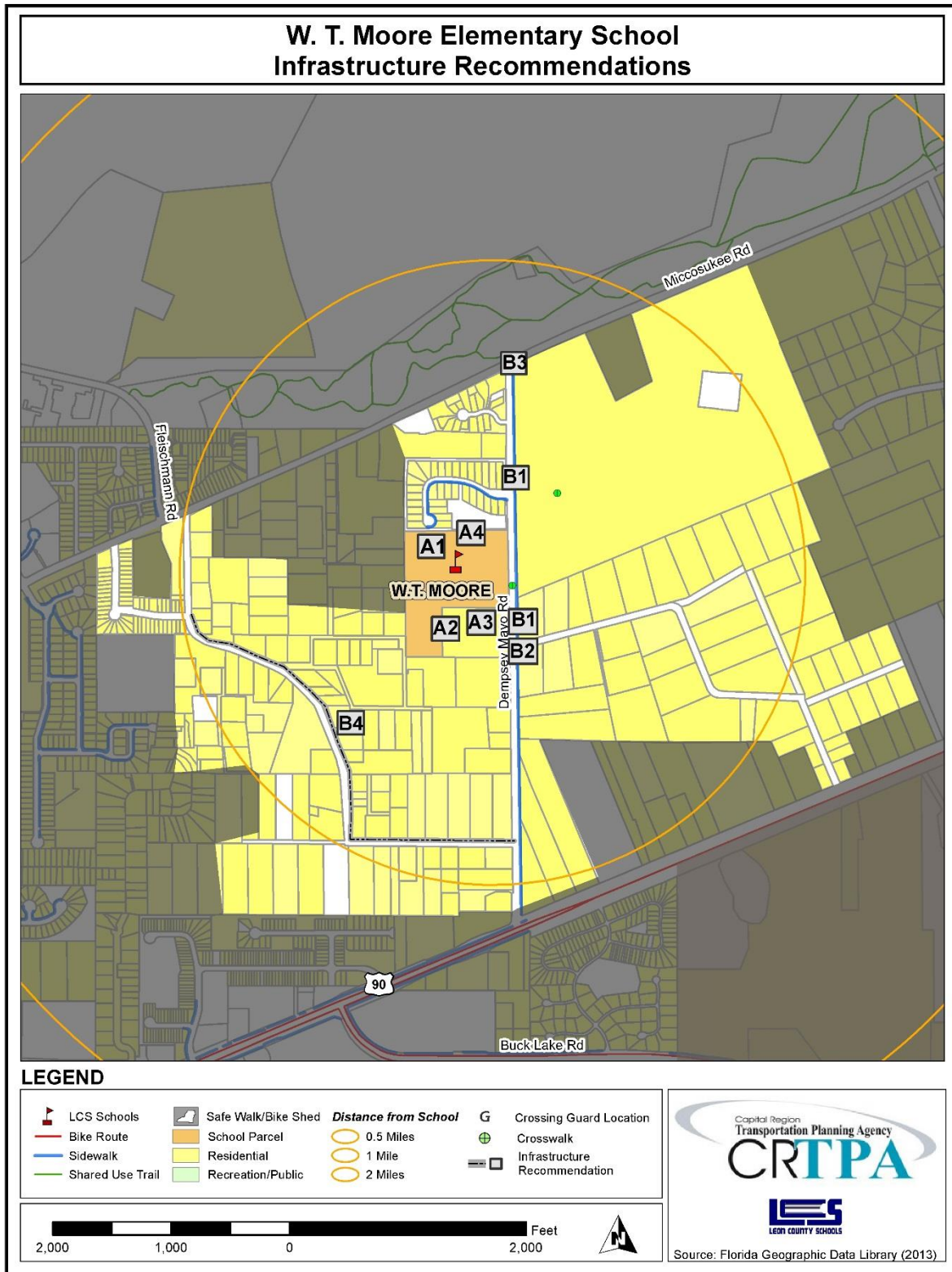
The table, above, corresponds to an infrastructure recommendations map on the following page.

### On-Site Recommendations

- A1) Stripe existing crosswalks – There are two existing crosswalks which lead from the main school entrance to the school parking lot; however, they are not as visible as they could be with additional striping.
- A2) Add pavement markings to school bus zone – Currently, the school bus zone functions with a one-way, single lane circulation. Add pavement markings to create two lanes would allow the high number of school buses and day care vans to move more efficiently through the zone by having a designated school bus/van lane and a designated thru lane.
- A3) Install benches in school bus zone – Installing benches, similar to those already in place in the parent pick-up/drop-off zone, will give students a holding area while they are waiting for their school bus or daycare van to arrive during the afternoon commuting hours.
- A4) Install bicycle rack – Currently, there is no bicycle rack available at the school. While the school is not known to have any bicyclists at the present time, installing a bicycle rack will help encourage another mode of transportation to/from school by having infrastructure available to safely lock-up a bicycle if needed.

### Off-Site Recommendations

- B1) Speed Enforcement Device – On Dempsey Mayo Road near the school zone warning lights. Parents expressed concerns for speeding vehicles along the roadway in the parent surveys. A speed enforcement device will make drivers more aware of their speeds during school commuting hours.
- B2) Add Striped Crosswalk - On Dempsey Mayo Road at Maylor Drive; a striped crosswalk will bring more attention to pedestrians trying to reach the sidewalks north and south of Maylor Drive.
- B3) Add Striped Crosswalk - On Dempsey Mayo Road at Miccosukee Road; a striped crosswalk will allow a safe, designated crossing for bicyclists and pedestrians to and from the Miccosukee Greenway trail entrance to sidewalks south of Miccosukee Road. A safe crossing as well as adults accompanying children on the Miccosukee Greenway trail to and from school would potentially expand the existing walk/bike shed.
- B4) Add new sidewalk – On the north side of Lonnie Road from Torchmark Lane to Dempsey Mayo Road; there are many residences located southwest of the school within a walkable distance. As such, adding a new sidewalk on Lonnie Road will provide an additional pedestrian connection.



## 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; and 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.
- 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 neighborhood surrounding 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

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

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) Adding crossing guards – Currently, there are no crossing guard locations near W.T. Moore Elementary School. Parent surveys expressed the desire for additional crossing guards on routes to school. Suggested crossing guard locations include: Dempsey Mayo Road & the parent pick-up/drop-off driveway as well as Dempsey Mayo Road & Meandering Way.
- C6) Carpooling literature – For those students who do not live within a safe, walk/bike distance from school, there is an opportunity to carpool. Literature should be sent home to parents, as well as made available on the school website, about the benefits of carpooling. Examples of programs to promote carpooling include sharing drop-off/pick-up duties with other parents or creating a carpool incentive program where students who carpool keep track of the number of days they carpooled in a month and compete for prizes or certificates, similar to those in a walk/bike mileage club.

## Policies

- D1) Bike check and security – **(In conjunction with On-Site Recommendation A4)** Once bicyclists become more prevalent at the school, 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 can 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 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.



- 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 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

<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.

## Chapter 7: Conclusion

Currently, W.T. Moore Elementary School does not have high walking and bicycling commuting rates for students. Overall, approximately one percent of students commute to and from school by walking while no students are known to bicycle to and from school. There appears to be two primary reasons. First, just north of the school many of the land uses are non-residential and so there is limited housing in the area. Additionally, neighborhoods closer to the school tend to be older, established residents who are retired and tend to not have elementary school-aged children. As such, many students that 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 crosswalks as well as speeding vehicles. However, parents indicated that accompanying children (by themselves/other parents) and enforcing speed limits in school zones 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 new crosswalks and sidewalks. 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 W.T. Moore 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
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. Twenty-six classrooms participated in the survey for a total of 458 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>	26
<b>Total Students Surveyed (K-5<sup>th</sup>)</b>	458
<b>Total K-2<sup>nd</sup> Students Surveyed</b>	239
<b>Total 3<sup>rd</sup>-5<sup>th</sup> Students Surveyed</b>	219

### 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 0% to 1%, with an overall average of 1%. None of the students surveyed reported biking to school. In total, the combined walk-bike average for the week ranged from 0% to 1%, with an overall average of 1%.

### 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 %	0 %	N/A	1 %
<b>Highest Day</b>	1 %	0 %	N/A	1 %
<b>Lowest Day</b>	0 %	0 %	N/A	0 %



### 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 0% to 3%, with an overall average of 2%. None of the students surveyed reported biking to school. In total, the combined walk-bike average for the week ranged from 0% to 3%, with an overall average of 2%.

#### SUMMARY OF YOUNGER-AGED CHILDREN WALKING AND BICYCLE TRAVEL PATTERNS (K-2<sup>nd</sup>)<sup>3</sup>

	Walk	Bicycle	Helmet Use	Total Walk + Bike
<b>Average Overall</b>	2 %	0 %	N/A	2 %
<b>Highest Day</b>	3 %	0 %	N/A	3 %
<b>Lowest Day</b>	0 %	0 %	N/A	0 %

### 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>) student travel surveys indicate that none of the students surveyed reported walking or biking to school.

#### 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>	0 %	0 %	N/A	0 %
<b>Highest Day</b>	0 %	0 %	N/A	0 %
<b>Lowest Day</b>	0 %	0 %	N/A	0 %

### 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 61% to 63%, with an overall average of 62%. Of the students that ride to school in an automobile, an overall average of 88% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 34% to 38%, with an overall average of 36%. The public bus-to-school average for the week

<sup>3</sup> Includes one K-4<sup>th</sup> grade class

ranged from 0% to 4%, with an overall average of 1%. (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

	Automobile	Seat Belt	School Bus	Public Bus
<b>Average Overall</b>	62 %	88 %	36 %	1 %
<b>Highest Day</b>	63 %	89 %	38 %	4 %
<b>Lowest Day</b>	61 %	87 %	34 %	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 64% to 68%, with an overall average of 66%. Of the students that ride to school in an automobile, an overall average of 92% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 31% to 33%, with an overall average of 32%. The public bus-to-school average for the week ranged from 0% to 2%, with an overall average of 0%. Only 5 students reported riding a public bus, making up less than 1% of the students surveyed.

#### SUMMARY OF YOUNGER-AGED CHILDREN BUS & AUTOMOBILE DROP-OFF TRAVEL PATTERNS (K-2<sup>nd</sup>)<sup>4</sup>

	Automobile	Seat Belt	School Bus	Public Bus
<b>Average Overall</b>	66 %	92 %	32 %	0 %
<b>Highest Day</b>	68 %	95 %	33 %	2 %
<b>Lowest Day</b>	64 %	90 %	31 %	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 56% to 61%, with an overall average of 58%. Of the students that ride to school in an automobile, an overall average of 83% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 36% to 43%, with an overall average of 40%. The public bus-to-school average for the week ranged from 0% to 9%, with an overall average of 2%.

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<sup>4</sup> Includes one K-4<sup>th</sup> grade class

**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>	58 %	83 %	40 %	2 %
<b>Highest Day</b>	61 %	85 %	43 %	9 %
<b>Lowest Day</b>	56 %	80 %	36 %	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:

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***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
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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***Capital Region Transportation Planning Agency***

## 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 183 parent surveys returned. Of those, 66 (36%) 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 55/45 by grade level grouping, with 36 students representing Kindergarten through 2<sup>nd</sup> Grade, and 30 students representing 3<sup>rd</sup> Grade through 5<sup>th</sup> Grade.

### SUMMARY OF PARENT SURVEY PARTICIPATION

<b>Total Enrollment</b>	652
<b>Total Number of Parent Surveys</b>	183
<b>Total Number within 2 Miles (K-2<sup>nd</sup> Grade)</b>	36
<b>Total Number within 2 Miles (3<sup>rd</sup>-5<sup>th</sup> Grades)</b>	30
<b>Percentage of Surveys within 2 Miles</b>	36 %

### 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	61 %
School Bus	35 %
Walk	2 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
<b>Afternoon</b>	
Car	47 %
School Bus	45 %
Walk	3 %
Other	2 %
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 61% in the morning and decreases to 47% in the afternoon. The school bus-to-school average for a typical week is 33% in the morning and increases to 47% in the afternoon. The walk-to-school average for a typical week is 3% in both the morning and afternoon. None of the parents reported that their children rode a bicycle, public bus, or an alternative commute mode in the morning or afternoon.

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

<b>Morning</b>	<b>Average Overall</b>
Car	61 %
School Bus	33 %
Walk	3 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
<b>Afternoon</b>	
Car	47 %
School Bus	47 %
Walk	3 %
Bicycle	0 %
Public Bus	0 %
Other	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 60% in the morning and decreases to 47% in the afternoon. The school bus-to-school average for a typical week is 37% in the morning and increases to 43% in the afternoon. None of the students walked to school in the morning. However, 3% of students walk in the afternoon. Also, none of the students use an alternative commute mode in the morning. However, 3% use an alternative commute mode in the afternoon. None of the parents reported that their children rode a bicycle or public bus in the morning or afternoon.

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

<b>Morning</b>	<b>Average Overall</b>
Car	60%
School Bus	37 %
Walk	0 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
<b>Afternoon</b>	
Car	47 %
School Bus	43 %
Walk	3 %
Other	3 %
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	20
Speeding Vehicles	13
Issues with Transportation Outside of School Zone	9

### 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 transportation outside of the school zone. There were approximately 11 comments of concern regarding issues with sidewalks and walking. General concerns include the lack of sidewalks and crosswalks, and sidewalks that are too narrow. Specific locations where sidewalks and walking tend to be a problem are Miccosukee Road, Centerville Road, and LonnBladh Road. Additionally, there were approximately nine comments of concern regarding issues with speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are Dempsey Mayo Road and Miccosukee Road. Lastly, there were five comments of concern regarding issues with transportation outside of school zone. General concerns include high traffic volumes on major roads. Specific locations where high traffic volumes tend to be a problem are Mahan Drive and Miccosukee Road.

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

Neighborhood Safety Concern	Number of Comments
Issues with Sidewalks/Walking	11
Speeding Vehicles	9
Issues with Transportation Outside of School Zone	5

### 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 include issues with sidewalks/walking, speeding vehicles, and transportation outside of the school zone. There were approximately nine comments of concern regarding issues with sidewalks and walking. General concerns include the lack of sidewalks and the limited number of sidewalks. Specific locations where sidewalks and walking tend to be a problem are Miccosukee Road and Dempsey Mayo Road. Additionally, there were approximately four comments of concern regarding issues with speeding vehicles. A specific location where high-speed vehicles tend to be a problem is Mahan Drive. Parents also mention vehicles speeding in neighborhoods and near bus stops. Lastly, there were four comments of concern regarding issues with transportation outside of the school zone. General concerns include the lack of crossing guards and bus stops where children have no safe place to stand by major roads. A specific location where transportation issues are a problem is near Mahan Drive & Dempsey Mayo Road.

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

Neighborhood Safety Concern	Number of Comments
Issues with Sidewalks/Walking	9
Speeding Vehicles	4
Issues with Transportation Outside of School Zone	4

**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 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 Accompanied by myself or other parents</i>		0	2	5	7	30	13
<i>#1 Speed limits were strictly enforced in school speed zones</i>		2	0	4	3	30	14

**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 living closer to school.

**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>		1	1	1	2	20	6
<i>#2 Accompanied by myself or other parents</i>		0	0	2	5	18	6
<i>#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school</i>		1	1	3	1	18	7
<i>#3 Speed limits were strictly enforced in school speed zones</i>		1	0	2	1	17	9
<i>#3 We lived closer to school</i>		2	0	4	0	17	7

**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 four influential factors to allow their child to walk or bicycle to school more often included factors related to the availability of crossing guards, enforcing speed limits in school zones, having a greater adult presence along routes to school, 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 Additional crossing guards were provided at busy intersections</i>		0	1	1	3	14	7
<i>#2 Speed limits were strictly enforced in school speed zones</i>		1	0	2	2	13	5
<i>#3 There was a greater adult presence of parent volunteers or police officers along walk routes to school</i>		0	0	2	5	12	6
<i>#3 Accompanied by myself or other parents</i>		0	2	3	2	12	7