August 2014

Safe Routes to School Audit Report
Raa Middle School

Leon County Public Schools

Augusta Raa Middle School
Featuring the Magnet Program of Fine and Performing Arts

Table of Contents

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 Raa Middle 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

Raa Middle School is located at 401 West Tharpe Street, Tallahassee, 32303 in Leon County, Florida. It is part of the Leon County Public Schools system. The school was established in 1959 and became a performing arts magnet school in the 2008. The school was added to the U.S. National Register of Historic Places in 1993. Regular school hours are from 9:30am to 3:50pm.

The number of students enrolled at the school, for the 2013 school year, was 894. The school has a current capacity for 1,048 students. The school includes grade levels 6th to 8th grade.

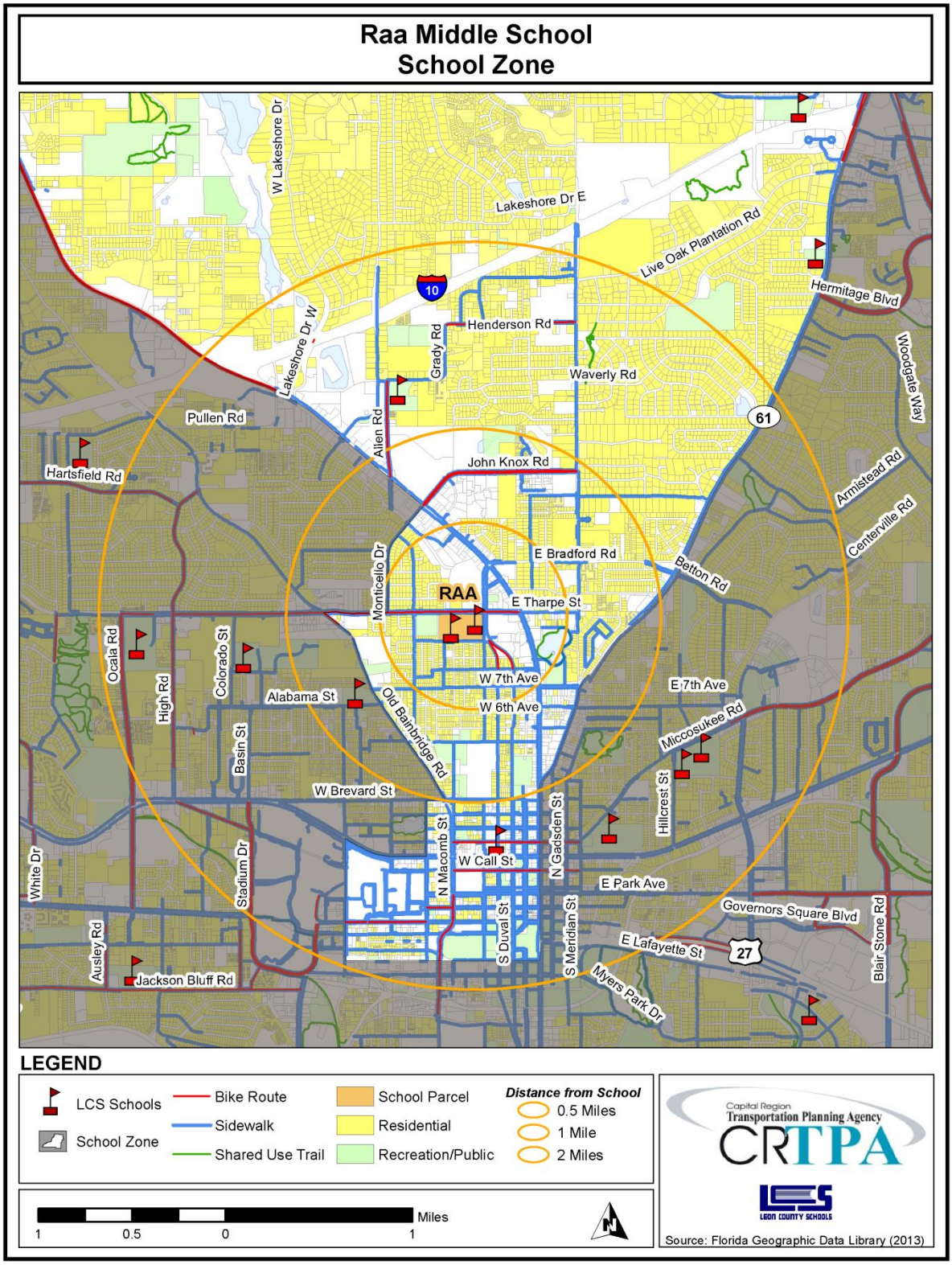
Students attending this school feed from Canopy Oaks Gilchrist, Riley, Ruediger, Sealey, and Kat Sullivan Elementary Schools and into Leon or Lincoln High Schools.

School Zone

The Raa Middle school zone, located in central Leon County, encompasses the neighborhoods of Lakeview, Levy Park, Midtown West, Glenview, Glendale, Plantation Heights, Waverly Hills, Macon Community, Lake Breeze, Lakeshore, and Hawks Nest. A portion of Florida State University is encompasses in the southern portion of the school zone. In addition to Florida State University, land uses in the school zone consist of mostly residential and recreational. Additionally, there are areas of commercial centered mostly around Interstate-10 and North Monroe Street including Tallahassee Mall. The presence of the university in the school zone influences the demographic makeup of the area, in the southern portion, with a significant amount of housing occupied by college students. The area north of Interstate-10 is mostly part of unincorporated Leon County.

The Raa school zone includes six major roadways. Interstate-10 runs east to west and bisects the zone into north and south. Thomasville Road runs mostly north to south and borders the zone on the east. North Monroe Street runs mostly northwest to southeast borders the zone to the west. North Meridian Road runs north to south through the central part of the zone. West Tharpe Street and West Tennessee Street both run east to west in the southern portion of the zone. There are approximately six other Leon County schools within the Raa school zone. Recreational facilities within the school zone include

Lafayette Park, Leverne Payne Community Center, Lake Ella Park, Levy Park and Pool, Troudell Gymnastics Center and Aquatics Center, Macon Community Neighborhood Park, and other facilities in the northern portion of the zone. There are a variety of shared-use trails and bike routes that are important non-motorized shared-use transportation amenities that traverse throughout the school zone, connecting the school to areas throughout downtown Tallahassee and nearby neighborhoods.


Raa Middle School
School Zone
RAA
W Lakeshore Dr
Lakeshore Dr E
Live Oak Plantation Rd
Hermitage Blvd
Lakeshore Dr W
Grady Rd
Henderson Rd
Waverly Rd
Woodgate Way
Pullen Rd
Allen Rd
61
Hartsfield Rd
John Knox Rd
Armistead Rd
Centerville Rd
Monticello Dr
E Bradford Rd
Betton Rd
E Tharpe St
Ocala Rd
Colorado St
High Rd
Alabama St
W 7th Ave
E 7th Ave
W 6th Ave
Old Bainbridge Rd
Miccosukee Rd
Basin St
W Brevard St
Hillcrest St
White Dr
Stadium Dr
N Macomb St
W Call St
N Gadsden St
E Park Ave
Governors Square Blvd
Ausley Rd
S Duval St
S Meridian St
E Lafayette St
27
Blair Stone Rd
Jackson Bluff Rd
Myers Park Dr
LEGEND
LCS Schools
School Zone
Bike Route
Sidewalk
Shared Use Trail
School Parcel
Residential
Recreation/Public
Distance from School
0.5 Miles
1 Mile
2 Miles
Miles
1
0.5
0
1
Capital Region Transportation Planning Agency
CRTPA
LEON COUNTY SCHOOLS
Source: Florida Geographic Data Library (2013)

Chapter 2: On-Site Meeting and Inventory

Date and Weather Conditions

The on-site inventory meeting was conducted on March 7th, 2013 with temperatures in the mid 50 degrees Fahrenheit.

Highlights and Key Observations of On-Site Meeting

During this visit, Raa Middle 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 and traffic education. Additionally, before- and after-school programs provided for students were discussed.

It was noted that overhead flashing lights (i.e. school zone warning lights) are located along both West Tharpe Street and North Martin Luther King, Jr. Boulevard. There are also traditional flashing lights along West 10th Avenue. There is no traffic calming measures present on roadways surrounding the school. Students are permitted to arrive to school as early as 8:45am and after-school programs and sports are available until around 6:30pm. Immediately west of the school is Ruediger Elementary School. It was also noted that Raa Middle School uses an information card to determine how each student will get to and leave from school. Any changes to this information on any given day must be in writing to 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.

While the school is located in an established neighborhood primarily comprised of higher density single family homes and multifamily homes, there are a limited number of students that walk or bicycle to/from school, as many rely heavily on busing and automobile rides. Raa Middle has a magnet program and as such many students who choose to attend the school may live outside of the school zone, too far a distance to walk or bicycle to school within a reasonable amount of time. Walkers and bicyclists can enter campus from both West Tharpe Street and North Martin Luther King, Jr. Boulevard. The school has one bicycle parking rack with space for approximately 15 bicycles.

The school bus drop-off and pick-up zone is shared with Ruediger Elementary School, next door, but functions with no problems due to the different school start and end times. There are ushers to help guide students arriving and departing school with minimal difficulty and conflict. The zone for arrival and departure is covered, which reduces stress for students and staff during times of inclement weather. It was also noted that there are a few students who use Star Metro buses and that they are mostly in the school's magnet program.

There are two parent drop-off and pick-up areas on campus, one is located along North Martin Luther King, Jr. Boulevard and the other is located along West Tharpe Street. The loading/unloading zone along

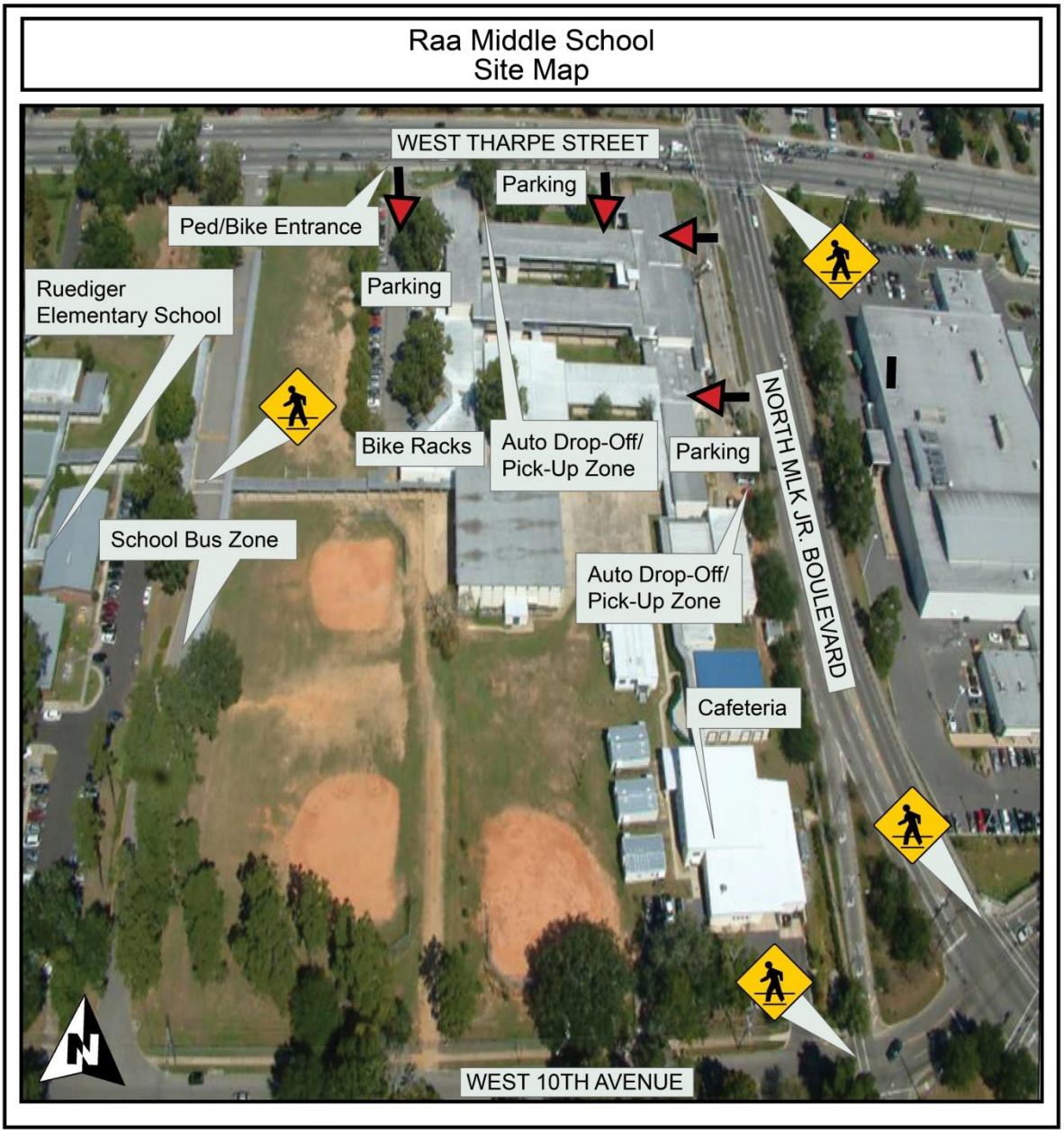
North Martin Luther King, Jr. Boulevard has a covered walkway. School officials noted that the North Martin Luther King Jr. Boulevard drop-off/pick-up has severe problems during school end times. Multiple lanes of traffic are trying to get into the designated two lane area and students leaving campus by foot, who are trying to get to the crosswalk or City bus stop, are walking through the incoming traffic. Additionally, the incoming traffic often extends into the roadway blocking the intersection of West Tharpe & North Martin Luther King, Jr. Boulevard. Finally, it was also noted that parents and students often use the area behind the school along West 10th Avenue as a pick-up even though it is not a designated area. Both of these areas can cause stress for students, parents, and school officials who are on duty.

Inventory Map

An aerial photograph showing Raa Middle School is located on the following page. As shown in the photo, the school fronts the corner of West Tharpe Street and North Martin Luther King Jr. Boulevard. Students can access campus from either of these streets. Bicycle parking racks are located along the west side of the school near the bus zone.

Standard width sidewalks are located along both sides of West Tharpe Street and there is a midblock crosswalk available with a small pedestrian refuge in the median. Additionally, standard width sidewalks are located along both sides of North Martin Luther King Jr. Boulevard. On the east side of the roadway, the sidewalk is buffered from the street with a metal guard rail. In the rear of the school, along West 10th Avenue, a standard width sidewalk is available on the school-side of the street.

There are two automobile pick-up and drop-off zones. The first is located along West Tharpe Street. Automobiles both enter and exit the zone at separate driveways along West Tharpe Street. The second is located along North Martin Luther King Jr. Boulevard. Automobiles both enter and exit the zone at separate driveways along North Martin Luther King Jr. Boulevard. Parking spaces are located in both of these areas as well. The bus drop-off and pick-up zone, co-shared with Ruediger Elementary School, is located between the two schools on a school access drive. Buses enter the zone from West Tharpe Street and exit onto West 10th Avenue.


Raa Middle School
Site Map
WEST THARPE STREET
Parking
Ped/Bike Entrance
Parking
Ruediger
Elementary School
Bike Racks
Auto Drop-Off/
Pick-Up Zone
Parking
NORTH MLK JR. BOULEVARD
School Bus Zone
Auto Drop-Off/
Pick-Up Zone
Cafeteria
N
WEST 10TH AVENUE

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 middle school zones are so large in size and students who live outside the zone may choose to attend the school, students often live more than two miles away from their school which can create a distance that is too long to walk or bicycle to school within a reasonable amount of time. Additionally, many students also participate in after-school clubs and sports that require them to bring additional items from home. Thus, it may be harder to walk or bicycle with these extra items. These kind of external factors are often difficult to overcome, at least in the short term. School-related and –supportive committees such as the Parent/Teacher Organization (PTO) 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.

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 6th to 8th 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**.)

The survey indicates that the vast majority of students at Raa Middle School – approximately two out of three students – are dropped-off at school by car. Riding a school bus and walking to school ranked a distant second and third place at approximately 27 percent and six percent of students, respectively. A low percentage of students, only one percent, arrived to school by public bus and none reported biking to school. (A detailed description of the analysis by mode can be found in **Appendix B**.)

SUMMARY OF SCHOOL-WIDE RESULTS

	Walk	Bicycle	Automobile	School Bus	Public Bus
Average Overall	6 %	<1 %	65 %	27 %	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 6th-8th Grade. (A detailed description of results for the parent surveys can be found in **Appendix D**.)

The small survey sample of students living within two miles from the school indicates that a vast majority of Raa Middle School students arrive to school by car in the morning, while few return home by the same mode in the afternoon. The car-to-school average for a typical week is 49% in the morning and decreases to 33% in the afternoon. In the afternoon, there are greater percentages of students returning home by walking or school bus. Overall, a combined total of approximately one-quarter to one-third of students commutes to and from school by either walking or bicycling. The school bus-to-school average for a typical week is 24% in the morning and increases to 28% in the afternoon. The walk-to-school and bike-to-school averages for a typical week are 18% and 1% in the morning and 29% and 1% in the afternoon, respectively. The public bus-to-school average for a typical week is 3% in both the morning and afternoon. None of the students used an alternative commute mode in the morning. However, in the afternoon, 1% of students used an alternative commute mode.

Neighborhood safety concerns for parents of middle-school-aged (6th-8th) children include three main concerns including issues with speeding vehicles, sidewalks/walking, and transportation outside of the school zone. There were approximately 16 comments of concern regarding issues with speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are West 10th Avenue, Gibbs Drive, West Tharpe Street, Old Bainbridge Road, and North Meridian Road. Parents also mention vehicles speeding in school zones and where children are trying to cross the road. Additionally, there were 14 comments of concern regarding issues with sidewalks and walking. General concerns include the lack of sidewalks and bicycle lanes, broken sidewalks, sidewalks that are not continuous on one side of the street. Specific locations where sidewalks and bicycle lanes tend to be a problem are Bradford Road, Old Bainbridge Road, North Meridian Road, West 7th Avenue, and Glenview Drive. Parents also mentioned sidewalks where dog owners have failed to clean up after their pets. Lastly, there were eight comments of concern regarding issues with transportation outside of the school zone. General concerns include the high volumes of traffic, the hours crossing guards are available after school, and the lack of crossing guards at some intersections. Specific locations where there tend to be problems are West Tharpe Street, West 10th Avenue, North Monroe Street, Bradford Road, and Old Bainbridge 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 marking school speed zones with flashing signs and enforcing speed limits, having separated and continuous bicycle/pedestrian pathways, and the availability of crossing guards were agreed upon by parents from 6th-8th grade.

Chapter 5: Neighborhood Field Review

A neighborhood field review was conducted on April 11th, 2013. The review consisted of an assessment of accessibility, connectivity and safety along neighborhood roadways within proximity to Raa Middle School. On the day of the field review, there was some light rain and temperatures were 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 Raa Middle School.

Character of Neighborhood Area

Raa Middle School is located in an established neighborhood primarily comprised of higher density single family homes and multifamily homes. For the most part, the neighborhood has a well-connected pattern of mostly gridded streets which contributes to the school's overall accessibility. A few streets south and west of the school have good sidewalk infrastructure in place but streets could use some bicycle-pedestrian improvements. The school is located on the corner of a busy intersection. Additionally, North Monroe Street, just east of the school, could act as a barrier for children due to its width and high traffic volumes. There is another school, Ruediger Elementary, just west of Raa Middle School.

Major roadways in the neighborhood include:

- North Monroe Street, a heavily traveled north-south, 4-5 lane roadway with a posted speed limit of 35mph or less.
- West Tharpe Street, an east-west, 4-5 lane roadway with a posted speed limit of 35mph or less.
- Old Bainbridge Road, a northwest-southeast, two lane roadway with a posted speed limit of 35mph or less.
- West Tennessee Street, a heavily traveled east-west, 4-7 lane roadway with a posted speed limit between 30-45mph.
- Thomasville Road, a southwest-northeast roadway that fluctuates between 2-7 lanes with a posted speed limit between 30-45mph.

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 15th to May 30th. 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.

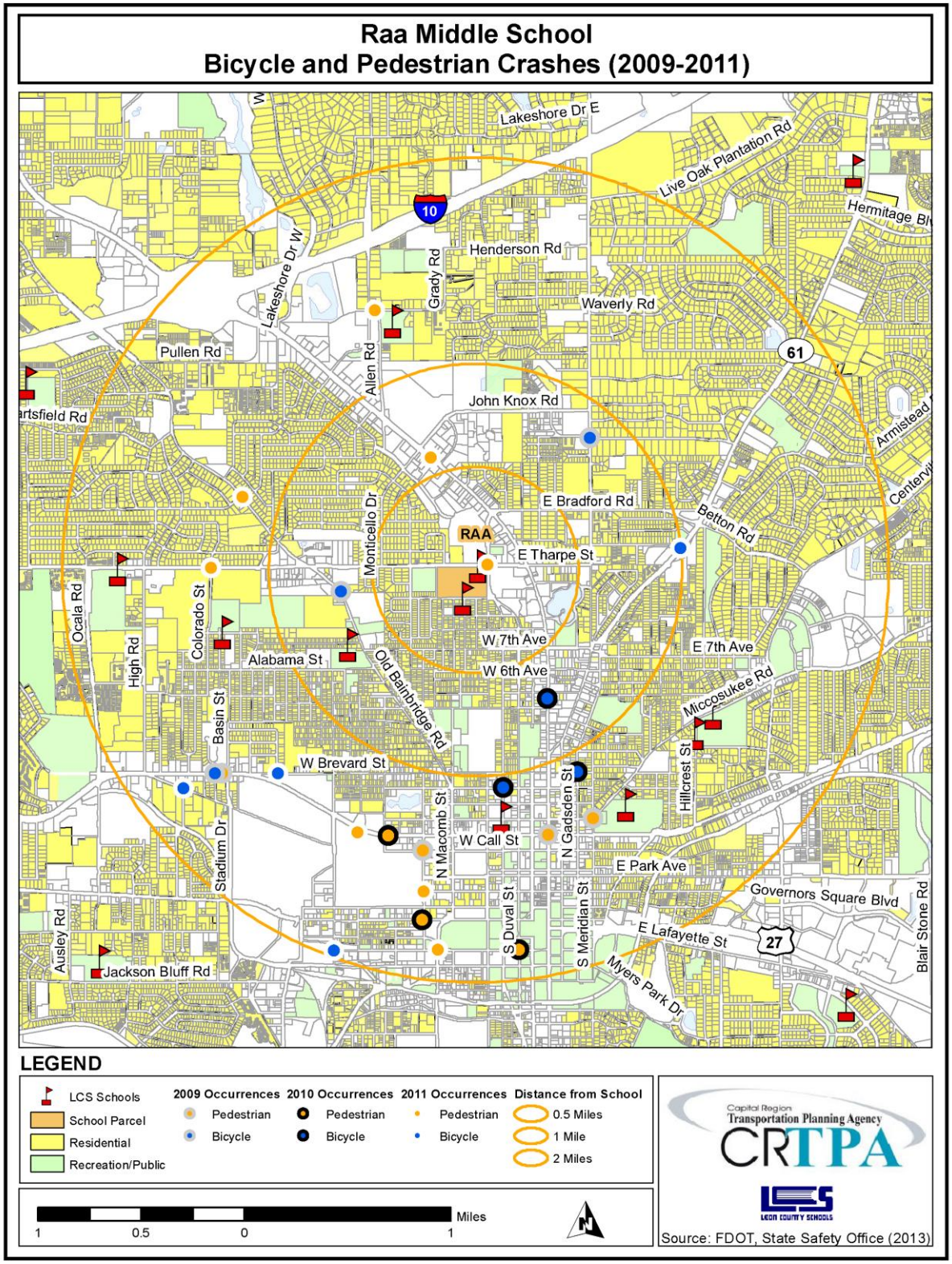
There were a total of 26 bicycle and pedestrian crashes that occurred within the theoretical two-mile walk/bike radius of Raa Middle School. Of those total crashes, 6 (23%) occurred during the morning hours and 20 (77%) occurred during the afternoon hours. A vast majority of the crashes involved adult pedestrians. However, there were incidents of crashes involving bicyclists and children. Injuries were reported in all but three crashes.

Most of the crashes occurred approximately one to two miles south of Raa Middle School, in an area mainly comprised of downtown Tallahassee and the Florida State University campus. Streets where crashes tend to be a problem are Madison Street, Monroe Street North, Tennessee Street, Duval Street, and Pensacola Street. Other streets that tend to be a problem in the area closer to school include West Tharpe Street, Old Bainbridge Road, and Thomasville Road.

SUMMARY OF CRASH REPORTS (2009-2011)

Date	Time	Day	On Road	Nearest Intersection	Injury or Fatality?	Type of Crash	Person(s) Involved
01/09/09	3:02pm	Friday	Tennessee St.	Monroe St.	Injury	Pedestrian	Adult
02/10/09	3:20pm	Tuesday	Meridian Rd.	Virginia St.	Injury	Pedestrian	Child
04/22/09	8:15am	Wednesday	Call St. W	Copeland St.	Injury	Pedestrian	Adult
04/29/09	8:27am	Wednesday	Tennessee St.	Bryan St.	Injury	Pedestrian	Adult
05/05/09	4:07pm	Tuesday	Old Bainbridge Rd.	Knots Ln.	Injury	Bicyclist	Adult
09/16/09	4:11pm	Wednesday	Tennessee St.	Campus Cir.	Injury	Bicyclist	Adult
09/23/09	3:13pm	Wednesday	S Ride	Meridian Rd.	Injury	Bicyclist	Adult
03/01/10	2:51pm	Monday	Gadsden St. N	Brevard St. E	Injury	Bicyclist	Adult
05/27/10	8:06am	Thursday	Madison St.	Duval St.	Injury	Pedestrian	Adult
09/06/10	2:09pm	Monday	Tennessee St.	Dewey St. N	Injury	Pedestrian	Adult
09/09/10	3:54pm	Thursday	N Monroe St.	4th Ave.	Injury	Bicyclist	Child
10/26/10	3:46pm	Tuesday	Pensacola St.	Copeland St. S	No Injury	Pedestrian	Adult
11/17/10	3:35pm	Wednesday	Bronough St. N	Georgia St. W	Injury	Bicyclist	Adult
01/07/11	2:15pm	Friday	N Monroe St.	Silver Slipper Ln.	Injury	Pedestrian	Adult
01/11/11	2:35pm	Tuesday	Academic Way	Territory Way	Injury	Pedestrian	Adult
01/19/11	3:43pm	Wednesday	Copeland St.	College Ave.	Injury	Pedestrian	Adult
02/08/11	3:32pm	Tuesday	Madison St.	Railroad Ave.	Injury	Pedestrian	Adult
02/14/11	2:15pm	Monday	Brevard St.	Richmond St.	No Injury	Bicyclist	Adult
02/16/11	4:05pm	Wednesday	Madison St.	Woodward Ave. S	Injury	Bicyclist	Adult
03/01/11	3:40pm	Tuesday	Thomasville Rd.	Glenview Rd.	Injury	Bicyclist	Adult
03/01/11	3:45pm	Tuesday	Old Bainbridge Rd.	Raa Ave.	Injury	Pedestrian	Child
03/30/11	4:13pm	Wednesday	W Tharpe Street Rd.	Colorado St.	No Injury	Pedestrian	Child
04/29/11	8:10am	Friday	Duval St.	Madison St.	Injury	Pedestrian	Adult

Date	Time	Day	On Road	Nearest Intersection	Injury or Fatality?	Type of Crash	Person(s) Involved
08/22/11	8:35am	Monday	W Tharpe Street Rd.	MLK Blvd.	Injury	Pedestrian	Adult
10/04/11	7:53am	Tuesday	Call St. W	Chapel Dr.	Injury	Bicyclist	Adult
11/30/11	4:20pm	Wednesday	Fulton Rd.	Sharer Rd.	Injury	Pedestrian	Adult


Raa Middle School
Bicycle and Pedestrian Crashes (2009-2011)
Lakeshore Dr E
Live Oak Plantation Rd
Hermitage Blvd
10
Henderson Rd
Lakeshore Dr W
Grady Rd
Waverly Rd
Pullen Rd
Allen Rd
61
John Knox Rd
Armistead
E Bradford Rd
Betton Rd
Monticello Dr
RAA
E Tharpe St
Ocala Rd
Colorado St
High Rd
Alabama St
W 7th Ave
E 7th Ave
W 6th Ave
Old Bainbridge Rd
Miccosukee Rd
Basin St
W Brevard St
Hillcrest St
N Gadsden St
N Macomb St
W Call St
Stadium Dr
E Park Ave
Governors Square Blvd
S Duval St
S Meridian St
E Lafayette St
27
Ausley Rd
Jackson Bluff Rd
Myers Park Dr
Blair Stone Rd
LEGEND
LCS Schools
School Parcel
Residential
Recreation/Public
2009 Occurrences
Pedestrian
Bicycle
2010 Occurrences
Pedestrian
Bicycle
2011 Occurrences
Pedestrian
Bicycle
Distance from School
0.5 Miles
1 Mile
2 Miles
Miles
1
0.5
0
1
Capital Region Transportation Planning Agency
CRTPA
Leon County Schools
Source: FDOT, State Safety Office (2013)

Neighborhood Assessment

The overall neighborhood layout surrounding Raa Middle School lends itself fairly well to walkability. The well connected gridded street network allows for multiple route choices to access the school especially in the neighborhoods located south of the school; however, bicycle facilities are limited to major roadways in the area. Further away from Raa Middle, outside of the half-mile radius of the school, land uses start to become more non-residential especially along North Monroe Street and Tennessee Street.

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 Raa Middle School walk/bike shed map is included at the end of this chapter.

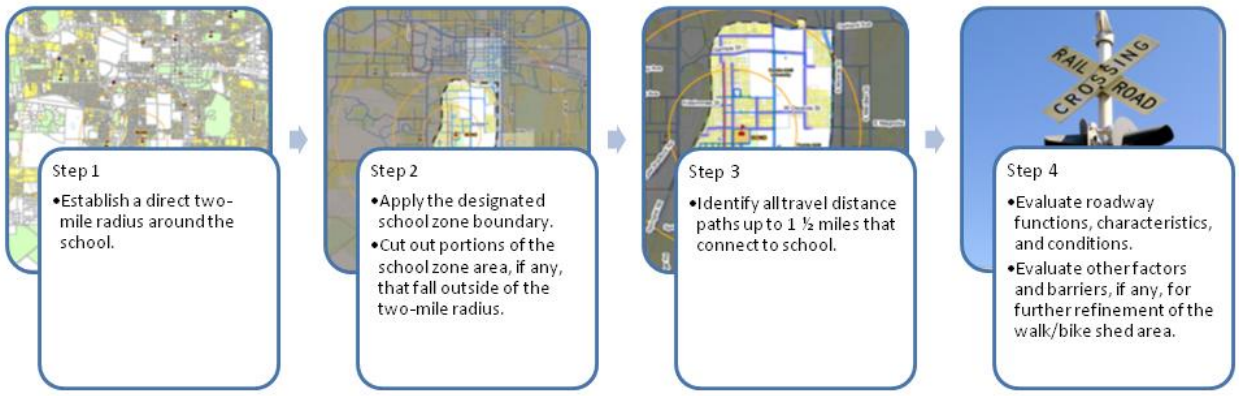
The walk/bike shed area and associated map are not meant to suggest that middle school students of all ages, maturity level, and experience should commute to and/or from school within the area delineated. Certainly, all students are not expected to walk or bike to school from practically any distance without the accompaniment of either a parent or older sibling. Also, students 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 Raa Middle School mostly extends south of the school. The area north of West Tharpe Street, excluding a neighborhood directly across from the school, are excluded from the walk/bike shed due to the lack of separation from traffic and four undivided lanes along the roadway. Old Bainbridge Road with its hazardous walking and biking accommodations, including minimal widths and gaps in the infrastructure, forms the western limits of the walk/bike shed. Also, because Tennessee Street has minimal to no separation from traffic and has a high number of travel lanes it forms the southern limits of the walk/bike shed. North Monroe Street forms the eastern limits of the walk/bike shed due to the high number of nonresidential land uses along the roadway.

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 middle 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.

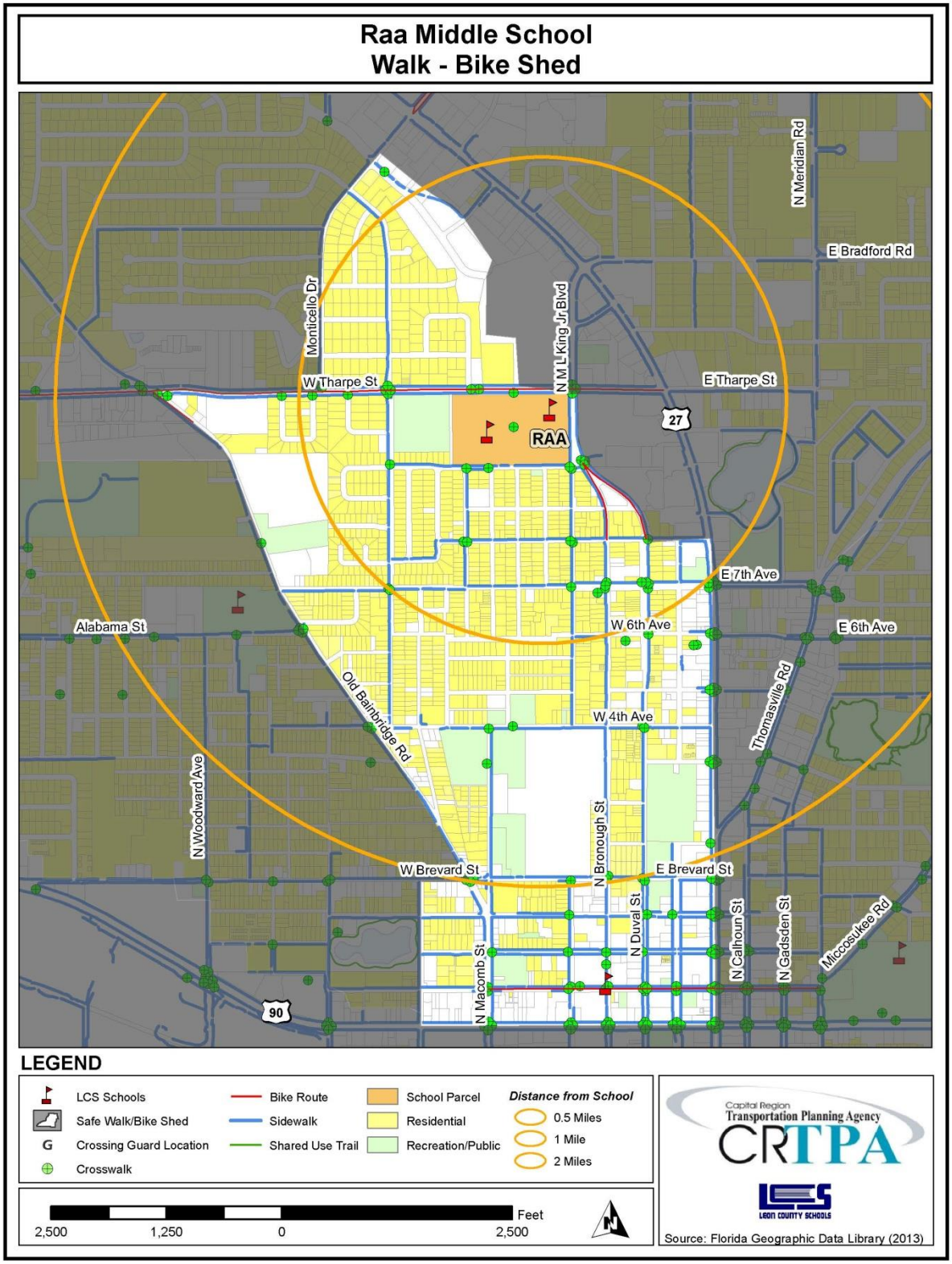
Travel Along Roadways				
Sidewalk Type	**Hazardous Conditions**			
	Type of Road	**Posted Speed Limit**	**Peak Hour Traffic**	**Length**
< 2' wide sidewalk OR without sidewalk	All roadways other than local, neighborhood streets	N/A	N/A	Exceeding 0.5 miles in length
</= 3' wide sidewalk OR </= 4' separation 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				

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


Raa Middle School
Walk - Bike Shed
N Meridian Rd
E Bradford Rd
Monticello Dr
N M L King Jr Blvd
W Tharpe St
E Tharpe St
RAA
27
E 7th Ave
Alabama St
W 6th Ave
E 6th Ave
Old Bainbridge Rd
W 4th Ave
Thomasville Rd
N Woodward Ave
N Bronough St
W Brevard St
E Brevard St
N Duval St
N Calhoun St
N Gadsden St
Miccosukee Rd
N Macomb St
90
LEGEND
LCS Schools
Safe Walk/Bike Shed
Crossing Guard Location
Crosswalk
Bike Route
Sidewalk
Shared Use Trail
School Parcel
Residential
Recreation/Public
Distance from School
0.5 Miles
1 Mile
2 Miles
Feet
2,500
1,250
0
2,500
Capital Region Transportation Planning Agency
CRTPA
LEON COUNTY SCHOOLS
Source: Florida Geographic Data Library (2013)

Chapter 6: Findings and Recommendations

There are an adequate number of access points for walkers and bicyclists onto the Raa Middle School campus; and there are few issues to note concerning school bus access and circulation. As such there are limited on-campus infrastructure-related recommendations for improvement. Recommendations for improving the parent pick-up and drop-off zones on campus are addressed through policy recommendations as there is limited space on school property to reconfigure the two existing zones.

There are, however, some opportunities to improve walking and bicycling opportunities as well as safety throughout the surrounding neighborhoods. In addition, there are some limited policy and programmatic recommendations for the school's consideration.

While there are some fairly busy roadways a way out from Raa Middle School, the surrounding neighborhoods are fairly well-connected to the school. And while there are many streets without sidewalks, most of these streets are internal residential streets with low-volume traffic. Most can be navigated by walkers and bicyclists with a fair amount of ease.

Comments were received directly from Raa Middle School representatives concerning on-site access and circulation within the automobile drop-off and pick-up zones. These zones as they exist today are relatively small and constrained mostly by Tharpe Street and Martin Luther King Jr. Boulevard, respectively. Vehicles stacking into these adjacent roadways during the morning and afternoon can be hazardous to safety. However, there is little that can be done immediately with regard to infrastructure-related improvements here, as the scope requires full-scale revaluation of the entire campus (and perhaps including some potential adjustments to the Ruediger Elementary School campus adjacent to the west). In the interim, certain policies are suggested, below, that may help alleviate the situation somewhat for now.

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 Raa Middle School. They include both on-and off-site improvements as follows:

Raa Middle School On- and Off-Site Recommendations

Improvement: On-Site		Location	From	To	Geography	Direction	Length	Comments
A1	Relocate Existing Bicycle Rack	SW corner of W Tharp St. & N MLK, Jr. Blvd.	N/A		Just north of MLK Parent Pick-Up/Drop-Off Zone	N/A	N/A	Currently, located near the school bus zone.

Public Comments (On-Site)		Location	From	To	Geography	Direction	Length	Comments
PC1	Comprehensive Design Study	Entire School Campus	N/A		N/A	N/A	N/A	Study to address automobile drop-off/pick-up areas on campus

	Improvement: Off-Site	Location	From	To	Geography	Direction	Length	Comments
B1	Stripe Existing Crosswalks (2)	West Tharpe Street	East and West of Ruediger Parent Pick-Up/Drop-Off Entrance		N/A	N-S	N/A	Note: City responsibility
B2	New Sidewalk	Branch Street	West 10th Avenue	West Tharpe Street	East side of Branch Street	N-S	Approx. 808 feet	
B3	New Crosswalks (2)	Gibbs Drive	At Monticello Drive		Northwest and Southwest sides	N/A	N/A	
B4	New Crosswalk	Monticello Drive	At Barrie Avenue		West side of Monticello Drive	N-S	N/A	
B5	New Crosswalk	Gibbs Drive	At Gladiola Terrace		West side of Gibbs Drive	N-S	N/A	
B6	New Crosswalks (2)	West 7th Avenue	At Branch Street		North and west sides	N/A	N/A	Include new sidewalk ramps as needed
B7	Remark existing crosswalk	West 7th Avenue	At N MLK, Jr. Blvd.		West side of N MLK, Jr. Blvd.	N-S	N/A	

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

On-Site Recommendation

A1) Relocate the existing bicycle rack – from near the parking lot closest to the school bus zone to inside the fence at the southwest corner of West Tharpe Street & North Martin Luther King Jr. Blvd. The current location of the bicycle rack is too close to parked vehicles and the fence line leaving little room for students to maneuver bicycles on/off the bicycle rack.

Public Comments (On-Site Improvement)

PC1) Raa Middle School representatives expressed concerns with both the safety and functionality of the parent drop-off and pick-up areas on campus. Closer evaluation reveals these areas to indeed be hazardous with regard to automobiles stacking onto Tharpe Street and Martin Luther King Jr. Blvd. due to property constraints and configuration. While it appears that little can be done immediately through infrastructure improvements to resolve these particular problems, a broader, more comprehensive assessment and evaluation of the entire campus (and perhaps including the eastern portion of the Ruediger Elementary School campus) could uncover solutions. Therefore, we recommend a comprehensive design study of the entire campus property to evaluate solutions to this problem. The design study should include school representatives, district safety and security personnel, Tallahassee-Leon County planning and transportation staff, and pertinent information and data from this audit report.

Off-Site Recommendations

B1) Stripe the two existing crosswalks on West Tharpe Street located just east and west of the parent pick-up/drop-off entrance. West Tharpe Street is a fairly well-traveled road and striped crosswalks will help make motorists more aware of pedestrians crossing mid-block.

B2) Construct a new sidewalk along the east side of Branch Street from West 10th Avenue to West Tharpe Street.

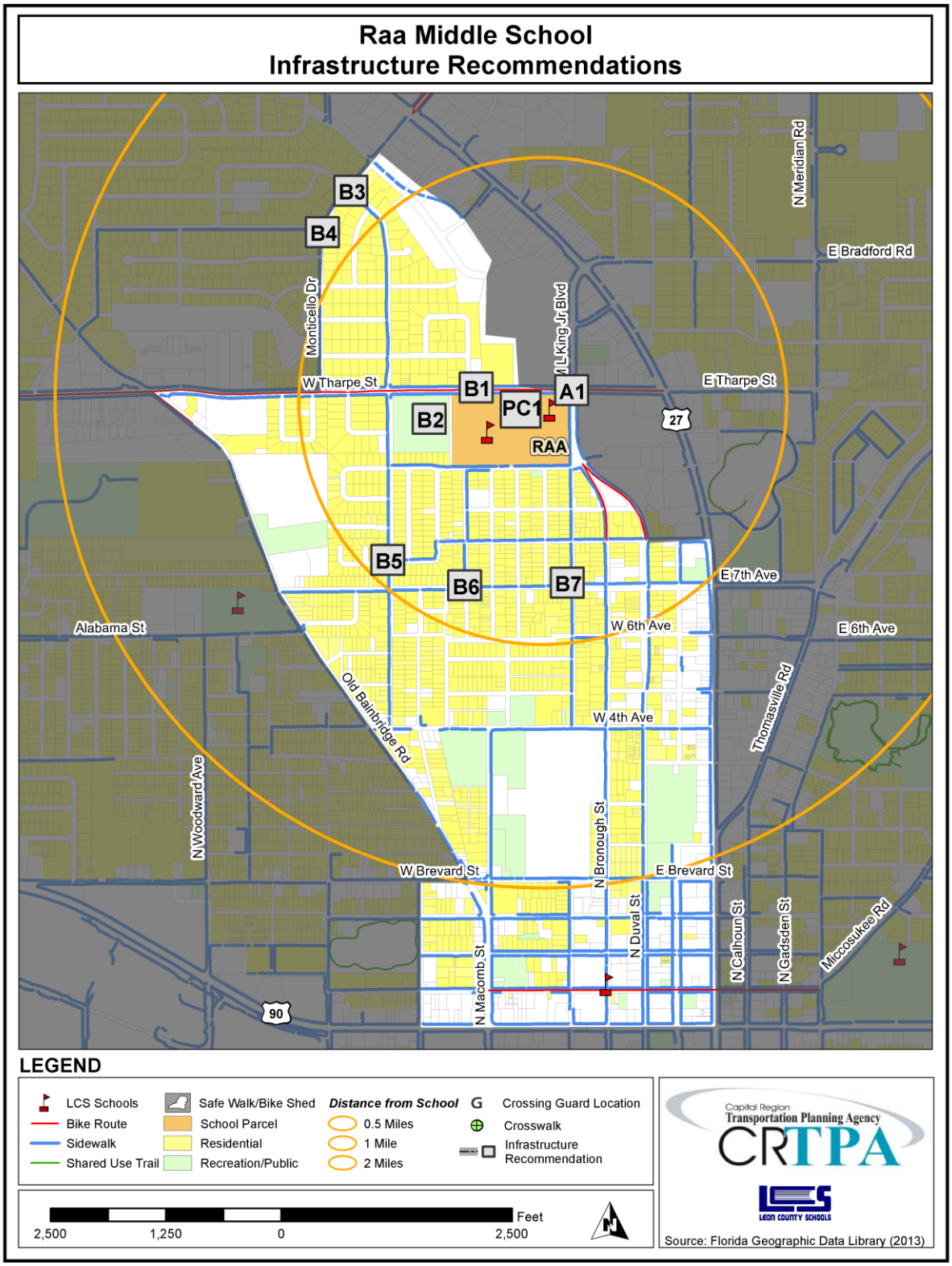
B3) Add two new crosswalks at the intersection of Gibbs Drive & Monticello Drive, along the northwest and southwest sides of the intersection.

B4) Add a new crosswalk at the intersection of Monticello Drive & Barrie Avenue, along the west side of Monticello.

B5) Add a new crosswalk at the intersection of Gibbs Drive & Gladiola Terrace, along the west side of Gibbs Drive.

B6) Add two new crosswalks at the intersection of West 7th Avenue & Branch Street, along the north and west sides of the intersection.

B7) Remark the existing crosswalk at the intersection of West 7th Avenue & North Martin Luther King, Jr. Blvd.; the existing crosswalk is faded and may be difficult for motorists to see when driving.


Raa Middle School
Infrastructure Recommendations
B3
B4
B1
PC1
A1
B2
RAA
B5
B6
B7
N Meridian Rd
E Bradford Rd
Monticello Dr
M L King Jr Blvd
W Tharpe St
E Tharpe St
27
E 7th Ave
Alabama St
W 6th Ave
E 6th Ave
Old Bainbridge Rd
W 4th Ave
Thomasville Rd
N Woodward Ave
N Bronough St
W Brevard St
E Brevard St
N Duval St
N Calhoun St
N Gadsden St
Miccosukee Rd
N Macomb St
90
LEGEND
LCS Schools
Bike Route
Sidewalk
Shared Use Trail
Safe Walk/Bike Shed
School Parcel
Residential
Recreation/Public
Distance from School
0.5 Miles
1 Mile
2 Miles
Crossing Guard Location
Crosswalk
Infrastructure Recommendation
Feet
2,500
1,250
0
2,500
Capital Region Transportation Planning Agency
CRTPA
LEON COUNTY SCHOOLS
Source: Florida Geographic Data Library (2013)

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; or 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 middle-school aged 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, turning, and making emergency stops can be very helpful for 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, nearby university groups, 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). Additionally, parents should be reminded that West 10th Avenue is not a designated pick-up/drop-off zone and as such, this area should not be used during school commuting hours.

C4) Carpooling – Due to the expansive size of the school zone as well as the presence of the magnet program, walking and bicycling may not be possible for all students. It would be beneficial to create a carpooling program that groups students together who live in the same neighborhoods. Parent volunteers could help coordinate the groups and also take turns driving students to/from school.

Policies

D1) Bike check and security – School policies to encourage bicycle riding could include having a school official or parent volunteer at the bike rack in the morning and afternoon to assist students parking their bikes. The adult assigned to handle check-in and check-out can assist with locking the bike in the morning and unlocking 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 West Tharpe Street or North MLK Jr., Blvd. 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 West Tharpe Street or North MLK Jr., Blvd., but please do not block driveways.
- 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) Parent Pick-Up Policies – Setting policies for the parent /pick-up process can improve the traffic conditions and creates a safer environment for automobiles, as well as, pedestrians and bicyclists. Examples of policies that can be put into place to create safer and more efficient pick-up zones on campus include:

- Staggered Pick-Up Times By Student Grade Level - For example:
  - 6th (Encourage parents to pick-up between 3:50pm-4:05pm)
  - 7th (Encourage parents to pick-up between 4:05pm-4:20pm)
  - 8th (Encourage parents to pick-up between 4:20pm-4:35pm)

    - Parents with multiple children can pick up students starting at the youngest student's designated pick-up time
- Designation of Pick-Up Zone by Last Name - For example:
    - Students whose last names begin with A-G will use the West Tharpe Street Automobile Pick-Up Zone
    - Students whose last names begin with H-Z will use the North Martin Luther King Jr. Boulevard Automobile Pick-Up Zone

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[1]

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

[1] 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

Raa Middle School is an in-town school near the edge of downtown Tallahassee. While the zone is fairly extensive, there are certain, physical barriers that also limit the ability to realistically and/or safely walk or bicycle to school within a reasonable distance, Old Bainbridge Road and Monroe Street being the obvious examples. It is also certainly worth mentioning the immediate area demographics also at play; with near proximity to Florida State University and Florida Agricultural & Mechanical University, the neighborhoods surrounding Raa Middle School tend to include a sizable college student population that lacks in elementary school-aged children. These issues are more system-wide transportation and geography issues outside the purview of this analysis. However, they could be further explored during any future school district boundary change considerations.

Raa Middle School enjoys a well-connected roadway network consisting of both major corridors and low-volume residential streets. The major corridors are mostly equipped with at least the minimum of pedestrian and bicycle infrastructure, including crossings; however, there are some needs and associated opportunities for improvement as highlighted in the previous chapter. The low-volume residential streets are mostly adequate and safe for pedestrians, and the school campus itself is accessible to walkers and bicyclists from most directions. That being said, the approximate number of students that commute to/from school by walking is six percent; however, less than one percent of students are known to bicycle to/from school.

As noted above, there are certain constraints at play that keep the numbers of walkers and bicyclists down; however, with the vast amount of housing within reasonable distance to school, these numbers could be improved. This audit report includes infrastructure-type enhancements to improve conditions as well as safety for students to walk and bicycle to school; however, with an already fairly manageable network of streets suitable to accommodate pedestrians, it is likely that programmatic- and policy-type recommendations will be just as important. By and large, 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

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.

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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 819 student responses recorded. Student travel survey results were counted and analyzed for the school as a whole.

SUMMARY OF STUDENT TRAVEL SURVEY POPULATION

Total Number of Participating Classrooms	45
Total Students Surveyed (6^{th} – 8^{th})	819

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 5% to 7%, with an overall average of 6%. Overall, the bike-to-school average for the week ranged from <1% to <1%, with an overall average of less than one percent. Of students that bike to school, an overall average of 9% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from 6% to 8%, with an overall average of 6%.

SUMMARY OF WALKING AND BICYCLE SCHOOL-WIDE TRAVEL PATTERNS

	Walk	Bicycle	Helmet Use	Total Walk + Bike
Average Overall	6 %	<1 %	9 %	6 %
Highest Day	7 %	<1 %	33 %	8 %
Lowest Day	5 %	<1 %	0 %	6 %

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 student travel surveys indicate that the automobile-to-school average for the week ranged from 63% to 66%, with an overall average of 65%. Of the students that ride to school in an automobile, an overall average of 78% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 27% to 28%, with an overall average of 27%. The public bus-to-school average for the week ranged from 1% to 1%, with an overall average of 1%.

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

	Automobile	Seat Belt	School Bus	Public Bus
Average Overall	65 %	78 %	27 %	1 %
Highest Day	66 %	85 %	28 %	1 %
Lowest Day	63 %	75 %	27 %	1 %

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
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 373 parent surveys returned. Of those, 97 (26%) claimed to reside within the theoretical two-mile walk/bike radius of the school.

SUMMARY OF PARENT SURVEY PARTICIPATION

Total Enrollment	894
Total Number of Parent Surveys	373
Total Number within 2 Miles	97
Percentage of Surveys within 2 Miles	26 %

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

Morning	Average Overall
Car	49 %
School Bus	24 %
Walk	18 %
Public Bus	3 %
Bicycle	1 %
Other	0 %
Afternoon	
Car	33 %
Walk	29 %
School Bus	28 %
Public Bus	3 %
Bicycle	1 %
Other	1 %

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.

SUMMARY OF TOP NEIGHBORHOOD SAFETY CONCERN

Neighborhood Safety Concern	Number of Comments
Speeding Vehicles	16
Issues with Sidewalks/Walking	14
Issues with Transportation Outside of School Zone	8

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).

TOP RANKING INFLUENTIAL FACTORS FOR MIDDLE-SCHOOL-AGED CHILDREN

	SCALE	1	2	3	4	5	N/A
I would allow my child to walk or bicycle to school more often if:							
#1 Speed limits were strictly enforced in school speed zones		*4*	*5*	*6*	*16*	*47*	10
#2 School speed zones were marked with flashing signs		*4*	*5*	*6*	*12*	*44*	17
#3 There were continuous sidewalks or bike paths from my neighborhood to school		*4*	*2*	*8*	*12*	*42*	17
#4 Additional crossing guards were provided at busy intersections		*5*	*3*	*10*	*12*	*41*	18
#5 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school		*6*	*4*	*7*	*15*	*40*	17