August 2014

Safe Routes to School Audit Report
Woodville Elementary School

Leon County Public Schools

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Acknowledgements

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

Capital Region Transportation Planning Agency (CRTPA)

Safe Routes to School (SRTS) National Partnership

Leon County Public Schools (LCS)

Florida Department of Transportation (FDOT)

Leon County Sheriff's Office (LCSO)

Prepared By:

RENAISSANCE PLANNING GROUP

WENDY GREY LAND USE PLANNING LLC

Chapter 1: Introduction

Project Purpose

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

School Overview

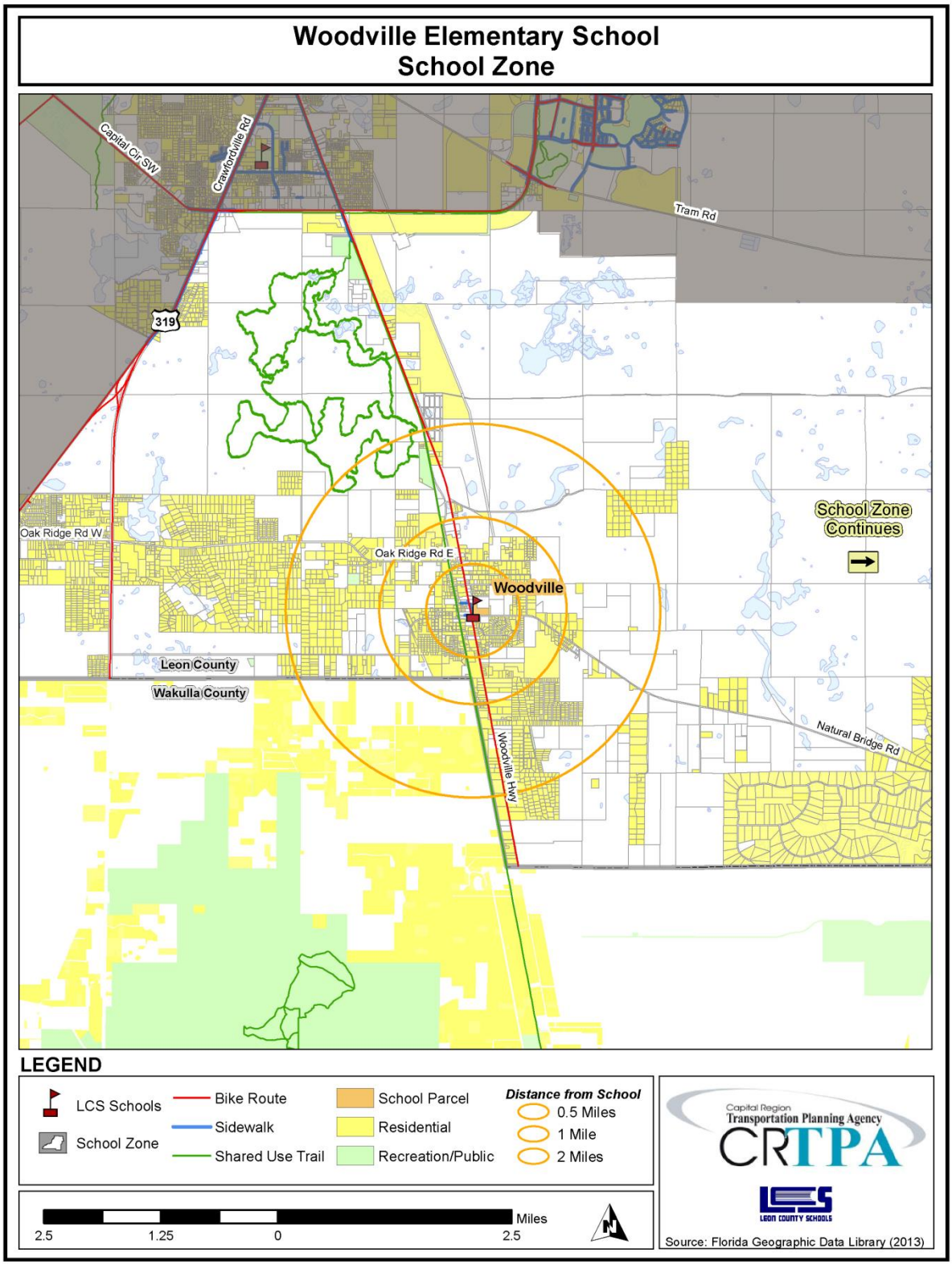
Woodville Elementary School is located at 9373 Woodville Highway, Tallahassee, 32305 in Leon County, Florida. It is part of the Leon County Public Schools system. The school is Leon County's oldest public schools with its history tracing back to as far as 1856. It was originally known as Hickory Grove Academy. The community around the school was originally centered on a railroad stop and a thriving timber industry. The current school buildings were built in 1979 after a fire destroyed the original school building. Regular school hours are from 8:30am to 2:50pm. A before school program is available from 7:00am to 8:00am. 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 462. The school has a current capacity for 543 students. The school includes grade levels Pre-Kindergarten to 5th grade.

Students attending this school feed into Nims Middle School and Rickards High School.

School Zone

The Woodville Elementary school zone, located in southern Leon County, encompasses the neighborhoods of Woodville and other more rural neighborhoods in the surrounding area bordering Wakulla County. The Apalachicola National Forest encompasses a large portion of the school zone in the west. Land uses within the school zone are predominantly vacant with residential taking up a significant portion. Additionally, there are several areas of recreational uses. The Woodville school zone includes three major roadways. Woodville Highway runs slightly northwest to southeast and divides the zone into east and west. Capital Circle Southwest runs east to west and borders the zone to the north. Crawfordville Highway runs northeast to southwest and borders the zone to the west. Recreational facilities within the school zone include Woodville State Forest, Woodville Community Center, J. Lewis Hall Sr. (Woodville) Park, St. Mark's shared-use trail, and the Munson Hills Trail in Apalachicola National Forest.


Woodville Elementary School
School Zone
Capital Cir SW
Crawfordville Rd
Tram Rd
319
Oak Ridge Rd W
Oak Ridge Rd E
Woodville
School Zone
Continues
Leon County
Wakulla County
Natural Bridge Rd
Woodville Hwy
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
2.5
1.25
0
2.5
N
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 February 15th, 2013 with temperatures in the mid 50 degrees Fahrenheit.

Highlights and Key Observations of On-Site Meeting

During this visit, Woodville 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 Woodville Highway; however, school zone compliance from drivers is low as many do not always obey the signs/signals. There is concern with speeding automobiles along Woodville Highway, especially near Natural Bridge Road. This causes a constant conflict between those at the north crosswalk and those traversing through the area, especially trucks. School representatives mentioned that the school has a safety committee dedicated to promoting safety procedures and policies. It was noted that there are restrictive access gates on the campus due to safety and security concerns at the school, especially related to crime in the area. The school's Safety Resource Officer (SRO) also noted that many crimes go unreported so the actual crime happening in the area may be higher.

Students are permitted to arrive to school as early as 6:45am, for before school programs, and there are after school programs available until 6:20am. Approximately 40 students participate in the before school program while there are 60 students who participate in the afternoon program. There is one designated crossing guard at the intersection of Woodville Highway and Natural Bridge Road. Parents have expressed safety concerns due to the minimal amount of sidewalks in the area and the lack of lighting on routes to and from school. It was also noted that during school commuting hours, temporary traffic control devices (i.e. cones and signs) are in place in the automobile zone, as well as, the school bus zone.

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 neighborhood with few connecting thru streets. As such, children may be commuting from further away, since there are few direct paths to school. School representatives estimate that only 4-5% of the students, attending the school, walk or bicycle to school. Some children walk or bike to school escorted by their parents. It was noted that last summer a child pedestrian was hit by a vehicle, near the school. Students who walk or bicycle to school may enter the campus along Woodville Highway at the restrictive access gate. The school has two bicycle racks. One is located near the administrative building and the other is located around the back of the school.

The school bus drop-off and pick-up zone functions adequately. The zone for arrivals and departures is covered and there is direct access to a walking facility. Additionally, there are multiple rows to accommodate buses. Buses are color-coded to help students more easily identify their bus. Also, a staff member keeps a checklist of all school buses arriving and leaving in the afternoons. There are slightly more students who ride school buses than those who are dropped-off/picked-up by automobile.

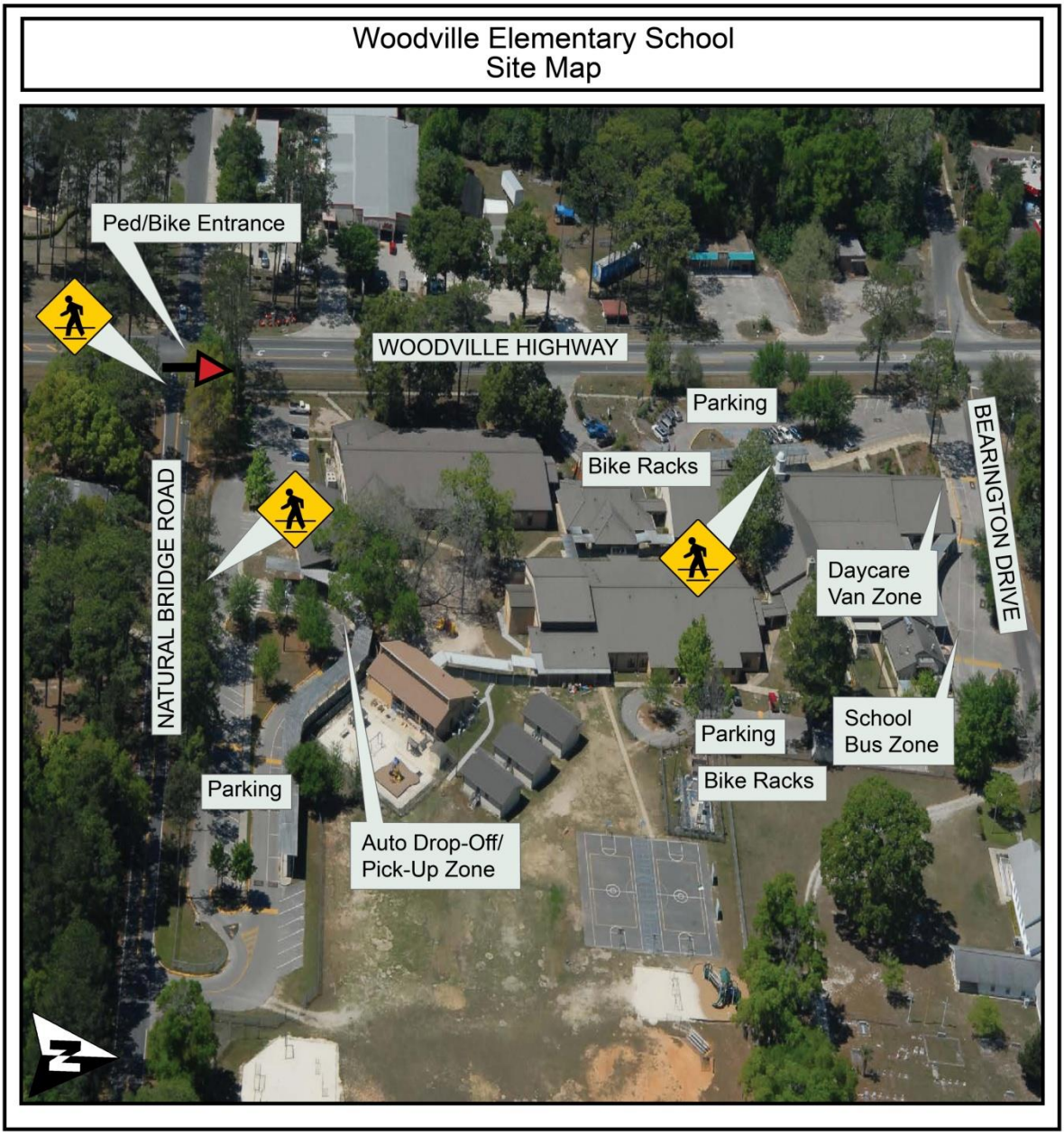
The daycare van pick-up zone functions well. There are three vans which pick-up students daily. The arrival and departure zone for the vans is not covered, but leads directly to a walking facility.

The parent drop-off and pick-up zone functions adequately to accommodate the volume of automobiles entering and exiting the site. There is supervision in the zone and there are ushers to assist with students arriving and departing during school commuting hours. Additionally, the area is covered and there is a holding area for students waiting to be picked-up.

Inventory Map

An aerial photograph showing Woodville Elementary School is located on the following page. As shown in the photo, the school fronts Woodville Highway. Students can access campus from the corner of Woodville Highway and Natural Bridge Road. Bicycle parking racks are located near the front entrance of the school by the administrative building as well as in the back of the school.

The automobile pick-up and drop-off zone is located along the south side of the school. Automobiles both enter and exit the zone at a shared driveway along Natural Bridge Road. Parking spaces are located in this area as well. The daycare van drop-off and pick-up zone is separately located along Bearington Drive. Daycare vans enter and exit at a shared driveway along Woodville Highway. Parking spaces are located in this area as well. The school bus zone is located on the north side of the campus along Bearington Drive. School buses both enter and exit to/from Bearington Drive from a shared driveway along Woodville Highway.


Woodville Elementary School
Site Map
Ped/Bike Entrance
WOODVILLE HIGHWAY
Parking
Bike Racks
BEARINGTON DRIVE
NATURAL BRIDGE ROAD
Daycare
Van Zone
School
Bus Zone
Parking
Bike Racks
Parking
Auto Drop-Off/
Pick-Up Zone
N

Issues and Opportunities

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

Geography and parents' concerns with their children's safety appear to be the primary issues with students' ability to walk and bicycle to school. The neighborhood surrounding the school is quite rural and there are not many streets with thru connections. Additionally, parents' concerns with the minimal sidewalk/bicycle infrastructure in the area, crime, and unlit paths may be deterring parents from letting their children walk or bicycle to school. These kind of external factors are often difficult to overcome, at least in the short term.

With what opportunities that do exist to increase walking and bicycling, including student safety, considerations should be given to Woodville Highway. Traffic calming measures should be explored to reduce automobile speeds and increase awareness of children in the area, especially during the morning and afternoon school commute hours. Also, 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. Furthermore, these groups can help get the word out to parents concerning issues on Woodville Highway, such as speeding. These groups could also help coordinate groups of walkers or bicyclists in the mornings and afternoons to help ease parents concerns with their children's safety.

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 5th 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 2nd Grade, and 3rd Grade through 5th 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 Woodville Elementary School – approximately seven out of ten students – are dropped off at school by car. The percentage rises slightly for younger-aged children, which is not uncommon. Riding a school bus and walking to school ranked a distant second and third place at approximately 27 percent and one percent of students, respectively. Of those commuting by school bus, more than one-and-a-half times as many were older students from 3rd, 4th, and 5th grades. Surprisingly, the percentage of students walking to school was slightly higher for younger-aged students than older-aged students. A low percentage of students, less than one percent, reported biking to school and none of the students surveyed reported arriving to school by public bus. (To note, there are no public buses within a reasonable distance to the school.)

SUMMARY OF SCHOOL-WIDE RESULTS

	Walk	Bicycle	Automobile	School Bus	Public Bus
Average Overall	1 %	<1 %	72 %	27 %	0 %

Chapter 4: Parent Survey – Summary of Results

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

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

The surveys of students living within two miles from the school indicate that a greater percentage of Woodville Elementary School students are dropped off by car to school 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 walking or another mode not described specifically in the survey such as an after-school program van. Overall, less than one-tenth 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 2nd and 3rd through 5th. Survey respondents overall showed concerns for the lack of sidewalks and bicycle lanes, 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 Natural Bridge Road and Woodville Highway.

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), enforcing speed limits in school zones, and having bicycle/pedestrian pathways that were separated from traffic were mutually agreed upon by parents from both Kindergarten through 2nd and 3rd through 5th.

Chapter 5: Neighborhood Field Review

A neighborhood field review was conducted on May 9th, 2013. The review consisted of an assessment of accessibility, connectivity and safety along neighborhood roadways within proximity to Woodville Elementary School. On the day of the field review, 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 Woodville Elementary School.

Character of Neighborhood Area

Woodville Elementary is located in a rural neighborhood comprised primarily of single family residences and manufactured homes. The neighborhood street pattern throughout the area is mostly dead-end streets that are not well-connected, due to the dispersed rural-nature of the area. Bicycle and pedestrian infrastructure throughout the area is almost non-existent. However, there is a shared-use trail, the St. Marks Trail, which runs along Old Woodville Road and is heavily used by people in the area. Woodville Highway could present itself as a barrier to bicyclists and pedestrians due to its high traffic volumes, a lot of which is truck traffic. There is a crosswalk at the intersection of Woodville Highway & Natural Bridge Road, to the school, but there is no traffic signal which could make it dangerous to cross for younger children.

Major roadways in the neighborhood include:

- Woodville Highway, a mostly north-south 2-3 lane roadway with a posted speed limit of 35mph or less near the school and transitions up to 55mph in both directions away from the school.
- Capital Circle Southwest, a two lane roadway, that transitions to six lanes east of Crawfordville Highway, with a posted speed limit of 45mph.
- Crawfordville Highway, a mostly north-south, two lane roadway, that transitions to four lanes near Capital Circle Southwest, with a posted speed limit between 50-55mph.
- Natural Bridge Road, a two lane roadway with a posted speed limit of 35mph or less.

Crash Data

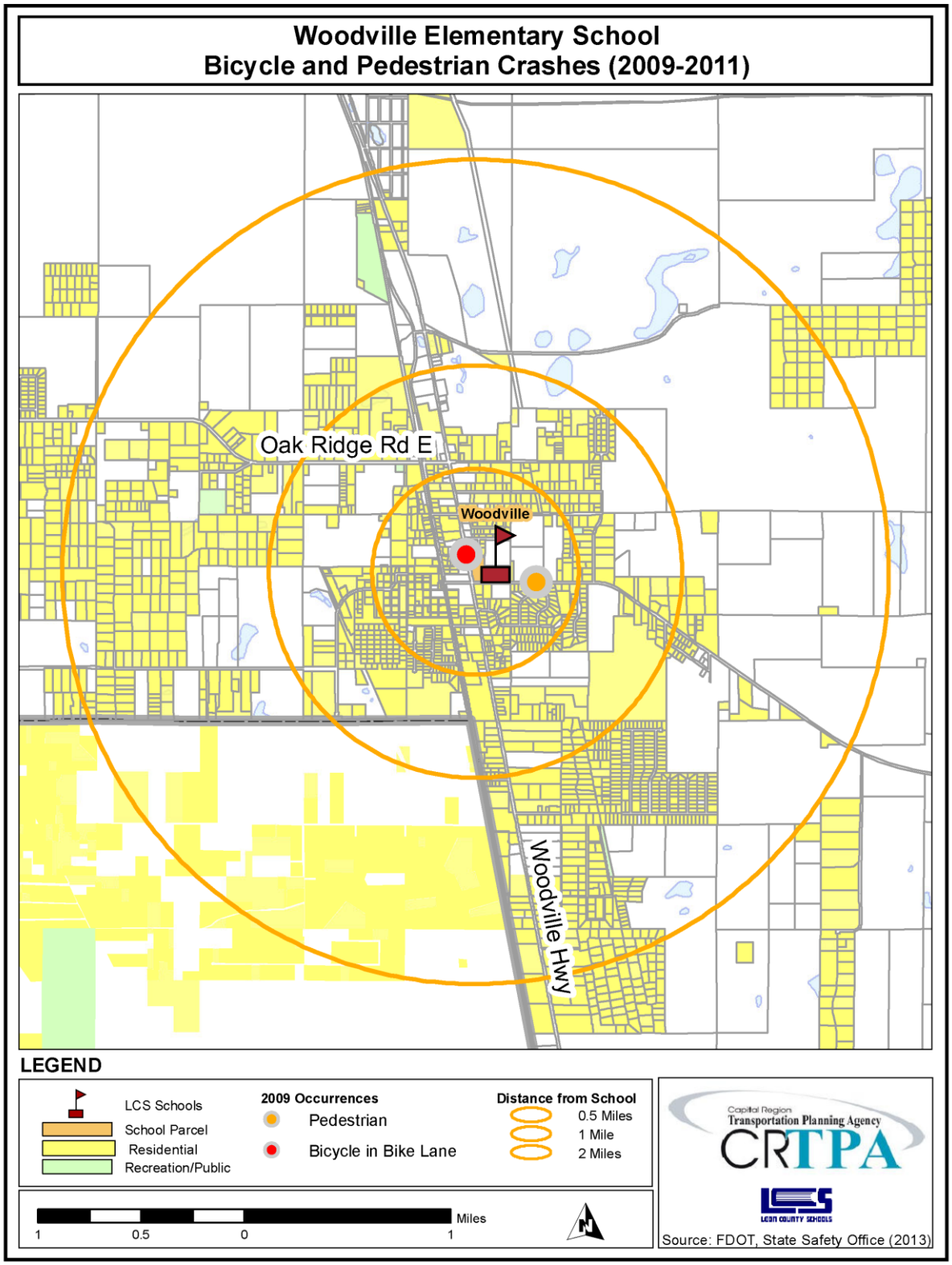
Crash data were collected from the Florida Department of Transportation's (FDOT) State Safety Office for years 2009-2011. Crashes reported include any crashes within Leon County and on any local and major roadways. The data were collected for a typical school year, August 15th to May 30th. Additionally, 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 two bicycle and pedestrian crashes that occurred within the theoretical two-mile walk/bike radius of Woodville Elementary School. Of those total crashes, both occurred during the morning hours. Injuries were reported in one of the two crashes.

Both crashes occurred less than one-half mile from Woodville Elementary School in the nearby residential and commercial areas. The crashes occurred on Natural Bridge Road and Lawhon Road.

SUMMARY OF CRASH REPORTS (2009-2011)

Date	Time	Day	On Road	Nearest Intersection	Injury or Fatality?	Type of Crash	Person(s) Involved
03/25/09	7:20am	Wednesday	Natural Bridge Rd.	Barwick Dr.	Injury	Pedestrian	Child
05/12/09	7:26am	Tuesday	Lawhon Rd.	Woodville Hwy.	No Injury	Bicyclist in Bike Lane	Adult


Woodville Elementary School
Bicycle and Pedestrian Crashes (2009-2011)
Oak Ridge Rd E
Woodville
Woodville Hwy
LEGEND
LCS Schools
School Parcel
Residential
Recreation/Public
2009 Occurrences
Pedestrian
Bicycle in Bike Lane
Distance from School
0.5 Miles
1 Mile
2 Miles
Miles
1
0.5
0
1
Capital Region Transportation Planning Agency
CRTPA
Source: FDOT, State Safety Office (2013)

Neighborhood Assessment

The overall neighborhood layout surrounding Woodville Elementary School does not lend itself well to walkability. The lack of a well-connected street network and bicycle/pedestrian infrastructure leaves few route choices to access the school. In the area immediately near the school, bicycle lanes are limited to Woodville Highway and a shared-use trail is available along Old Woodville Road. However, sidewalks are strictly limited to the area just in front of the school near/on Woodville Highway. 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 Woodville Elementary School walk/bike shed map is included at the end of this chapter.

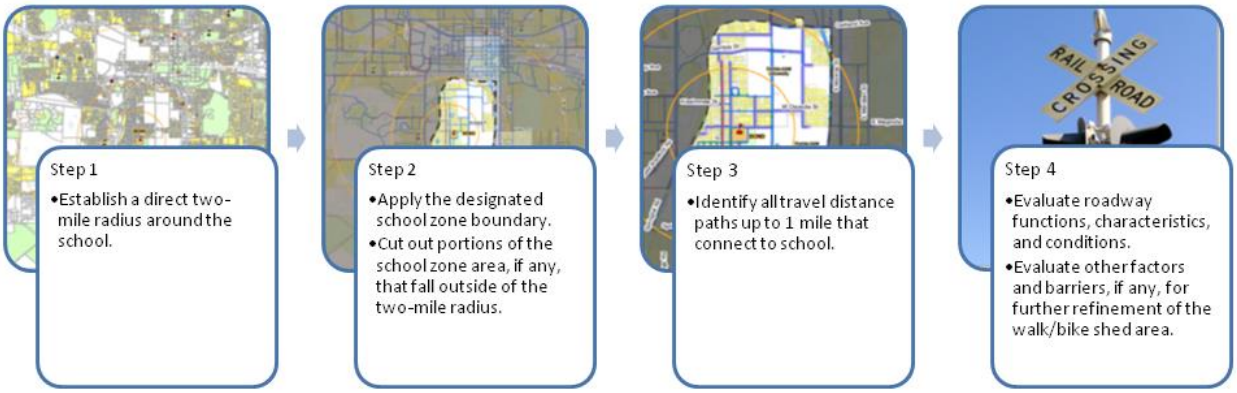
The walk/bike shed area and associated map are not meant to suggest that elementary school students of all ages, maturity level, and experience should commute to and/or from school within the area delineated. Certainly, younger children such as kindergarten students are not expected to walk or bike to school from practically any distance without the accompaniment of either a parent or much older sibling. Also, older children such as 5th 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 Woodville Elementary School mostly extends southwest and west of the school. The area east of Woodville Highway, excluding one small area just north of the school, is excluded from the walk/bike shed due to the lack of pedestrian accommodations along the roadway and the lack of connected thru streets in the area. Oak Ridge Road East forms the northern limits of the walk/bike shed due to its lack of bicycle and pedestrian accommodations. The Leon/Wakulla County Line forms the southern limits of the walk/bike shed. Considering the typical distance elementary-school-aged children can travel on foot or by bicycle as well as the few residential land uses in the area, the area approximately three-fourths a mile west of the school is excluded 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 Unsignalized Crosswalk	More than 2 travel lanes	Greater than 25 mph	Greater than 1,500	N/A
Marked Crosswalk Signalized Crosswalk	Greater than 4 travel lanes	Greater than 40 mph	Greater than 2,000	N/A

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.

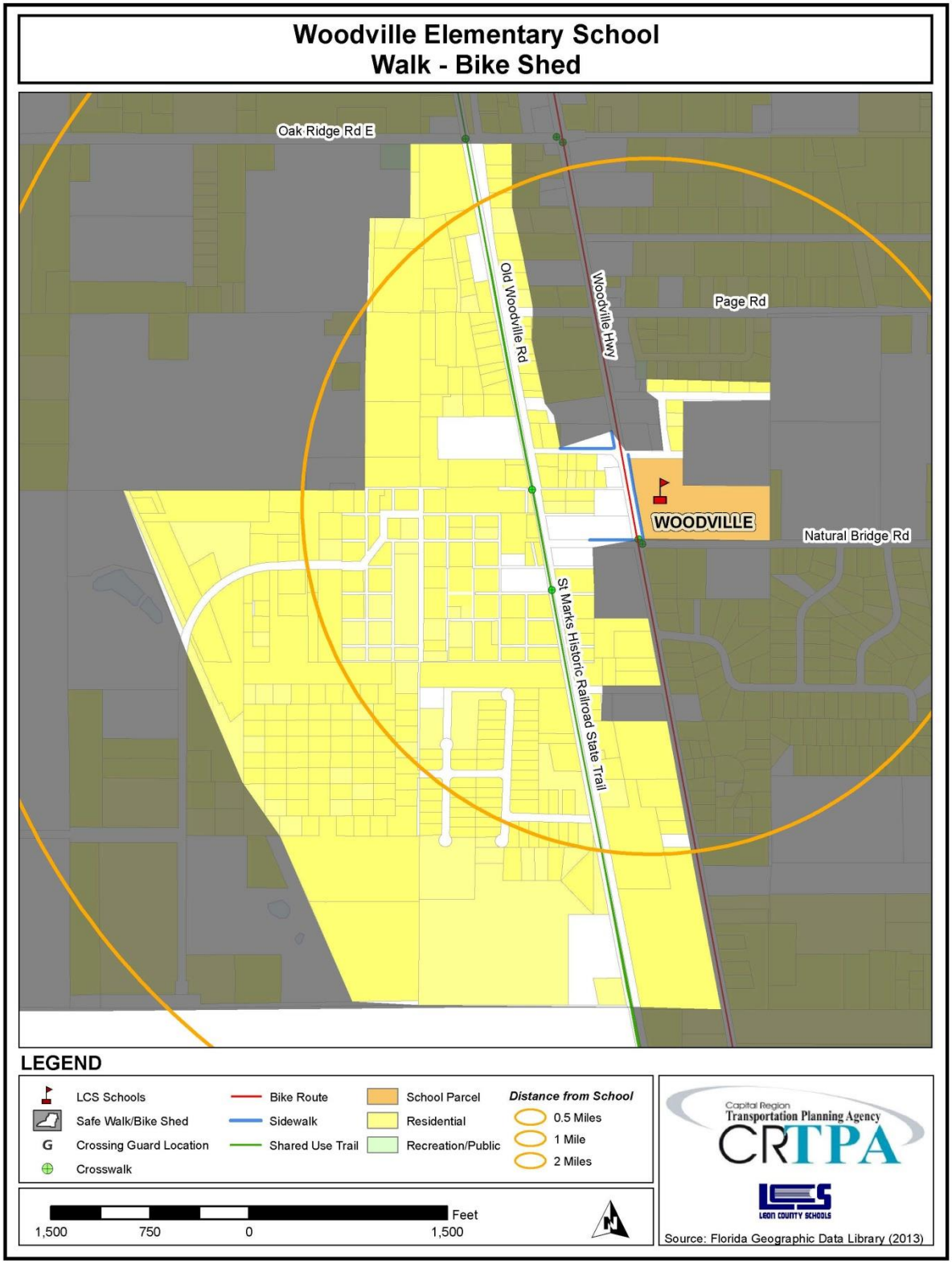
In determining a safe walking and bicycling area, this report applies a methodology and criterion that is more stringent than State standards and more in line with existing studies, research and opinions collected from numerous experts in the fields of pedestrian and bicycle transportation and safe routes 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


Woodville Elementary School
Walk - Bike Shed
Oak Ridge Rd E
Old Woodville Rd
Woodville Hwy
Page Rd
WOODVILLE
Natural Bridge Rd
St Marks Historic Railroad State Trail
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
1,500
750
0
1,500
Capital Region
Transportation Planning Agency
CRTPA
LEON COUNTY SCHOOLS
Source: Florida Geographic Data Library (2013)

Chapter 6: Findings and Recommendations

Walking and bicycling to Woodville Elementary School can be difficult due to the lack of bicycle/pedestrian connections near the few residential land uses located west of the school. However, there are 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 amount of vehicles using the zone during school commuting hours. Additional policy and programmatic recommendations that might help to increase safe walking and bicycling to and from school 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 Woodville Elementary School. They include both on- and off-site improvements as follows:

Woodville Elementary School On- and Off-Site Recommendations

	Improvement: On-Site	Location	From	To	Geography	Direction	Length	Comments
A1	New Canopy over Sidewalk	Bearington Drive	At the Daycare Van Zone		South side of Bearington Drive	E-W	Approx. 92 feet	

	Improvement: Off-Site	Location	From	To	Geography	Direction	Length	Comments
B1	New Crosswalk	Old Woodville Road	At Natural Bridge Road		North side of Intersection	E-W	N/A	Connect to shared-use path
B2	New Crosswalk	Old Woodville Road	At Lawhon Road		North side of Intersection	E-W	N/A	Connect to shared-used path
B3	New Striped Crosswalk	Woodville Highway	At Lawhon Rd./Bearington Drive		North side of Intersection	E-W	N/A	
B4	New Sidewalk	Canyon Creek Road	Old Woodville Road	Shumard Drive	North side of Canyon Creek Road	E-W	Approx. 644 feet	
B5	New Sidewalk	Shumard Drive	Canyon Creek Road	Bur Oak Drive	East side of Shumard Drive	N-S	Approx. 294 feet	
B6	New Sidewalk	Bur Oak Drive	Shumard Drive	Forest Grove Road	North side of Bur Oak Drive	E-W	Approx. 811 feet	
B7	Pedestrian Flashing Beacons (2)	Woodville Highway	At Natural Bridge Road crosswalk		East and west side of Woodville Highway	N/A	N/A	Subject to approval of FDOT
B8	New Sidewalk	Woodville Highway	Cemetary Road	Bearington Drive	East side of Woodville Highway	N-S	Approx. 425 feet	
B9	New Sidewalk	Woodville Highway	Natural Bridge Road	Hickory Lane	East and west side of Woodville Highway	N-S	Approx. 694 feet	
B10	New Sidewalk	Natural Bridge Road	Woodville Highway	Taff Road	North side of Natural Bridge Road	E-W	Approx. 3,112 feet	

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

On-Site Recommendations

A1) Canopy over sidewalk at daycare van drop-off/pick-up zone – This zone is currently uncovered and, thus, can cause discomfort and create inconveniences during times of inclement weather for students and staff alike. Installing a canopy structure in this area, similar to those found at many other Leon County elementary schools, could improve the loading/unloading process and flow of traffic during these critical and sometimes stressful times of day.

Off-Site Recommendations

B1) Add a new crosswalk on the north side of the Natural Bridge Road & Old Woodville Road intersection to connect the sidewalk to the shared-used trail path.

B2) Add a new crosswalk on the north side of the Lawhon Road & Old Woodville Road intersection to connect the sidewalk to the shared-used trail path.

B3) Add a new striped crosswalk on the north side of the Woodville Highway & Lawhon Road intersection.

B4) Construct a new sidewalk along Canyon Creek Road from Old Woodville Highway to Shumard Drive.

B5) Construct a new sidewalk along Shumard Drive from Canyon Creek Road to Bur Oak Drive.

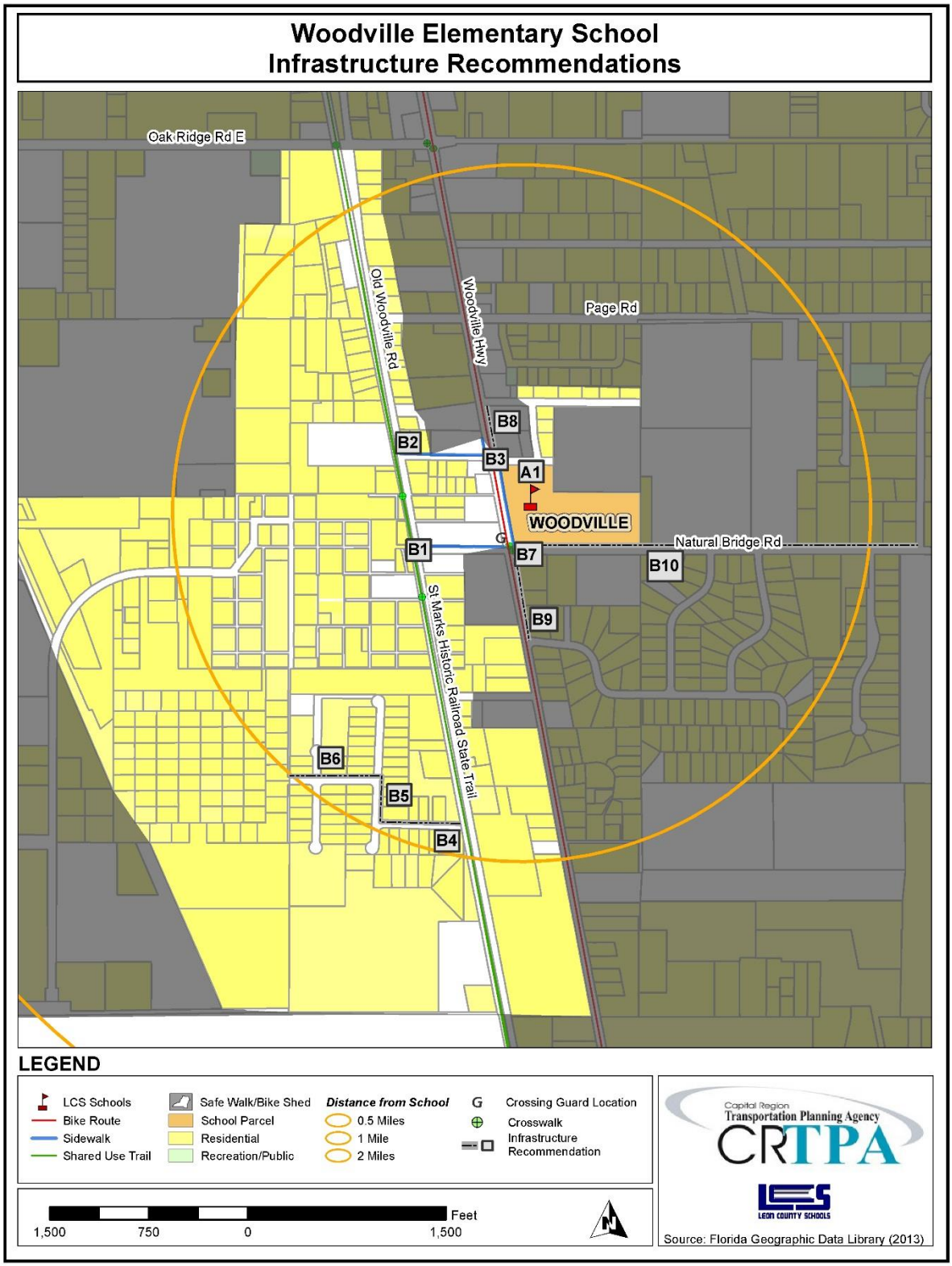
B6) Construct a new sidewalk along Bur Oak Drive from Shumard Drive to Forest Grove Road.

B7) Install two pedestrian flashing beacons on both the east and west side of the crosswalk located at the intersection of Woodville Highway & Natural Bridge Road. The flashing beacons, in conjunction with the existing school zone signage, will provide an enhanced warning for vehicles to yield to pedestrians and/or bicyclists.

B8) Constrict a new sidewalk along Woodville Highway from Cemetary Road to Bearington Drive.

B9) Construct a new sidewalk along Woodville Highway from Natural Bridge Road to Hickory Lane.

B10) Construct a new sidewalk along Natural Bridge Road from Woodville Highway to Taff Road.


Woodville Elementary School
Infrastructure Recommendations
Oak Ridge Rd E
Old Woodville Rd
Woodville Hwy
Page Rd
B8
B2
B3
A1
WOODVILLE
B1
B7
Natural Bridge Rd
B10
St Marks Historic Railroad State Trail
B9
B6
B5
B4
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
1,500
750
0
1,500
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 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, 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) Additional crossing guard – While a crossing guard is currently available at the Woodville Highway & Natural Bridge Road crosswalk, an additional crossing guard would be needed at the Woodville Highway & Lawhon Road/Bearington Drive intersection with the addition of a new crosswalk **(Off-Site Recommendation B5)**

C4) Student carpool program – Due to the rural-nature of the school, not all students live within a safe, walkable/bikeable distance to school. As such, many of these students rely on automobile rides. It would be beneficial for staff and parents of students to organize a carpool amongst the students to reduce the amount of automobiles arriving/departing to and from the school daily.

Policies

D1) Bike check and security – School policies to discourage theft and encourage bicycle riding could include having a school official or parent volunteer at the bike rack in the morning and afternoon to check-in and check-out students parking their bikes. The adult assigned to handle check-in and check-out will assist with locking the bike in the morning and will unlock the bike for the students in the afternoon. The existing bike rack is in a relatively secure, visible spot; however, theft is still a concern. 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.

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

Currently, Woodville 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; likewise, less than one percent of students bicycle to and from school. There appears to be two primary reasons. First, the school is located in a rural part of Leon County. As a result, there are a limited number of students that walk or bicycle to/from school, as many must rely heavily on school busing and automobile rides. 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 speeding vehicles and the lack of sidewalks in the area. However, parents indicated that accompanying children (by themselves/other parents), enforcing speed limits in school zones, and having bicycle/pedestrian pathways that were separated from traffic 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 such as sidewalks and crosswalks. 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, a policy suggesting the opportunity to carpool amongst students has been provided.

While Woodville Elementary 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 for those that do live near the school.

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. Twenty-one classrooms participated in the survey for a total of 337 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

Total Number of Participating Classrooms	21
Total Students Surveyed (K-5th)	337
Total K-2nd Students Surveyed	180
Total 3rd-5th Students Surveyed	157

Walking and Bicycling

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

Walking and Bicycling School-Wide Travel Patterns

The school-wide student travel surveys indicate that the walk-to-school average for the week ranged from <1% to 1%, with an overall average of 1%. Overall, the bike-to-school average for the week ranged from 0% to <1%, with an overall average of less than one percent. Of the students that bike to school, an overall average of 0% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from <1% to 1%, with an overall average of 1%.

SUMMARY OF WALKING AND BICYCLE SCHOOL-WIDE TRAVEL PATTERNS

	Walk	Bicycle	Helmet Use	Total Walk + Bike
Average Overall	1 %	<1%	0 %	1 %
Highest Day	1 %	<1 %	0 %	1 %
Lowest Day	<1 %	0 %	0 %	<1 %

Walking and Bicycling Travel Patterns of Younger-Aged Children (K – 2nd Grade)

The younger-aged (K-2nd) children student travel surveys indicate that the walk-to-school average for the week ranged from 1% to 2%, with an overall average of 1%. None of the students surveyed reported riding a bike to school. In total, the combined walk-bike average for the week ranged from 1% to 2%, with an overall average of 1%.

SUMMARY OF YOUNGER-AGED CHILDREN WALKING AND BICYCLE TRAVEL PATTERNS (K-2nd)

	Walk	Bicycle	Helmet Use	Total Walk + Bike
Average Overall	1 %	0 %	N/A	1 %
Highest Day	2 %	0 %	N/A	2 %
Lowest Day	1 %	0 %	N/A	1 %

Walking and Bicycling Travel Patterns of Older-Aged Children (3rd – 5th Grade)

The older-aged (3rd-5th) children student travel surveys indicate that the walk-to-school average for the week ranged from 0% to 1%, with an overall average of less than one percent. Overall, the bike-to-school average for the week ranged from 0% to 1%, with an overall average of less than one percent. Of the students that bike to school, an overall average of 0% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from 0% to 1%, with an overall average of 1%.

SUMMARY OF OLDER-AGED CHILDREN WALKING AND BICYCLE TRAVEL PATTERNS (3rd-5th)

	Walk	Bicycle	Helmet Use	Total Walk + Bike
Average Overall	<1 %	<1 %	0 %	1 %
Highest Day	1 %	1 %	0 %	1 %
Lowest Day	0 %	0 %	0 %	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 69% to 75%, with an overall average of 72%. Of the students that ride to school in an automobile, an overall average of 84% wore a seatbelt. Overall, the school bus-to-school average for the week

ranged from 24% to 30%, with an overall average of 27%. None of the students surveyed reported riding a public bus to school. (To note, there are no public buses within a reasonable distance to the school.)

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

	Automobile	Seat Belt	School Bus	Public Bus
Average Overall	72 %	84 %	27 %	0 %
Highest Day	75 %	88 %	30 %	0 %
Lowest Day	69 %	79 %	24 %	0 %

Bus and Automobile Travel Patterns of Younger-Aged Children (K – 2nd Grade)

The younger-aged (K-2nd) children student travel surveys indicate that the automobile-to-school average for the week ranged from 76% to 80%, with an overall average of 78%. 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 19% to 23%, with an overall average of 21%. None of the students surveyed reported riding a public bus to school.

SUMMARY OF YOUNGER-AGED CHILDREN BUS & AUTOMOBILE DROP-OFF TRAVEL PATTERNS (K-2nd)

	Automobile	Seat Belt	School Bus	Public Bus
Average Overall	78 %	83 %	21 %	0 %
Highest Day	80 %	89 %	23 %	0 %
Lowest Day	76 %	76 %	19 %	0 %

Bus and Automobile Travel Patterns of Older Children (3rd – 5th Grade)

The older-aged (3rd-5th) children student travel surveys indicate that the automobile-to-school average for the week ranged from 62% to 70%, with an overall average of 66%. Of the students that ride to school in an automobile, an overall average of 86% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 30% to 38%, with an overall average of 33%. None of the students surveyed reported riding a public bus to school.

SUMMARY OF OLDER-AGED CHILDREN BUS & AUTOMOBILE DROP-OFF TRAVEL PATTERNS (3rd-5th)

	Automobile	Seat Belt	School Bus	Public Bus
Average Overall	66 %	86 %	33 %	0 %
Highest Day	70 %	89 %	38 %	0 %
Lowest Day	62 %	83 %	30 %	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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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 130 parent surveys returned. Of those, 47 (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 50/50 by grade level grouping, with 24 students representing Kindergarten through 2nd Grade, and 23 students representing 3rd Grade through 5th Grade.

SUMMARY OF PARENT SURVEY PARTICIPATION

Total Enrollment	462
Total Number of Parent Surveys	130
Total Number within 2 Miles (K-2nd Grade)	24
Total Number within 2 Miles (3rd-5th Grades)	23
Percentage of Surveys within 2 Miles	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

Morning	Average Overall
Car	85 %
School Bus	11 %
Walk	4 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
Afternoon	
Car	77 %
School Bus	11 %
Walk	9 %
Other	4 %
Bicycle	0 %
Public Bus	0 %

Commuting Patterns of Younger-Aged Children (K – 2nd Grade)

The surveys of parents of younger-aged (K-2nd grade) indicate that the car-to-school average for a typical week is 79% in both the morning and afternoon. The school bus-to-school average for a typical week is 17% in both the morning and afternoon. The walk-to-school average for a typical week is 4% in both the morning and afternoon. None of the students rode a bicycle, public bus, or used an alternative commute mode in the morning or afternoon.

COMMUTING PATTERNS OF YOUNGER-AGED CHILDREN (K-2nd)

Morning	Average Overall
Car	79 %
School Bus	17 %
Walk	4 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
Afternoon	
Car	79 %
School Bus	17 %
Walk	4 %
Bicycle	0 %
Public Bus	0%
Other	0%

Commuting Patterns of Older-Aged Children (3rd – 5th Grade)

The surveys of parents of older-aged (3rd-5th grade) indicate that the car-to-school average for a typical week is 91% in the morning and decreases to 74% in the afternoon. The walk-to-school average for a typical week is 4% in the morning and 13% in the afternoon. The school bus-to-school average for a typical week is 4% in both the morning and afternoon. None of the students use an alternative commute mode in the morning. However, 9% use an alternative commute mode in the afternoon. Also, none of the students rode a bicycle or public bus in the morning or afternoon.

COMMUTING PATTERNS OF OLDER-AGED CHILDREN (3rd-5th)

Morning	**Average Overall**
Car	91 %
Walk	4 %
School Bus	4 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
Afternoon	
Car	74 %
Walk	13 %
Other	9 %
School Bus	4 %
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

Neighborhood Safety Concern	**Number of Comments**
Issues with Sidewalks/Walking/Bicycle Lanes	16
Speeding Vehicles	15
Issues with Transportation Outside of School Zone	14

Neighborhood Safety Concerns For Younger-Aged Children (K – 2nd Grade)

Neighborhood safety concerns for parents of younger-aged (K-2nd) children include three main concerns including issues with sidewalks/walking, speeding vehicles, and transportation outside of the school zone. There were approximately seven comments of concern regarding issues with sidewalks and bicycle lanes General concerns include the lack of sidewalks and bicycle lanes. Specific locations where sidewalks and bicycle lanes tend to be a problem are Natural Bridge Road, Woodville Highway, and Hickory Lane. Additionally, there were approximately seven comments of concern regarding issues with speeding vehicles. Specific locations where speeding vehicles tend to be a problem are Woodville Highway, Natural Bridge Road, and Page Road. Lastly, there were six comments of concern regarding issues with transportation outside of the school zone. General concerns include the availability of crossing guards, high volumes of traffic, faded stop signs, and the need for a traffic light at the intersection of Natural Bridge Road & Woodville Highway.

SUMMARY OF TOP NEIGHBORHOOD SAFETY CONCERNS (K-2nd Grade)

Neighborhood Safety Concern	Number of Comments
Issues with Sidewalks/Bicycle Lanes	7
Speeding Vehicles	7
Issues with Transportation Outside of School Zone	6

Neighborhood Safety Concerns For Older-Aged Children (3rd – 5th Grade)

Neighborhood safety concerns for parents of older-aged (3rd-5th) children include issues with sidewalks/walking, speeding vehicles, and issues with 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, poor lighting, and making crosswalks a more distinctive color. A specific location where sidewalks and walking tend to be a problem is Natural Bridge Road. Additionally, there were eight comments of concern regarding issues with speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are Natural Bridge Road and Woodville Highway. Parents also mention vehicles speeding in the school zone. Lastly, there were eight comments of concern regarding issues with transportation outside of the school zone. General concerns include the availability of crossing guards before and after school, high volumes of traffic, and the need for a traffic light at the intersection of Natural Bridge Road & Woodville Highway.

SUMMARY OF TOP NEIGHBORHOOD SAFETY CONCERNS (3rd-5th Grade)

Neighborhood Safety Concern	Number of Comments
Issues with Sidewalks/Walking	9
Speeding Vehicles	8
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).

SUMMARY OF TOP RANKING SCHOOL-WIDE INFLUENTIAL FACTORS RESULTS

	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		*1*	*0*	*1*	*2*	*28*	8
#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school		*1*	*0*	*2*	*3*	*25*	10
#3 Accompanied by myself or other parents		*0*	*0*	*1*	*6*	*24*	14

Influential Factors for Younger-Aged Children (K – 2nd Grade)

Parents of children in Kindergarten through 2nd grade agreed that the top four influential factors to allow their child to walk or bicycle to school more often included factors related to accompanying children (by themselves/other parents), enforcing speed limits in school zones, and having continuous and separate bicycle/pedestrian pathways from traffic.

TOP RANKING INFLUENTIAL FACTORS FOR YOUNGER-AGED CHILDREN (K-2nd)

	SCALE	1	2	3	4	5	N/A
I would allow my child to walk or bicycle to school more often if:							
#1 Accompanied by myself or other parents		*0*	*0*	*0*	*2*	*13*	10
#1 Speed limits were strictly enforced in school speed zones		*1*	*0*	*1*	*0*	*13*	5
#1 There were continuous sidewalks or bike paths from my neighborhood to school		*1*	*0*	*0*	*0*	*13*	5
#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school		*1*	*0*	*2*	*1*	*12*	4

Influential Factors for Older-Aged Children (3rd – 5th Grade)

Parents of children in 3rd through 5th grade agreed that the top five influential factors to allow their child to walk or bicycle to school more often included factors related to enforcing speed limits in school zones and marking zones with flashing signs, having separate bicycle/pedestrian pathways, availability of crossing guards, and accompanying children (by themselves/other parents).

TOP RANKING INFLUENTIAL FACTORS FOR OLDER-AGED CHILDREN (3rd-5th)

	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		*0*	*0*	*0*	*2*	*15*	3
#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school		*0*	*0*	*0*	*2*	*13*	6
#3 Additional crossing guards were provided at busy intersections		*0*	*2*	*1*	*1*	*12*	5
#4 Accompanied by myself or other parents		*0*	*0*	*1*	*4*	*11*	4
#4 School speed zones were marked with flashing signs		*0*	*1*	*0*	*3*	*11*	5