August 2014

# Safe Routes to School Audit Report
# Chaires Elementary School

Leon County
Public Schools

# Table of Contents

Acknowledgements ..... iii
Chapter 1: Introduction ..... 1
Project Purpose ..... 1
School Overview ..... 1
School Zone ..... 1
Chapter 2: On-Site Meeting and Inventory ..... 3
Date and Weather Conditions ..... 3
Highlights and Key Observations of On-Site Meeting ..... 3
Circulation ..... 3
Inventory Map ..... 4
Issues and Opportunities ..... 6
Chapter 3: Student Travel Survey – Summary of Results ..... 7
Chapter 4: Parent Survey – Summary of Results ..... 8
Chapter 5: Neighborhood Field Review ..... 9
Character of Neighborhood Area ..... 9
Crash Data ..... 9
Neighborhood Assessment ..... 9
Walk/Bike Shed ..... 10
Methodology ..... 10
Evaluating Roadways ..... 11
Hazardous Walking Conditions, as defined per Florida Statute ..... 12
Evaluating Other Factors and Barriers ..... 13
Chapter 6: Findings and Recommendations ..... 15
Infrastructure Improvements ..... 15
On-Site Recommendations ..... 17
Off-Site Recommendations ..... 17
Programs ..... 19
Policies ..... 20
Planning-Level Cost Estimates ..... 21
Chapter 7: Conclusion ..... 22

Appendix A: Student Travel Survey.....24
Appendix B: Student Travel Survey – Detailed Analysis .....25
Appendix C: Parent Survey.....29
Appendix D: Parent Survey – Detailed Analysis.....31

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**Capital Region Transportation Planning Agency (CRTPA)**

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**Leon County Public Schools (LCS)**

**Florida Department of Transportation (FDOT)**

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

**Prepared By:**

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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

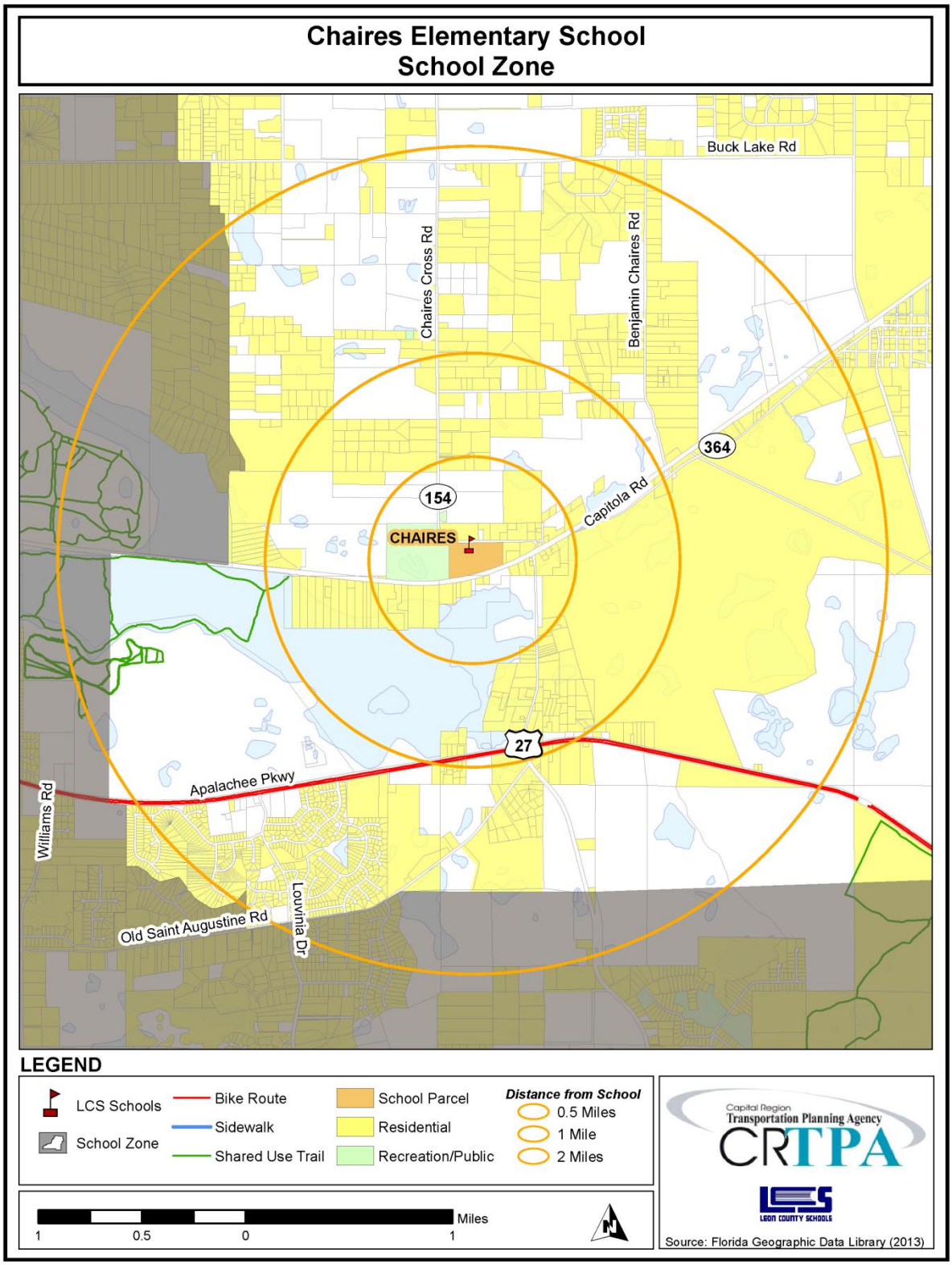
Chaires Elementary School is located at 4774 Chaires Cross Road, Tallahassee, 32317 in Leon County, Florida. It is part of the Leon County Public Schools system. The school is named after one of the three Chaires brothers who helped settle Tallahassee and the surrounding areas in Leon County. The school has served as an important community structure in the area since its historical roots began in 1928. Regular school hours are from 8:30am to 2:50pm. A before school program is offered at the school from 7:00am to 8:00am. Additionally, an after school program is offered from 2:55pm to 6:00pm.

The number of students enrolled at the school, for the 2013 school year, was 572. The school has a current capacity for 776 students. The school includes grade levels Pre-Kindergarten through 5$^{th}$ Grade.

Students attending this school feed into either Fairview or Swift Creek Middle Schools and either Lincoln or Rickards High Schools.

## School Zone

The Chaires Elementary school zone is located in a more rural portion of eastern Leon County and encompasses the neighborhoods of Chaires, Pine Meadows, and High Halden, as well as, a portion of Lake Lafayette. Land uses in the school zone consist of mostly residential with some recreation. A railroad line bisects the zone into north and south. The Chaires school zone includes three major roadways. The Apalachee Parkway and Capitola Road run mostly parallel east to west while Chaires Cross Road runs north to south near the middle of the zone. An important recreational area within the school zone includes Chaires Community Park, as well as, the J.R. Alford Greenway Trail just west of the zone.


Chaires Elementary School
School Zone
Buck Lake Rd
Chaires Cross Rd
Benjamin Chaires Rd
364
154
Capitola Rd
CHAIRES
27
Apalachee Pkwy
Williams Rd
Louvinia Dr
Old Saint Augustine Rd
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 60 degrees Fahrenheit.

## Highlights and Key Observations of On-Site Meeting

During this visit, Chaires 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 Chaires Cross Road; however, there are no other traffic calming measures present along the roadway. Students are permitted to arrive to school as early as 7:00am and there are after school programs available until 6:00pm. There are currently no policies or programs in place related to bicycle and pedestrian safety. However, school staff highly discourages any children from crossing the railroad tracks near the school.

Due to the rural nature of the area surrounding the school, there very few students that walk or bike to school. As such, there are no designated crossing guards around the school. Additionally, there are no temporary traffic control devices (i.e. cones/signs) used, as they are not needed. School staff and administrators serve as ushers for students at both the automobile drop-off/pick-up and school bus zones. The student safety patrol assist with these functions as well. School representatives noted that enrollment numbers at the school are down so there is a chance that the school may get new school zone boundaries in the future. It was also noted that crime in the area is low and not a major concern.

### 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 very rural neighborhood with limited residential housing and few streets. As a result, few students are known to commute via walking or bicycling, as many must rely heavily on school busing and automobile rides due to the long distances from home to school. There is no bicycle parking located at the school.

The single lane school bus drop-off and pick up zone functions adequately. The zone for arrivals and departures is mostly covered and there is direct access to a walking facility. Six school buses use the zone every morning and afternoon. Additionally, three program vans use the zone in the afternoons.

The parent drop-off and pick up zone functions adequately to accommodate the volume of automobiles entering and exiting the site. The zone for arrivals and departures is covered and there are ushers to

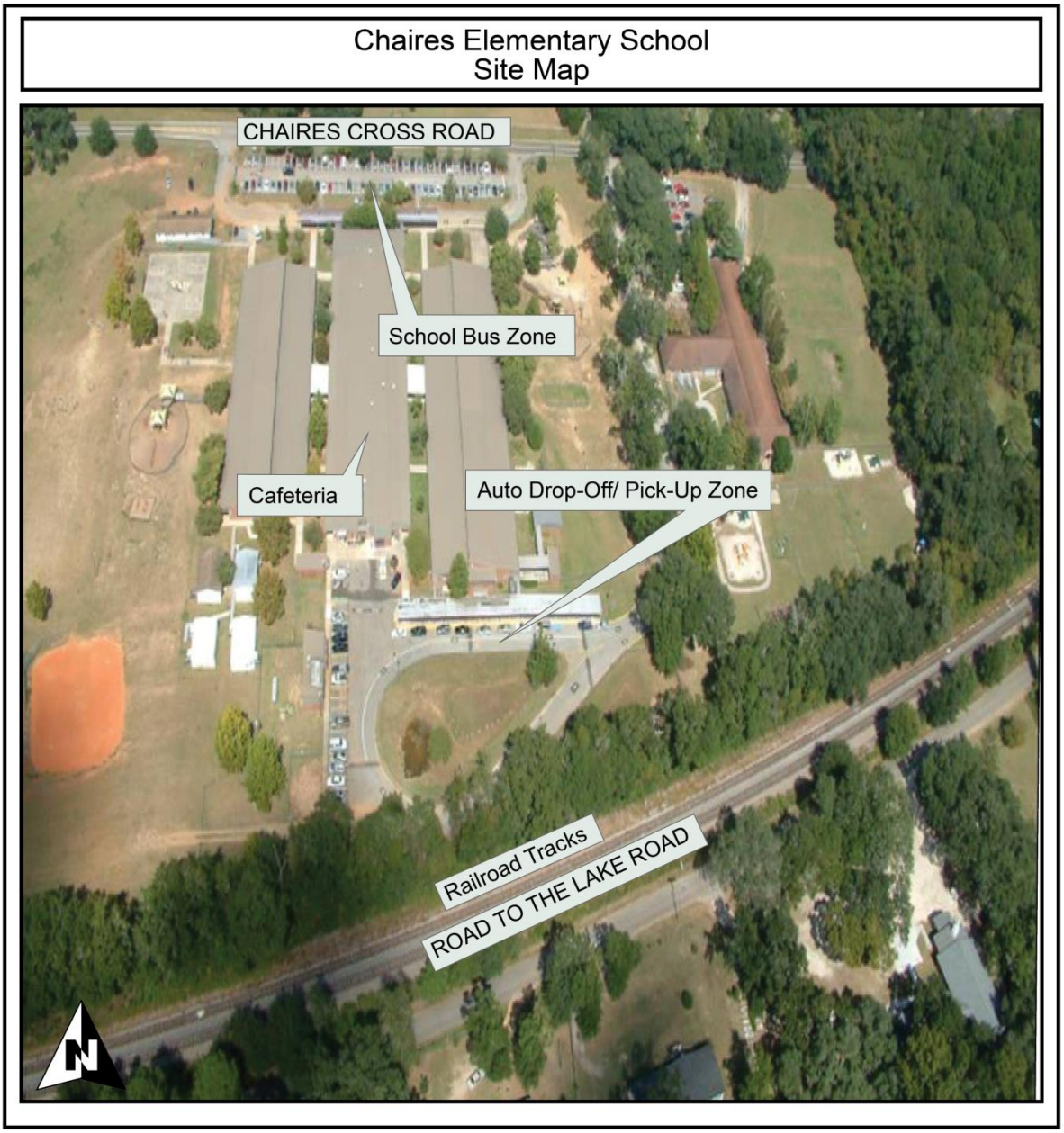
assist students in loading and unloading from vehicles. Additionally, there are guard rails to separate the vehicles from the walking facility in the zone.

## Inventory Map

An aerial photograph showing Chaires Elementary School is located on the following page. As shown in the photo, the school fronts Chaires Cross Road. There is no bicycle parking rack located at the school.

There are no sidewalks available on Chaires Cross Road or the surrounding residential streets leading to Chaires Cross Road. Additionally, there are railroad tracks bordering the school to the south.

The automobile pick-up and drop-off zone is located at the rear of the school. However, automobiles both enter and exit the zone along Chaires Cross Road. Parking spaces are located in this area as well. The bus drop-off and pick-up zone is separately located along the main entrance of the school along Chaires Cross Road. Buses enter the zone from and exit onto Chaires Cross Road. Additional parking spaces are located in this area as well.


Chaires Elementary School
Site Map
CHAIRES CROSS ROAD
School Bus Zone
Cafeteria
Auto Drop-Off/ Pick-Up Zone
Railroad Tracks
ROAD TO THE LAKE ROAD
N

## Issues and Opportunities

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

Geography is the primary issue with students' ability to walk and bicycle to school. The neighborhood is very rural. As such, the distance to/from home and school serves as a major barrier. Also, near the school is a railroad line that is not very appropriate for crossing by elementary school children, especially those at lower grade levels. These kind of external factors are often difficult to overcome, at least in the short term.

Since there are limited opportunities to walk and bike in the area, consideration should be given to alternative forms of transportation such as carpooling. School-related and –supportive committees such as the Parent/Teacher Organization (PTO) can be used to educate parents on the opportunities and benefits to carpooling, where such options are feasible. These groups can also help get the word out to parents concerning any on-campus issues, such as appropriate behavior and protocol within the parent drop-off/pick-up zone.

## 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 Chaires Elementary School – approximately two out of three students – are dropped off at school by car. The percentage rises slightly for younger age children, which is not uncommon. Riding a school bus ranked a distant second place at approximately 34 percent. The percentage rises slightly for older-age children. A low percentage, less than one percent, reported biking to school. None of the students surveyed reported walking or riding a public to school. (To note, there are no public buses within a reasonable distance to the school.)

**SUMMARY OF STUDENT TRAVEL SURVEY POPULATION**

| | Walk | Bicycle | Automobile | School Bus | Public Bus |
|---|---|---|---|---|---|
| **Average Overall** | 0 % | <1 % | 66 % | 34 % | 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 Chaires Elementary School students are dropped off by car or ride a school bus in the morning, while fewer return home by the same modes in the afternoon. In the afternoon, there are greater percentages of students returning home by another mode not described specifically in the survey such as an after-school program van. None of students commutes to and from school by either walking or bicycling.

With regard to neighborhood safety, the concerns were generally agreed upon by parents from both Kindergarten through 2$^{nd}$ and 3$^{rd}$ through 5$^{th}$. Survey respondents overall showed concerns for the condition and/or lack of sidewalks as well as the behavioral patterns of automobile drivers, generally, in terms of excessive driving speeds and, issues with transportation outside of the school zone. As for speeding complaints, specific problem locations cited include Chaires Cross Road and Buck Lake Road.

With regard to facts that might influence their decision to allow their child to walk or bike to school, survey responses indicate that factors such as having a greater adult presence along routes to school, enforcing speed limits in school zones, and having separated bicycle/pedestrian pathways were mutually agreed upon by parents from both Kindergarten through 2$^{nd}$ and 3$^{rd}$ through 5$^{th}$.

# 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 Chaires Elementary School. On the day of the field review, the 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 Chaires Elementary School.

## Character of Neighborhood Area

Chaires Elementary is located in a very rural area comprised of low-density, single-family homes on large parcels of land. Streets throughout the area tend to only connect a few homes per street due to the dispersed nature of the residences. There is no bike-ped infrastructure present in the area surrounding the school. Additionally, there are no direct connections to Chaires Community Park via sidewalk. A CSX railroad line runs directly behind the school and is a major barrier bike-ped barrier. There are some residential areas south of the railroad line, but they are close to the two-mile mark and would have to cross a difficult roadway in order to access the school.

Major roadways in the school zone include:

- Apalachee Parkway, a mostly east-west four lane roadway with a posted speed limit between 50-55mph west of Chaires Cross Road and between 60-65mph east of Chaires Cross Road.
- Capitola Road, a southwest-northeast two lane roadway with a posted speed limit of 35mph or less.
- Chaires Cross Road, a north-south two lane roadway with a posted speed limit between 50-55mph just south of Buck Lake which transitions to less than 35mph closer to the school.

## 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 no bicycle or pedestrian crashes reported within the theoretical two-mile walk/bike radius of Chaires Elementary School between 2009 and 2011.

## Neighborhood Assessment

The overall neighborhood layout surrounding Chaires Elementary School does not lend itself well to walkability. The area is quite rural and there are few neighborhoods near the school. Additionally, there are no sidewalks and bicycles lanes on roadways near the school, discouraging non-motorized access to the school. Additionally railroad tracks border the school to the south, creating yet another barrier for walking and bicycling. Project-specific recommendations can be found in the Findings and Recommendations chapter of this report.

## Walk/Bike Shed

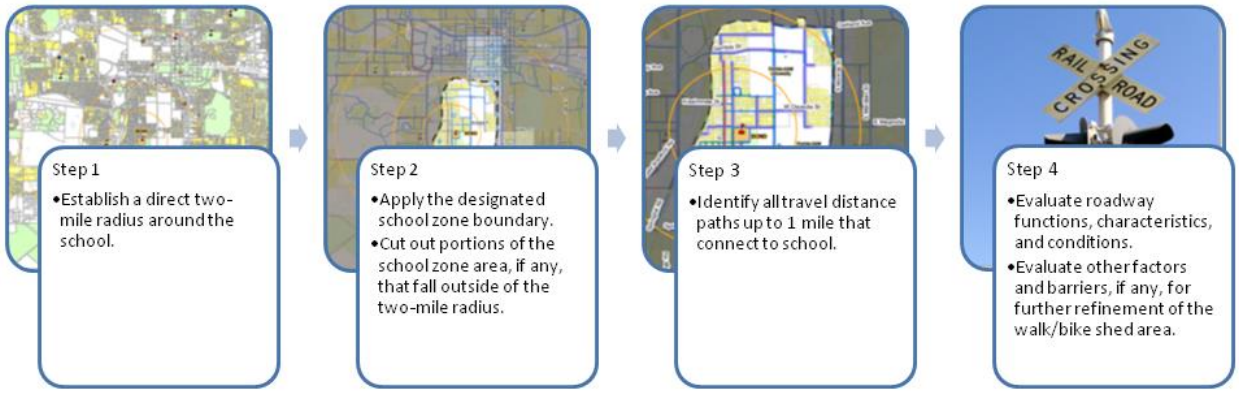
As mentioned previously, a walk/bike shed area was delineated on a map within the school zone, surrounding the school. The Chaires Elementary School walk/bike shed map is included at the end of the chapter.

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.

Due to the lack of sidewalk/pathway infrastructure and the rural-nature of the area, the walk/bike shed for Chaires Elementary School mostly extends only one-half mile north and one-half mile east from the school. The lack of sidewalks and bicycle lanes along Chaires Cross Road, a non-local road, presents a hazardous condition for students traveling to/from school by foot or bicycle. Additionally, the existing railroad tracks form the southern limits of the walk/bike shed. It should be noted that certain improvement recommendations could potentially expand the potential walk/bike shed area, due to improved conditions for walking and bicycling.

### Methodology

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



## Evaluating Roadways

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

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

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

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

Multiple factors are no doubt present for each hazard. And no two factors or situations are the same. This makes evaluation as much of an art as a science. Nonetheless, there are certain conditions in and of themselves that are considered decisive limitations to elementary school children walking and/or bicycling to school. Such conditions where walking and/or bicycling are deemed hazardous include the following. It should be noted that only one condition from either table needs to be met for a situation to be deemed hazardous.

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

| Roadway Crossing Points | | | | |
|---|---|---|---|---|
| **Crosswalk Type** | **Hazardous Conditions** | | | |
| | **Type of Road** | **Posted Speed Limit** | **Peak Hour Traffic** | **Length** |
| Unmarked Crosswalk<br>Unsignalized Crosswalk | More than 2 travel lanes | Greater than 25 mph | Greater than 1,500 | N/A |
| Marked Crosswalk<br>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.

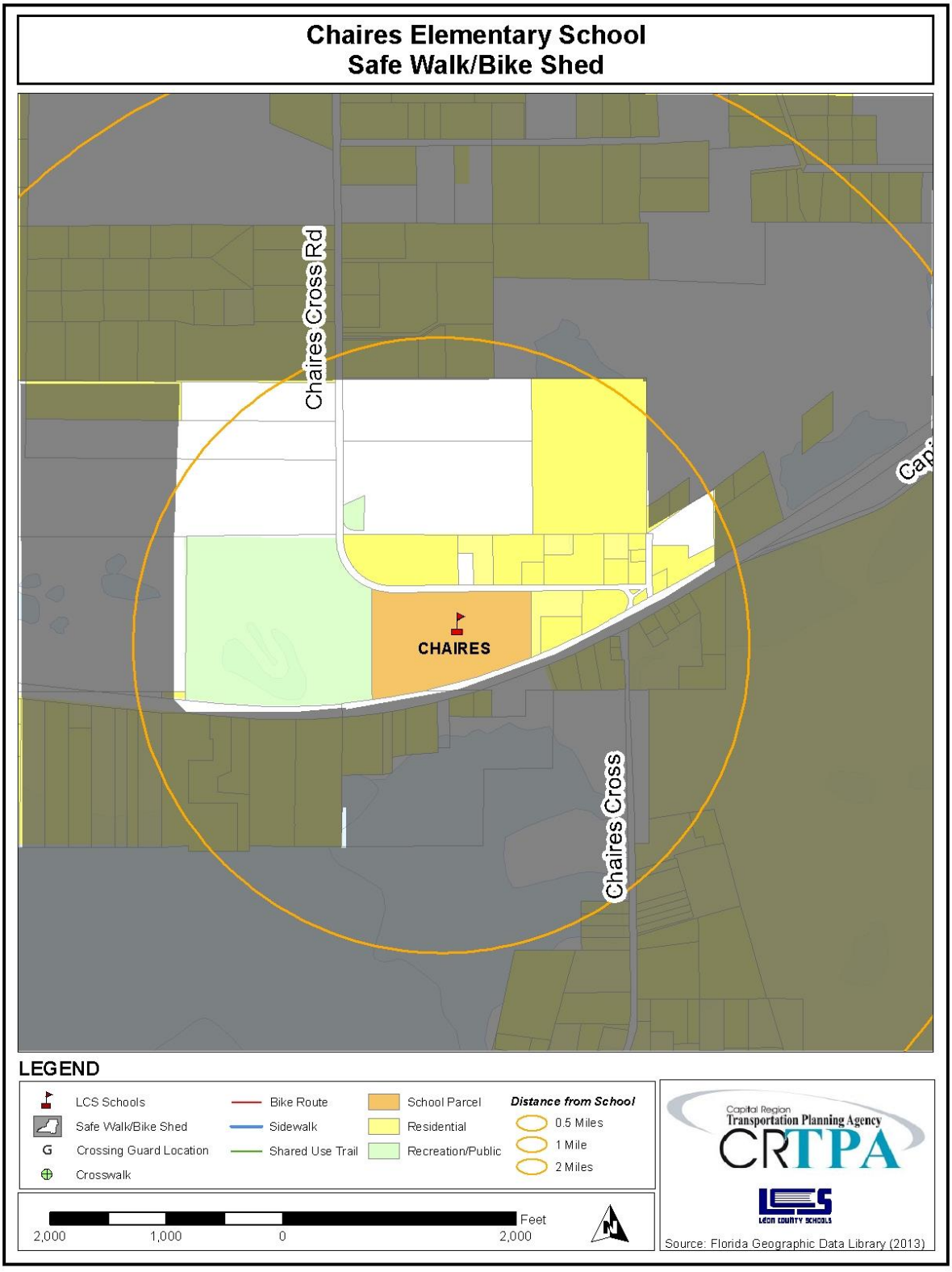
In determining a safe walking and bicycling area, this report applies a methodology and criterion that is more stringent than State standards and more in line with existing studies, research and opinions collected from numerous experts in the fields of pedestrian and bicycle transportation and safe routes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


Chaires Elementary School
Safe Walk/Bike Shed
Chaires Cross Rd
CHAIRES
Chaires Cross
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
2,000
1,000
0
2,000
Capital Region Transportation Planning Agency
CRTPA
Source: Florida Geographic Data Library (2013)

# Chapter 6: Findings and Recommendations

Walking and bicycling to Chaires Elementary School can be difficult due to the lack of bicycle/pedestrian connections to the few residential land uses in the area. However, there are a few infrastructure recommendations that would provide much benefit toward improving the existing conditions. For the majority of students that require automobile or school bus access to school, the existing circulation configurations at the school are adequate. Additional some policy and programmatic recommendations that might help create safer travel 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 the few infrastructure needs and improvements that could enhance walking and bicycling safety and convenience to and from Chaires Elementary School. They include both on- and off-site improvements as follows:

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

| | Improvement: On-Site | Location | From | To | Geography | Direction | Length | Comments |
|---|---|---|---|---|---|---|---|---|
| A1 | New Sidewalk | Chaires Cross Road | Main School Entrance | School Bus Driveway Entrance | West side of School Bus Zone | E-W | approx 125 feet | Existing fencing would need to be reconfigured |
| A2 | New Sidewalk | Chaires Cross Road | Main School Entrance | School Bus Driveway Exit | East side of School Bus Zone | E-W | approx 165 feet | Existing fencing would need to be reconfigured |

| | Improvement: Off-Site | Location | From | To | Geography | Direction | Length | Comments |
|---|---|---|---|---|---|---|---|---|
| B1 | New Sidewalk | Chaires Cross Road | School Bus Driveway Entrance | Chaires Community Park Entrance | South side of Chaires Cross Road | E-W | approx 425 feet | Include buffer from roadway |
| B2 | New Sidewalk | Chaires Cross Road | School Bus Driveway Exit | Parkhill Road | South side of Chaires Cross Road | E-W | approx 1,290 feet | Include buffer from roadway |
| B3 | New Striped Crosswalk | Chaires Cross Road | At Parkhill Road | | North side of Parkhill Road | E-W | approx 30 feet | Include associated pedestrian warning signage before and after crosswalk |
| B4 | New Sidewalk | Chaires Cross Road | Chaires Community Park Entrance | Boykin Road | West side of Chaires Cross Road | N-S | approx. 3,662 feet | Low priority project |

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

### On-Site Recommendations

A1) Construct a new sidewalk along Chaires Cross Road from the main entrance of school to the school bus entrance. This will allow a connection to **Off-Site Recommendation B1**.

A2) Construct a new sidewalk along Chaires Cross Road from the main entrance of school to the school bus exit. This will allow a connection to **Off-Site Recommendation B2**.

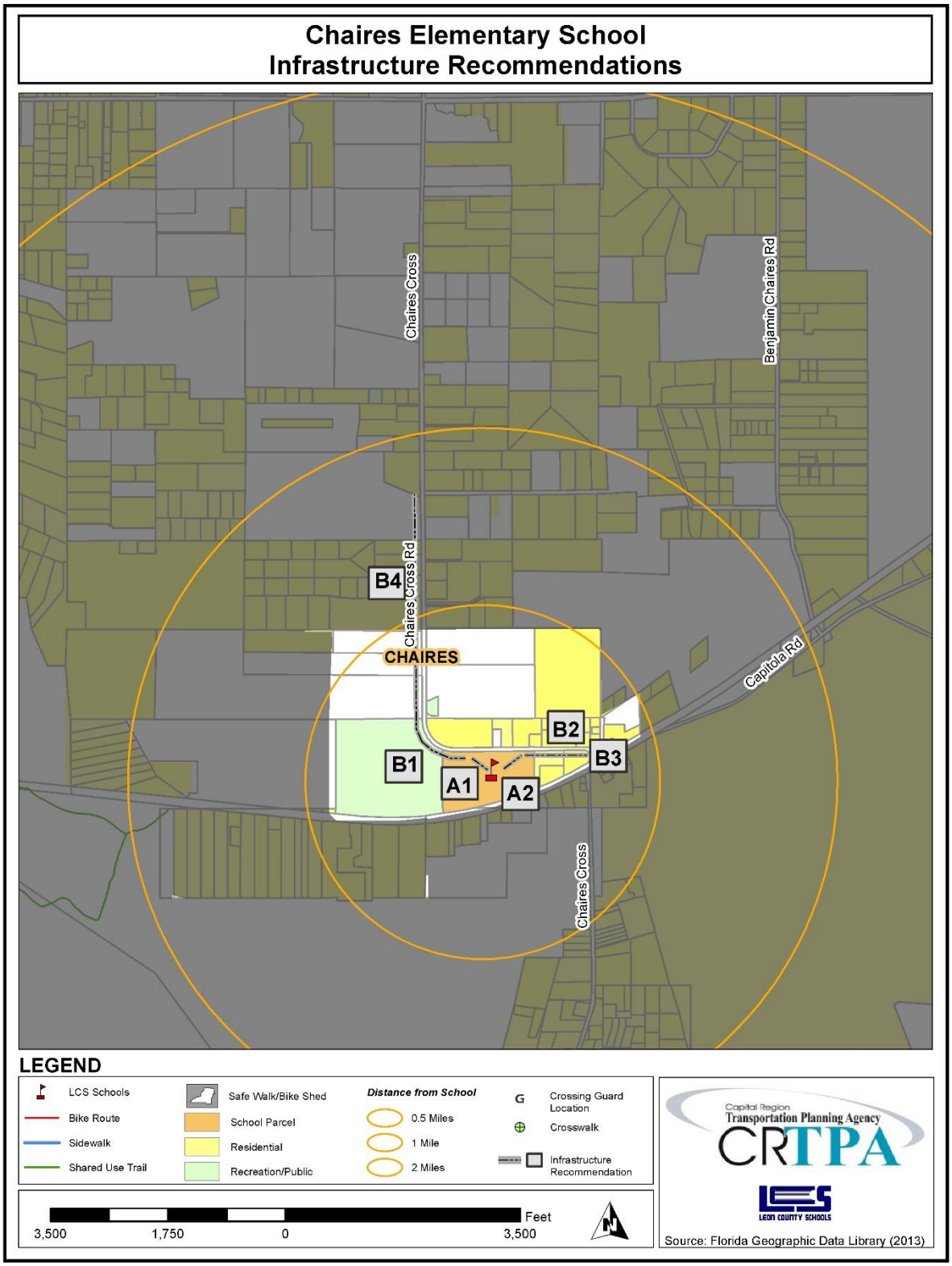
### Off-Site Recommendations

B1) Construct a new sidewalk along Chaires Cross Road from the school's bus entrance to the entrance of Chaires Community Park. This will give students a safe route to/from the park for sports or programs at the community center.

B2) Construct a new sidewalk along Chaires Cross Road from the school bus exit to Parkhill Road.

B3) **(In conjunction with Off-Site Recommendation B2)** Mark a new striped crosswalk at the intersection of Chaires Cross Road & Parkhill Drive. Additionally, associated pedestrian warning signage should be included before and after the crosswalk to warn oncoming motorists.

B4) Construct a new sidewalk along Chaires Cross Road from the entrance of Chaires Community Park to Boykin Road. It should be noted that this sidewalk project is considered a low priority and should only be constructed if there is development pressure in the area to increase densities.


Chaires Elementary School
Infrastructure Recommendations
Chaires Cross
Benjamin Chaires Rd
Chaires Cross Rd
B4
CHAIRES
Capitola Rd
B2
B3
B1
A1
A2
Chaires Cross
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
3,500
1,750
0
3,500
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; and encouraging families who normally drive to school to look for ways to safely and legally park in a parking lot away from school such as Chaires Community Park, but within walking distance, and then walk to school from the lot.

C2) Bicycle safety and accessibility workshop – Organize and hold a workshop or a bike rodeo that demonstrates bicycle safety topics, catered to younger children, such as bicycle hand signals, how to properly wear a bicycle helmet, and properly obeying traffic signs/signals. Parents and students should be reminded that under Florida Law, anyone under the age of 16 must wear a bicycle helmet. An on-campus bicycle obstacle course that covers skills such as avoiding obstacles, balancing at slow speeds, turning, and making emergency stops can be very helpful for young riders. Additionally, a group bicycle ride to residences near 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 clubs/organizations, 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) Walk/Run Mileage Club - Create a mileage club where students or entire classrooms keep track of how much they walk to compete for prizes or certificates; This can be a before or after school program, run by school staff or parent volunteers that meets once a week and walks or runs around the school's play field. This will help encourage students at Chaires Elementary School to walk more since there are few opportunities to do so from school to home, and vice versa.

C4) Safe Routes to Bus Stops – Due to the rural-nature of the school, many students rely on school buses to transport them during school commuting hours. Creating safe routes to bus stops is a way of encouraging more students to walk to/from their bus stops in the mornings and afternoons instead of having parents drive them to a bus stop.

C5) Crossing Guards – **(In conjunction with Off-Site Recommendation B3)** Having crossing guards available at the recommended crosswalk at the intersection of Chaires Cross Road & Parkhill Drive would be beneficial to children commuting to/from school by walking or bicycling.

C6) 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) Designated bicycling parking – While few, if any, students commute to and from school by bicycle, it would be beneficial to establish a designated bicycle parking location on campus for students that may wish to bike to school.

D2) Signage rewording – A sign along the fencing in front of the school states “No Skateboarding, Rollerblading, or Biking Allowed.” While intended to keep students from doing the activities on campus, it may send the wrong message to students. Students may be discouraged from bicycling to school with such a sign in place. Consider rewording the sign to state “No Skateboarding, Rollerblading, or Biking Allowed on Campus.”

## 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, Chaires Elementary School does not have high walking and bicycling commuting rates for students. Overall, none of the students commute to and from school by walking and 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 very rural neighborhood where there are minimal opportunities for housing nearby. 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 due to the distance. Additionally, a railroad line prohibits any direct connections south of the school property.

The second reason for low walking and bicycling rates to school was revealed from information garnered from the parent survey results as well as meetings with school representatives. Overall, when it comes to allowing their children to walk or bicycle to school, parents primarily expressed concerns for the condition and/or lack of sidewalks as well as speeding vehicles. However, parents indicated that the presence of adults along routes to school during school commuting hours, enforcement of speed limits, and separated bicycle/pedestrian pathways were all factors that might influence their decision to allow their children to walk or bicycle to school.

For those few 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, there is the opportunity to carpool amongst students.

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

## *Capital Region Transportation Planning Agency*

# Appendix B: Student Travel Survey – Detailed Analysis

The survey consisted of a one-page sheet with a script of questions for homeroom teachers to read to students as they took morning attendance. Surveys were conducted each morning during a typical week of the school year for a total of five straight days, Monday to Friday. The script prompted teachers to ask and record the number of children in their class that came to school by walking, bicycling, car, school bus, or city bus. The student travel survey was conducted in February, 2013 Twenty-four classrooms participated in the survey for a total of 395 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** | 24 |
| **Total Students Surveyed (K-5th)** | 395 |
| **Total K-2nd Students Surveyed** | 190 |
| **Total 3rd-5th Students Surveyed** | 205 |

## 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 none of the students surveyed reported walking to school. Overall, the bike-to-school average for the week ranged from 0% to <1%, with an overall overage of less than one percent. Of the students that bike to school, an overall average of 100% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from 0% to <1%, with an overall average of less than one percent.

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

| | Walk | Bicycle | Helmet Use | Total Walk + Bike |
|---|---|---|---|---|
| **Average Overall** | 0 % | <1 % | 100 % | <1 % |
| **Highest Day** | 0 % | <1 % | 100 % | <1 % |
| **Lowest Day** | 0 % | 0 % | 100 % | 0 % |

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

The younger-aged (K-2nd) student travel surveys indicate that none of the students surveyed reported walking to school. 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 100% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from 0% to 1%, with an overall average of less than one percent.

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

| | Walk | Bicycle | Helmet Use | Total Walk + Bike |
|---|---|---|---|---|
| **Average Overall** | 0 % | <1 % | 100 % | <1 % |
| **Highest Day** | 0 % | 1 % | 100 % | 1 % |
| **Lowest Day** | 0 % | 0 % | 100 % | 0 % |

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

The older-aged (3rd-5th) student travel surveys indicate that none of the students surveyed reported walking or biking to school.

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

| | Walk | Bicycle | Helmet Use | Total Walk + Bike |
|---|---|---|---|---|
| **Average Overall** | 0 % | 0 % | N/A | 0 % |
| **Highest Day** | 0 % | 0 % | N/A | 0 % |
| **Lowest Day** | 0 % | 0 % | N/A | 0 % |

## Bus and Automobile Drop-Off

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

### Bus and Automobile School-Wide Travel Patterns

The school-wide travel surveys indicate that the automobile-to-school average for the week ranged from 64% to 68%, with an overall average of 66%. Of the students that ride to school in an automobile,

[2] Does not include bicycle data for Day 5. This data was not available on the surveys.
[3] Includes one K-5th class

an overall average of 94% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 31% to 36%, with an overall average of 34%. 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** | 66 % | 94 % | 34 % | 0 % |
| **Highest Day** | 68 % | 97 % | 36 % | 0 % |
| **Lowest Day** | 64 % | 88 % | 31 % | 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 68% to 72%, with an overall average of 70%. Of the students that ride to school in an automobile, an overall average of 95% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 27% to 32%, with an overall average of 30%. 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** | 70 % | 95 % | 30 % | 0 % |
| **Highest Day** | 72 % | 98 % | 32 % | 0 % |
| **Lowest Day** | 68 % | 88 % | 27 % | 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 60% to 65%, with an overall average of 62%. Of the students that ride to school in an automobile, an overall average of 92% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 35% to 40%, with an overall average of 38%. 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)[4]**

| | Automobile | Seat Belt | School Bus | Public Bus |
|---|---|---|---|---|
| **Average Overall** | 62 % | 92 % | 38 % | 0 % |
| **Highest Day** | 65 % | 95 % | 40 % | 0 % |
| **Lowest Day** | 60 % | 88 % | 35 % | 0 % |

[4] Includes one K-5th class

# 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: | | | | | | |

_____

_____

_____

_____

## *Capital Region Transportation Planning Agency*

# Appendix D: Parent Survey – Detailed Analysis

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

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

The parent surveys were conducted during the winter/spring semester of 2013. There were 110 parent surveys returned. Of those, 20 (18%) 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 11 students representing Kindergarten through 2nd Grade, and 9 students representing 3rd Grade through 5th Grade.

**SUMMARY OF PARENT SURVEY PARTICIPATION**

| | |
|---|---|
| **Total Enrollment** | 572 |
| **Total Number of Parent Surveys** | 110 |
| **Total Number within 2 Miles (K-2nd Grade)** | 11 |
| **Total Number within 2 Miles (3rd-5th Grades)** | 9 |
| **Percentage of Surveys within 2 Miles** | 18 % |

### 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 | 55% |
| School Bus | 45 % |
| Walk | 0 % |
| Bicycle | 0 % |
| Public Bus | 0 % |
| Other | 0 % |
| **Afternoon** | |
| Car | 45 % |
| School Bus | 30 % |
| Other | 25 % |
| Walk | 0 % |
| 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 73% in the morning and decreases to 55% in the afternoon. The school bus-to-school average for a typical week is 27% in the morning and decreases to 9% in the afternoon. None of the parents reported that their children walked, rode a bike, rode a public bus or took another mode in the morning. However, parents did report that the alternative mode-to school average for a typical week, in the afternoon, was approximately 36% of students.

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

| Morning | Average Overall |
|---|---|
| Car | 73 % |
| School Bus | 27 % |
| Walk | 0 % |
| Bicycle | 0 % |
| Public Bus | 0 % |
| Other | 0 % |
| **Afternoon** | |
| Car | 55 % |
| Other | 36 % |
| School Bus | 9 % |
| Walk | 0 % |
| Bicycle | 0 % |
| Public Bus | 0 % |

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

The surveys of parents of older-aged (3rd-5th grade) indicate that the school bus-to-school average for a typical week is 67% in the morning and decreases to 56% in the afternoon. The car-to-school average for a typical week is 33% in both the morning and afternoon. None of the parents reported that their children walked, rode a bike, rode a public bus or took another mode in the morning. However, parents did report that the alternative mode-to school average for a typical week, in the afternoon, was approximately 11% of students.

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

| **Morning** | **Average Overall** |
|---|---|
| School Bus | 67 % |
| Car | 33 % |
| Walk | 0 % |
| Bicycle | 0 % |
| Public Bus | 0 % |
| Other | 0 % |
| **Afternoon** | |
| School Bus | 56 % |
| Car | 33 % |
| Other | 11 % |
| Walk | 0 % |
| 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 | 7 |
| Speeding Vehicles | 5 |
| Issues with Transportation Outside of School Zone | 2 |

### 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 issues with transportation outside of the school zone. There were approximately four comments of concern regarding issues with sidewalks and walking. General concerns include the lack of sidewalks, broken sidewalks, and sidewalks that are narrow and located near deep water ditches. Specific locations where sidewalks tend to be a problem are Chaires Cross Road and Buck Lake Road. Additionally, there were four comments of concern regarding speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are Chaires Cross Road, Buck Lake Road, and Woodrich Drive. Lastly, there was one comments of concern regarding an issue with transportation outside of the school zone. One parent mentioned limited visibility of students due to hills and vehicles parking in the street along Woodrich Drive.

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

| Neighborhood Safety Concern | Number of Comments |
|---|---|
| Issues with Sidewalks/Walking | 4 |
| Speeding Vehicles | 4 |
| Issues with Transportation Outside of School Zone | 1 |

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

Neighborhood safety concerns for parents of older-aged (3rd-5th) children also include issues with sidewalks/walking, speeding vehicles, and issues with transportation outside of the school zone. There were approximately three comments of concern regarding issues with sidewalks and walking. General concerns include the lack of sidewalks and deep water ditches near walking routes. Additionally, there was one comment of concern regarding speeding vehicles. The specific location mentioned where high-speed vehicles tend to be a problem is Parkhill Road. Parents also mention vehicles speeding in school zones. Lastly, there was one comment of concern regarding issues with transportation outside of the school zone. One parent mentioned a bus stop located along a curve at Bud Henry Place that has no signs or lights and is difficult to see during the winter months.

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

| Neighborhood Safety Concern | Number of Comments |
|---|---|
| Issues with Sidewalks/Walking | 2 |
| Speeding Vehicles | 1 |
| Issues with Transportation Outside of School Zone | 1 |

### 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:** | | | | | | | |
| *#1There was a greater adult presence of parent volunteers or police officers along walk routes to school* | | *4* | *0* | *1* | *1* | *9* | 1 |
| *#2 Speed limits were strictly enforced in school speed zones* | | *4* | *0* | *0* | *3* | *8* | 1 |
| *#3 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school* | | *5* | *1* | *0* | *1* | *8* | 1 |

### 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 having a greater adult presence along routes to school, enforcing speed limits in school zones, having separate bicycle/pedestrian pathways from traffic, and accompanying children (by themselves/other parents).

**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 There was a greater adult presence of parent volunteers or police officers along walk routes to school* | | *1* | *0* | *1* | *0* | *5* | 1 |
| *#2 Speed limits were strictly enforced in school speed zones* | | *1* | *0* | *0* | *2* | *4* | 1 |
| *#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school* | | *1* | *1* | *0* | *1* | *4* | 1 |
| *#2 Accompanied by myself or other parents* | | *1* | *0* | *0* | *1* | *4* | 2 |

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

Parents of children in 3rd through 5th grade agreed that the top six influential factors to allow their child to walk or bicycle to school more often included factors related to having continuous and separated bicycle/pedestrian pathways, speed limits enforced in school zones marked with flashing lights, having a greater adult presence along walk routes to school, and the availability of crossing guards.

**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 There were continuous sidewalks or bike paths from my neighborhood to school* | | *3* | *0* | *0* | *0* | *5* | 0 |
| *#2 There was a greater adult presence of parent volunteers or police officers along walk routes to school* | | *3* | *0* | *0* | *1* | *4* | 0 |
| *#2 Speed limits were strictly enforced in school speed zones* | | *3* | *0* | *0* | *1* | *4* | 0 |
| *#2 Additional crossing guards were provided at busy intersections* | | *3* | *1* | *0* | *0* | *4* | 0 |
| *#2 School speed zones were marked with flashing signs* | | *3* | *0* | *0* | *0* | *4* | 0 |
| *#2 There were bicycle/pedestrian pathways separated from traffic from the neighborhood to the school* | | *4* | *0* | *0* | *0* | *4* | 0 |