

August 2014

Safe Routes to School Audit Report Hawks Rise Elementary School



Leon County
Public Schools



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Chapter 1: Introduction

Project Purpose

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

School Overview

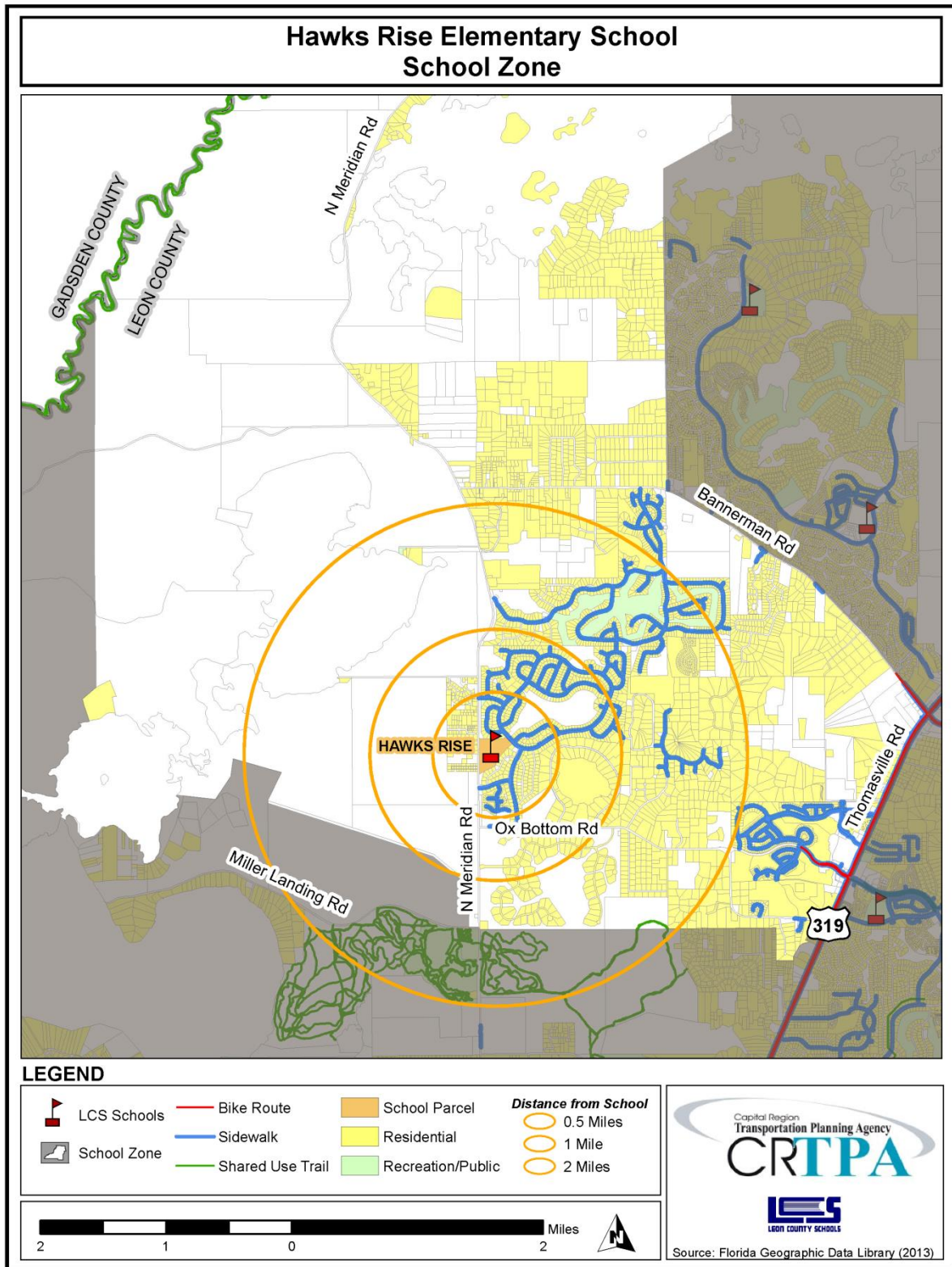
Hawks Rise Elementary School is located at 205 Meadow Ridge Drive, Tallahassee, 32312 in Leon County, Florida. It is part of the Leon County Public Schools system. The school was established in 1995. Regular school hours are from 8:30am to 2:50pm. A before school program is available from 7:00am to 8:20am. 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 834. The school has a current capacity for 886 students. The school includes grade levels Pre-Kindergarten to 5th grade.

Students attending this school feed to Deerlake Middle School and Chiles High School.

School Zone

The Hawks Rise Elementary school zone, located in northern Leon County, encompasses the neighborhoods of Rosehill, Ox Bottom Manor, and Summerbrook. The area of the school zone west of North Meridian Road and north of Bannerman Road is part of unincorporated Leon County. The land uses in the school zone, within incorporated Leon County, are predominantly residential with one area of recreation. Additionally, there are several lakes dispersed throughout the school zone. The Hawks Rise school zone includes two major roadways. North Meridian Road runs north to south and bisects the zone into east and west. Thomasville Road runs southwest to northeast and borders the school zone on the east. The only recreational facility within the school zone is the Summerbrook golf course.



Chapter 2: On-Site Meeting and Inventory

Date and Weather Conditions

The on-site inventory meeting was conducted on February 13th, 2013 with temperatures in the 60's degrees Fahrenheit.

Highlights and Key Observations of On-Site Meeting

During this visit, Hawks Rise 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 warning lights) are located along Meadow Ridge Drive. Additionally, there are school zone signs with school commuting hours posted on Ox Bottom Manor Drive. Students are permitted to arrive to school as early as 7:00am and there are after school programs available until 6:00pm. The school has a Safety Advisory Committee that deals with issues and concerns on campus. It was noted that the campus is not gated since there are no issues with crime in the area; however, there have been some concerns with unleashed dogs. Also, there is a perception from parents that letting their children walk and bike to school is dangerous, as many parents are highly cautious.

There are two designated crossing guards near the school. The first is located at the Meadow Ridge Drive crosswalk between Hines Hill Circle and Whittondale Drive. The second is located at the intersection of Meadow Ridge Drive & Ox Bottom Manor Drive. Additionally, school staff acts as crossing guards in the automobile zone on campus to escort parents and children between the parking lot and campus. During school commuting hours, temporary traffic control devices (i.e. signs) are used.

School representatives noted that there are two programs at the school that promote walking and bicycling by students. A bicycle safety rodeo is held every Spring semester as part of the Physical Education (P.E.) curriculum. Additionally, the school has a "Hawks Rise Mileage Club." Students, parents, and P.E. teachers walk/run the school track each morning from 8:05am to 8:20am. Students are given mileage marker cards to keep track how of how far they have run or walked. As the students reach certain mile markers, they are given prizes. The club is funded by the Gulf Winds Track Club who donates money each year to buy incentives for the students.

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 neighborhood where there are fairly walkable and bikeable residential streets, with low traffic volumes and low speeds, As such, there is a decent amount of students that walk and bike to school. School representatives estimate that about 3% of the students walk and 1% of the students bike to school. It was also noted that there are "Walking Groups" that get together to walk

to/from school as a group. Walkers and bicyclists can enter campus from Meadow Ridge Drive, where there is a sidewalk that leads directly to the bicycle racks and main entrance of campus. The eight bicycle racks are outdoors and have space for approximately 100 bicycles. Additionally, there is a helmet hanging rack right next to the bike racks with space for approximately 32 helmets. During the site visit, there were two scooters and four bicycles parked as well as one helmet hanging.

The school bus drop-off and pick-up zone functions adequately. The zone for arrival and departure is covered and there is direct access to a walking facility. A single lane accommodates the morning and afternoon buses as well as the three after school day care vans. It was noted that there are more buses in the afternoons than in the mornings. Additionally, school representatives stated that any students living west of North Meridian Road are given school bus service regardless of their distance from school.

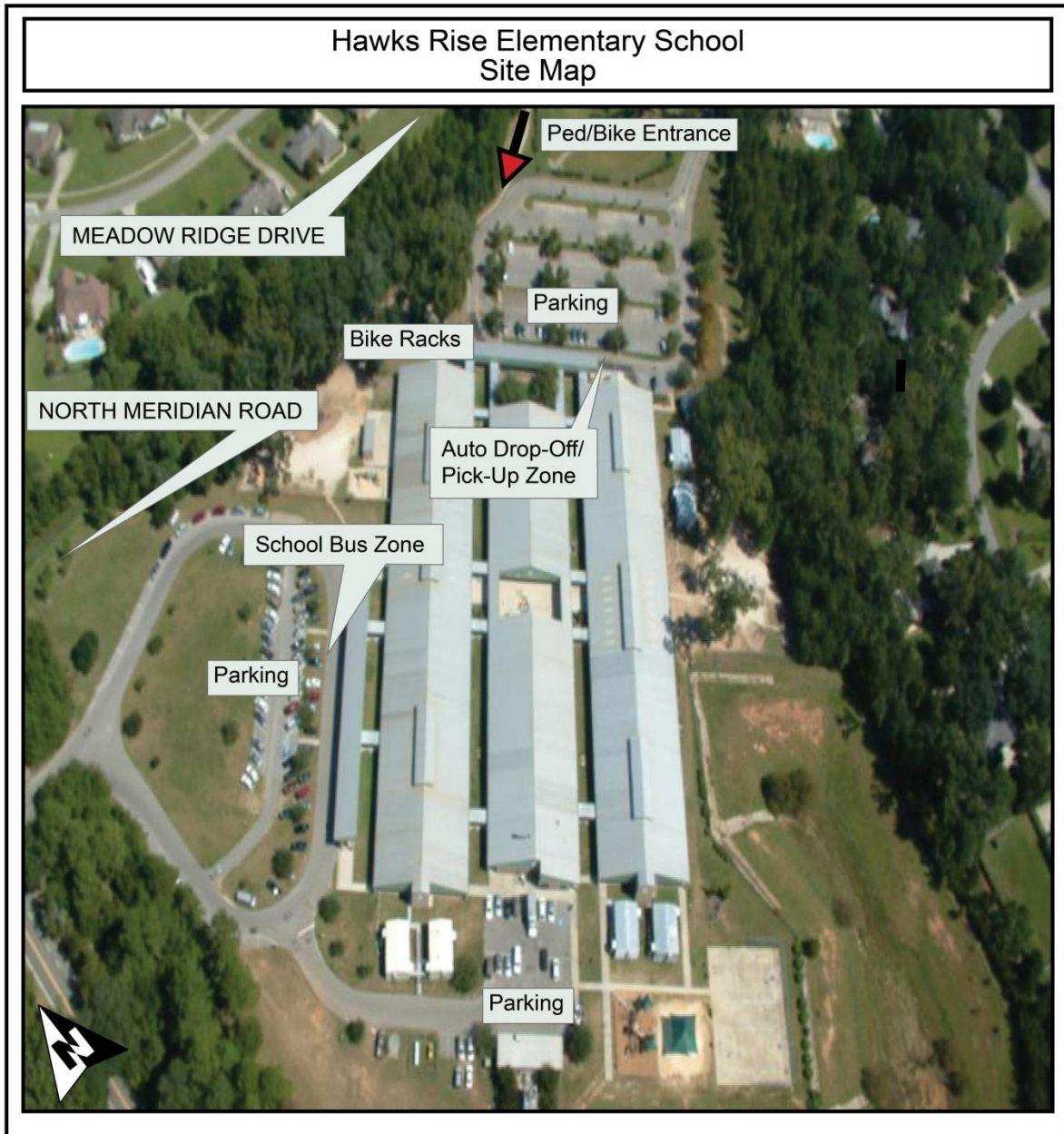
The parent drop-off and pick-up zone has an excellent layout and functions well to accommodate the volume of automobiles entering and exiting the site. The zone for loading and unloading is partially covered, which helps during times of inclement weather, and there is direct access to a walking facility. Additionally, there is a small holding area with benches for students waiting to be picked up in the afternoons. It was noted that there is a right-turn only sign, with restricted times posted on the sign, when leaving the automobile zone that has helped improve the parent pick-up/drop-off line tremendously.

Inventory Map

An aerial photograph showing Hawks Rise Elementary School is located on the following page. As shown in the photo, the school fronts Meadow Ridge Drive. Students can access campus from this street. Bicycle parking racks are located near the front entrance of the school.

Standard width sidewalks are located along both sides of Meadow Ridge Drive until Whittondale Drive where it transitions to only the non-school side of the street. There is a midblock crosswalk on Meadow Ridge Drive that connects directly to a sidewalk that enters onto campus.

The automobile pick-up and drop-off zone is located directly in front of the school's main entrance. Automobiles both enter and exit the zone at a shared driveway along Meadow Ridge Drive. Parking spaces are located in this area as well. The bus drop-off and pick-up zone is separately located on the side of the school along North Meridian Road. Buses both enter and exit the zone at a share driveway along North Meridian Road. Staff parking spaces are located in this area as well.



Issues and Opportunities

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

While a decent amount of students walk and bike to school, there are still some geography issues that hinder other students' ability to walk and bike to school. There are few residential neighborhoods west of the school and any students living in this area are automatically given school bus service due to the lack of bike/ped infrastructure and lack of thru connections on North Meridian Road. Additionally, further out from campus there are busy roadways that are not conducive to bicycle and pedestrian travel, by students of any age. These kinds 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, consideration should be given to Meadow Ridge Drive and Ox Bottom Manor Drive. Traffic calming measures should be explored to reduce automobile speeds and increase awareness of children in the area, especially during school commuting times. Also, school-related and –supportive committees such as the Parent/Teacher Organization (PTO) and Hawks Rise Mileage Club can be used to help educate parents on the opportunities and benefits to having their children walk or bicycle to school, where such options are feasible. These groups can also help get the word out to parents concerning on-campus issues, such as appropriate behavior and protocol within the parent drop-off/pick-up zone, so that it continues to function well.

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 Hawks Rise Elementary School – approximately seven out of eight students – are dropped off at school by car. The percentage rises just slightly for older-aged children. Riding a school bus and walking to school ranked a distant second and third place at approximately 11 percent and 1 percent of students, respectively. Of those commuting by school bus, the percentage rises slightly for younger-aged children. Not surprisingly, the percentage of older students walking was two times higher than that of younger students. None of the students surveyed reporting biking or 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 %	88 %	11 %	<1 %

Chapter 4: Parent Survey – Summary of Results

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

Parent survey results were counted and analyzed by grade level groupings of Kindergarten through 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 Hawks Rise Elementary School students are dropped off by car in the morning, while fewer return home by the same mode in the afternoon. In the afternoon, there are greater percentages of students returning home by walking, school bus or another mode not described specifically in the survey such as an after-school program van. Overall, between 7% and 15% 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 2nd and 3rd through 5th. Survey respondents overall showed concerns for the condition and/or lack of sidewalks, 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 Ox Bottom Manor Drive, Meadow Ridge Drive, Meridian Road, and Heritage Ridge Road.

With regard to factors that might influence their decision to allow their child to walk or bike to school, survey responses indicate that factors such as accompanying children (by themselves, with other parents, or with other children), enforcing speed limits in school zones, and having a greater adult presence along routes to school 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 April 8th, 2013. The review consisted of an assessment of accessibility, connectivity and safety along neighborhood roadways within proximity to Hawks Rise Elementary School. On the day of the field review, temperatures were in the 70's degrees 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 Hawks Rise Elementary School.

Character of Neighborhood Area

Hawks Rise Elementary School is located in a suburban residential neighborhood primarily comprised of single-family homes. The neighborhood street pattern throughout the area is mostly cul-de-sacs and curved streets that connect in a semi-gridded manner. For the most part, streets in the area are very walkable due to low traffic volumes and their strictly residential nature. All roads east of Meridian Road, adjacent to the school, have a sidewalk on at least one side of the street. Additionally, a well-marked crosswalk and school zone in front of the school make it very bicycle and pedestrian friendly. Neighborhoods east of the school are private and do not have sidewalk facilities. North Meridian Road and Ox Bottom Road serve as major bike-ped barriers due to their lack of bike-ped infrastructure. There are no multi-use trails within the immediate area of the school.

Major roadways in the school zone include:

- North Meridian Road, a two lane roadway with a posted speed limit of 45mph north of Ox Bottom Road and 35mph or less south of Ox Bottom Road.
- Ox Bottom Road, a two lane roadway with a posted speed limit of 45mph.
- Thomasville Road, a heavily traveled southwest-northeast six lane roadway with a posted speed limit between 40-45mph.

Crash Data

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

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

Neighborhood Assessment

The overall neighborhood layout surrounding Hawks Rise Elementary School lends itself well to walkability. While the suburban-style layout of the neighborhoods creates longer routes to/from school, almost all of the streets have a sidewalk available on at least one side of the road that lead, for the most part, uninterrupted, to residences in the area. Project-specific recommendations to further promote walking and bicycling 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 Hawks Rise Elementary School walk/bike shed map is included at the end of this chapter.

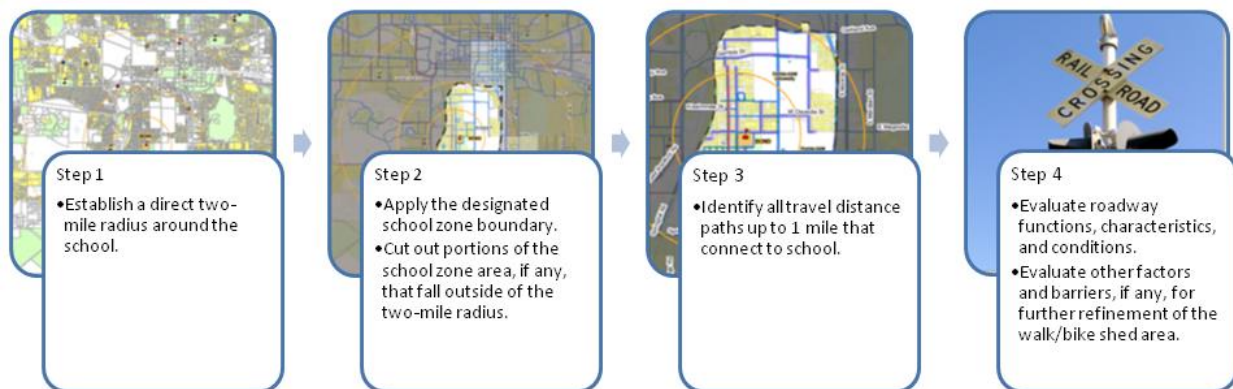
The walk/bike shed area and associated map are not meant to suggest that elementary school students of all ages, maturity level, and experience should commute to and/or from school within the area delineated. Certainly, younger children such as kindergarten students are not expected to walk or bike to 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 Hawks Rise Elementary School mostly extends east and north of the school. North Meridian Road and Ox Bottom Road with their lack of bicycle and pedestrian accommodations form the western and southern limits of the walk/bike shed. The area north of Summerbrooke Drive is excluded from the walk/bike shed due to the few residential land uses to the north and the lack of bicycle and pedestrian accommodations. Areas east of The Grove at Summerbrooke neighborhood were excluded from the walk/bike shed due to their lack of through street connections.

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

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

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

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

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

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

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

Hazardous Walking Conditions, as defined per Florida Statute

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

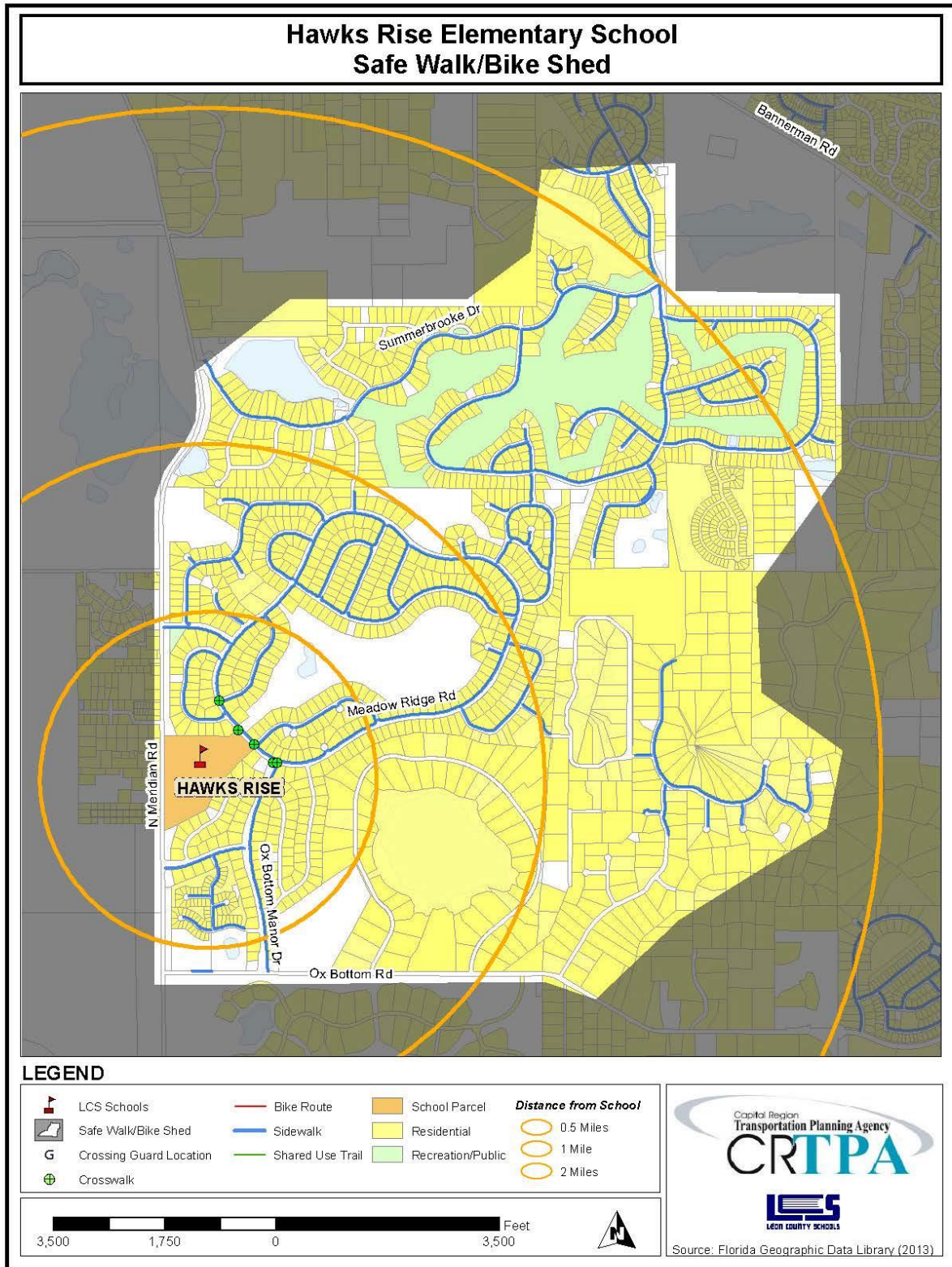
In determining a safe walking and bicycling area, this report applies a methodology and criterion that is more stringent than State standards and more in line with existing studies, research and opinions collected from numerous experts in the fields of pedestrian and bicycle transportation and safe routes to school planning. In addition, this report goes much further than simply identifying sidewalk/pathway

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

Evaluating Other Factors and Barriers

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

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



Chapter 6: Findings and Recommendations

The existing point of access for walkers and bicyclists to Hawks Rise Elementary School provide efficient access onto campus from Meadow Ridge Drive. For those requiring or desiring automobile access as well as short-term parking, the automobile school functions quite well already. There are probably more parents transporting their children, by automobile, to school than necessary given the proximity of homes, layout of roadways and the quality of street infrastructure. This chapter includes some policy and programmatic recommendations for the school's consideration that might help to ease concerns of parents regarding speeding vehicles and increase walking and bicycling to and from school (and likewise provide some relief to both the car line and bus zone).

Almost all of the streets near the school have sidewalks that are separated from vehicle travel space and can be navigated by walkers and bicyclists with a fair amount of ease. Still, parents are apprehensive primarily with regard to potentially speeding vehicles along Meadow Ridge Drive. There are some infrastructure recommendations that would provide some benefit toward improving existing conditions.

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 Hawks Rise Elementary School. They include both on- and off-site improvements as follows:

Hawks Rise Elementary School On- and Off-Site Recommendations

Improvement: On-Site		Location	From	To	Geography	Direction	Length	Comments
A1	Stripe existing crosswalk	Parking lot (Parent Drop-Off/Pick-Up)	Second row of parking		N/A	N/A	N/A	
A2	Add new sidewalk	Parking lot (Parent Drop-Off/Pick-Up)	Between second and third row of parking		N/A	NE-SW	Approx. 50 feet	Connect to existing crosswalk in second row of parking

Improvement: Off-Site		Location	From	To	Geography	Direction	Length	Comments
B1	Stripe existing crosswalk	Meadow Ridge Drive	Between Hines Hill Circle and Whittondale Drive		N/A	NE-SW	N/A	
B2	Repaint existing crosswalk	Meadow Ridge Drive	At Ox Bottom Manor Drive		East side of Meadow Ridge Drive	N-S	N/A	
B3	New sidewalk with crosswalks added to existing roundabout	Sleepy Hollow	Rogers Circle	Ox Bow Circle	North side of Sleepy Hollow	E-W	Approx. 2,050 feet	
B4	New sidewalk	Heritage Ridge Road	Meadow Ridge Drive	Summerbrooke Drive	East side of Heritage Ridge Road	N/S	Approx. 1,200'	If ROW permits enough space for sidewalk
B5	Paint New Crosswalks	Meadow Ridge Drive	See description below		See description below	See description below	N/A	Connect existing sidewalks

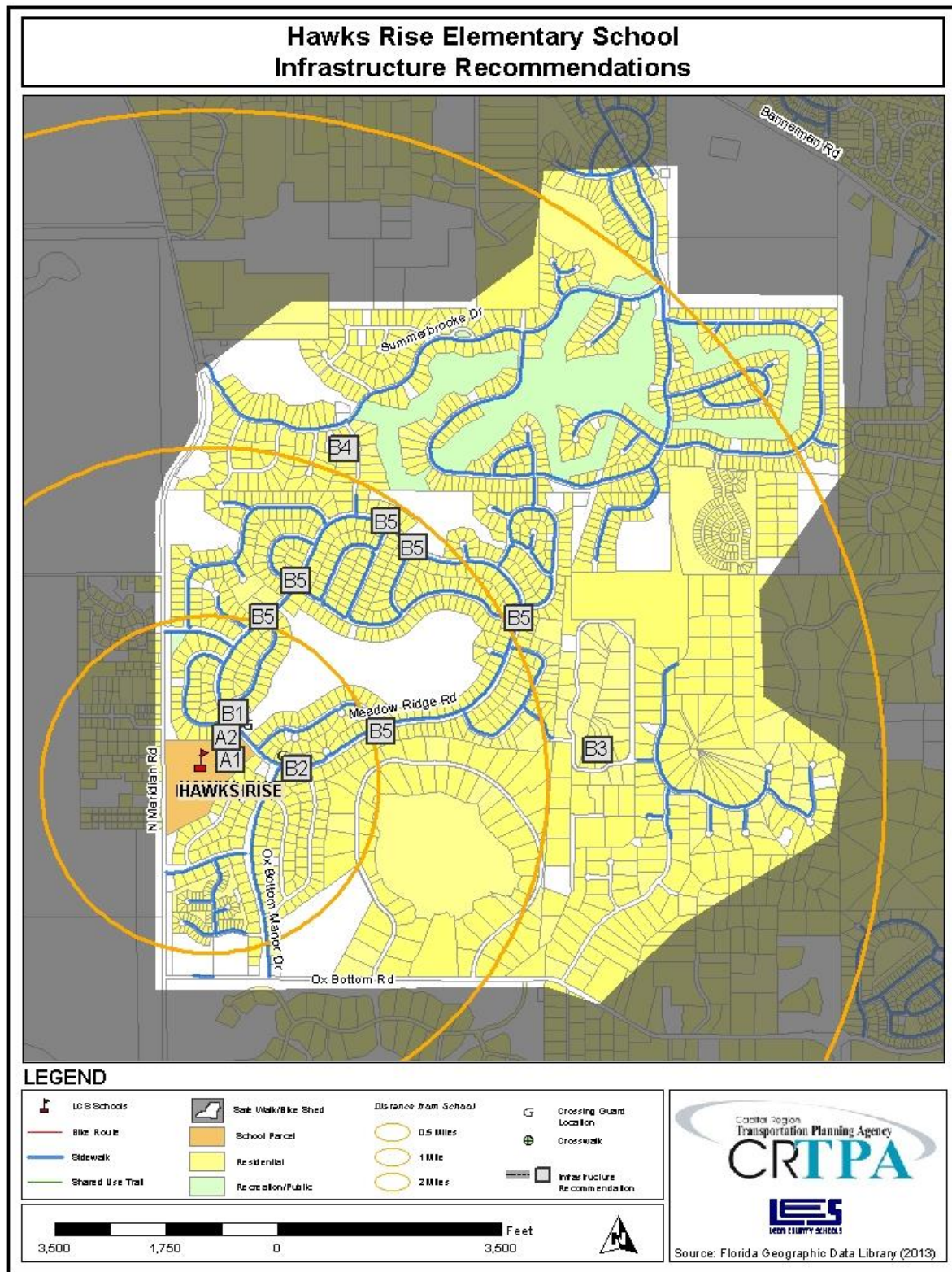
The table, above, corresponds to an infrastructure recommendations map on the following page.

On-Site Recommendations

- A1) Stripe existing crosswalk – the existing crosswalk is located in the second row of the front parking lot near the automobile pick-up/drop-off zone.
- A2) Add new sidewalk – there are existing crosswalks and sidewalks from the front entrance of the school to the parking lot; however, they stop just before the third row of the parking lot.

Off-Site Recommendations

- B1) Stripe the existing crosswalk – On Meadow Ridge Drive between Hines Hill Circle and Whittondale Drive. This is the only access point onto campus for walkers and bicyclists so it should be emphasized more visibly to motorists who may be traveling along Meadow Ridge Drive especially since there are concerns by parents with speeding vehicles along the roadway.
- B2) Repaint existing crosswalk – On Meadow Ridge Drive at Ox Bottom Manor Drive; the markings on the existing crosswalk are faded and may be difficult for motorists to see.
- B3) New sidewalk with crosswalks added to the existing roundabout – On Sleepy Hollow from Rogers Circle to Ox Bow Circle; this will create an uninterrupted pedestrian path between school and residences surrounding Lake Charlotte.
- B4) New sidewalk – On Heritage Ridge Road from Meadow Ridge Drive to Summerbrooke Drive, if right-of way permits; this will create an uninterrupted pedestrian path between school and Summerbrooke residences.
- B5) Paint new crosswalks along Meadow Ridge Road:
 - E-W @ Whittondale Drive (North side of Meadow Ridge Road)
 - N-S @ Thornberg Drive (West side of Meadow Ridge Road)
 - E-W @ Glasgow Drive (South side of Meadow Ridge Road)
 - E-W @ Sinkola Drive (South side of Meadow Ridge Road)
 - N-S @ Thornberg Drive (East side of Meadow Ridge Road)
 - NE-SW @ Blackfox Way South (East of Meadow Ridge Road)



Programs

- C1) Walk and bicycle encouragement literature – Send home literature to parents, as well as make it available on the school website, about the benefits of children walking and bicycling to school. Information and statistics from the National Safe Routes to School organization can be used to highlight health and safety benefits. The literature provided to parents should highlight some specific examples of how parents and the community can make walking and bicycling to school safe and fun. During the on-site school visit, school representatives stated there are already “Walking Groups” in place. However, it is possible that not all parents know about these groups that currently exist to promote non-motorized travel to/from school. Promotion of the groups through flyers or the school website may be helpful. Additionally, the school should continue their “Hawks Rise Mileage Club” that occurs on-campus but also encourage students to include miles they may walk to/from school. Again, promotion of the club to parents is a key way to ensure that everyone is well-informed of the opportunities to encourage walking and bicycling.
- C2) Bicycle safety and accessibility workshop – Continue to organize and hold a workshop or a bike rodeo each school year 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 is very helpful for young riders. Additionally, a group bicycle ride, through the Summerbrook and Ox Bottom Manor neighborhoods surrounding the school, can be a safe and fun way to get children more comfortable with their built environment and any obstacles they may encounter en route to school. Local community groups, as well as, Florida Agricultural & Mechanical University, Leon County Sheriff’s Office, and Leon County Public Schools may be willing to donate time and/ or supplies such as bikes, helmets, and locks for workshops and rodeos if contacted.
- C3) Parent drop-off/pick-up zone protocol encouragement– Send home literature to parents, as well as make it available on the school website, about the proper drop-off and pick-up process for the school, particularly at the start of a new school year or after an extended school break. Maps of the drop-off/pick-up zone, as well as, the traffic flow pattern can be very helpful to parents. The literature available to parents should remind them to be patient and courteous to other parent drivers and clearly discourage parents from letting children out in the parking lot before the drop zone, releasing them on the side of the road, or parking on the side of the road (to wait for their child). Additionally, parents should be reminded that using cell phones while in the drop-off/pick-up line is highly discouraged. Providing small rewards, such as stickers or pencils, to students whose parents follow the proper drop-off/pick-up process is typically more beneficial than punishing improper behavior. If necessary, educational flyers could be placed on the windshields of vehicles illegally parked to remind parents of the proper rules and procedures.

- C4) Car seat restraints (e.g. seat belts, booster seats, etc.) – Send home literature to parents, as well as make it available on the school website, about the proper use and type of car seat restraints needed by children of different ages and weights. Remind parents that car crashes are the leading cause of death for children 1 to 13 years old in the United States.¹ Ideally, children should remain in the back seat at least until age 12. Periodically, send out reminders on this important issue and possibly get the Parent-Teacher Organization (PTO) involved to further spread the message to parents.

Policies

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

Drop-Off Procedures

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

Pick-Up Procedures

- Please stay in vehicle and pull forward to the front of the parent drop-off/pick-up zone.
- Please continue to queue the line for parent pick-off along Meadow Ridge Drive if necessary, but please do not block driveways or crosswalks.
- It is suggested that parents clearly and boldly write their child's name, classroom teacher, and grade level on a letter-sized sheet of paper and place it on the dash of their vehicle to assist staff and others in the parent pick-up zone. Please be prepared to promptly assist your child(ren) entering your vehicle at the pick-up point.

¹ <http://www.nhtsa.gov/Safety/CPS>

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

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

Planning-Level Cost Estimates

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

General Unit Cost Estimates²

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

² 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

The setup for Hawks Rise Elementary School and surrounding neighborhoods makes it fairly easy to walk or bicycle to school within relative distance. The school is located along and accessible from Meadow Ridge Drive, which is a two-lane residential collector roadway equipped with sidewalks. The Summerbrook and Ox Bottom Manor neighborhoods near the school include low volume streets with sidewalks available on at least one side of the street throughout, allowing for safe, convenient non-motorized travel. Regardless, the school does not show a correlation between such convenience and walking/bicycling rates of students. According to the student travel surveys, approximately one percent of students within a relative safe distance commute to and from school by walking, while approximately less than one percent commutes by bicycle. Parent surveys suggest walking and bicycling rates are slightly higher; however, overall percentages appear low, considering that Hawks Rise is a neighborhood-oriented school.

Some reasons for such low rates are clear while others are more complicated. One thing made clear by parents is that there are concerns with speeding vehicles, particularly on Meadow Ridge Drive. The roadway, as previously mentioned includes elements to encourage walking and bicycle. However, it is still a residential collector that encourages higher than posted speeds for motorists connecting to major roadways outside of the neighborhood such as North Meridian Road and Ox Bottom Road. Goals that involve increasing walking and bicycling to school must consider the need to maintain tolerable speeds along Meadow Ridge Drive. Parents did mention that factors such as accompanying children (by themselves, with other parents, or with other children), enforcing speed limits in school zones, and having a greater adult presence along routes to school would influence their decision to allow their child to walk or bike to school.

Hawks Rise Elementary School has many of the physical elements to promote walking and bicycling to school including sidewalks, which for the most part, are adequately separated from vehicle travel space on routes to and from school. Additionally, the school has more than enough bicycle racks available for students as well as a rack to hang bicycle helmets during the school day. There are, however, a few measures that should be explored to help improve overall walking and bicycling rates to and from school, as laid out in the previous recommendations chapter. These measures along with what is already occurring in and around Hawks Rise Elementary School will no doubt help to improve walking and bicycling safety and increase non-motorized commuting rates.

Appendices

Appendix A: Student Travel Survey

Leon County Schools

STUDENT TRAVEL SURVEY

NAME OF SCHOOL: _____

Dear Teacher:

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

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

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

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

TEACHER'S NAME: _____ GRADE: _____

DATE: _____ NUMBER OF STUDENTS IN CLASS TODAY: _____

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

Note to Principals:

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

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Appendix B: Student Travel Survey – Detailed Analysis

The survey consisted of a one-page sheet with a script of questions for homeroom teachers to read to students as they took morning attendance. Surveys were conducted each morning during a typical week of the school year for a total of five straight days, Monday to Friday. The script prompted teachers to ask and record the number of children in their class that came to school by walking, bicycling, car, school bus, or city bus. The student travel survey was conducted in February, 2013. Forty-one classrooms participated in the survey for a total of 773 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	41
Total Students Surveyed (K-5th)	773
Total K-2nd Students Surveyed	398
Total 3rd-5th Students Surveyed	375

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 2%, 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 0%. Only 18 students reported biking to school, making up less than 1% of the students surveyed. Of the 18 students that bike to school, an overall average of 94% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from 1% to 2%, with an overall average of 2%.

SUMMARY OF WALKING AND BICYCLE SCHOOL-WIDE TRAVEL PATTERNS

	Walk	Bicycle	Helmet Use	Total Walk + Bike
Average Overall	1 %	<1 %	94 %	2 %
Highest Day	2 %	1 %	100 %	2 %
Lowest Day	1 %	0 %	67 %	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 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 100% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from <1% to 1%, with an overall average of 1%.

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

	Walk	Bicycle	Helmet Use	Total Walk + Bike
Average Overall	<1 %	<1 %	100 %	1 %
Highest Day	1 %	<1 %	100 %	1 %
Lowest Day	<1 %	0 %	100 %	<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 2% to 2%, with an overall average of 2%. Overall, the bike-to-school average for the week ranged from 1% to 1%, with an overall average of 1%. Of the students that bike to school, an overall average of 94% wore a bicycle helmet. In total, the combined walk-bike average for the week ranged from 3% to 3%, with an overall average of 3%.

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

	Walk	Bicycle	Helmet Use	Total Walk + Bike
Average Overall	2 %	1 %	94 %	3 %
Highest Day	2 %	1 %	100 %	3 %
Lowest Day	2 %	1 %	67 %	2 %

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.

³ Includes one 1st-4th grade class

Bus and Automobile School-Wide Travel Patterns

The school-wide travel surveys indicate that the automobile-to-school average for the week ranged from 87% to 88%, with an overall average of 88%. Of the students that ride to school in an automobile, an overall average of 94% wore a seatbelt. Overall, the school bus-to-school average for the week ranged from 10% to 11%, with an overall average of 11%. The public bus-to-school average for the week ranged from 0% to <1%, with an overall average of <1%. (To note, there are no public buses within a reasonable distance to the school.)

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

	Automobile	Seat Belt	School Bus	Public Bus
Average Overall	88 %	94 %	11 %	<1 %
Highest Day	88 %	96 %	11 %	<1 %
Lowest Day	87 %	92 %	10 %	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 86% to 88%, with an overall average of 87%. 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 12% to 13%, with an overall average of 12%. The public bus-to-school average for the week ranged from 0% to <1%, with an overall average of less than one percent.

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

	Automobile	Seat Belt	School Bus	Public Bus
Average Overall	87 %	95 %	12 %	<1 %
Highest Day	88 %	99 %	13 %	<1 %
Lowest Day	86 %	92 %	12 %	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 88 % to 89%, with an overall average of 89%. 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 8% to 10%, with an overall average of 9%. 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	89 %	92 %	9 %	0 %
Highest Day	89 %	96 %	10 %	0 %
Lowest Day	88 %	91 %	8 %	0 %

⁴ Includes one 1st-4th grade 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:

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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 307 parent surveys returned. Of those, 142 (46%) 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 almost 50/50 by grade level grouping, with 66 students representing Kindergarten through 2nd Grade, and 76 students representing 3rd Grade through 5th Grade.

SUMMARY OF PARENT SURVEY PARTICIPATION

Total Enrollment	834
Total Number of Parent Surveys	307
Total Number within 2 Miles (K-2nd Grade)	66
Total Number within 2 Miles (3rd-5th Grades)	76
Percentage of Surveys within 2 Miles	46 %

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	87 %
School Bus	6 %
Walk	4 %
Bicycle	3 %
Public Bus	0 %
Other	0 %
Afternoon	
Car	73 %
Walk	11 %
School Bus	8 %
Bicycle	4 %
Other	3 %
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 91% in the morning and decreases to 85% in the afternoon. The school bus-to-school average for a typical week is 6% in both the morning and afternoon. The walk-to-school average for a typical week is 2% in the morning and increases to 6% in the afternoon. None of the students rode a bicycle, a public bus, or an alternative mode in the morning. However, approximately 3% rode an alternative mode in the afternoon.

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

Morning	Average Overall
Car	91 %
School Bus	6 %
Walk	2 %
Bicycle	0 %
Public Bus	0 %
Other	0 %
Afternoon	
Car	85 %
School Bus	6 %
Walk	6 %
Other	3 %
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 car-to-school average for a typical week is 83% in the morning and decreases to 63% in the afternoon. The walk-to-school average for a typical week is 5% in the morning and increases to 16% in the afternoon. The school bus-to-school average for a typical week is 5% in the morning and increases to 11% in the afternoon. None of the students used an alternative commute method or rode a public bus in the morning. However, 3% use an alternative commute mode in the afternoon.

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

Morning	Average Overall
Car	83 %
Walk	5 %
School Bus	5 %
Bicycle	5 %
Other	0 %
Public Bus	0 %
Afternoon	
Car	63 %
Walk	16 %
School Bus	11 %
Bicycle	7 %
Other	3 %
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
Speeding Vehicles	30
Issues with Sidewalks/Walking	12
Issues with Transportation Outside of School Zone	12

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 speeding vehicles, sidewalks/walking, and issues with transportation outside of the school zone. There were approximately 13 comments of concern regarding issues with speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are Ox Bottom Manor Drive, Meadow Ridge Drive, and Meridian Road. Parents also mention cars driving fast in neighborhoods. Additionally, there were six comments of concern regarding sidewalks and walking. General concerns include a lack of sidewalks, broken/uneven sidewalks, and hilly sidewalk terrain. Parents also mentioned hedges that limit the vision of pedestrians near the intersection of Ox Bottom Manor Drive and Hawk Meadow Drive. Another location where sidewalks tend to be a problem is Meadow Ridge Drive. Lastly, there were five comments of concern regarding issues with transportation outside of the school zone. General concerns include cars not stopping for school buses and the difficulty of crossing roads with crossing guards.

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

Neighborhood Safety Concern	Number of Comments
Speeding Vehicles	13
Issues with Sidewalks/Walking	6
Issues with Transportation Outside of School Zone	5

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 speeding vehicles, sidewalks/walking, and issues with transportation outside of the school zone. There were approximately 17 comments of concern regarding issues with speeding vehicles. Specific locations where high-speed vehicles tend to be a problem are Heritage Ridge Road, Meadow Ridge Drive, and Ox Bottom Manor Drive. Additionally, there were seven comments of concern regarding issues with transportation outside of the school zone. General concerns include difficult to cross intersections, high volumes of traffic, and lack of crossing guards at some intersections. Specific locations that tend to be a problem are the intersection of Ox Bottom Manor Drive & Borderline Drive and Meadow Ridge Drive. However, three parents did mention one particular crossing guard, Mr. Ford, who is especially helpful in helping children cross the street. Lastly, there were six comments of concern regarding issues with sidewalks/walking. General concerns include a lack of sidewalks, broken sidewalks, and sidewalks that have difficult, hilly terrain. Specific locations where sidewalks tend to be a problem are Heritage Ridge Road, Milestone Drive, Borderline Drive, and Ox Bottom Manor Drive.

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

Neighborhood Safety Concern	Number of Comments
Speeding Vehicles	17
Issues with Transportation Outside of School Zone	7
Issues with Sidewalks/Walking	6

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:							
<i>#1 Accompanied by myself or other parents</i>		6	3	13	18	70	14
<i>#2 Accompanied by other children</i>		12	2	12	17	62	18
<i>#3 There was a greater adult presence of parent volunteers or police officers along walk routes to school</i>		3	4	13	20	59	20
<i>#4 Speed limits were strictly enforced in school speed zones</i>		5	7	16	16	56	17

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

Parents of children in Kindergarten through 2nd grade agreed that the top five influential factors to allow their child to walk or bicycle to school more often included factors related to accompanying children (by themselves/other parents, or other children), enforcing speed limits in school zones, having a greater adult presence along routes to school, and living closer to school.

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:							
<i>#1 Accompanied by myself or other parents</i>		1	0	2	7	39	4
<i>#2 There was a greater adult presence of parent volunteers or police officers along walk routes to school</i>		0	4	4	7	30	7
<i>#3 Speed limits were strictly enforced in school speed zones</i>		1	4	5	7	27	7
<i>#4 Accompanied by other children</i>		4	1	5	11	25	7
<i>#5 We lived closer to school</i>		3	3	4	3	24	17

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 accompanying children (by themselves/other parents, or other children), having a greater adult presence along routes to school, enforcing speed limits in school zones, and providing more walking and bicycling safety training for students.

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:							
<i>#1 Accompanied by other children</i>		8	1	7	6	37	11
<i>#2 Accompanied by myself or other parents</i>		5	3	11	11	31	10
<i>#3 There was a greater adult presence of parent volunteers or police officers along walk routes to school</i>		3	0	9	13	29	13
<i>#3 Speed limits were strictly enforced in school speed zones</i>		4	3	11	9	29	10
<i>#3 Schools provided more walking and bicycling safety training for students</i>		8	1	8	8	29	10