

# Charles Ellis Montessori School

## Safe Routes to School Travel Plan

June 2014

*220 E. 49th Street  
Savannah, Georgia*



# Georgia

GEORGIA DEPARTMENT OF TRANSPORTATION

*Prepared with assistance from the Georgia SRTS  
Resource Center*

## **Acknowledgements**

This report represents the work of the Safe Routes to School (SRTS) Team at Charles Ellis Montessori School in Savannah, Georgia. In the fall of 2013, the Georgia Department of Transportation selected Charles Ellis Montessori Academy to receive planning assistance through the Georgia Safe Routes to School Resource Center. With oversight and input from a team of staff and volunteers, Charles Ellis Montessori Academy received technical assistance from transportation consultants in the development of this SRTS Travel Plan. The plan can help Charles Ellis Montessori Academy identify projects and programs to improve the safety of children walking and bicycling to school, and to encourage more families to do so.

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## Introduction

Charles Ellis Montessori Academy joins communities in Georgia and across the country that have developed local Safe Routes to School (SRTS) programs.

The federal SRTS program was established in 2005 under the *Safe, Accountable, Flexible, Efficient, Transportation Equity Act (SAFETEA-LU)*, and later re-grouped with other bicycle and pedestrian programs under “Transportation Alternatives Program” with the passing of *Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21)* in 2012. The core purpose of SRTS programs has always been the following:

- to enable and encourage children, including those with disabilities, to walk and bicycle to school;
- to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and
- to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

In Georgia, funds from the federal program are administered through the Georgia Department of Transportation (GDOT.) In keeping with best practices, the Georgia SRTS program emphasizes a comprehensive approach to SRTS, being sure to address the “Five E’s”: Engineering, Education, Enforcement, Encouragement, and Evaluation (see sidebar).

In the fall 2013, GDOT selected Charles Ellis Montessori Academy to receive planning assistance through the Georgia SRTS Program. This SRTS Travel Plan includes strategies from each of the Five E’s.

### The Five E’s

**Engineering** strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails, and bikeways.

**Education** programs target children, parents, caregivers and neighbors, teaching how to walk and bicycle safely and informing drivers on how to drive more safely around pedestrians and bicyclists. Education programs can also incorporate health and environment messages.

**Enforcement** strategies increase the safety of children bicycling and walking to school by helping to change unsafe behaviors of drivers, as well as pedestrians and bicyclists. A community approach to enforcement involves students, parents or caregivers, school personnel, crossing guards, and law enforcement officers.

**Encouragement** activities promote walking and bicycling to school to children, parents and community members. Events such as Walk to School Day, contests such as a Frequent Walker/Bicyclist challenge, or on-going programs such as a Walking School Bus or Bicycle Train can promote and encourage walking and bicycling as a popular way to get to school.

**Evaluation** is an important component of SRTS programs that can be incorporated into each of the other E’s. Collecting information before and after program activities or projects are implemented allow communities to track progress and outcomes, and provide information to guide program development.

*- Excerpted from “Safe Routes to School: A Transportation Legacy”, the report of the National Safe Routes to School Task Force*

## ***SRTS Vision***

The Team vision for Charles Ellis Montessori Academy (and the surrounding neighborhoods) is:

- a place where traveling for all is safe and comfortable, regardless of mode, age, or ability
- a place where pedestrians and bicycle riders are as important as motorists
- a place where walking school buses and bicycle trains are in place nearly every school day, traveling along established routes that have been improved to make travel along them safe and comfortable
- a place where more students walk and bike to school; more students and their parents park farther from school and walk the last distance to school

This SRTS Travel Plan outlines the school's intentions for making walking to and from school safer and more sustainable for students and the community. Through the SRTS program and efforts, the Charles Ellis Montessori Academy SRTS Team hopes to reach a rate of 40% of students walking or biking to school at least two days a week. This goal is attainable, as approximately 20% of the students currently walk and bike at least two days per week<sup>1</sup> and just over 70% of the students live within a mile of the school campus<sup>2</sup>.

## ***Travel Plan Goals***

The team identified the following goals for this Travel Plan, based on its vision:

- Establish walking school buses and bike trains from 3 locations
- Over time, support walking school buses and bike trains that function each school day
- Provide pedestrian safety education for all students and classroom safety education for students participating in bicycle trains
- Enhance relationships with the surrounding community
- Serve as a prelude to a larger traffic calming effort in neighborhood, anticipated in 2015 -2016
- Inform the 2014-2015 Victory Drive corridor study

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<sup>1</sup> Figure taken from student travel tallies completed in October 2013.

<sup>2</sup> Figure estimated from school attendance boundary/student addresses map.

## ***Safe Routes to School Planning Process***

The Charles Ellis Montessori Academy SRTS Team met four times during the winter-spring of 2014. The following table summarizes specific meeting content and outcomes.

Date	Content & Outcomes
<b>January 17, 2014</b>	<ul style="list-style-type: none"><li>• Introduced the federal SRTS program, including the comprehensive, “Five E’s,” approach to SRTS planning.</li><li>• Discussed the Georgia SRTS program, planning process, and outcomes.</li><li>• Discussed concerns about walking and bicycling conditions in the school vicinity.</li><li>• Reviewed parent survey data and student travel tally results.</li></ul>
<b>February 18</b>	<ul style="list-style-type: none"><li>• Discussed a vision for the Travel Plan.</li><li>• The consultant team observed student arrival and dismissal.</li><li>• Conducted a walk audit of the school environment to confirm barriers to walking and bicycling.</li><li>• Discussed challenges for walking and biking to school.</li></ul>
<b>February 20</b>	<ul style="list-style-type: none"><li>• Team confirmed vision.</li><li>• Team identified plan goals.</li><li>• Consultants presented an overview of engineering treatments for improving walking and bicycling conditions near schools.</li><li>• Consultant presented programmatic recommendations to support regular school buses and bicycle trains.</li></ul>
<b>April 16</b>	<ul style="list-style-type: none"><li>• Review completed draft plan.</li></ul>

## ***Charles Ellis Montessori Academy and City of Savannah Overview***

Charles Ellis Montessori Academy (CEMA) is located in historic Savannah, Georgia, a coastal town at the mouth of the Savannah River. CEMA is nestled in the historic Chatham Crescent and Ardsley Park neighborhoods – both rich with historic charm, and built around a traditional neighborhood transportation grid that includes iconic small parks that serve as community gathering places. The school’s locale sets the tone for a preference for walking and bicycling, which is further enhanced by the City of Savannah and the Chatham County Metropolitan Planning Commission. Various plans, programs, and guidelines (discussed later in this plan) encourage and maintain walkability, creating a relatively supportive environment for CEMA student families.

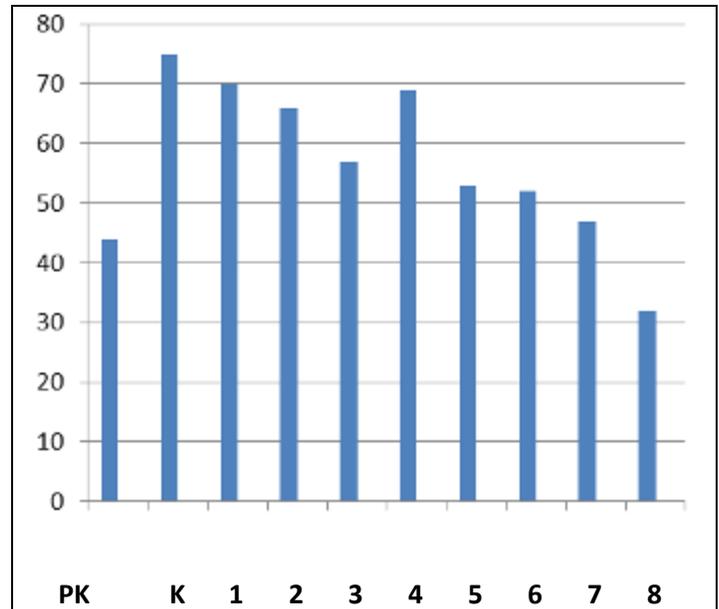


CEMA has an active walking and bicycling community involving many student families in its preK-8 student population.<sup>3</sup> While the school is a countywide magnet-type (known locally as a “specialty program”) Montessori school, many students live within the one- to two-mile typical attendance boundary of a traditional school. The school annually participates in International and Georgia Walk to

<sup>3</sup> Schools in Savannah are part of the Chatham County School District.

School Days, joined by students from near-by Jacob G. Smith Elementary School, starting from Hull Park.

School enrollment in the 2013-2014 school year is 565, divided among grades pre-K through 8 as shown in the accompanying graph.<sup>4</sup> Map 1 shows student addresses in the current school year. The school partnered with the Resource Center in 2010 and began participating in Walk to School Day events like the fall International Walk to School Day, spring Georgia Walk, and National Bike to School Day in May. The school also offers pedestrian and bicycle education for students, including hosting a Safe Kids Coordinator who provided bicycle and pedestrian safety information to some students.



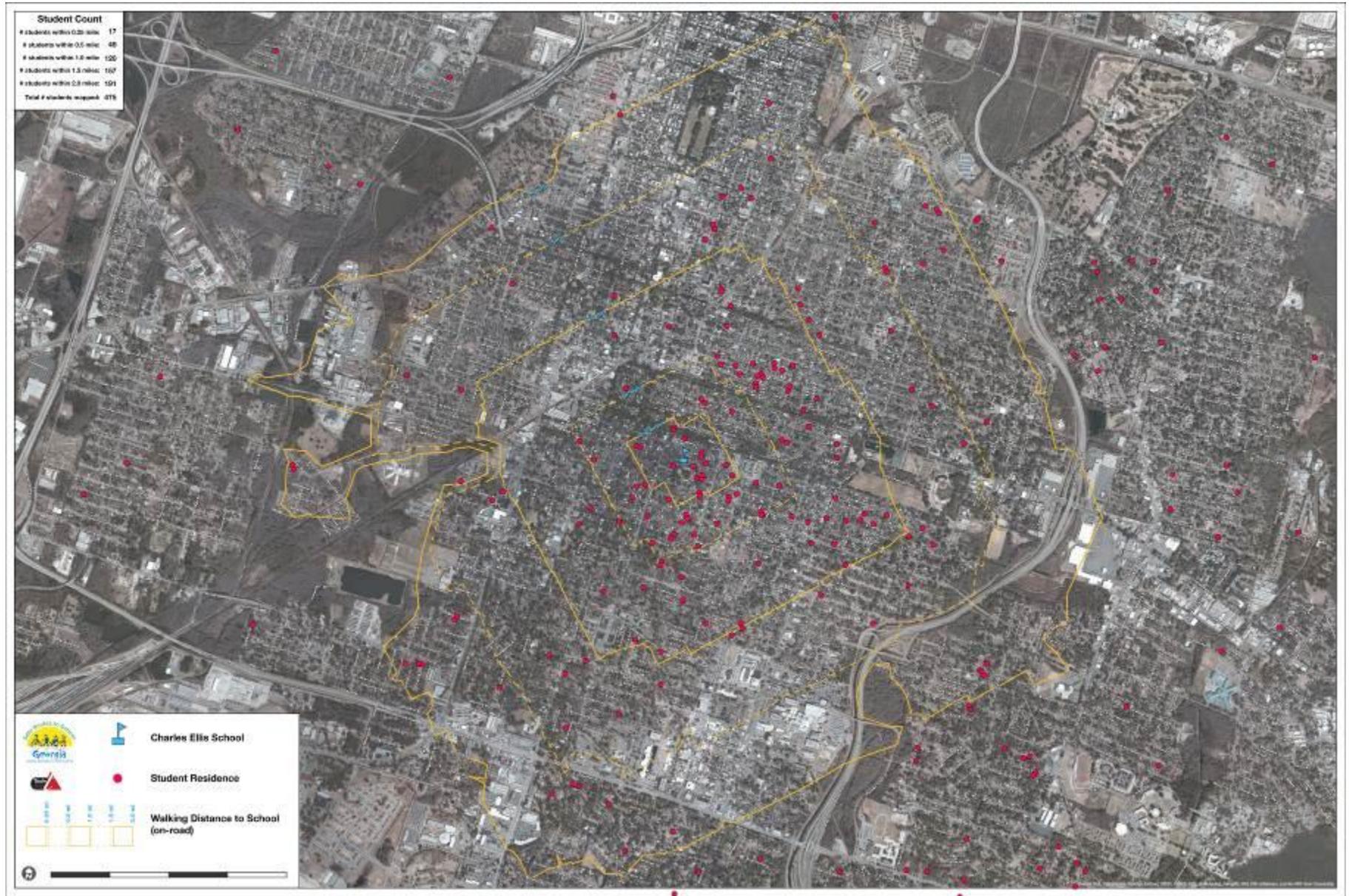
In addition to travel to school, students walk and bicycle to several after and during school activities at nearby parks, including:

- Walking to Hull Park for softball practices four days a week
- Walking to Hull Park for baseball and softball
- Walking to Daffin Park for soccer practice
- Walking to Savannah Arts Academy for basketball practice
- Walking field trips often occur to neighborhood parks
- Emergency evacuation to the Savannah Arts Academy and St. Paul’s Church



<sup>4</sup> Enrollment information is from the School Profile completed as part of the travel plan development process.

Map 1. Map of where students live in relation to the school.



During the first travel plan meeting, current and potential walking and bicycling routes to school were discussed. Below is a table describing the different streets along these routes, as well as some of the benefits and challenges for children traveling to school:

<b>East-West Routes</b> <b>Between Abercorn Street and Waters Avenue/Daffin Park</b>		
<p><u>Victory Drive</u></p> <p>Victory Drive/Route 80 is a four-lane median divided road offers an east-west connection for students living north of school and north of Victory Drive.</p>	<ul style="list-style-type: none"> <li>✓ Bike</li> <li>✓ Walking</li> <li>✓ Both</li>   <li><input type="checkbox"/> Current</li> <li>✓ Potential</li> </ul>	<p><u>What works:</u> The wide sidewalks and signaled controlled intersections provide space along and across the roadway.</p> <p><u>What doesn't work:</u> High traffic volumes and traffic speeds are disincentives for students, especially when crossing the roadway to and from school.</p>
<p><u>Washington Avenue</u></p> <p>This tree-lined boulevard offers one motor vehicle and one bicycle lane in each direction and a raised, planted median. It serves as an alternative route for students living north of school and north of Washington Avenue.</p>	<ul style="list-style-type: none"> <li>✓ Bike</li> <li>✓ Walking</li> <li>✓ Both</li>   <li>✓ Current</li> <li><input type="checkbox"/> Potential</li> </ul>	<p><u>What works:</u> Quieter residential neighborhood with lower traffic volumes and speed. On-street parking and a bike lane help buffer pedestrians walking on sidewalks on either side of the street.</p> <p><u>What doesn't work:</u> The sidewalk network does not meet current accessibility standards. Cars parking too close to the corners and the mid-block crossing at Savannah Arts Academy (discussed later in engineering recommendations) may restrict sight lines and visibility of pedestrians and bicyclists.</p>
<p><u>48<sup>th</sup> and 49<sup>th</sup> Streets</u></p> <p>These 2-lane neighborhood streets with sidewalks on both sides bookend CEMA on the north and south.</p>	<ul style="list-style-type: none"> <li>✓ Bike</li> <li>✓ Walking</li> <li>✓ Both</li>   <li>✓ Current</li> <li><input type="checkbox"/> Potential</li> </ul>	<p><u>What works:</u> Narrow streets offer shorter pedestrian crossing distances. A 25 mph speed limit and on-street parking help calm traffic for the increased pedestrian and bicycle volumes close the school and during arrival and dismissal.</p> <p><u>What doesn't work:</u> Cars parking too close to the corners restrict sight lines and visibility of pedestrians and bicyclists. Narrow sidewalks adjacent to the roadway reduce the number of pedestrians who can walk sociably together.</p>

North-South Routes		
<p>Abercorn Street <i>between 52<sup>nd</sup> Street and 42<sup>nd</sup> Street</i></p> <p>This four-lane street serves as a major north-south through route between the historic district and neighborhoods to the south. Sidewalks on both side of the street and a center planted median make this Abercorn an attractive boulevard.</p>	<input type="checkbox"/> Bike <input checked="" type="checkbox"/> Walking <input type="checkbox"/> Both  <input checked="" type="checkbox"/> Current  <input type="checkbox"/> Potential	<p><u>What works:</u> Sidewalks on both side of the street and a center planted median make Abercorn Street an attractive boulevard for walking. The center planted median provides a refuge and two-stage crossing for students. Traffic signals at the two busiest intersections (Victory Drive and Washington Avenue) provide dedicated crossing times.</p> <p><u>What doesn't work:</u> During this school year there are no students that live along Abercorn Street, and the volumes of students walking north/south along Abercorn are low. Students living west of Abercorn Street cross Abercorn to continue along neighborhood streets to the school; however, two-way stop signs on the side streets and limited marked crosswalks across Abercorn at most intersections do not provide designated pedestrian and bicyclist crossing times, affecting yielding compliance and safety while traveling across the street.</p>
<p>Habersham Street <i>between 52<sup>th</sup> Street and 42 Street</i></p> <p>Habersham Street is a two-way roadway with one travel lane and bicycle lane in each direction, with sidewalks on nearly all blocks next to the curb.</p> <p>A number of student households are located along Habersham.</p>	<input checked="" type="checkbox"/> Bike <input checked="" type="checkbox"/> Walking <input checked="" type="checkbox"/> Both  <input checked="" type="checkbox"/> Current  <input type="checkbox"/> Potential	<p><u>What works:</u> Traffic signals at the two busiest intersections (Victory Drive and Washington Avenue) provide dedicated crossing times.</p> <p><u>What doesn't work:</u> Students living west of Habersham need to cross the street. Two-way stop signs at most intersections do not provide designated pedestrian and bicyclist crossing times, affecting safety while traveling across the street.</p> <p>The relatively narrow sidewalks placed at the curb offer limited width for walking sociably along the street, even with the bicycle lanes that provide a buffer between the sidewalks and motor vehicle travel lane.</p>

<p>Batthey Street <i>between McCauley Park and Washington Avenue</i></p> <p>This neighborhood street runs along the east side of the CEMA campus and is closed during arrival and dismissal.</p>	<ul style="list-style-type: none"> <li>✓ Bike</li> <li>✓ Walking</li> <li>✓ Both</li>   <li>✓ Current</li> <li><input type="checkbox"/> Potential</li> </ul>	<p><u>What works:</u> The street closure helps support walking and biking to school, as well as park and walk students. School family socializing, especially after school is part of the building block for the school community. The adult crossing guard stationed at Batthey and 40<sup>th</sup> Streets helps ensure student safety when making the last crossing before arriving at or leaving school.</p> <p>The street is the main walking and biking route between the school and McCauley Park, a favorite afterschool meeting place.</p> <p><u>What doesn't work:</u> Two-way stop signs on side streets at most intersections do not provide designated pedestrian and bicyclist crossing times across Batthey Street, affecting yielding compliance and safety while traveling across the street.</p> <p>The relatively narrow sidewalks placed at the curb offer limited width for walking sociably along the street, especially given its proximity to school.</p> <p>Park and walk school families result in more motor vehicle and pedestrian traffic along this street. Vehicles parked too close to intersections restrict sight lines and visibility.</p>
<p>Reynolds Street <i>between 52<sup>nd</sup> Street and 41<sup>st</sup> Street</i></p> <p>Reynolds Street is a two-way roadway with one lane in each direction and no on-street parking. Narrow sidewalks run the length of the street adjacent to the roadway.</p> <p>A number of student households are located along Reynolds. The street also serves students at Savannah Arts Academy.</p>	<ul style="list-style-type: none"> <li>✓ Bike</li> <li>✓ Walking</li> <li>✓ Both</li>   <li>✓ Current</li> <li>Potential</li> </ul>	<p><u>What works:</u> Traffic signals at Reynolds Street at Victory Drive support travel to and from school.</p> <p><u>What doesn't work:</u> The intersection with Washington Avenue and Chatham Crescent is comprised of multiple approaches and a fairly large intersection. The flashing light at this intersection does not appear to provide sufficient warning or traffic control to make it comfortable and safe for student pedestrians and bicyclists crossing at this intersection.</p> <p>The relatively narrow sidewalks placed at the curb offer limited width for walking sociably along the street, especially given its proximity to school.</p>

<p>Atlantic Avenue Mall <i>between Washington Avenue and Baldwin Park</i></p> <p>This pedestrian (and bicycling) mall offers a wide sidewalk and a park setting for all city residents.</p>	<ul style="list-style-type: none"> <li>✓ Bike</li> <li>✓ Walking</li> <li>✓ Both</li>   <li>✓ Current</li> <li><input type="checkbox"/> Potential</li> </ul>	<p><u>What works:</u> The wide sidewalk offers a comfortable and safe walking and bicycling route to school. Relatively quiet neighborhood streets cross the Atlantic Avenue Mall; given the attractiveness of the park for many users, motorists are more accustomed to pedestrians, bicyclists, and others using the park for recreation.</p> <p><u>What doesn't work:</u> The intersection with Washington Avenue and Victory Drive lack traffic controls to address pedestrian and bicyclists crossing safety and comfort.</p>
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**Existing Crossing Guard Locations**

- One adult crossing guard assists students crossing 49th Street at Battey Street, adjacent to the school.
- A second adult crossing guard is stationed at the Washington Avenue entrance to the Savannah Arts Academy (SAA) high school during arrival for SAA students. While SAA and CEMA daily schedule are different, CEMA students walking or bicycling to school may be assisted by the crossing guard at this location, if they arrive at CEMA early.

The school SRTS team identified three other crossing locations where adult crossing guards are needed at 49th and Reynolds, Washington and Reynolds, and Habersham and 50<sup>th</sup> Street.

***Local and State Policies and Practices***

The SRTS program at Charles Ellis Montessori School is a key component in the school’s efforts to meet the goals as stated on page 5 of this plan. Savannah-Chatham County Public Schools Board of Education Policy and the State of Georgia guidelines establish a one and one-half mile (1 ½) non-transport zone (NTZ), i.e., the ‘walk zone’. Understanding that students within the NTZ may bicycle to school, the Board includes a strong statement for safety, citing state law requiring bicycle helmets.

*Each year 800 bicyclists are killed and as many as 500,000 require emergency room care for injuries. Georgia bicycle traffic law (O.G.C.A. § 40-6-296) requires every person under the age of sixteen to wear a bicycle helmet while operating a bicycle or riding as a passenger. **Any person that rides a bike to and from Savannah-Chatham Public Schools, including accompanying adults, MUST wear a bicycle helmet.** The District’s bicycle helmet initiative is a comprehensive approach to identify and eliminate any gaps in school injury prevention programs and to protect the health and well-being of our children. With your assistance, SCCPSS will become a model for preventing bicycle related injuries and death. Please join us in this groundbreaking injury prevention effort to keep our children safe – “It’s the Law.”*

An online resource for parents and students, provided by the district for helping parents get their children ready for the first day of school, includes the following recommendation for walkers, including Step 5: *If your child . . . is a walker, plan the route and walk it together both ways.*<sup>5</sup>

The CEMA parent handbook includes information on arrival and dismissal locations for walkers, as well as a statement regarding student conduct (page 3): *Walkers are asked to be courteous to our neighbors. Please stay on the sidewalks, and obey the crossing guards.*

Policies, plans and programs of the Georgia Department of Transportation (GDOT), the City of Savannah, and the Chatham County Regional Planning Commission support the CEMA's goals. These include:

### **The GDOT Complete Streets Design Policy**

The policy statement shown below expresses the department's intent to create safe and accessible pedestrian and bicyclist networks along state-maintained roads that offer mobility for all users.

*It is the policy of the Georgia Department of Transportation (GDOT) to routinely incorporate bicycle, pedestrian . . . accommodations into transportation infrastructure projects as a means for improving mobility, access, and safety for the traveling public. Accordingly, GDOT coordinates with local governments and regional planning agencies to ensure that bicycle, pedestrian...needs are addressed beginning with system planning and continuing through design, construction, and maintenance and operations. . . The design of transportation projects for multiple modes of travel requires the balancing of the needs of each mode. This 'balance' must be accomplished in a context sensitive manner...*<sup>6</sup>

The policy is supported by warrants for building complete streets network that emphasize user safety and user needs, rather than the more tradition requirement for a demonstrated need (i.e., the number of pedestrians crossing a street). Both pedestrian and bicyclist warrants include standards (i.e., conditions that must be met) and guidelines (i.e., offer flexibility in responding to a condition). For example the pedestrian warrants include:

#### **9.4.1. Pedestrian Warrants**

*Standards – Pedestrian accommodation shall be considered in all planning studies, and be included in all . . . projects [in] and urban border area . . . or are located in areas with any of the following conditions:*

- *Along corridors with pedestrian travel generators and destinations. . .*
- *Where there is evidence of pedestrian traffic.*
- *Where a need is identified by a local government, MPO or regional commission through an adopted planning study.*

*Guidelines – Pedestrian accommodations should be considered on projects that are located in areas with any of the following conditions:*

- *Within close proximity (i.e., 1 mile) of a school, college, university, or major public institution...*
- *Any location where engineering judgment, planning analysis, or the public involvement process indicates a need.*

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<sup>5</sup> <http://internet.savannah.chatham.k12.ga.us/Family/Pages/HowtoHelpYourChildPreparefortheFirstDayofSchool.aspx>

<sup>6</sup> GDOT Complete Streets Design Policy, page 9-2.

## Tri-Centennial Chatham County-Savannah Comprehensive Plan, revised December 2012

The plan identifies and addresses several issues related to the CEMA School Travel Plan goals:

- Issue 2 – Historic Neighborhood Vitality and Sustainability
- Issue 6 – Environmental Protection
- Issue 8 – Multi-modal efficiency

*The strategic goals translate into specific action for a Short term work plan:*

*A. Work towards a community that has a safe and efficient multi-modal transportation system*

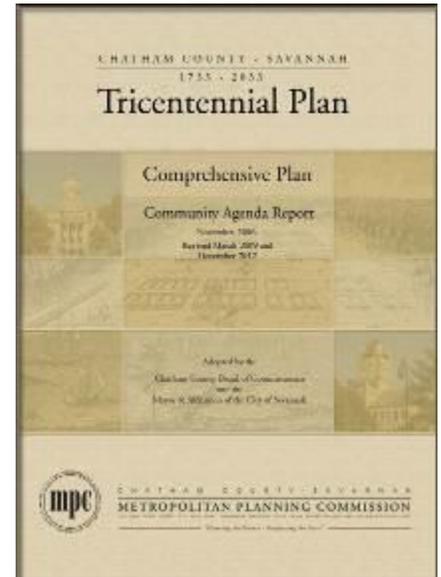
- *Regional transportation system that offers modal choice*
- *Expand opportunities for modal choice connecting employees to employers*

*C. Develop a road system to maintains and preserves the unique characteristics of neighborhoods...*

- *Match the roadway to the adjacent land use*
- *Consider the impact of roads on the physical and economic health of its residents*

*E. Establish a transportation system that anticipates and facilitates economic activity*

- *Establish Savannah as a... bicycle-friendly, walkable community...*



## Chatham County MPO completed a School Zone Safety Report (2010)

The report included a summary of national standards and guidelines for school zones; best practices from other communities such as Charlotte NC, Phoenix AZ, and St. Petersburg, FL; and a toolkit of various crossing treatment from the 2009 Manual of Uniform Traffic Control Devices (MUTCD). Treatments that are relevant for CEMA are shown below:

**METROPOLITAN PLANNING COMMISSION**  
100 EAST CENTER STREET, 100-1000, SUITE 400A, GAITHERSBURG, MARYLAND 20878

### Advance Warning Signage

Advance warning signage is used to notify vehicles in advance of upcoming pedestrian presence. This signage is especially helpful in situations where drivers may not expect a pedestrian crossing and it allows them adequate time to reduce speeds. The MUTCD provides specific guidance on sign selection and location.

The "State Law Stop for Pedestrian" sign is often used in the street along the center line at lane lines to slow vehicles down in crossing areas. It also educates drivers that they are required to stop when a pedestrian is waiting to make a crossing at an unsignalized location. The MUTCD states that this signage should not be post-mounted on the side of the roadway, and if an island is available, it should be placed there. Similarly, the overhead State Law signage can be mounted overhead at the crosswalk location.

Because the above State Law signage is not recommended for post-mounting along the side of the roadway, the Georgia Department of Transportation (GDOT) has developed a standard for similar signage, shown at right, to mount alongside crosswalks on standard two-way sign posts. It is often used at crosswalks at channelized right turns and beside other crosswalks at intersections.

Advanced Warning Signage

**METROPOLITAN PLANNING COMMISSION**  
100 EAST CENTER STREET, 100-1000, SUITE 400A, GAITHERSBURG, MARYLAND 20878

### WALK (High Intensity Activated Crosswalk) Beacon

The WALK beacon is a crossing signal used at unsignalized intersections that is activated by pedestrians and stops traffic to allow for safe pedestrian crossing. Mounted on roadside poles and mast arms, it remains dark until pedestrian activation. The WALK beacon was originally developed for school crossings in Tucson, Arizona, and it is increasingly being used at locations that do not warrant a full traffic signal. Use of the beacon has been shown to increase motorist compliance for stopping for pedestrians at unsignalized crossings.

The sequence of the beacon is as follows:

1. Beacon is dark.
2. Pedestrian presses activation button. Beacon flashes yellow for approaching drivers; warns to reduce speed and prepare of pedestrians.
3. Solid yellow beacon.
4. Solid red beacon; drivers must stop at stop line. Pedestrian receives WALK signal with a countdown timer on a pedestrian signal head.
5. Pedestrian receives flashing DON'T WALK indication on pedestrian signal head; Motorists see flashing red, indicating that they must remain stopped until pedestrians have completed crossing.
6. Beacon goes dark.

When the beacon is dark, motorists are not required to stop as they normally are when standard signals are dark. Use of the WALK beacon at midblock locations has recently been added to the MUTCD.

WALK beacons cost approximately \$50,000.

What Drivers See	What Pedestrians See
1. DARK	Flash the button.
2. FLASHING YELLOW	
3. SOLID YELLOW	
4. SOLID RED	Start crossing.
5. FLASHING RED	Complete crossing.
6. DARK	

Pedestrian Hybrid Beacon

**METROPOLITAN PLANNING COMMISSION**  
100 EAST CENTER STREET, 100-1000, SUITE 400A, GAITHERSBURG, MARYLAND 20878

### High Visibility Signs and Markings

High visibility signs and markings are used to further calm the awareness of drivers to the presence of pedestrians. High visibility school signs and any supplemental plaques should consist of a fluorescent yellow-green background with a black legend and border, as presented by the MUTCD, unless otherwise specified. Signs should be of retroreflective material or illuminated.

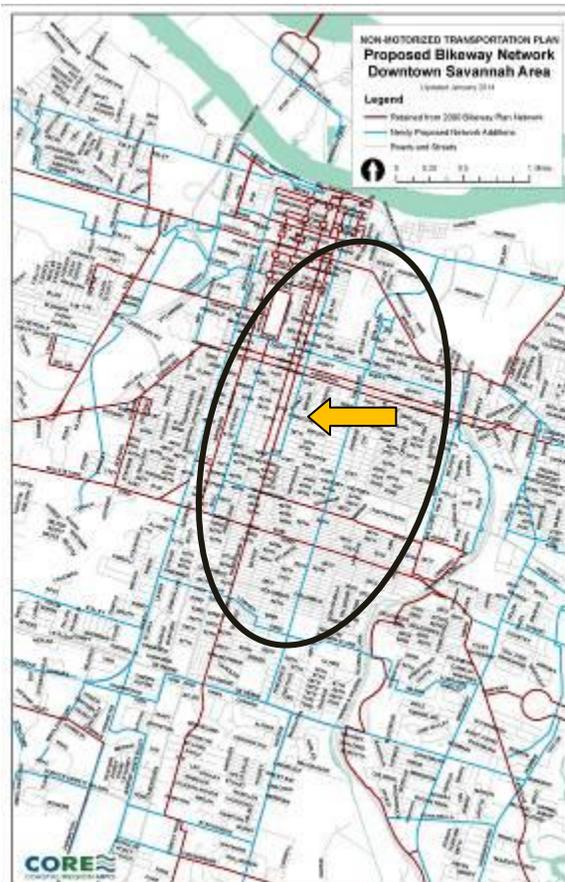
Markings in school areas, including crosswalk striping and SCHOOL pavement lettering, should be thermoplastic or available so that all markings can be clearly seen by vehicles in school areas. Often, pavement markings are worn down in time by vehicles frequently traversing them. Those that are not properly maintained are less visible in certain light, particularly when very sunny or dark.

Recommended high-visibility crosswalk striping consists of two transverse stripes spaced no less than six feet apart. They should extend the full width of the pavement and be at least 6 inches and no more than 24 inches in width, preferably 12 inches. The area between the transverse lines should be marked with diagonal lines at a 45-degree angle or lines parallel to the traffic flow, sometimes known as "zebra" striping. These lines should be 12 to 24 inches in width, separated by gaps of 12 to 60 inches. The gap between lines should be no more than 2.5 times the width of the line itself. Whenever possible, these lines should avoid the wheel paths of vehicles so that the life of the marking is extended.

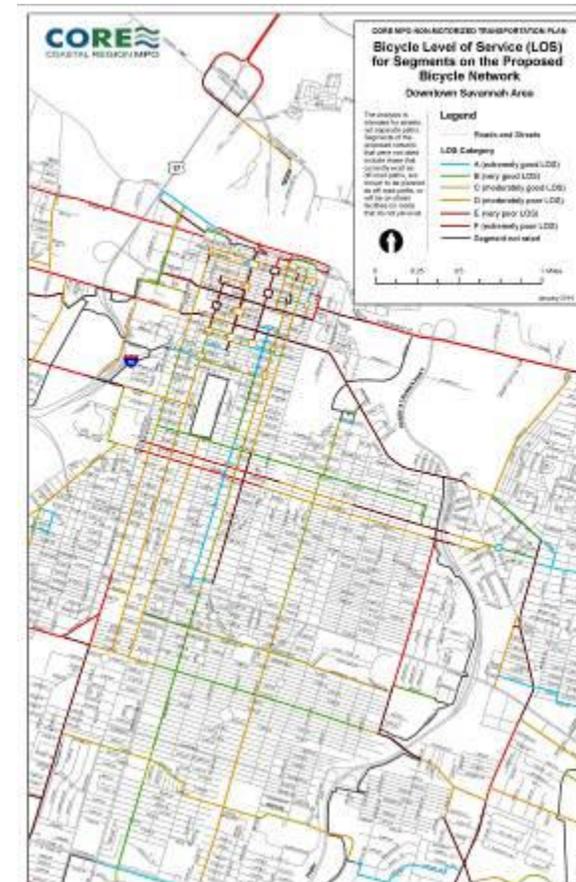
High Visibility Signs and Markings

## Coastal Region Metropolitan Planning Organization

The Coastal Region Metropolitan Planning Organization (CORE MPO) is an integral part of developing Savannah's pedestrian and bicycle networks. Because the pedestrian network along walking routes to CEMA is relatively complete, CORE MPO has proposed pedestrian network improvements in other areas of downtown Savannah. Bicycle network recommendations include a bikeway on Broad Street; this bikeway would benefit students living north of Victory Drive. See the Map 2 below. CORE MPO has also determined the bicycle level of service (LOS) (comfort and safety rating) for the existing bicycle network. Map 3 shows that bikeways near CEMA have a LOS score generally between extremely good and moderately good. A bikeway network improvement is recommended for Broad Street (see Map 2), the street with the lowest LOS score.



Map 2. Recommended bikeway network improvement serving CEMA students (see orange arrow).



Map 3. Bicycle LOS for bikeways near CEMA.

Two studies affecting the walking and bicycling routes to school identified in this plan are expected to be conducted in 2015 or 2016, discussed below.

The first is a **traffic calming plan for the Ardsley Park** neighborhood. The City’s uses a process rich in public input to identify traffic calming treatments (such as traffic circles, curb extensions, and raised crosswalks), led by the City’s Traffic Calming Committee. This school travel plan can help inform the traffic calming plan. The neighborhood traffic calming plan is developed over three community meetings. Once treatments are identified by those participating in the community meetings, the plan needs to be endorsed by the entire neighborhood. Savannah provides a fixed amount per neighborhood for improvements, funded from the City’s SPLOST fund.<sup>7</sup>

The second is a **Victory Drive Corridor Study** lead by the Coastal Region Metropolitan Planning Organization. The study, anticipated to be completed by early 2015, will include a stakeholder advisory committee that includes the representatives from MPO, MPC, City of Savannah, Savannah Tree Foundation, Historic Savannah Foundation, and garden clubs among others. The CEMA Travel Plan includes an important recommendation for an improved pedestrian crossing at Victory Drive and the Atlantic Avenue Mall that benefits all community members using this popular park. All recommendations affecting Victory Drive should be coordinated with those of the Victory Drive Corridor Study, a multi-agency study underway in 2014 and being managed through CORE MPO.

### ***Student Travel to and from School***

Table 1 below shows the number of student households within 2 miles of school, in ¼ or ½ mile increments. Forty percent of CEMA student households (191) in the current school year are within 2 miles of school. Of these, 120 are within a mile of school, a distance considered walkable for K-8 students.

Table 1. Student Households within 2 Miles of School

Distance From School	Cumulative Count	Count per buffer	Percentage of all households within 2 miles
<b>Students living within 1/4 mile of school</b>	17	17	4%
<b>Students living within 1/2 mile of school</b>	49	32	10%
<b>Students living within 1 mile of school</b>	120	71	25%
<b>Students living within 1.5 miles of school</b>	157	37	33%
<b>Students living within 2.0 miles of school</b>	191	34	40%

*Counts total 475 are cumulative and are based on mapped student addresses from 2013 enrollment. See Map 1 on page 8.*

<sup>7</sup> <http://www.savannahga.gov/index.aspx?NID=1174>

Table 2 shows how students travel to and from school. Based on the October 2013 student travel tallies, 14% of students walk to and from school on a typical day and 3% of students bike to and from school, with more students tend to walking home from school. A majority of the remaining students travel to and from school by private motor vehicle.

Table 2. Existing Student Travel Patterns

Travel Mode	Walk	Bike	School Bus	Family Vehicle	Carpool	Other
<b>Number of Students</b>	67	13	101	265	11	15
<b>Percentage of Student Body</b>	14%	3%	22%	57%	2%	3%

Note: Counts are based on student travel tallies collected in October 2013. The 3-day tallies for traveling to and from school were averaged.

### ***Parent Survey about walking and biking to school***

CEMA administered the Parent Survey regarding travel to school in February 2014. Complete results of the survey are provided in Appendix D. A summary of results is below.

- Sixty-nine (69) survey responses were tabulated. While students in all grades were represented, the majority of responses were for students in grades K-4 and for students living either within ¼ mile from school or more than 2 miles from school.
- The large percentage of parents who reported their child asked to walk or bike to school were from those living within ½ mile to 1 mile of school, in addition to a strong percentage of students living with ¼ mile from school. Students living within these distances from school may be responsive to programs and activities that promote safe and comfortable travel to school on foot on bike.
- Top issues affecting a parent’s decision about walking or biking to school are different between those who do not walk and those that currently walk.

	Issues of higher concern	Issues of lower concern
<b>Current <u>do not</u> walk or bike to school</b>	<ol style="list-style-type: none"> <li>1. Distance</li> <li>2. Amount of traffic &amp; Intersection/crossing safety</li> <li>3. Speed of traffic</li> </ol>	<ol style="list-style-type: none"> <li>1. Crossing guards</li> <li>2. Convenience of driving</li> <li>3. Child’s after school program participation</li> </ol>
<b>Currently <u>do</u> walk or bike to school</b>	<ol style="list-style-type: none"> <li>1. Intersection/crossing safety</li> <li>2. Speed of traffic</li> <li>3. Crossing guards</li> </ol>	<ol style="list-style-type: none"> <li>1. Travel time</li> <li>2. Violence or crime</li> <li>3. Child’s after school program participation</li> </ol>

### ***Concerns identified by SRTS Team***

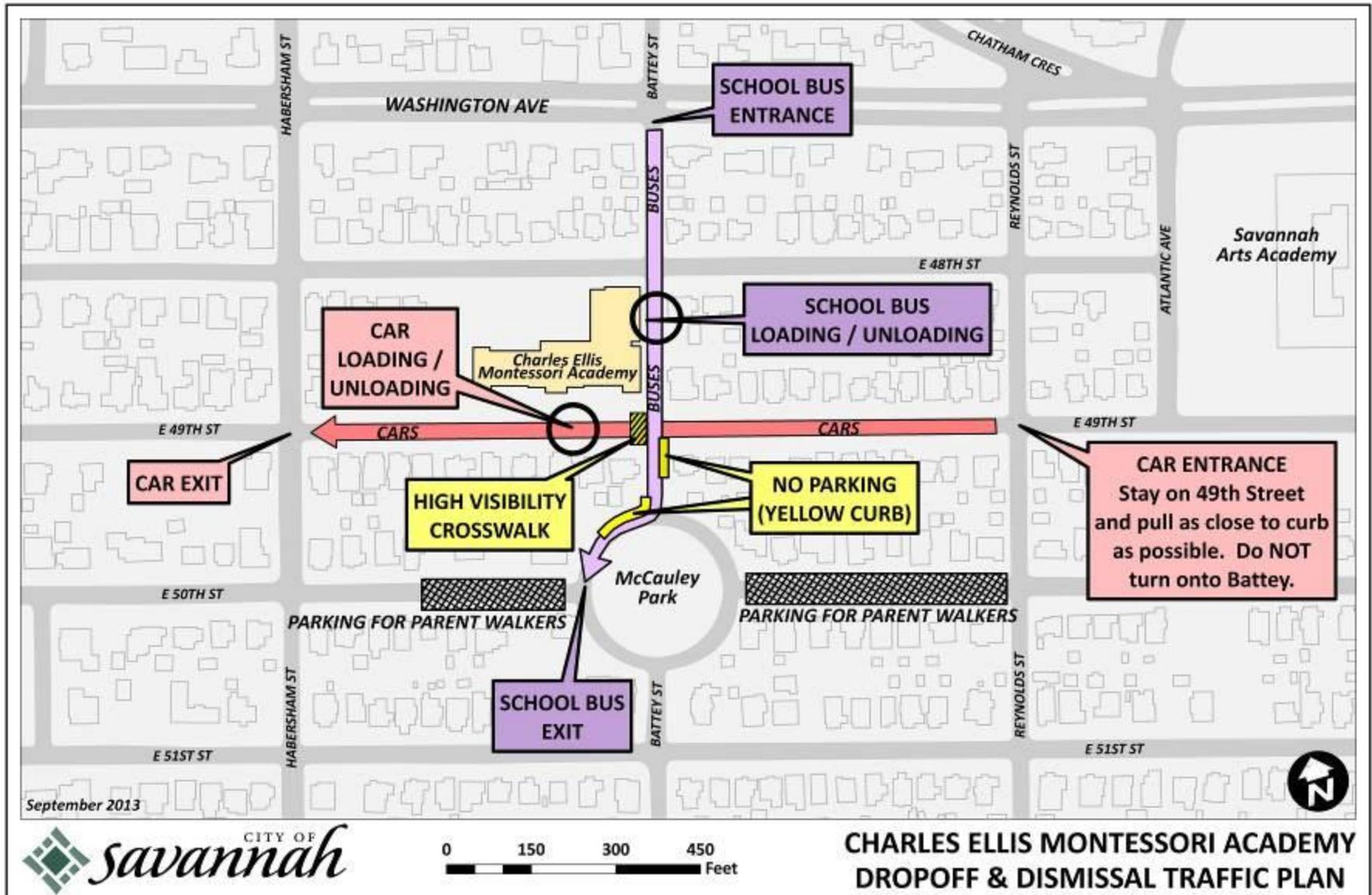
As part of the planning process, the team discussed issues that affect walking and bicycling to school. Specific concerns included motorist behavior within the school vicinity – whether driving or parking – that created student safety concerns in the blocks adjacent to the school. Of particular concern was

the congestion at McCauley Park, a neighborhood park used as a meeting place for students and their parents, regardless of travel mode. Both deficient pedestrian and motorist infrastructure and traveler behavior affected safety. These concerns, described in more detail in the engineering recommendations section beginning on page 29, include:

- The lack of striped cross walks
- Parked cars that block sight lines of student pedestrians for motorists
- Sidewalk gaps and missing curb ramps
- The lack of traffic controls for motorists traveling along roads that students cross to arrive at school
- Limited bicycle parking on the school campus
- Motorist travel speeds higher than posted speed limits, especially in the school zone or near the school
- The number of park and walk students increases the number of pedestrians traveling to school along roads adjacent to the school

The arrival and dismissal process has been an on-going concern for the school. In the fall 2013, the school community worked with the City of Savannah to develop a new arrival and dismissal plan aimed at improving the orderliness of the process by all modes. Figure 1 shows this plan. The SRTS team considered changes to this plan as part of discussions for developing this plan.

Figure 1. New arrival and dismissal plan, fall 2013.



## Safe Routes to School Recommendations

The Charles Ellis Montessori Academy SRTS Travel Plan includes strategies from each of the Five Es: Engineering, Education, Encouragement, Enforcement, and Evaluation. Recommendations for each E are described in this section. A table showing each recommendation by E and timeframe is below. The identifier in the left-hand column is used for engineering recommendations. Details on Engineering and Programmatic recommendations follow.

Immediate actions		Type	Team Priority
	Establish walking school buses and bicycle trains from designated gathering locations	Encouragement	High
	Participate in International Walk to School Day	Encouragement	High
	Establish additional on campus bicycle parking	Encouragement	High
	Conduct bi-annual student travel tallies	Evaluation	High
	Conduct annual parent surveys	Evaluation	High
	Incorporate walking and bicycling information in regular school communication	Education	High
B	At McCauley Park: Restrict parking 20' from corners and where in-street pedestrian walkways may be proposed.	Engineering	High
C	Designate the Atlantic Avenue Mall as a multi-use path to legalize bicycling.	Engineering	High
	Publicize SRTS at orientation and back to school night	Encouragement	Medium

Short term actions		Type	
	Integrate pedestrian and bicycle safety instruction into the curriculum	Education	High
	Participate in National Bike to School Day	Encouragement	High
	Participate in Georgia Walk to School Day	Encouragement	High
	Incorporate Information on walking and bicycling to school in communications with parents	Education	High
	Offer education for walking school bus and bicycle train adult leaders	Education	High
	Develop and enforcement and encouragement program for students participating in walking school buses and bike trains	Enforcement	High
	Work with the School Resource Officer and the Savannah Police Department on enforcement around the school and along established walking school bus and bicycle train routes	Enforcement	High
	Establish Crossing Guards during arrival and dismissal at key walking school bus and bicycle train crossing locations	Enforcement	High
	Establish a Safe Driving Pledge	Enforcement	High
	Conduct annual Parent Surveys and Student Tallies	Evaluation	High
A	Install 4-way stops and stop bars at intersections around school campus	Engineering	High
A	Install stop sign and stop bar on McGillicuddy Lane at 48 <sup>th</sup> Street	Engineering	High
B	Provide a continuous and accessible sidewalk network	Engineering	High

Short term actions		Type	
	around the parks. Maintain trees where possible.		
B	Add high visibility crosswalks and accessible curb ramps across all intersections.	Engineering	High
B	Improve crossings into the parks with mid-block crossings with curb ramps, high visibility crosswalks	Engineering	High
C	Along walking and biking route for walking school buses and bicycle trains: Provide traffic calming measures, i.e., 'neighborways'	Engineering	High
D	Install a pedestrian hybrid beacon and advance pedestrian warning signs on E. Victory Drive at Atlantic Avenue Mall	Engineering	High
D	Raise the median at the crossing of E. Victory Drive; provide at grade cut-throughs for pedestrians with detectable warning panels; install stormwater management features in the median while maintaining visibility	Engineering	High
E	Install rectangular rapid flash beacon on both sides of Washington Street at entrance to the Savannah Arts Academy	Engineering	High
G	Reynolds Street between E. 41 <sup>st</sup> and E. 56 <sup>th</sup> Street: replace broken yellow lane line and install a double yellow lane line to restrict passing	Engineering	High
	Hold a bicycle rodeo before start of school	Education	Medium
	Offer bicycle safety education for middle school students	Education	Medium
	Year-end review of pedestrian safety skills	Education	Medium
	Develop and implement a community outreach campaign	Education	Medium
	Track participation in walking school buses and bicycle trains	Evaluation	Medium
	Conduct regular assessments of congestion during arrival and dismissal	Evaluation	Medium
A	Upgrade sidewalks around the school for accessibility	Engineering	Medium
A	Accessible curb ramps and high visibility crosswalks at intersections around school campus	Engineering	Medium
A	Upgrade school zone signage to meet current standards. Install school zone pavement markings on 48th and 49th streets on both approaches to the school within about 100' to 300'.	Engineering	Medium
B	Provide traffic calming measures for McCauley Park	Engineering	Medium
C	Upgrade school zone signage to meet current standards	Engineering	Medium
E	Install curb extension where curb is currently painted yellow on both sides of Washington Street at entrance to the Savannah Arts Academy	Engineering	Medium
F	Replace broken yellow lane line with a double yellow lane line to restrict passing on Habersham Street between E. 41 <sup>st</sup> Street and E. 56 <sup>th</sup> Street	Engineering	Medium
F	On Habersham Street, remove parking on the block between 48 <sup>th</sup> Street and Washington Street to continue the bike lane through this block	Engineering	Medium

Mid-term actions		Type	
	Conduct regular assessments of conditions and needs around the school	Evaluation	Medium
B	Hull Park: Install traffic circles at northern and southern intersections; replace stop signs with yield signs	Engineering	Low
C	Along walking and biking route for walking school buses and bicycle trains: Upgrade sidewalks to meet accessibility requirements.	Engineering	Medium
C	Along walking and biking route for walking school buses and bicycle trains: Provide curb ramps and marked crosswalks along all legs of intersections	Engineering	Medium
C	Install raised crosswalks at midblock intersections along the Atlantic Avenue Mall	Engineering	Medium
D	Install curb ramps and marked crosswalks across North and South Atlantic Avenue to connect to the Mall (on both the northern and southern legs of the intersection). Install an accessible sidewalk to create a "neckdown" to slow motor vehicle traffic.	Engineering	Medium
D	Provide an accessible route to access the Atlantic Avenue Mall.	Engineering	Medium
F	Habersham Street between E. 41 <sup>st</sup> Street and E. 56 Street: Install buffered bike lane	Engineering	Medium

Long-term actions		Type	
A	Add a minimum 5' wide sidewalk on the west side of McGillicuddy Lane across from the school.	Engineering	Low

## Engineering

SRTS engineering strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails, and bikeways.

The Engineering Recommendations, Table [N] lists improvements at x locations within x miles of the schools. Recommendations range from signs and markings to sidewalk or path construction. Recommendations are identified as short-term or long-term based on these generalizations. However, site, soil, materials, right-of-way acquisition, and environmental regulations also impact the cost and complexity of any given project. Accordingly, actual timeframes may vary depending on the lead agency, design and construction process for each recommendation. The short, medium, and long timeframes shown in the chart to the right serve as a guide for anticipated project completion, but actual timeframes may vary.

Immediate term	Within this year
Short term	Within 2 years
Medium term	Within 5 years
Long term	Longer than 5 years

**These recommendations are for planning purposes only and may require further engineering analysis, design, or public input before implementation and should be in full compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 2009 edition and other applicable federal, state and local guidelines, standards and policies.** A description of these typical SRTS engineering treatments can be found beginning on page 23 of this travel plan.

Infrastructure improvements can take time to complete and are a collaborative effort between the community and transportation agencies that must implement projects.

### Factors Affecting Ranking:

1. Locations with specific safety concerns.
2. Locations along existing student walking or bicycling routes, or with a sufficient number of school family residences.
3. At intersections and along streets within ½ mile of school.
4. Locations that are priorities for the school community.

### Considerations for Design, Project Selection, and Funding:

- All engineering recommendations in this plan are considered “planning level” and may require further engineering analysis, design, or public input before implementation.
- The engineering treatments shown are based on national best practice design techniques. Some treatments may not in wide use by the City of Savannah or Georgia and may necessitate additional review. The process for implementation of each recommendation will vary depending on the lead agency for construction (e.g. the local municipality, county, or Georgia.)
- Recommended changes to existing traffic patterns (adding a signal, adding a stop sign, changing lane patterns, etc.) will require a study to evaluate the potential impact that the recommendation could have on existing traffic conditions. If funded through Georgia, this study must meet the standards and guidelines of Georgia, including GDOT’s Complete Streets Design Policy. If funded

through the City of Savannah, the projects must be consistent with current city practices, guidelines and standards.

- Drainage, existing utilities, and Americans with Disabilities Act (ADA) compliance will need to be evaluated for all recommendations at the time of design. ADA guidelines recommend particular design features to accommodate persons with disabilities. ADA design considerations for curb ramps, sidewalks and paths, include appropriate slopes, landing areas, surface conditions, and use of detectable warning materials for visually impaired pedestrians, among other design features.
- Right-of-way was not evaluated as a part of this project. Recommendations assume that sufficient right-of-way exists or that a method to gain needed right-of-way will be identified as the project progresses.
- GDOT will not be responsible for electric usage or maintenance expenses associated with lighting installation. An agreement would be needed to assign the responsibility of maintenance and electric cost.
- For all recommendations, final approval will require an engineering review of the specific site.
- A variety of funding sources may be used for the recommendations.

### **Summary of infrastructure improvements included in this plan**

#### **High Visibility Crosswalks:**

High visibility crosswalk striping improves the visibility of pedestrians to motorists. Different striping patterns can be used, all generally around a ladder style. Thermal plastic materials should be used to resist decay.

#### **Speed Tables/Raised crosswalks:**

Raised crosswalks are flat-topped speed humps with crosswalk markings painted on the top. Raised crosswalks serve two purposes: they make pedestrians more visible to motorists; and they cause motorists to slow at the most critical location, where pedestrians cross (*The Effects of Traffic Calming Measure on Pedestrian and Motorists Behavior, FHWA 2001*).

#### **Curb Extensions:**

Curb extensions are recommended to reduce pedestrian crossing distances (and thus exposure to traffic) and to slow motor vehicle turning speeds. Curb extensions located along school bus routes should effectively calm traffic, but not impede buses from making the turn.

#### **Curb Ramps:**

Curb ramps are located at the curb line to allow elevation change from street level to sidewalk level. Curb ramps are typically located at crosswalks /crossings. Curb ramps should be ADA compliant. Two ramps at a corner are preferred vs. one diagonal.

#### **Shared lane marking (also called a Sharrow)**

A shared lane marking is a pavement marking that alerts drivers and cyclists that a street is shared by the two modes. It also shows cyclists the optimum place to ride on the street. The shared lane marking is an effective, flexible alternative to striped bike lanes and can be used to create an on-street bike facility and make connections between bike lanes on streets too narrow for standard five-foot wide bike lanes.

### Rapid Flashing Beacons:

Rapid flashing beacons will increase the visibility of students and all pedestrians as they cross the roadway. This type of signal is pedestrian-activated, i.e., the signal will only flash if a pedestrian has pushed a button, indicating that they need to cross the street.

### Pedestrian Hybrid Beacon:

A pedestrian hybrid beacon is a special type of traffic signal (also known as H.A.W.K. signal) used to warn and control traffic at an un-signalized location to assist pedestrians in crossing a street or highway at a marked crosswalk (2009 MUTCD). The signal is actuated by pedestrians, meaning that there will only be a “red light” if a pedestrian has indicated a need to cross the intersection. The pedestrian hybrid beacon recommended in this plan is not meant to replace the current crossing guard, nor is it intended to serve as a fully operational traffic signal. Rather it is intended to help support the task of crossing children by making the crossing guard more visible to traffic approaching the intersection from either direction.

### Pedestrian Countdown signals:

Countdown signals provide a numerical display of time remaining once the “red hand” or “Don’t Walk” symbol appears, allowing pedestrians to see how much time they have left to complete crossing the street. The countdown is usually based on a walking time of 4 feet per second, or the new standards of 3.5 feet per second.

### School Zone Identification:

School zone signs and pavement markings are recommended to alert motorists that they are entering a school zone where pedestrians may be present both along and crossing the roadway. New pavement markings can work with existing school zone signs to reinforce the message to motorists about the school zone.

### Sidewalks and buffers:

Sidewalks are most effective when they include a buffer to increase pedestrian comfort and safety, as to serve as a place for pedestrian “overflow”, especially closer to the school. The preferred design for sidewalks in this plan is a minimum 6’ wide sidewalk with a minimum 2’ wide buffer. Available right of way will impact the ultimate design. The GDOT standard minimum sidewalk width is 6’ from back of curb. Minimum dimensions for sidewalks with buffers are a 5’ sidewalk with a 2’ buffer.

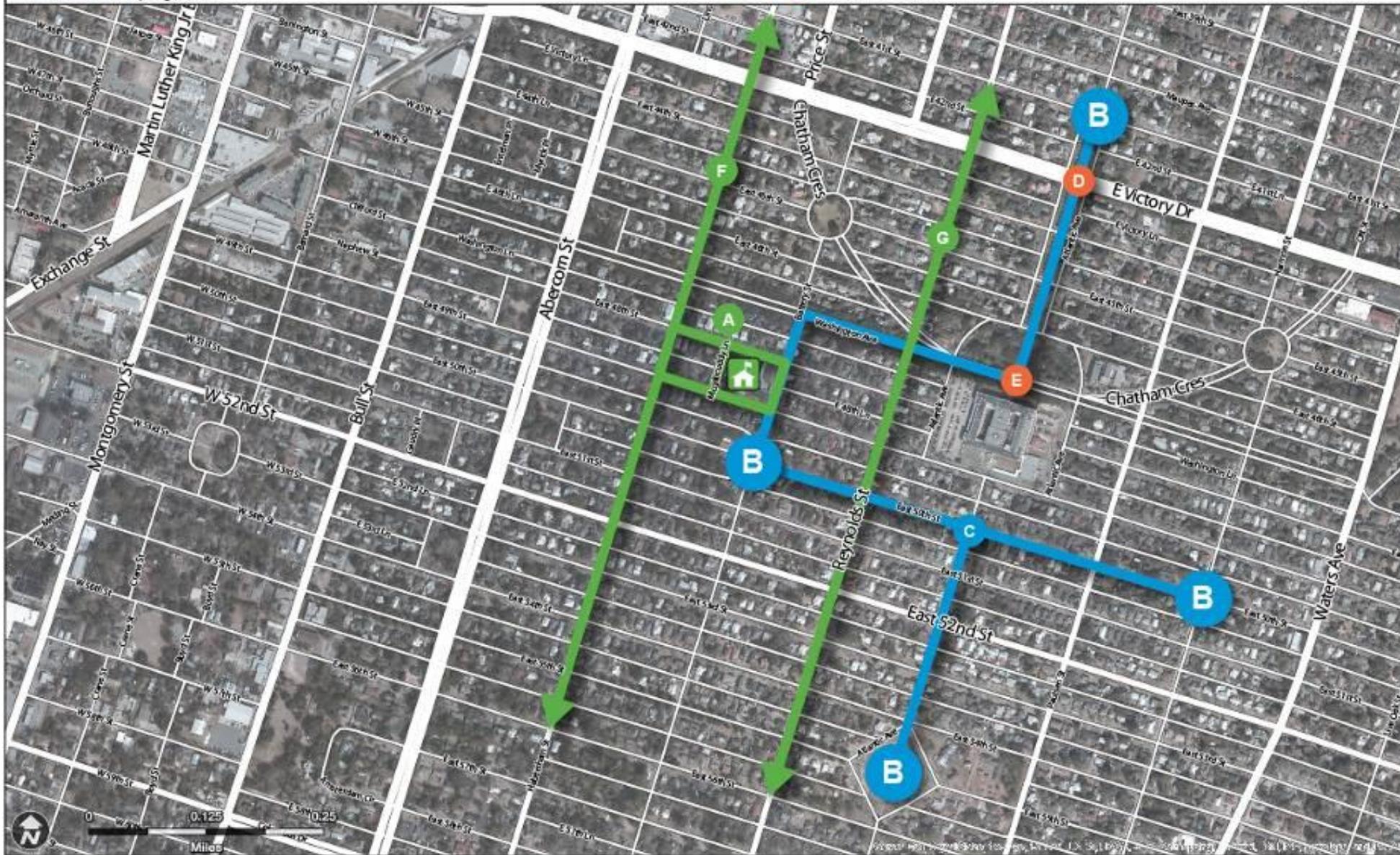


# Charles Ellis School Engineering Recommendations Location Key

Savannah, GA  
Spring 2014

## Legend

- School Location
- Walking School Bus / Bike Train Route
- Gathering Locations
- Segment Improvement
- Intersection/Spot Improvement



## Engineering Recommendations

The following table provides a summary of the engineering strategies recommended for the Charles Ellis Montessori School. These recommendations were developed by Toole Design Group, LLC based on input received from the Charles Ellis Montessori School SRTS Team. All proposed improvements have been prioritized at each site for the Charles Ellis Montessori School SRTS Team (Team Priority).

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Notes, factors	Time frame (immediate, short, medium, long)
A	<p><b>Blocks Around Charles Ellis</b></p> <ul style="list-style-type: none"> <li>• E 48th and E 49th Streets from Habersham Street to Battey Street</li> <li>• Habersham Street and Battey Street from E 48th Street to E 49th Street</li> <li>• McGillicuddy Lane</li> </ul> 				
	Sidewalks around Charles Ellis do not meet current accessibility requirements.	Upgrade sidewalks around the school to meet accessibility requirements. (Spot improvements may be adequate; however in some cases full reconstruction due to drainage and slope requirements may be necessary. Improvements should be determined based on engineering	Medium	Accessibility for students with disabilities	Short

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Notes, factors	Time frame (immediate, short, medium, long)
		judgment.)			
	Intersections around the school do not meet current accessibility requirements, and there are missing or degrading crosswalks.	Provide accessible curb ramps and high visibility crosswalks on all legs of each intersection: <ul style="list-style-type: none"> <li>• E 48<sup>th</sup> Street and Habersham Street</li> <li>• E 49<sup>th</sup> Street and Habersham Street</li> <li>• E 48<sup>th</sup> Street and Battey Street</li> <li>• E 49<sup>th</sup> Street and Battey Street</li> <li>• McGillicuddy Lane and E 48<sup>th</sup> Street</li> <li>• McGillicuddy Lane and E 49<sup>th</sup> street</li> </ul>	Medium	Accessibility for students and neighbors with disabilities	Short
	There are concerns with speeding and motorists not yielding to pedestrians when crossing intersections. E 48 <sup>th</sup> and E 49 <sup>th</sup> Streets are uncontrolled on the east bound approach to Battey Street.	Install 4-way stops and stop bars (pavement marking) at each intersection: <ul style="list-style-type: none"> <li>• E 48<sup>th</sup> Street and Habersham Street</li> <li>• E 49<sup>th</sup> Street and Habersham Street</li> <li>• E 48<sup>th</sup> Street and Battey Street</li> <li>• E 49<sup>th</sup> Street and Battey Street</li> </ul>	High		Short

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Notes, factors	Time frame (immediate, short, medium, long)
	<p>McGillicuddy Lane is on the west side of the school. Traffic on this one-block, one-way street between E 49<sup>th</sup> and E 48<sup>th</sup> street flows northbound. There is no stop sign on McGillicuddy Lane at E 48<sup>th</sup> Street.</p>	<p>Install a stop sign and stop bar on McGillicuddy Lane at 48<sup>th</sup> Street.</p>	<p>High</p>	<p>Dangerous intersection</p>	<p>Short</p>
	<p>McGillicuddy Lane abuts the school property and is where walkers are dismissed. There is only one sidewalk adjacent to the school.</p>	<p>Add a minimum 5' wide sidewalk on the west side of McGillicuddy Lane across from the school.</p>	<p>Low</p>		<p>Long</p>
	<p>The existing school zone signage does not meet current retro-reflectivity/color standards, and there are no school zone pavement markings.</p>	<p>Upgrade school zone signage to meet current standards. Install school zone pavement markings on 48<sup>th</sup> and 49<sup>th</sup> streets on both approaches to the school within about 100' to 300'.</p>	<p>Medium</p>	<p>Signs and pavement markings should be updated as soon as possible.</p>	<p>Short</p>
<b>B</b>	<p><b>Gathering Locations for Walking School Buses and Bicycle Trains</b>            McCauley, Solomons, Hull, and Baldwin Parks were identified by the team as gathering places for walking school buses and bike trains.</p>				
	<p>The school community identified safety concerns at student and parent gathering locations due to the incomplete network of accessible pedestrian facilities. The roadways around the parks are similar, with the roads being one-</p>	<p>Provide a continuous and accessible sidewalk network around the parks. Maintain trees where possible. Best practices in communities where tree preservation is a priority includes:</p> <ul style="list-style-type: none"> <li>• Meandering the sidewalk around the tree, potentially removing an on-</li> </ul>	<p>High</p>	<p>Safety measure for students already walking</p>	<p>Short (if possible)</p>

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Notes, factors	Time frame (immediate, short, medium, long)
	way with one lane and on-street parking. All roadways are about 25' to 28' wide, and have an incomplete sidewalk network. Trees obstruct some existing sidewalks.	street parking space if on-street parking is present. <ul style="list-style-type: none"> <li>Installing in-street pedestrian walkway where it is desired to maintain trees. A ramp down into the street could be installed and the walkway could be distinguished with paint, planters, or flexible bollards.</li> </ul>			
	Intersections around the parks lack crosswalks and/or accessible curb ramps.	Add high visibility crosswalks and accessible curb ramps across all intersections.	High	Accessibility issue for existing walk/bike routes	Short
	There are no crossings into the parks themselves.	Crossings into the park should be considered; accessible curb ramps and high visibility crosswalks could be located midblock between the intersections, or at each intersection on both legs of the crossing.	High	See above	Short
	Speeding and lack of motorists not yielding to pedestrians was a noted concern by the team, especially for McCauley Park. Conditions at other gathering locations need to be assessed.	Provide traffic calming measures to create a "neighborway" developed in concert with the local community. Recommendations may include curb extensions where on-street parking is present, painted intersections, wayfinding signage, bicycle infrastructure, and raised crossings.	Medium	Accessibility and safety measures for existing walk/bike routes	Short (some – like paint and signage) Medium – curb extensions.
	<b>McCauley Park</b> is well-used by school families, especially as an after school destination. The	Restrict parking 20' from corners and where in-street pedestrian walkways may be proposed. This can be achieved	High	Safety measures for students already walking/biking	Immediate

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Notes, factors	Time frame (immediate, short, medium, long)
	<p>school's arrival and dismissal traffic flow plan uses the McCauley Park traffic circle for park and walk, and for the bus route. Motorists are parking where the curb is painted yellow, restricting visibility and creating hazards for turning buses.</p>	<p>through painted yellow curbs and or signage. (Note: restricting parking within 20' of intersections should be considered at all locations. Priority for parking restrictions should be considered at McCauley Park)</p>			
	<p><b>Hull Park</b> is the largest of the four gathering locations, and is a diamond shape rather than a traffic circle. The northern and southern intersections of the park are five-leg approaches and are stop controlled. The eastern and western approaches are two leg intersections and are yield controlled.</p>	<p>Install traffic circles at the northern and southern intersections of the park. Remove stop signs and add yield signs.</p>	<p>Low</p>	<p>Used only on special occasions currently for walking school bus/bike train. Prioritize again when on-going walking school buses/bike trains are implemented</p>	<p>Medium</p>

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
C	<p><b>Walking School Bus and Bicycle Train Routes</b></p> <p>The walking school bus and bicycle train routes include:</p> <ul style="list-style-type: none"> <li>• Battey Street (McCauley Park to Washington Avenue)</li> <li>• Washington Avenue (Battey Street to Hedeman Park/ Atlantic Street Mall - entrance of Savannah Arts Academy)</li> <li>• Atlantic Avenue (Hull Park to E 50<sup>th</sup> Street)</li> <li>• E 50th Street (Solomons Park to McCauley Park)</li> <li>• Atlantic Avenue Mall (Baldwin Park to Washington Street)</li> </ul> <p>The first four routes are along roadways, and the Atlantic Avenue Mall is along an existing grand walkway within a park system. The Atlantic Avenue Mall is also a community resource and serves as a direct connection to the Savannah Arts Academy.</p>				
	<p>These routes were identified by the team as Walking School Bus/Bike Train Routes based on the gathering locations. As noted in the general recommendations that follow, the aging pedestrian infrastructure in the Ardsley Park Neighborhood does not meet accessibility standards. Often there are missing gaps in the sidewalk network.</p>	<p>Upgrade sidewalks to meet accessibility requirements. (Spot improvements may be adequate; however in some cases full reconstruction due to drainage and slope requirements may be necessary. Improvements should be determined based on engineering judgment.)</p>	Medium		Medium
	<p>The curb ramps and marked crosswalks that exist do not meet current accessibility standards; otherwise most intersections do not have curb ramps or marked crosswalks.</p>	<p>Provide curb ramps and marked crosswalks along all legs of each intersection on these routes.</p>	Medium	Accessibility issues	Medium

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
	Along these routes there are concerns of speeding and a lack of motorists yielding to pedestrian at intersections.	Provide traffic calming measures to create a “neighborway” developed in concert with the local community. Recommendations may include curb extensions where on-street parking is present, painted intersections, wayfinding, bicycle infrastructure, and raised crossings. Consider installing 4-way stop signs and stop bars at E 50 <sup>th</sup> Street and: <ul style="list-style-type: none"> <li>• Paulsen Street</li> <li>• Atlantic Avenue</li> <li>• Reynolds Street</li> </ul>	High	Some locations/routes are immediate safety needs	short
	The existing school zone signage does not meet current retro-reflectivity/color standards, and there are no school zone pavement markings.	Upgrade existing school zone signage to meet current standards.	Medium	Signs and pavement markings should be updated as soon as possible	Short

	<p>There are no crosswalks or accessible curb ramps at each intersection along the Atlantic Avenue Mall (E 41st Street to Washington Street).</p>	<p>Install a raised crosswalk at the midblock intersections along the Atlantic Avenue Mall.</p> <p>Alternative: Install accessible curb ramps and high visibility crosswalks (If these are not feasible due to drainage infrastructure requirements and cost constraints).</p>	<p>Medium</p>	<p>Once implemented, the route will necessitate re-prioritization of this item</p>	<p>Medium</p>
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The Atlantic Avenue Mall (E 41st Street to Washington Street) may not currently be designated as a bike route or multiuse path.

Designate the Atlantic Avenue Mall as a multi-use path to legalize bicycling.<sup>8</sup> This can be achieved through pavement markings or other treatments like differentiating materials. See figures below for examples of best practices:

High

Necessary to implement bike train route

Short



Figure 2. Multi-use trail down linear park in Los Angeles.



Figure 3. Bikeway on sidewalk at Georgia Tech in Atlanta.

<sup>8</sup> Bicycling on sidewalks is prohibited in Savannah.

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
D	<p><b>Atlantic Avenue Mall at E Victory Drive</b>            The Atlantic Avenue Mall intersects E Victory Drive midblock between the one-way couplets of North Atlantic Avenue and South Atlantic Avenue. E Victory Drive (State Route 80) has been identified as a barrier to walking and biking to school. It is a median separated urban principal arterial roadway with two travel lanes in each direction and a posted speed limit of 40 mph. All recommendations affecting Victory Drive should be coordinated with those of the Victory Drive Corridor Study, a multi-agency study underway in 2014 and being managed through CORE MPO.</p>				
	<p>There is a high visibility crosswalk across E Victory Drive at the Mall. There is one pedestrian warning sign (per direction) on the approach to the crosswalks on the right hand side of the road. With the existing controls and based on observations, the team's experience during field work and walkabouts was that motorists do not yield to pedestrians waiting to cross E. Victory Drive. All members of the team have expressed concerns about children crossing E. Victory Drive and their ability to judge gaps in fast moving motor vehicle traffic.</p>	<p>Install a pedestrian hybrid beacon and advanced pedestrian warning signs on E. Victory Drive at Atlantic Avenue Mall.</p>  <p>Figure 4. HAWK signal along a busy commercial street requires motorists to stop when activated by pedestrians.</p>	High	Necessary safety improvement in order to implement bike route from Baldwin Park	Short

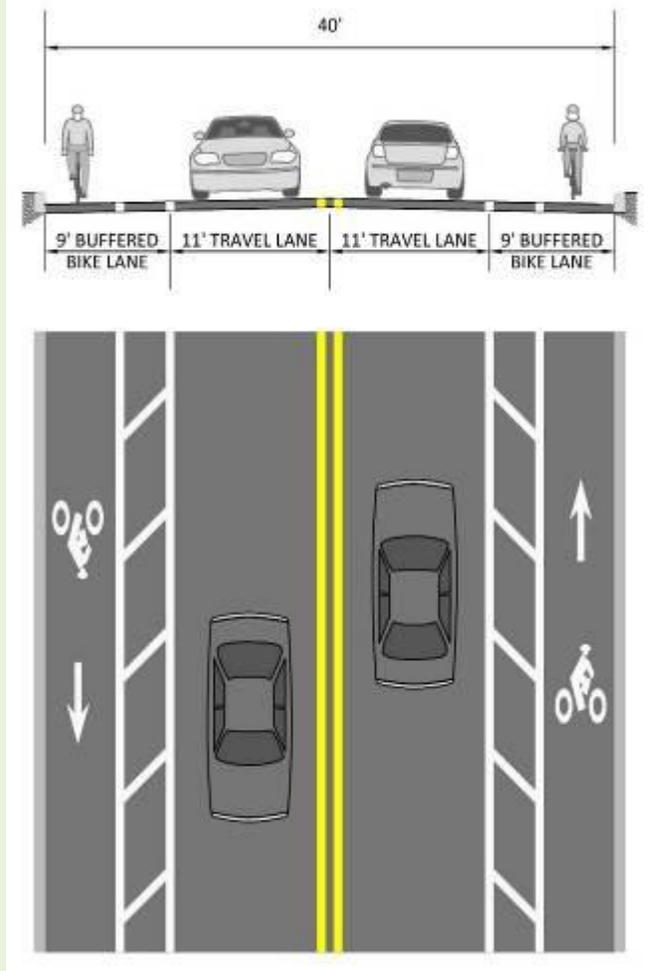
Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
	There are no crosswalks or connections across North or South Atlantic Avenue to connect to the Mall (on both the northern and southern legs of the intersection). Also, there is no sidewalk, but a paved shoulder.	Install curb ramps and marked crosswalks across North and South Atlantic Avenue to connect to the Mall (on both the northern and southern legs of the intersection). Install an accessible sidewalk to create a “neckdown” to slow motor vehicle traffic.	Medium		Medium
	Stairs leading from the Atlantic Avenue Mall down to cross E Victory Drive do not offer an accessible route to cross E Victory into the Mall. It was noted that the stairs may be a historic structure.	Provide an accessible route to access the Atlantic Avenue Mall. Pending the historic status of the stair structure, this could be achieved by retrofitting a ramp onto the stairs or providing a sidepath into the park.	Medium		Medium
	E Victory Drive has a center median with two lanes in each direction. This is a two stage crossing with a pedestrian refuge in the median. The median is flush with the roadway and there are no signs restricting access at the median.	Raise the median at the crossing of E. Victory Drive to restrict motor vehicle traffic. Provide at grade cut-throughs for pedestrians with detectable warning panels. Install stormwater management features in the median while maintaining visibility.	High	Safety concern and needed improvement to implement walk/bike route from Baldwin Park	Short

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
E	<b>Washington Street at Hedeman Park/Atlantic Avenue Mall (Entrance to Savannah Arts Academy)</b> Washington Street is a median separated arterial with one travel lane, a bike lane, and on-street parking in each direction. This intersection is viewed as an important connection between the Atlantic Avenue Mall, Hedemen Park, the Savannah Arts Academy, and the Walking School Bus and Bike Train Routes identified by the team.				
	There is a midblock high visibility crosswalk connecting to the Hedemen Park and the Atlantic Avenue Mall. There are warning signs at the crossing and curb ramps. There have been concerns expressed by the team that a crossing guard may be needed at this location due to motorists not yielding to pedestrians waiting to cross Washington Street. It was noted that there is a crossing guard at this location in the afternoon for the high school; however, the crossing guard would not be present for Charles Ellis dismissal.	Install a rectangular rapid flash beacon on both sides of the road.	High	Safety for existing walk route/future walk route	Short
	It was observed that people are parking along the yellow painted curb that designates no parking.	Install a curb extension where the curb is currently painted yellow on both sides of the road. The curb extension should extend out 6' from the existing curb line and should not encroach into the bike lane. Low-growing stormwater management features should be	Medium	Safety for existing walk/bike routes	Short

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
		considered in the curb extension while maintaining visibility.			

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
F	<b>Habersham Street (E 41<sup>st</sup> Street to E 56<sup>th</sup> Street)</b> Habersham Street is a continuous north-south route with a broken yellow center lane line and a bike lane in each direction.				
	Parents were observed dropping off children in the morning at the corners of 48 <sup>th</sup> and 49 <sup>th</sup> Streets and Habersham Road. There are concerns about speeding and passing vehicles.	Replace broken yellow lane line with a double yellow lane line to restrict passing.	Medium	Safety under current conditions	Short
	On-street parking is permitted on the block between 48 <sup>th</sup> Street and Washington Street where the bike lane is replaced by shared lane markings.	Remove parking on the block between 48 <sup>th</sup> Street and Washington Street to continue the bike lane through this block, maintaining a consistent facility type. Parking removal will need to be coordinated and supported by the local neighborhood.			
	The approximate width of the street is 40'. There are issues with speeding motor vehicles. There is additional space that could be reallocated to help slow motor vehicle traffic and provide a buffer for bicyclists to increase comfort.	Install a buffered bike lane with the recommended cross-section (see diagram on next page.)	Medium		Medium

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
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Alternative: create a cycle track by installing flexposts in the buffer area.

Map Key	Location/Issue	Recommendations*	Team Priority (High, Medium, Low)	Ranking Factor	Time frame (immediate, short, medium, long)
G	<b>Reynolds Street (E 41<sup>st</sup> Street to E 56<sup>th</sup> Street)</b>				
	Reynolds Street is a north/south route with a broken yellow lane line. The approximate width of the street is 30'.				
	There are concerns about speeding vehicles and passing vehicles.	Replace the broken yellow lane line and install a double yellow lane line to restrict passing.	High	Safety for current and future pedestrians	Short

**General Recommendations:**

- Upgrade the pedestrian network in the Ardsley Park Neighborhood to meet accessibility requirements;
  - Prioritize streets surrounding the school working outward through the neighborhood as determined by City of Savannah and local residents/stakeholders
  - Prioritize walking school bus and bike train routes (Atlantic Avenue, Washington Street, 50<sup>th</sup> Street, and Battey Street)
  - Provide pedestrian access across Lanes (Alleys) by providing a continuous raised sidewalk or ADA compliant curb ramps. The team recommends the City create standard lane construction details to systematically upgrade these facilities.
- In general, the team encourages the City of Savannah to develop an accessibility transition plan to address aging pedestrian infrastructure.
- Lighting should be upgraded at intersections along biking and walking routes identified by the team. Additional location in the Ardsley Park Neighborhood should be considered when accessibility improvements are made to ensure there are no conflicts in the pedestrian zone with light and/or utility posts.
- Pedestrian scale lighting should also be considered along neighborway routes.

## Programmatic Recommendations

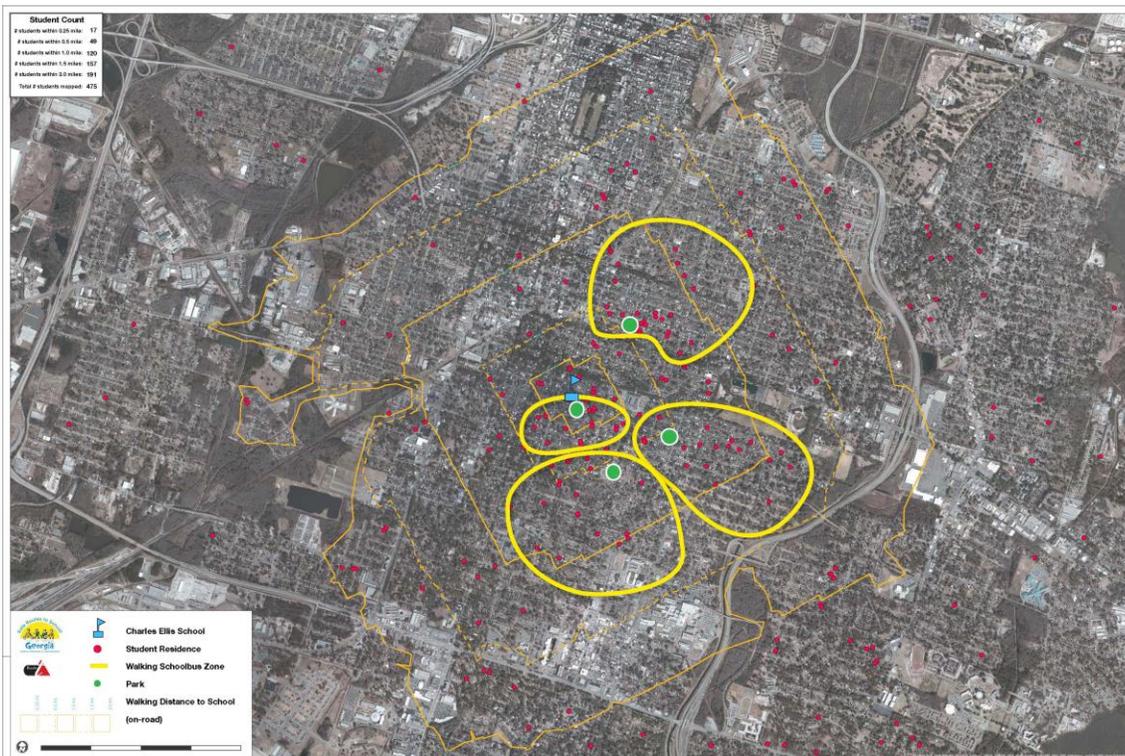
The following sections include SRTS Education, Encouragement, Enforcement, and Evaluation strategies of interest to Charles Ellis Montessori Academy. It will be important for the SRTS Team to identify a community champion to take responsibility for each strategy in order for them to be successfully implemented. The tables below identify members of the CEMA SRTS Team who will serve as the champions for each initiative. The tables should be updated over time.

### Overview

The Charles Ellis SRTS team's primary goal of having more students walking and bicycling to school served as the organizing principal for all recommendations – programmatic and engineering/infrastructure through establishing and supporting regular walking school buses and bicycle trains. The team identified three 'gathering locations' to serve as starting and ending points: Solomons, Hull, and Baldwin Parks. McCauley Park is currently used as a nearby gather location, especially for afterschool socializing and as part of the school's arrival and dismissal plan (see Figure 1). A fifth gathering place and walking school bus-bicycle train route may be established for students living west of the school if there is sufficient interests. Ardsley Park may serve as the gather place.

Programs and activities to support walking school buses and bicycle trains for the Solomons, Hull, and Baldwin Parks would target students living within the capture areas shown on Map 4. While the programmatic recommendations will work in conjunction with infrastructure recommendations, they can be implemented in advance of infrastructure projects, with appropriate measures taken to ensure safety at major roadway crossing.

Map 4. Walk school bus and bicycle train capture areas.



## Encouragement

Encouragement strategies are aimed at increasing the number of families who walk and bike to school, and thus changing overall thinking about travel-to-school mode. Encouragement strategies help change the culture from motor vehicle-oriented to a balance between motorized and non-motorized travel-to-school modes. Other potential benefits include healthier, more active children, reduced air pollution, less traffic congestion, and improved conditions for pedestrians and bicyclists.

Encouragement Strategy	Champion
<p><b>Establish walking school buses and bicycle trains from between school and the three established gathering locations (Short-term).</b> Walking school buses and bicycle trains are adult supervised groups of students walking or bicycling to and from school. They can help alleviate parental concerns about personal security and traffic safety. Typically, each walking school bus or bicycle train is coordinated by one or two people who establish solicit participation, establish regular communication among participant families, serve as the liaison with the school, etc. Other Georgia schools have gone as far as installing walking school bus way-finding. This helps ensure the routes are used and maintained. The Savannah Bicycle Campaign may be a good resource to assist with bicycle trains.</p> <p>Develop a parking plan on 50th to encourage students and parents to walk through circle to school 49<sup>th</sup> and Batty where an adult crossing guard is stationed.</p> <p>The Charles Ellis- Jacob G. Smith Elementary partnership for Georgia Walk to School Day could be expanded for walking school buses and bicycle trains, especially at Hull Park.</p>	<p>Patra Rickman, Principal, and PTA</p>
<p><b>Continue annual tradition of participating in Georgia Walk to School Day (Short-term).</b> Georgia Walk to School Day is similar to International Walk to School Day but is specifically for schools in Georgia. It is scheduled annually on the first Wednesday in March. Charles Ellis partners with nearby Jacob G. Smith Elementary for Georgia Walk to School Day. More information on this event can be found on the Georgia SRTS Resource Center’s website: <a href="http://www.saferoutesga.org/content/georgia-walk-school-day">http://www.saferoutesga.org/content/georgia-walk-school-day</a></p>	<p>Patra Rickman</p>
<p><b>Continue annual tradition of participating in International Walk to School Day (short-term).</b> International Walk to School Day is a one-day event celebrating walking and bicycling to school. Charles Ellis partners with nearby Jacob G. Smith Elementary for Georgia Walk to School Day. Resources to support walk to school day events are available on the Georgia SRTS Resource Center’s website, including tip sheets, signs, and flyers: <a href="http://www.saferoutesga.org/content/international-walk-school-day">http://www.saferoutesga.org/content/international-walk-school-day</a></p>	<p>Patra Rickman</p>
<p><b>Establish additional parking on campus (Short-term).</b> More students bicycling to school means more bicycle parking is needed. Given space limitations on campus, Charles Ellis can consider working with students in SCAD’s industrial design program to build a bicycle rack designed for children that has a smaller footprint. See text box on page 45.</p>	<p>PTA; SCAD classes (R Campbell, Professor)</p>
<p><b>Continue participating in National Bike to School Day (short-term).</b> National Bike to School Day is similar to International Walk to School Day but it focuses on bicycling. This is typically</p>	<p>Patra Rickman</p>

held on a Wednesday in May. The date is coordinated with the League of American Bicyclists. More information on this event can be found on the Georgia SRTS Resource Center's website: <a href="http://www.saferoutesga.org/content/national-bike-school-day">http://www.saferoutesga.org/content/national-bike-school-day</a>	
<b>Publicize walking and biking to school at kindergarten orientation and Back to School Nights (short-term).</b> In order to establish a culture of walking and biking, it will be important to encourage and involve students and parents as early as possible. When parents enroll their kindergarten-aged students into school, they are invited to an orientation in the summer to go over important logistics. This is a great opportunity to introduce them to the walking and bicycling routes to the school campus.	Patra Rickman
<b>Continue to address park and walk needs near the school campus. (Short-term).</b> The Team will work to refine and improve on the arrival and dismissal plan established early in the 2013-2014 school year to increased safety for all students, including park and walk students. See Figure 1. New arrival and dismissal plan, fall 2013.	Principal

## Education

Education strategies help children develop safety skills they can apply on the way to school and in other contexts throughout their lifetimes. Education strategies also aim to make parents and community members aware of the goals of the SRTS program and the impacts of their behavior on safety conditions around the school.

Education Strategy	Champion
<b>Integrate pedestrian safety instruction into the curriculum (short-term).</b> Pedestrian safety education will ideally occur in advance of major walk to school events, so that children are adequately prepared and have an opportunity to practice the skills they have learned. The Child Pedestrian Safety Curriculum produced by the National Highway Traffic Safety Administration (NHTSA) is an example a curriculum that might be used for this instruction. The curriculum and the standards of learning that it satisfies are available for free from The Resource Center's website at: <a href="https://www.saferoutesga.org/content/safety-education-resources">https://www.saferoutesga.org/content/safety-education-resources</a> . The Resource Center's School Outreach Coordinator (SOC) can train someone from Charles Ellis to teach the NHTSA curriculum.	Patti Sistrunk, Margaret Brown, school staff
<b>Conduct bicycle rodeo at school two weeks prior to the start of school (Short-term).</b> Bicycle rodeos feature bicycle safety skills instruction, bicycle skills practice, equipment inspections, and helmet fitting. The Savannah Bicycle Campaign may be available to conduct the rodeo. Students participating in the rodeo would receive a 'license' to ride their bicycle to school.	Bicycle Campaign (John Bennett)
<b>Provide bicycle safety education for middle school students (Short-term).</b> A new <a href="#">bicycle education curriculum</a> and parent guide developed by the National Highway Transportation Safety Administration (NHTSA) and the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD). The materials are intended for middle and high school students.	Bicycle Campaign (John Bennett)

<p><b>Provide education for parents and other caregivers who lead walking school buses and bicycle trains (Short-term).</b> Including adults responsible for traveling with students to school in student safety education will serve as a good reminder of safe walking and bicycling habits. The training can also include a separate time for adults to coordinate on other details of planning and managing walking school buses and bicycle trains.</p>	<p>Bicycle Campaign (John Bennett)</p>
<p><b>Review safe pedestrian skills at the end of the year picnic (short-term).</b> The school’s end of the year picnic is a great time to review safe walking skills. The students will be home for the summer and will need to have a firm grasp of how to make safe decisions when walking.</p>	<p>Patti Sistrunk; PTA</p>
<p><b>Incorporate information on walking and bicycling to school in communications with parents (short-term).</b> This information will seek to accomplish the following: 1) clarify that Charles Ellis encourages walking and bicycling to school; 2) provide information on the health benefits of walking; 3) suggest ways parents can support safe walking and bicycling, including reminders about the arrival and dismissal plan traffic plan, which should be revised to include the walking school bus and bicycle train routes.</p>	<p>Principal</p>
<p><b>Develop and implement a community outreach campaign (medium-term).</b> Many children are walking and biking in the neighborhoods adjacent to the school. Neighbors can serve as ‘eyes on the street’ to help ensure the safety of children from many perspectives. One of the goals of this travel plan is to maintain good relationships with neighbors, making them a part of the school community. Part of this can include helping students learn good-neighbor behaviors and reminding community members to drive the speed limit and watch for children when driving during school arrival and dismissal times.</p>	<p>PTA</p>

### Child-Friendly Multi-Level Bike Rack

Charles Ellis Montessori Academy (CEMA) in Savannah has a number of students and staff that bike to school. The school is in a neighborhood built when lot sizes were small, and the amount of space for bike racks on campus is constrained. The school does not have additional land for bike racks, given other instructional uses for the available space, such as gardens. Today, those biking to school lock their bikes to the one available rack and to fencing on school property.

The CEMA [Safe Routes to School](#) team, while working on strategies to increase the number of children walking and bicycling to school, identified limited bike parking as a concern. One solution may be to design, develop, and install vertical bike racks, i.e., multi-level bike parking, increasing the number of bikes that can be parked in the same footprint. Vertical racks are designed for adults, so the mechanism for lifting bikes from the ground to the ‘second story’ resting place may be difficult for children. An ideal design would be compact, would be compact, accommodate many bicycles (both adult and child-sized) and be relatively easy for a child to operate. A solution may also encourage students to ride to school so they can use the bike rack.



Photo 1. Current demand for bicycle parking results in bikes parked on fence.



Photo 2. Child-friendly multi-level bike racks would preserve co-curricular gardens.

## Enforcement

Enforcement strategies improve the safety of children bicycling and walking to school by helping to change unsafe behaviors of drivers, as well as pedestrians and bicyclists. SRTS enforcement is a community effort that involves students, parents, school administration, and others in addition to law enforcement, and targets pedestrian and bicycle behavior as well as driver behavior.

Enforcement Strategy	Champion
<p><b>Develop an enforcement (and encouragement) program for students participating in walking school buses and bicycle trains.</b> While not carrying the force of law, an enforcement program would reinforce safe walking and bicycling behaviors with ‘caught being good’ certificates and ‘improvement needed’ warrants. The enforcement program would also include citations for not obeying the school district policy for wearing bicycle helmets (see the accompanying text box). .</p>	<p>Patra Rickman; Principal</p>
<p><b>Work with the School Resource Officer and the Savannah Police Department on enforcement around the school and along established walking school bus and bicycle train routes.</b> Specific items to enforce include parking regulations (such as distance from corner, no parking on sidewalks), speed limits and school zone speed limits, and state law requiring motorists to stop for pedestrians in a crosswalk or otherwise legally in an intersection.<sup>9</sup></p>	<p>Delegated by Principal</p>
<p><b>Establish Crossing Guards during arrival and dismissal at key walking school bus and bicycle train crossing locations, and at locations to support park and walk students.</b> The team noted that additional crossing guards would be helpful at several locations, including on Washington at the Savannah Arts Academy, and at E 48<sup>th</sup> and Habersham streets.</p>  <p>Photo 3. Some park and walk students cross Habersham at E 48th where there is no stop sign for motorists.</p>	<p>SCCPSS Police (Corporal Tim Capps)</p>
<p><b>Establish a Safe Driving Pledge (short-term).</b> Program participants pledge to drive the speed limit on neighborhood streets, respect pedestrians and bicyclists, avoid distracted driving and display the Pace Car sticker. This pledge can be included in the materials that are sent home to parents before the start of the school year, packaged with the student travel-mode information, and shared with neighbors as part of the community outreach plan.</p>	<p>PTA Safety Committee</p>

<sup>9</sup> Georgia Code - Motor Vehicles & Traffic - Title 40, Section 40-6-21

## Evaluation

Evaluation is an important component of any SRTS program. Use of evaluation tools, such as the student tally and parent survey forms provided by National Center for Safe Routes to School, are encouraged by the Georgia SRTS Resource Center as they can be used to establish baseline information on student travel behavior and measure the effectiveness of SRTS efforts over time. Survey and tally forms can be found at <http://www.saferoutesinfo.org/data/>

<b>Evaluation Strategy</b>	<b>Champion</b>
<p><b>Track participation in Walking School Buses and Bicycle Trains.</b> Tracking walking school bus and bicycle train activity is a key way to help promote walking school buses and bicycle trains, and to help reach the longer-term goal of daily functioning. Tracking can be done in a way that's easy and fun, using a method that is comfortable for the school. One of the school's student committees, such as the Solar Club (a student led organization supervised by Anne Powers and Patra Rickman) could organize this activity, which helps reach the travel plan goal of a positive impact on the environment surrounding the school.</p>	<p>Patra Rickman</p>
<p><b>Conduct annual Parent Surveys and Student Tallies (short-term).</b> The Georgia SRTS Resource Center asks all School Partners to conduct student travel tallies in the fall and spring, and to administer parent surveys once a year. The school SRTS team can use both of these survey tools to track overall walking and bicycling to school rates and parent attitudes about walking and bicycling to school.</p>	<p>Patra Rickman; school staff</p>
<p><b>Conduct regular assessments of conditions and needs around the school.</b> Establish regular times just before and during the school year to evaluate the existing walking and biking conditions along school routes and observe school arrival and dismissal practices to identify any changes that may need to be addressed to improve safety. Students can be included in these assessments.</p>	<p>School SRTS team and City of Savannah</p>
<p><b>Conduct regular assessments of congestion during arrival and dismissal.</b> As walking and bicycling to school rates increase, motor vehicle congestion around the school should decrease. A method to determine rates can be devised and used regularly to help gauge progress towards this goal.</p>	<p>SRTS team and City of Savannah</p>

## Next Steps & SRTS Program Sustainability

Members of the Charles Ellis Montessori Academy SRTS Team provided valuable information, insight, and guidance in the development of this SRTS plan. In order for Charles Ellis Montessori Academy's SRTS program to be successful and sustainable, team members will need on-going support and assistance from additional community champions and volunteers. Information on implementing SRTS strategies can be found on the Georgia Safe Routes to School Resource Center website, [www.saferoutesga.org](http://www.saferoutesga.org), and on the National Center for Safe Routes to School website, [www.saferoutesinfo.org](http://www.saferoutesinfo.org).

### Key Strategies for Creating a Sustainable SRTS Program

- **Present the Plan to the Mayor and Council (or other authoritative bodies).** The City Council's backing will be critical for implementing many of the recommendations in this Travel Plan particularly those that address pedestrian and bicycle infrastructure.
- **Identify funding sources for high priority projects and programs.** Review high priority projects against opportunities to incorporate them within already planned projects that exist from several sources such as the Savannah's operating budget, the capital budget and development/re-development projects. The City's [Special Purpose Local Option Sales Tax program](#) supports projects in a number of areas, including sidewalks and parks, which may benefit walking and bicycling to school. Additional information on potential funding strategies can be found on the Resource Center website at [www.saferoutesga.org](http://www.saferoutesga.org). It is important to regularly review funding programs to determine if SRTS projects can be submitted for funding, especially if they are connected to a complementary need such as the traffic calming study and the Victory Drive corridor study.
- **Identify stakeholders.** Determine which stakeholders should be informed and involved in SRTS planning and implementation going forward.
- **Maintain and expand the SRTS Team.** Charles Ellis Montessori Academy has an established SRTS Team with representatives from the school, the City of Savannah, the Savannah Bicycle Campaign, Safe Kids Savannah, two regional commissions, and two injury prevention and care organizations. It is important to maintain this group. Consideration should also be given to recruiting new members,



### Current and Potential Partners

#### At the schools:

- Parents
- Principals
- PTA members
- Teachers
- School Nurses

#### In the community:

- Ardsley Park Neighborhood Association
- Chatham Crescent Neighborhood Association
- Baldwin Park Neighborhood Association

#### At the city level:

- City of Savannah Traffic Engineering, Police Department
- City of Savannah Neighborhoods & Housing; Parks & Recreation; Mobility & Parking Services
- Savannah-Chatham County Public Schools
- Savannah Bicycle Campaign
- Safe Kids Savannah
- Oschmer
- Memorial University Medical Center
- Healthy Savannah

#### At the county, regional and state level:

- Chatham County Metropolitan Planning Commission
- Coastal Regional Commission
- Georgia Department of Transportation

including representatives from surrounding neighborhoods, and perhaps an elected official.

- **Consider establishing a calendar.** Creating an annual calendar of SRTS activities for the community and school can be helpful for staying on track. Determine how frequently and where groups involved in SRTS planning and implementation will meet. Include a timeline for evaluations, which should occur at least annually. An example 12-month activity calendar is provided in Appendix E.
- **Monitor and Evaluate.** Establish measurable goals and conduct regular reviews to determine progress toward meeting them. The goals should be coordinated and cross-referenced with other stakeholder groups.

By completing this Travel plan, the Charles Ellis Montessori Academy SRTS Team hopes to shape the school and the surrounding area into a place where students, parents, teachers and community members of all ages and abilities can safely walk and bike throughout the neighborhood.

## **APPENDICES**

- A. School Profile
- B. Student Travel Tallies
- C. Parent Surveys
- D. Photos from Charles Ellis Field Visit
- E. 12-month Activity Calendar for Programmatic Recommendations

## Appendix A. School Profile

### SRTS TRAVEL PLAN SCHOOL PROFILE

This school profile is a first step in preparing for developing a SRTS Travel Plan. The School Outreach Coordinator working in your territory will help you complete this school profile. All of the information here will be used in your school's travel plan. It will also be used to guide activities involved in preparing your travel plan. For example, the walkabout that is part of one of your SRTS Travel Plan team meetings will be set based on the walking routes and locations of barriers to walking and bicycling to school identified in this School Profile.

You'll need basic information about your school and your school's SRTS program. In addition, you'll need the following information to complete this school profile:

#### School demographics

- Current year enrollment
- Enrollment by grade
- Student addresses (no names, please)
- Number of students living within ½ mile, 1 mile, 1 ½ mile, and 2 miles (may not need this if student addresses are provided in a spreadsheet or GIS layer).
- Number of students who regularly take the bus, walk, bike, and arrive by private vehicle

#### SRTS program

- Student travel tallies
- Parent surveys
- Participation in national, state and other walking and bicycling events
- Other

#### School support for walking and bicycling

- Crossing guards – number of placement during arrival and dismissal
- Presence of bike racks

#### Transportation network

- Who owns the roads in your school neighborhood?
- General presence and condition of sidewalks
- General presence and completeness of road crossings (i.e., are there crosswalks, traffic lights/stop signs, pedestrian signals?)
- Amount of vehicle traffic and the speed limits of the roads surrounding your school

#### Maps and school documents

- Arrival and dismissal procedures
- Map of arrival dismissal routes by mode
- Attendance zone

# SRTS TRAVEL PLAN SCHOOL PROFILE

School Outreach Coordinator

Date

## THE BASICS

School Name:

School Address:

County:

School District:

Resource Center Partner:

Champions (names and roles):

School hours:

Start/end date of 2013-14 School year:

School attendance boundaries (map or description): County wide (magnet-type program)

School Walk Zone\* (drawn on map or description):

*\*The School Walk Zone is the distance to the school within which students are not offered bussing unless there is a safety or access barrier. The distance from school is set locally.*

## SRTS ACTIVITIES

1. Which event(s) have you participated in?

- International Walk to School Day (fall)
- Georgia Walk to School Day (spring)
- National Bike to School Day (spring)

2. Do you currently have a Safe Routes to School program?

Yes

No

3. If so, when did it start? What activities have you put in place to complement SRTS?

The School has always had an active walk/bike community. The school partnered with the Resource Center in 2010 and began participating in Walk to School Day events like IWalk and gWalk. The school has some pedestrian education and hosted the Safe Kids Coordinator who provided bicycle and pedestrian safety information to some students. Patti Sistrunk spoke at a PTA meeting in 2011. The school participates and promotes bicycling events. The school recently coordinated meetings with city and others to develop a school drop-off and pick-up system.

4. What activities related to SRTS does your school promote?

Walk to School Day events, Bike to School Day events.

## SCHOOL DEMOGRAPHICS AND TRAVEL INFORMATION

1. How many students attend this school? List total students per grade:

Pre-K	K	1	2	3	4	5
<b>44</b>	<b>75</b>	<b>70</b>	<b>66</b>	<b>57</b>	<b>69</b>	<b>53</b>

6	7	8	9	10	11	12	Total, all grades
<b>52</b>	<b>47</b>	<b>32</b>					

2. Is this a Title 1 School?

Yes

No

3. What is the percentage of students that qualify for Free and Reduced Lunch?

4. Approximately how many students receive bus service?

5. Approximately how many students currently walk or bicycle on a typical day?

6. What (if any) are the known walking routes to school or locations that our team should review? *(Describe the general routes students and their families take. Include Park and Walk locations and routes.)*

7. How many students live within ½ mile, 1 mile, 1 ½ mile, and 2 miles (this question can be skipped if student addresses are provided)

	0 to ½ mile	0 to 1 mile	0 to 1 ½ miles	0 to 2 miles
Number of students				
Is there a major barrier such as a railroad crossing or natural feature that is an obstacle for students?				

8. Are there crossing guards assigned to the school?

Yes

No

9. If yes, where are they stationed? **Intersection of 49<sup>th</sup> and Battey. Others are NEEDED at Reynolds and Habersham crossings.**

10. Briefly describe the current conditions of sidewalks and paths around your school. Normal, good condition
11. Briefly describe the amount of vehicle traffic and the speed limits of the roads surrounding your school. High traffic area, school is located in a neighborhood between two through street, Habersham and Reynolds
12. Are there physical barriers that prohibit students from walking and biking to school? No
13. Are there policies in place that prohibit students from walking and biking to school? No
14. What after school activities occur on campus? (Please list and number of student participants)
  - 1<sup>st</sup> 9 weeks – Softball, 20 students walk to Hull Park 4 days/week to practice after school
  - 2<sup>nd</sup> 9 weeks – Volleyball at Ellis, 15 students stay on campus 4 days per week
  - 3<sup>rd</sup> 9 weeks – Basketball – 30 students walk to SAA , ride a bus to JG Smith, or practice at Ellis
  - 4<sup>th</sup> nine weeks Baseball, 15 students walk to Hull park 4 days per week for practice & Soccer 40 students walk to Daffin 4 days per week for practice
15. Who owns/maintains the roads in town around the school and along the walking routes identified in number 6? *Local, County, State, Combination. Describe distribution below:*
16. **Did the school complete pre-evaluation data? (Circle either No or Yes)**
  - a. Parent Surveys:
 

**No/Yes**                      Date Completed \_\_\_\_\_ Submitted to National Center: Y / N *Patti is looking into getting these completed.*
  - b. Student Travel Tallies:
 

**No/Yes**                      Date Completed \_Oct. 13, 2014\_\_\_\_\_ Submitted to National Center: Y / N *Not yet. Patti is hand-entering to Database.*

17. Did the school provide student addresses?

18. Safe Routes to School Team Members Identified – See the SOC Tip Sheet

Name	Role	Organization
Tanya Melville	School principal	Charles Ellis Montessori (CEMS)
Patra Rickman	Teacher and parent	CEMS
	Law enforcement	
	Student(s)	
	Parents	
	Local transportation planner	
	Local GDOT engineer/planner	
Alison Huffman	Child safety advocate	Safe Kids Savannah
John Bennett	Executive Director (bike advocate)	Savannah Bicycle Campaign
Jane Love	Planner	MPC
Beatrice Soler	Planner	Coastal Regional Commission
Michele	City Engineer	City of Savannah

## Appendix B. Student Travel Tallies

### Student Travel Tally Report: One School in One Data Collection Period

**School Name:** Charles  
Ellis Montessori Academy

**Set ID:** 14216

**School Group:** GA SRTS  
Resource Center

**Month and Year Collected:** October 2013

**School Enrollment:** 565

**Date Report Generated:** 01/16/2014

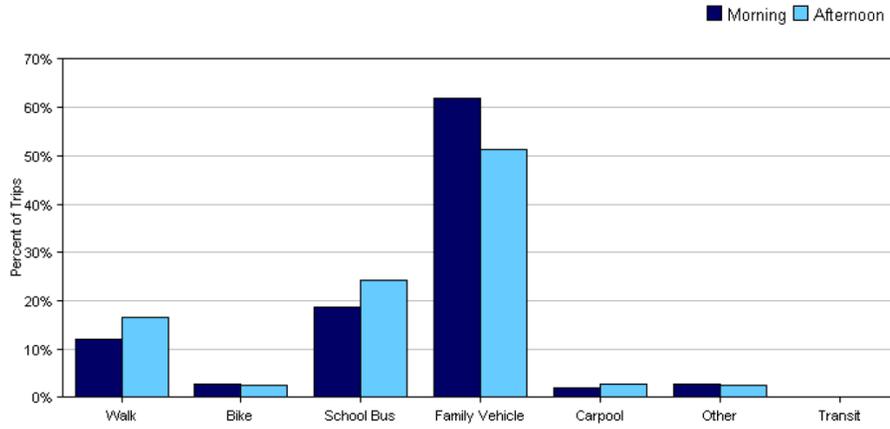
**% of Students reached by  
SRTS activities:** 76-100%

**Tags:** Chatham,Crosswalk - add or improve,Pavement markings - add or improve,Pedestrian/bicyclist safety instruction,Walk to School Day,Walking/bicycling route map - create or promote

**Number of Classrooms  
Included in Report:** 25

This report contains information from your school's classrooms about students' trip to and from school. The data used in this report were collected using the in-class Student Travel Tally questionnaire from the National Center for Safe Routes to School.

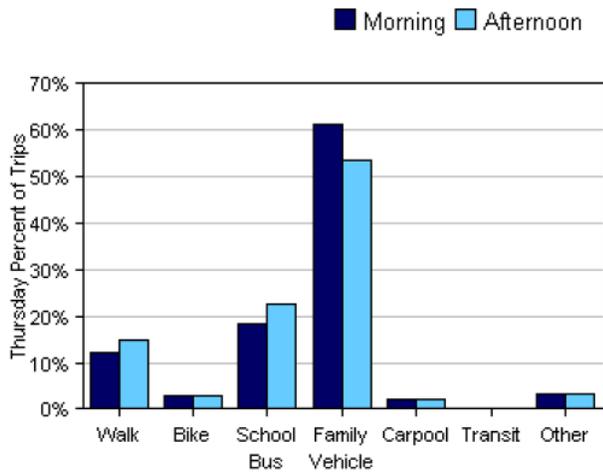
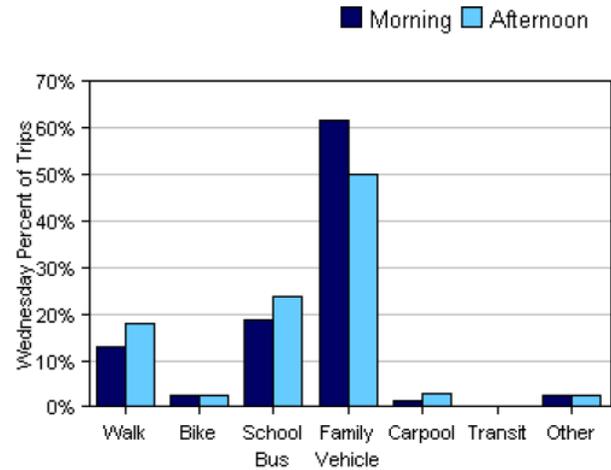
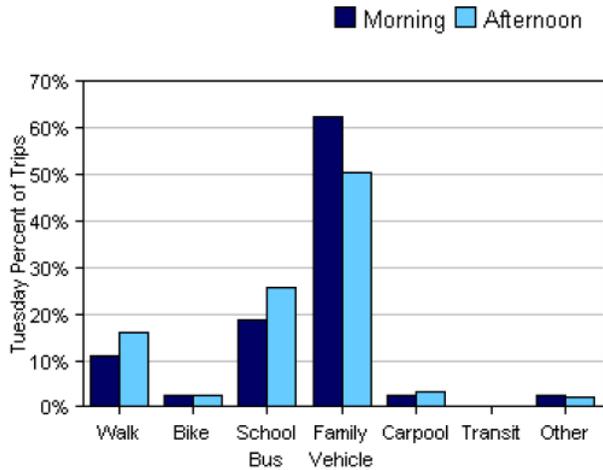
### Morning and Afternoon Travel Mode Comparison



### Morning and Afternoon Travel Mode Comparison

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	1429	12%	3%	19%	62%	2%	0%	3%
Afternoon	1399	17%	3%	24%	51%	3%	0.1%	3%

## Morning and Afternoon Travel Mode Comparison by Day

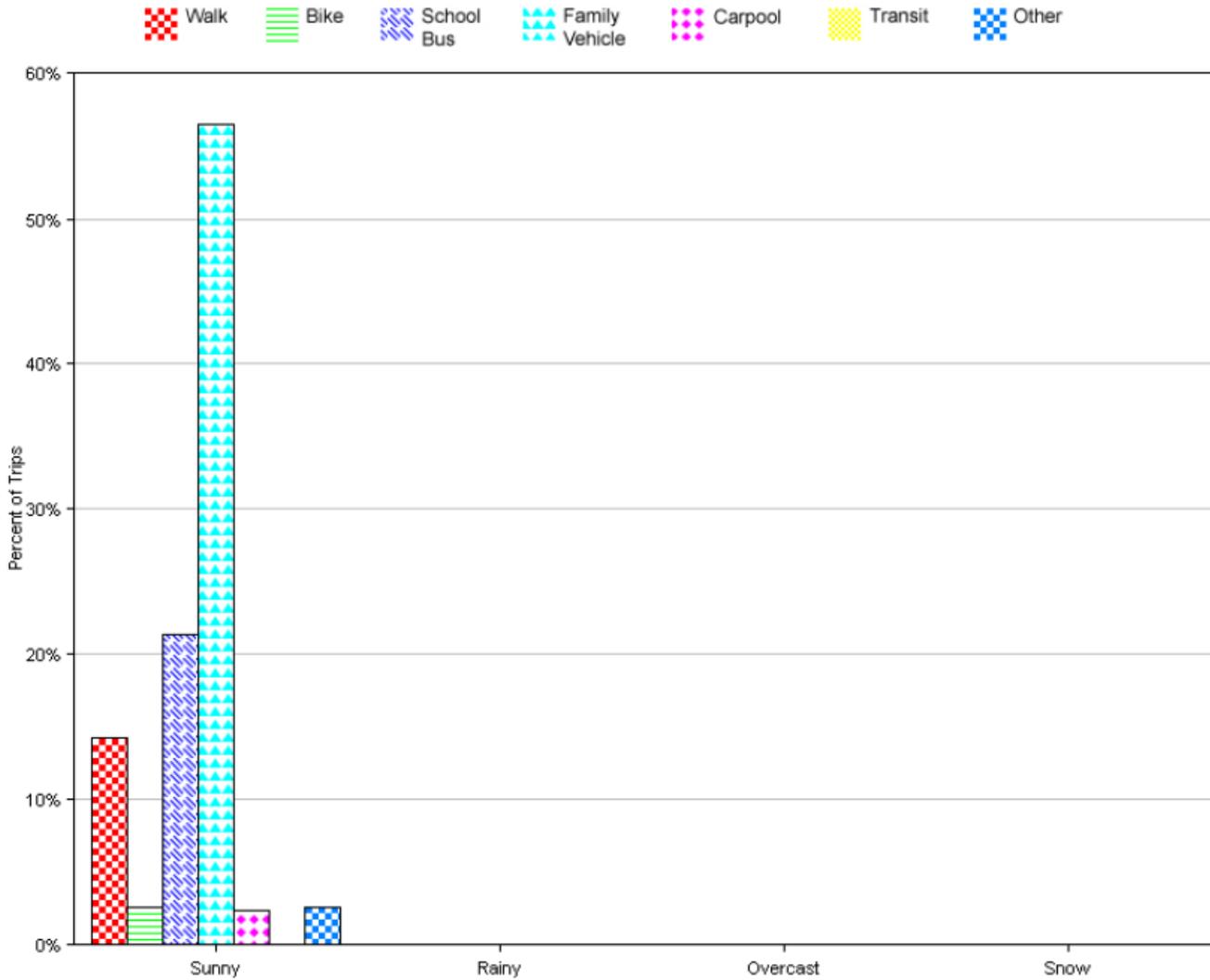


## Morning and Afternoon Travel Mode Comparison by Day

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Tuesday AM	482	11%	2%	19%	62%	2%	0%	2%
Tuesday PM	477	16%	3%	26%	51%	3%	0%	2%
Wednesday AM	528	13%	3%	19%	62%	2%	0%	2%
Wednesday PM	510	18%	3%	24%	50%	3%	0.2%	3%
Thursday AM	419	12%	3%	18%	61%	2%	0%	3%
Thursday PM	412	15%	3%	23%	53%	2%	0.2%	3%

Percentages may not total 100% due to rounding.

### Travel Mode by Weather Conditions



### Travel Mode by Weather Condition

Weather Condition	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Sunny	2828	14%	3%	21%	57%	2%	0.1%	3%
Rainy	0	0%	0%	0%	0%	0%	0%	0%
Overcast	0	0%	0%	0%	0%	0%	0%	0%
Snow	0	0%	0%	0%	0%	0%	0%	0%

Percentages may not total 100% due to rounding.

## Appendix C. Parent Surveys

### Parent Survey Report: One School in One Data Collection Period

**School Name:** Charles Ellis Montessori Academy

**Set ID:** 11150

**School Group:** GA SRTS Resource Center

**Month and Year Collected:** February 2014

**School Enrollment:** 0

**Date Report Generated:** 06/16/2014

**% Range of Students Involved in SRTS:** 76-100%

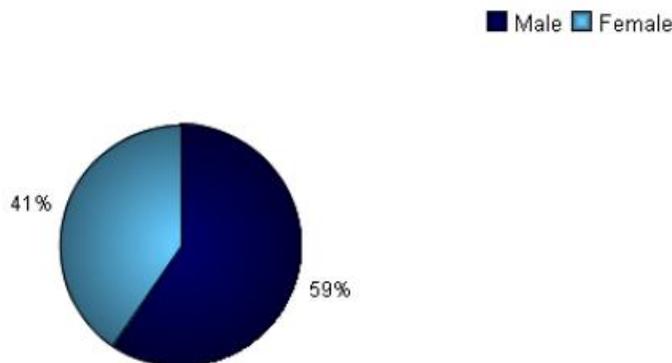
**Tags:**

**Number of Questionnaires Distributed:** 75

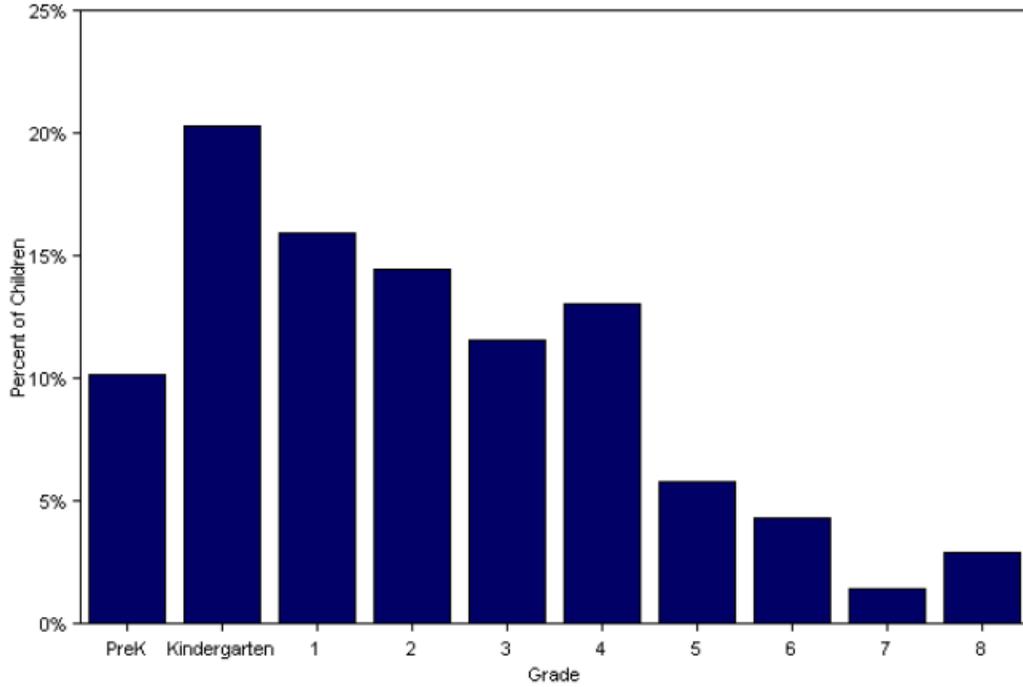
**Number of Questionnaires Analyzed for Report:** 69

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

#### Sex of children for parents that provided information



Grade levels of children represented in survey



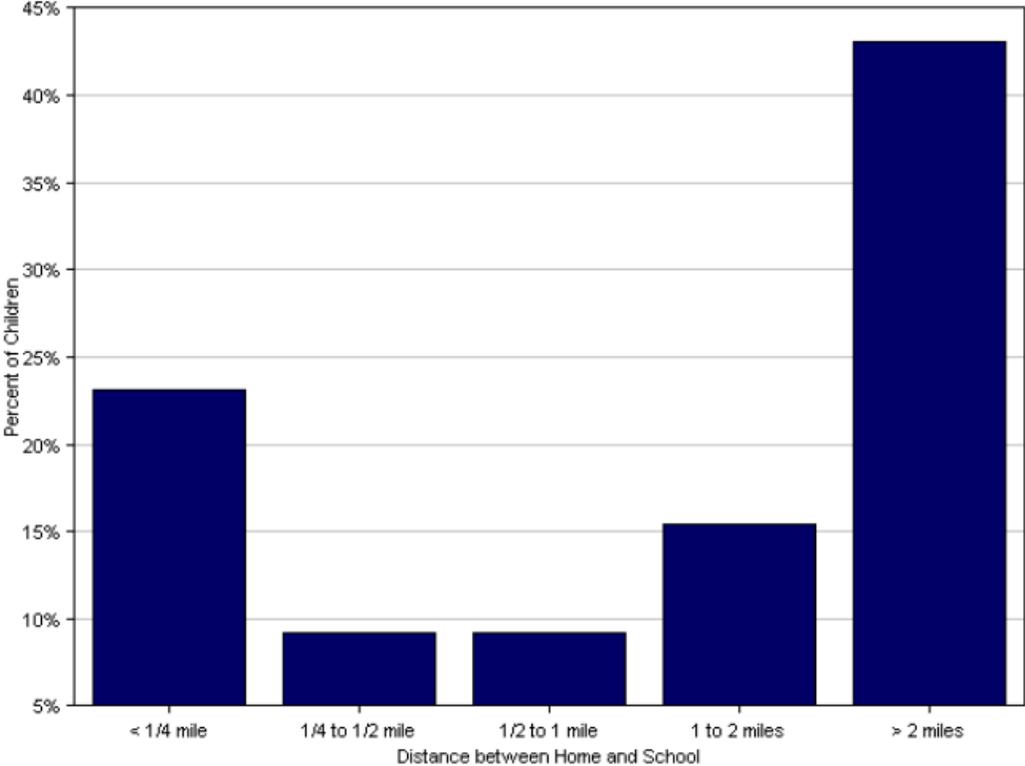
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
PreK	7	10%
Kindergarten	14	20%
1	11	16%
2	10	14%
3	8	12%
4	9	13%
5	4	6%
6	3	4%
7	1	1%
8	2	3%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school

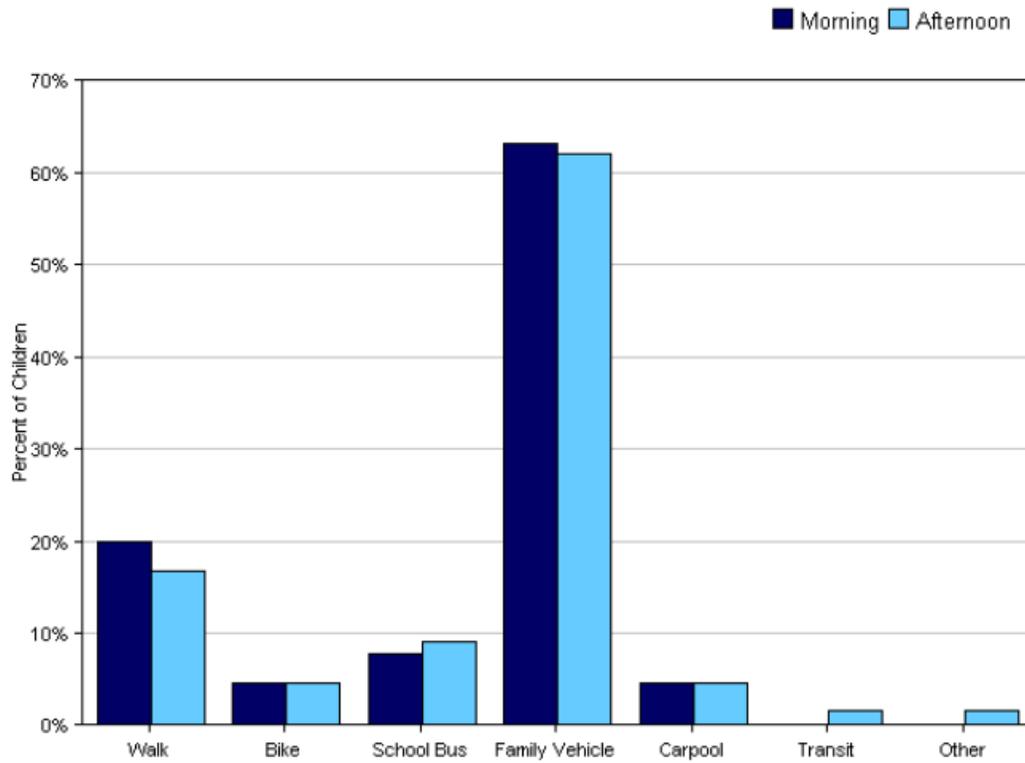


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	15	23%
1/4 mile up to 1/2 mile	6	9%
1/2 mile up to 1 mile	6	9%
1 mile up to 2 miles	10	15%
More than 2 miles	28	43%

Don't know or No response: 4  
 Percentages may not total 100% due to rounding.

### Typical mode of arrival at and departure from school



### Typical mode of arrival at and departure from school

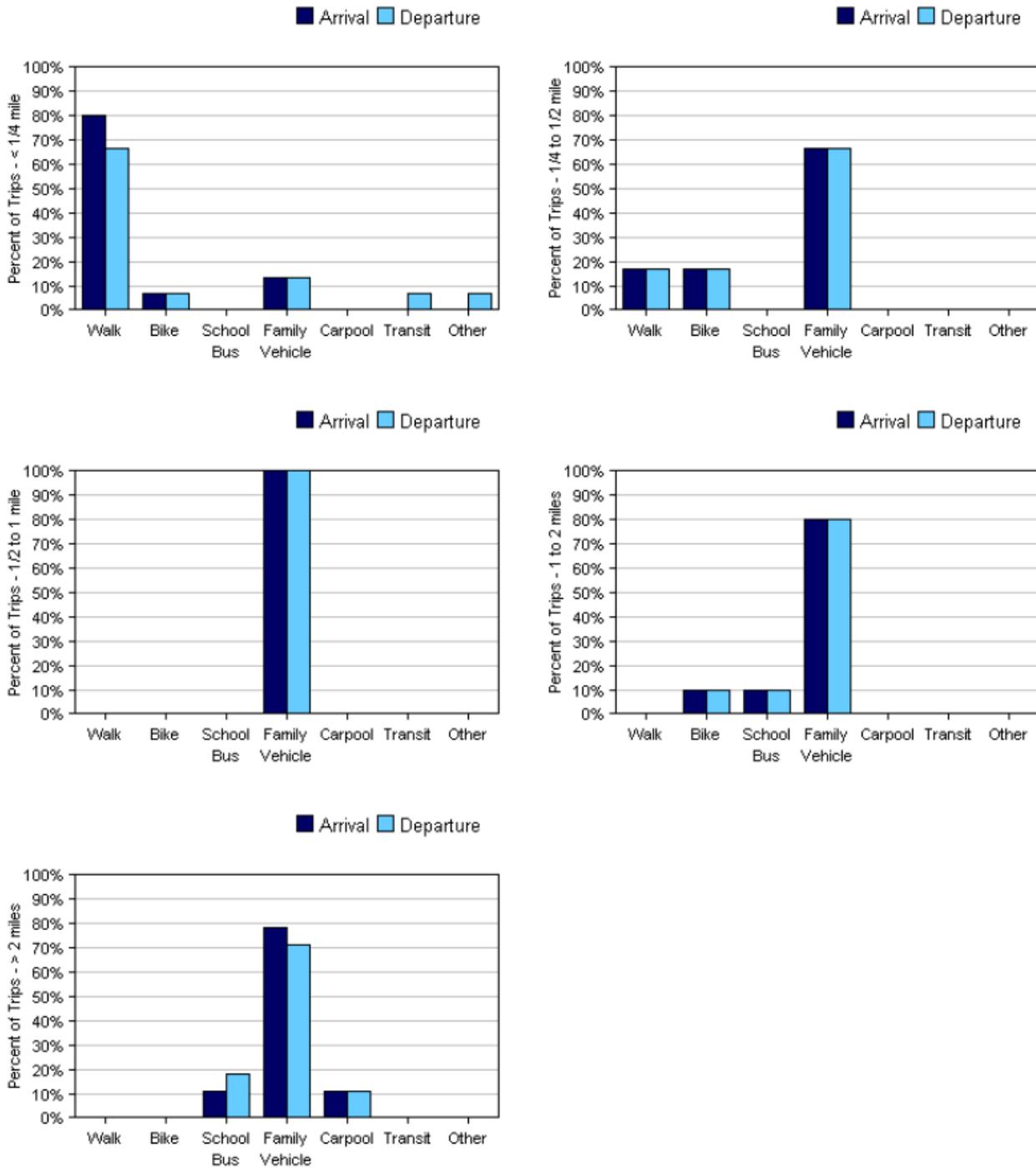
Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	65	20%	5%	8%	63%	5%	0%	0%
Afternoon	66	17%	5%	9%	62%	5%	2%	2%

No Response Morning: 4

No Response Afternoon: 3

Percentages may not total 100% due to rounding.

## Typical mode of school arrival and departure by distance child lives from school



## Typical mode of school arrival and departure by distance child lives from school

### School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	15	80%	7%	0%	13%	0%	0%	0%
1/4 mile up to 1/2 mile	6	17%	17%	0%	67%	0%	0%	0%
1/2 mile up to 1 mile	5	0%	0%	0%	100%	0%	0%	0%
1 mile up to 2 miles	10	0%	10%	10%	80%	0%	0%	0%
More than 2 miles	28	0%	0%	11%	79%	11%	0%	0%

Don't know or No response: 5

Percentages may not total 100% due to rounding.

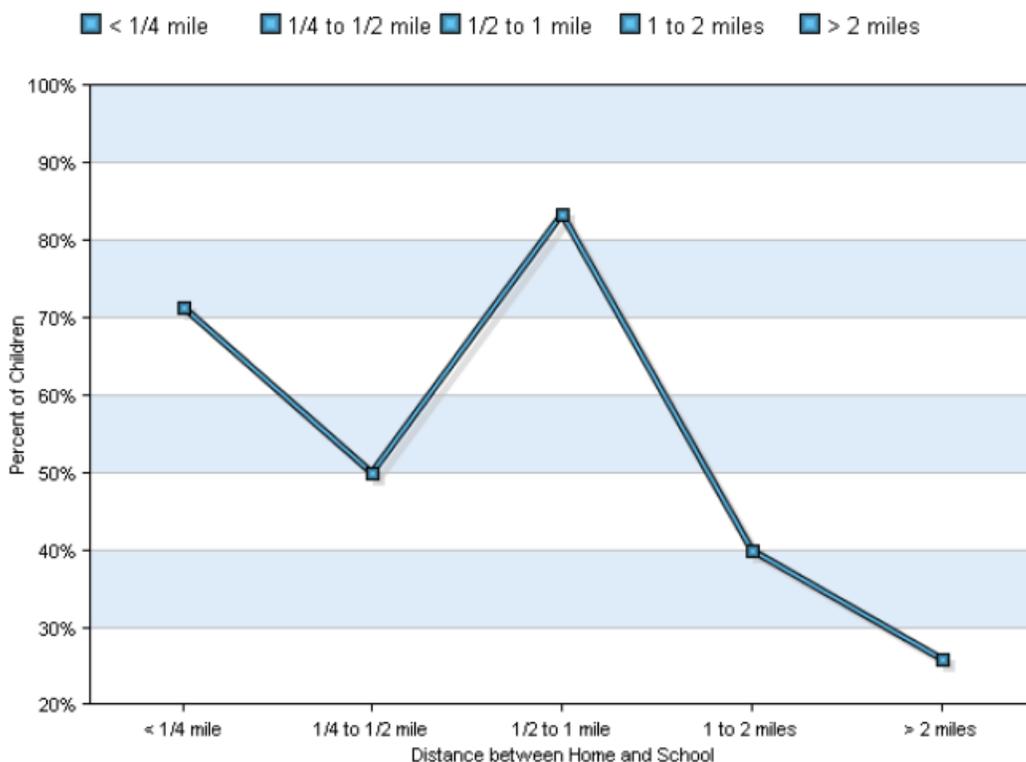
### School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	15	67%	7%	0%	13%	0%	7%	7%
1/4 mile up to 1/2 mile	6	17%	17%	0%	67%	0%	0%	0%
1/2 mile up to 1 mile	6	0%	0%	0%	100%	0%	0%	0%
1 mile up to 2 miles	10	0%	10%	10%	80%	0%	0%	0%
More than 2 miles	28	0%	0%	18%	71%	11%	0%	0%

Don't know or No response: 4

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

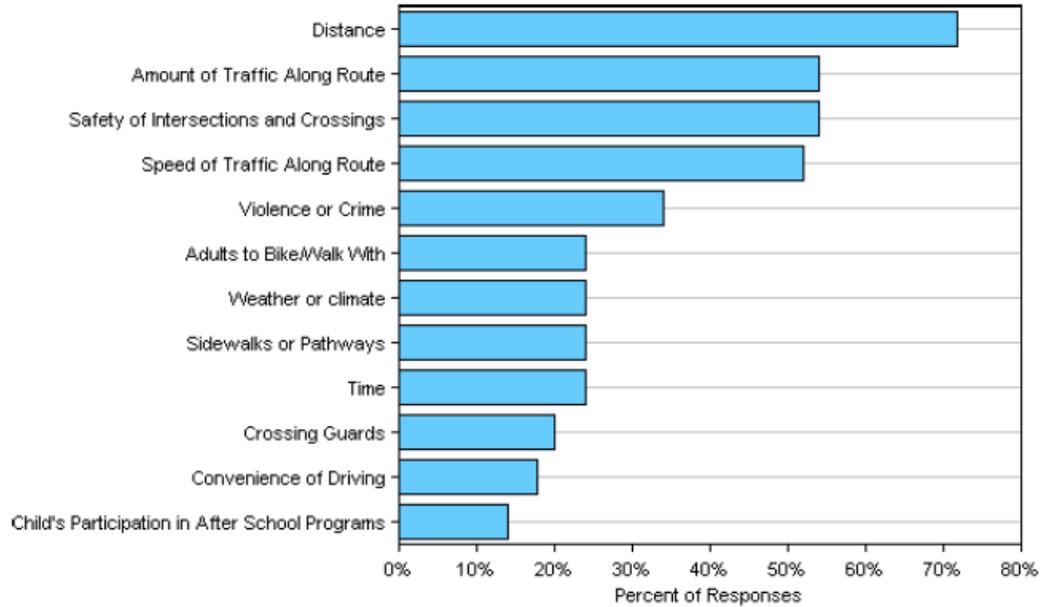


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

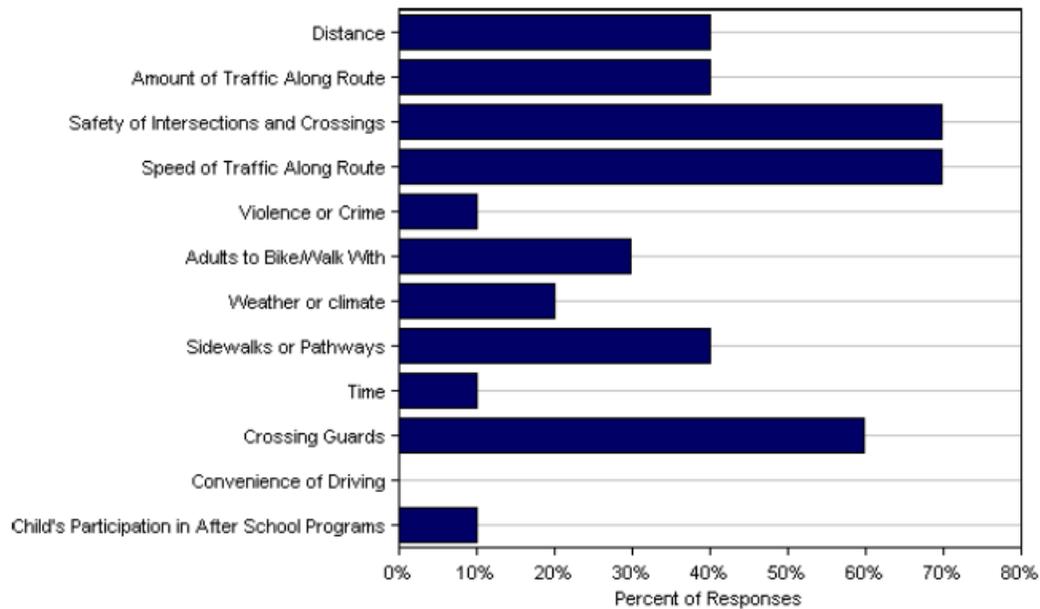
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	29	71%	50%	83%	40%	26%
No	34	29%	50%	17%	60%	74%

Don't know or No response: 6  
 Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by  
parents of children who already walk or bike to/from school

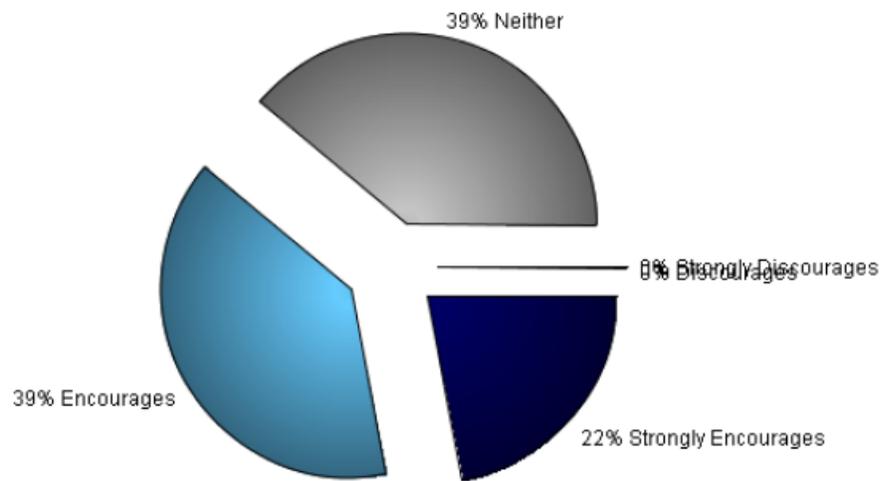
Issue	Child does not walk/bike to school	Child walks/bikes to school
Distance	72%	40%
Amount of Traffic Along Route	54%	40%
Safety of Intersections and Crossings	54%	70%
Speed of Traffic Along Route	52%	70%
Violence or Crime	34%	10%
Adults to Bike/Walk With	24%	30%
Weather or climate	24%	20%
Sidewalks or Pathways	24%	40%
Time	24%	10%
Crossing Guards	20%	60%
Convenience of Driving	18%	0%
Child's Participation in After School Programs	14%	10%
<b>Number of Respondents per Category</b>	<b>50</b>	<b>10</b>

No response: 9

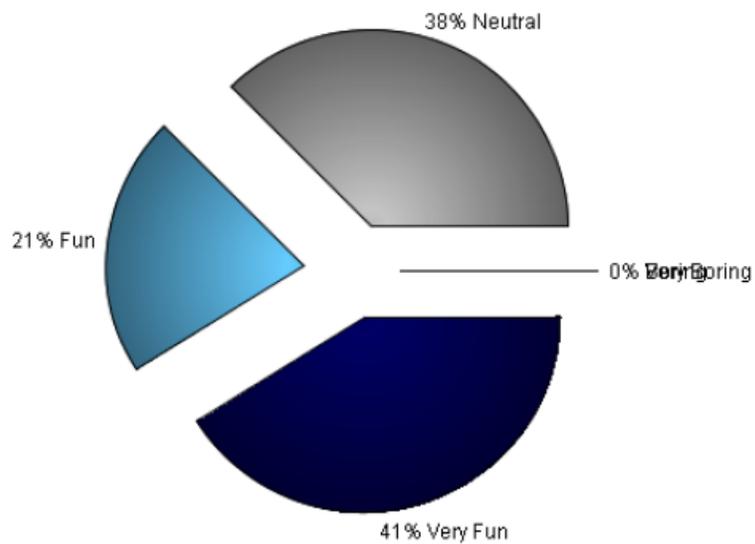
Note:

- Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.
- Each column may sum to > 100% because respondent could select more than issue
- The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



## Comments Section

SurveyID	Comment
1135288	I feel that my answers are highly influenced by my daughter's age (4). If she were older I think I would be more open. I love the idea of walking/biking to school.
1135323	Sometimes we drive to my office, which is 10 blocks from school, and then walk/bike to school. I will allow my child to do this alone when in 6th grade, I believe.
1135337	For my youngest daughter, having older siblings to ride with is also a very important factor. She's in 3rd grade and I'm not sure I'd let her ride her bike alone, but having a group to ride with makes it good.
1135338	crossing VICTORY IS THE BIG ISSUE
1137718	When I was younger, the neighborhood kids would walk to Charles Ellis. The group normally consisted of about 10-15 kids grades ranging from K-5. We all had so much fun, there were crossing guards on Victory Drive and Washington Avenue. My Kids attend Ellis now and because we don't live in the neighborhood I drive them in the mornings and they ride the school bus in the afternoon. If we lived in the neighborhood I would let them walk/or walk with occasionally.
1137726	a crossing guard on Reynolds would be great
1137728	My children are on the bus for 3 hours a day. They are late to school everyday because of the bus. If we lived closer we would walk.
1137805	I want my daughter to walk to school more!! My husband drops her off on the way to work; she is picked up by a family member w/a bad back (has trouble walking long distances). When my youngest starts at Ellis, I will walk both children together. Currently, I am at home with the youngest during the time the oldest has to leave for school. I would love to see a walking school bus form in our neighborhood. I'd love to know the next steps, or if this is just a survey for data collection. Thank you!
1138343	We already bike to school with our child when weather allows... Just don't/won't allow her to do alone
1138397	I am willing to bike with my child to school when my schedule permits, but in the mornings the traffic is very heavy in our neighborhood. I am still trying to figure out the best route. She is only 7 and the traffic scares both of us!
1135311	I would allow my child to walk without me if there was a crossing guard at Habersham/49th Street. The traffic on Habersham is too fast now without a guard.
1137711	The crossing guard at batty/49th is critical as is other teachers standing outside to help with carpool. Living less than a block away, this helps me feel safe having my 2nd grader walk by himself in the morning.
1137719	If we did not live so far away and I did not have to hurry due to work, I would love to walk my child to school!
1135325	Savannah is not safe enough to let younger children ride bikes or walk to school. Both in how others drive (and ignore bikes/walkers) and in terms of crime.
1135309	The sidewalks between school and home are not in great condition especially for biking. 48th Street needs blinking lights and a crosswalk from the school side to the other side. I LOVE the idea of walking buses with an adult leading the kids to school.
1137714	I feel that the intersection the at Batty and the circle park between 49th & 50th street is very dangerous for pedestrians. The buses and cars don't have a stop sign so they come zipping around the corner without stopping or even slowing down. The sidewalk does not continue after the back lane behind 50th street. Walker are forced to walk out in the road around cars park in the street, this is the same location where the buses don't stop. This intersection leaves little or no margin for children to get to the sidewalk on Batty without getting run over by large buses or cars. I believe this area around the circle park is so dangerous for our children. The city put a small strip of yellow on this corner but still left enough room for one car to park and the trees/bushes make it impossible to get to Batty without walking around the parked car and into the street on the corner where the buses/cars don't stop. I walk my children daily to school and several times this year they have been within inches of a moving school bus. I beg someone to come observe this area and find a solution that will allow children to safely walk to school.
1137721	thank you to traffic engineering dept and chatham county police for helping us institute some safety procedures concerning traffic and pedestrians this year, and for providing a crossing guard at 49th and batty.

1137828	There are a lot of students like our son that attend Ellis that do not live near the school so the walking/biking option will never be an option for our students and many others at Ellis. Please keep this in mind, Ellis is not a neighborhood school.
1138345	If we lived within walking distance of the school I'd probably allow my son to walk when he is 10 or 11.
1138393	Abercorn and Habersham are very busy streets, so I am wary to let my child cross them alone.
1148492	<p>We live very close to school, and although our child is young, we allow him to walk by himself bc: 1) we can see him cross the street on 48th. after that, he has one more crossing, and there is a crossing guard. if there were no crossing guard, we would not allow him to go by himself. 2) there are a lot of parents walking their kids at the same time, which gives me a better feeling of safety. Despite it being 100% lottery, Ellis has a neighborhood feel to it, which to me is one of the most endearing qualities about the school. It takes a village, and the Ellis community exemplifies this principle. Seeing all the pedestrians in front of our house and around the school in the mornings provides a feeling of security. People interact with one another bc they are not trapped in their cars. Encouraging this environment at other schools should be a priority, and creating safe routes for kids and families to walk/bike to school is a key component.</p> <p>On a related note, 48th street needs some traffic calming measures. My biggest fear about etting our son walk by himself is not the school buses rolling down Battey, as all the drivers seem very aware and yield to pedestrians. My biggest fear is the high school kids barreling down 48th in and out of the Savannah Arts High School parking lot. They frequently exceed the speed limit and do not drive with a level of caution that one should around a busy elementary s</p>

## Appendix D. Photos from Charles Ellis Field Visit



Bicycle parking at Charles Ellis.



Bicycle parking, student garden plots, and main entrance at Charles Ellis.



Intersection of McGillicuddy Street and E 48<sup>th</sup> Street, facing south.



Washington Street bike lanes, intersection of Atlantic Avenue and Washington Street, facing west.



Typical intersection drainage infrastructure in Ardsley Park neighborhood. North east corner of Battey Street and E 49<sup>th</sup> Street, facing north.



School arrival, parents dropping off students at main entrance on E 49<sup>th</sup> Street facing west.



School dismissal, parents picking up students at main entrance on E 49<sup>th</sup> Street facing west.



McGillicuddy Street during dismissal school pick up entrance on the right.



McGillicuddy Street and E 49<sup>th</sup> Street facing north. During dismissal the street is closed to motor vehicles.



School crossing guard at Battey Street and E 49<sup>th</sup> Street, facing west.



Students entering McCauley Park after school from Battey Street and E 48<sup>th</sup> Street, facing south.



Parking around McCauley Park, intersection of Battey Street and E 50<sup>th</sup> Street, facing south east.



Typical sidewalk network around McCauley Park.



Hull Park at E 55<sup>th</sup> Street, facing west.



Baldwin Park, facing east.



Baldwin Park at E 41<sup>st</sup> Street, facing east.



Bike lanes on Habersham Street, facing north.



Bike lanes on Habersham Street, facing south.



Habersham Street, facing southbound.



Renolds Street at 49<sup>th</sup> Street, facing southbound.



Typical intersection pedestrian infrastructure in Ardsley Park neighborhood. Intersection of E 48<sup>th</sup> Street and Habersham Street, facing north.



Typical sidewalk across driveway in Ardsley Park neighborhood. Habersham Street, facing north.



Typical intersection pedestrian infrastructure in Ardsley Park neighborhood. Intersection of E 49<sup>th</sup> Street and Habersham Street, facing south.



Typical intersection pedestrian infrastructure in Ardsley Park neighborhood. Intersection of E 53<sup>rd</sup> Street and Battey Street, facing south.



Intersection of E 52<sup>nd</sup> Street and Montgomery Street, facing west. Natural chicane created by old growth tree.



Midblock, uncontrolled crossing on Washington Street eastbound in front of Savannah Arts Academy across from Hedeman Park, facing east.



Midblock, uncontrolled crossing on Washington Street eastbound in front of Savannah Arts Academy across from Hedeman Park, facing south.



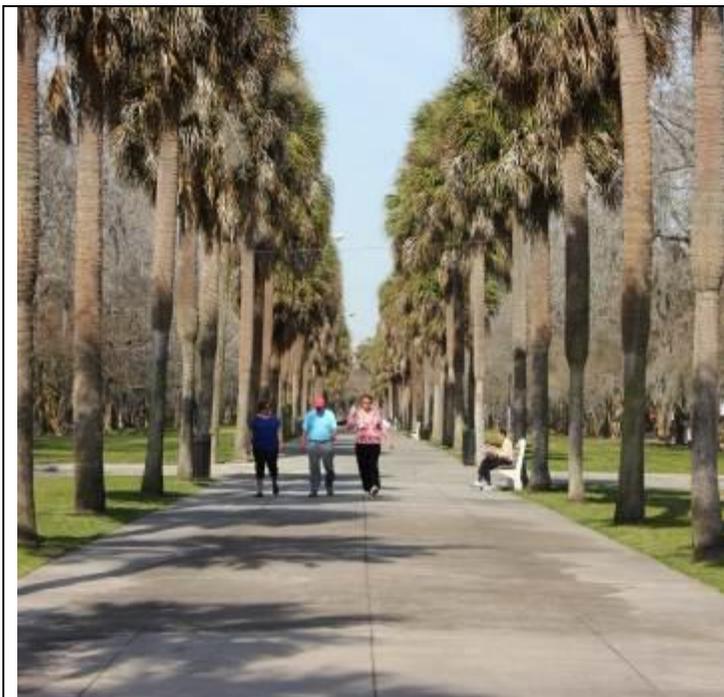
Midblock crossing from Atlantic Avenue Mall across E Victory Drive, facing south.



Victory Drive westbound at Atlantic Avenue Mall midblock, uncontrolled crossing, facing east.



Typical midblock crossing along Atlantic Avenue Mall. Intersection of Atlantic Avenue Mall at E 44<sup>th</sup> Street, facing north.



Atlantic Avenue Mall, facing north.

## **Appendix E. 12-month Activity Calendar for Programmatic Recommendations**

The following activity calendar is an example calendar that Charles Ellis Montessori Academy can follow in order to implement its Safe Routes to School program. It is recommended that the SRTS team reviews and updates this calendar prior to approval for the next academic year.

Activity	Coordinator	Jul. 2014	Aug. 2014	Sept. 2014	Oct. 2014	Nov. 2014	Dec. 2014	Jan. 2015	Feb. 2015	Mar. 2015	Apr. 2015	May 2015	Jun. 2015	Complete
<b>ENCOURAGEMENT</b>														
Establish walking school buses and bicycle trains for three gathering locations														
Plan														
Implement														
Continue Georgia Walk to School Day participation														
Plan														
Implement														
Continue International Walk to School Day participation														
Plan														
Implement														
Additional on campus bicycle parking														
Plan														
Implement														
Continue National Bike to School Day participation														
Plan														
Implement														
Publicize SRTS at Kindergarten orientation and back to school night														
Plan														
Implement														
Address park and walk needs near school campus														
Plan														
Implement														
<b>EDUCATION</b>														
Pedestrian safety curriculum														
Plan														
Implement														
Bike Rodeo before school starts in the fall														
Plan														
Implement														
Bicycle safety education														
Plan														
Implement														
Education for Walk School Bus and Bicycle Train adult leaders														
Plan														

Activity	Coordinator	Jul. 2014	Aug. 2014	Sept. 2014	Oct. 2014	Nov. 2014	Dec. 2014	Jan. 2015	Feb. 2015	Mar. 2015	Apr. 2015	May 2015	Jun. 2015	Complete
Implement														
Review pedestrian skills at year-end picnic														
Plan														
Implement														
SRTS communication in existing materials														
Plan														
Implement														
Community outreach campaign														
Plan														
Implement														
<b>ENFORCEMENT</b>														
Enforcement program for walking school buses and bicycle trains														
Plan														
Implement														
Savannah police enforcement around school														
Plan														
Implement														
Additional crossing guards														
Plan														
Implement														
Safe Driving Pledge														
Plan														
Implement														
<b>EVALUATION</b>														
Track Walking School Bus and Bicycle Train participation														
Plan														
Implement														
Conduct annual (or biennial) parent surveys of student travel patterns														
Plan														
Implement														
Conduct regular assessment of conditions around school														
Plan														
Implement														

Activity	Coordinator	Jul. 2014	Aug. 2014	Sept. 2014	Oct. 2014	Nov. 2014	Dec. 2014	Jan. 2015	Feb. 2015	Mar. 2015	Apr. 2015	May 2015	Jun. 2015	Complete
Assess congestion during arrival and dismissal														
Plan														
Implement														