

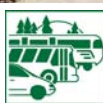
# Egg Harbor City School District Safe Routes to School Travel Plan

Charles L. Spragg Elementary &  
Egg Harbor Community School

August 2012



NEW JERSEY  
**Safe Routes  
to School**



**CROSS  
COUNTY  
CONNECTION**

TRANSPORTATION MANAGEMENT ASSOCIATION

# Egg Harbor City School District Travel Plan

**Prepared by:**

**Cross County Connection Transportation Management Association  
August 2012**

Cross County Connection Transportation Management Association was formally incorporated in 1989 through the efforts of a group of southern New Jersey business leaders, local government officials, and representatives from the New Jersey Department of Transportation and New Jersey Transit Corporation to address mobility issues in the region and reduce the number of vehicles on state and local roadways. Today, Cross County Connection is a non-profit organization partnering with the New Jersey Department of Transportation, New Jersey Transit, Federal Highway Administration and its members to provide solutions to complex transportation problems for counties, municipalities, employers and commuters in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem Counties.

This Cross County Connection Transportation Management Association publication is funded by the New Jersey Department of Transportation through the U.S. Department of Transportation Federal Highway Administration. The Federal Government and the State of New Jersey assume no liability for the contents.



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## INTRODUCTION

Egg Harbor City is a small but diverse community that is home to Charles L. Spragg Elementary and Egg Harbor City Community School. The Egg Harbor City School District recognizes the importance of active transportation to the health of children and the environmental health of their community, and seeks to increase the number of children that walk or bike to school. To that end and as part of Egg Harbor City's effort to create safe pedestrian corridors, improve the health of students and reduce traffic congestion around schools, the administration has chosen to develop a district Travel Plan.

The purpose of this travel plan is to identify safe travel routes and recommend ways to increase the number of children walking or biking to school through infrastructure improvements and programming. This effort's goals are consistent with the National Safe Routes to School Program (SRTS) goals of improving the health of schoolchildren through increased activity, increasing travel safety and reducing reliance on cars to get to school. The plan was created in partnership with the Egg Harbor City School District and Egg Harbor City Police Department.

## SCHOOL DESCRIPTION

Charles L. Spragg Elementary is located on Buffalo Avenue, two blocks south of Philadelphia Avenue. Egg Harbor City Community School, built in 2010, is located on Havana Avenue at Duerer Street (County Road 561). Both schools are in urban residential areas approximately one mile northeast of US 30 (White Horse Pike), and are separated by six blocks. Leek Athletic Complex, a city recreation area that includes baseball and football fields, tennis courts and a playground, is located between the two schools on Diesterweg Street between Buffalo and St Louis Avenues.

The majority of Egg Harbor City's development, population and school traffic is concentrated in the city's southwestern corner. Egg Harbor City's relatively compact grid layout, shown in Map I, is itself conducive to children walking and biking to school, assuming travel areas are safe and convenient. Much of the city's residential development is single family detached housing with pockets of multifamily housing located in the central and southwestern portions of the city, notably the Philadelphia Village Apartments on Buffalo Avenue northeast of Duerer Street and apartment buildings southwest of US 30. Commercial land uses are located on Philadelphia Avenue between US 30 and Campe Street and along US 30 throughout the city.

The two major street corridors in the city are Philadelphia Avenue (County Road 563), the city's "main street," shown

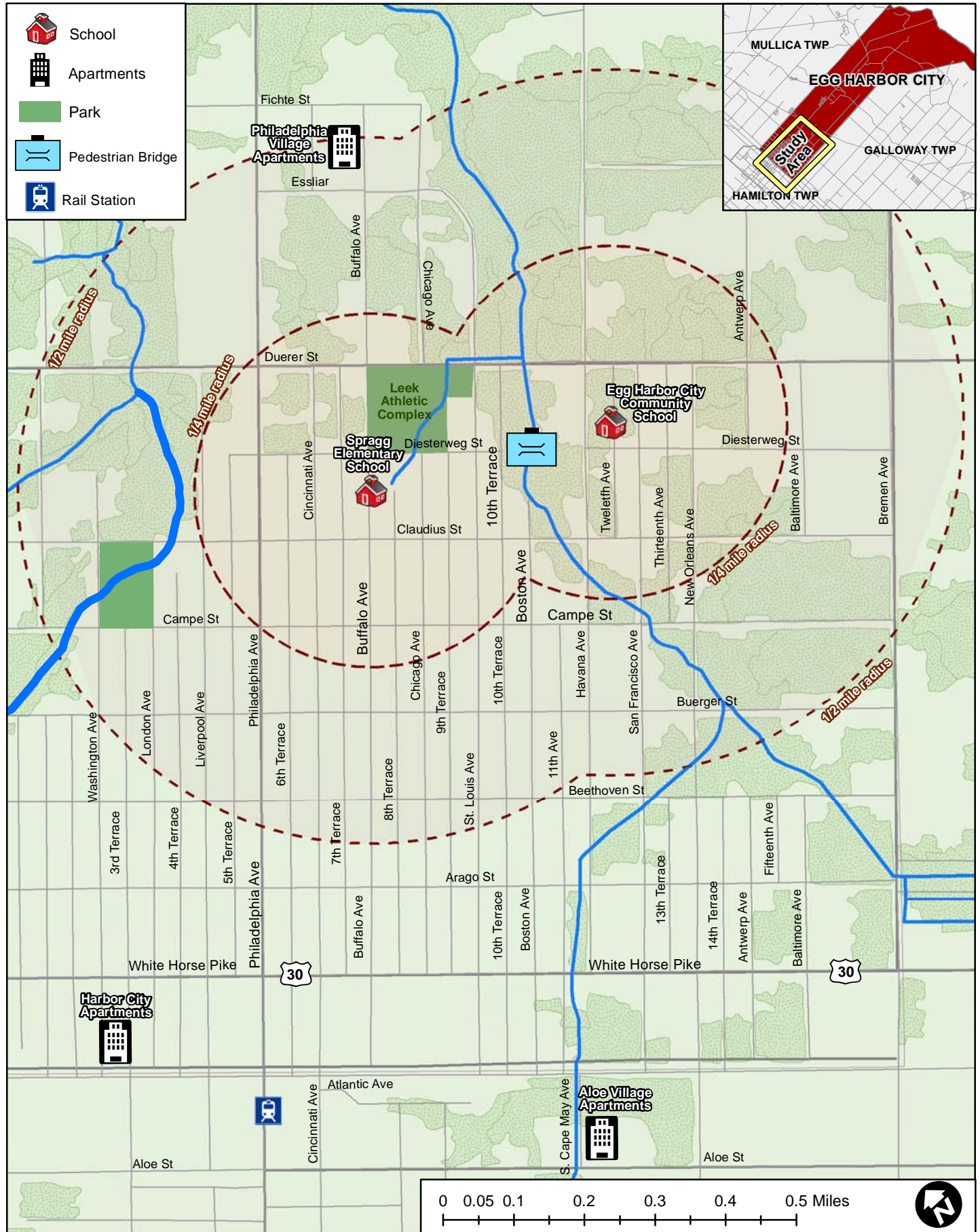
**Figure I. Charles L. Spragg Elementary School**





# Map I. Egg Harbor City School District Travel Plan Area

Egg Harbor City School District Travel Plan, August 2012



Data Source: NJDEP, Atlantic County

in Figure 2, which recently completed a major streetscape improvement project including crosswalks bumpouts, wide sidewalk replacements, pedestrian scale lighting, street trees and crosswalk striping; and US 30, the most trafficked road in the city at over 15,000 vehicles per day on average. Both of these streets have continuous sidewalk coverage, however sidewalk conditions are variable on US 30 and available only on one side of the street on Philadelphia Avenue north of Diesterweg Street. Duerer Street is another significant arterial corridor that sees moderate traffic volume, approximately 1,900 vehicles per day on average, but has high travel speeds with a posted 45 MPH speed limit. Duerer Street is adjacent to the Community School and one block northeast of Spragg Elementary, and has no shoulders or sidewalks.

**Figure 2. Philadelphia Avenue at Beethoven Street Facing Southwest**



Egg Harbor City has a significant number of low-income residents. Over one-third of all children under 18 years, and 20% of the 4,243 residents in Egg Harbor City are living in poverty<sup>1</sup>. Egg Harbor City also has a high percentage of students eligible for free or reduced price lunch, 79%, which is among the highest in the state<sup>2</sup>. Studies show that there is direct correlation between childhood obesity and poverty rates<sup>3</sup>, which makes walking and biking to school in the city important as both an equitable and healthy transportation option.

- 1 U.S. Census Bureau, American Community Survey 2006-2010, accessed on 5/16/2012, <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
- 2 New Jersey Department of Education, 2010-11 Enrollment Report: Egg Harbor City, accessed on 5/20/12, <http://www.state.nj.us/education/data/>.
- 3 Adam Drewnowski and SE Specter, "Poverty and obesity: the role of energy density and energy costs" (2001), The American Journal of Clinical Nutrition, accessed on 5/15/12, <http://www.ajcn.org/content/79/1/6.full>.

## EXISTING POLICIES & PRACTICES

Egg Harbor City is a walking district with the exception of students participating in special education programs, the mobility impaired or students living more than two miles away from their assigned school. Students are permitted to bike to school and are required to wear a helmet. Egg Harbor City provides crossing guards at the following intersections also shown in Map 2:

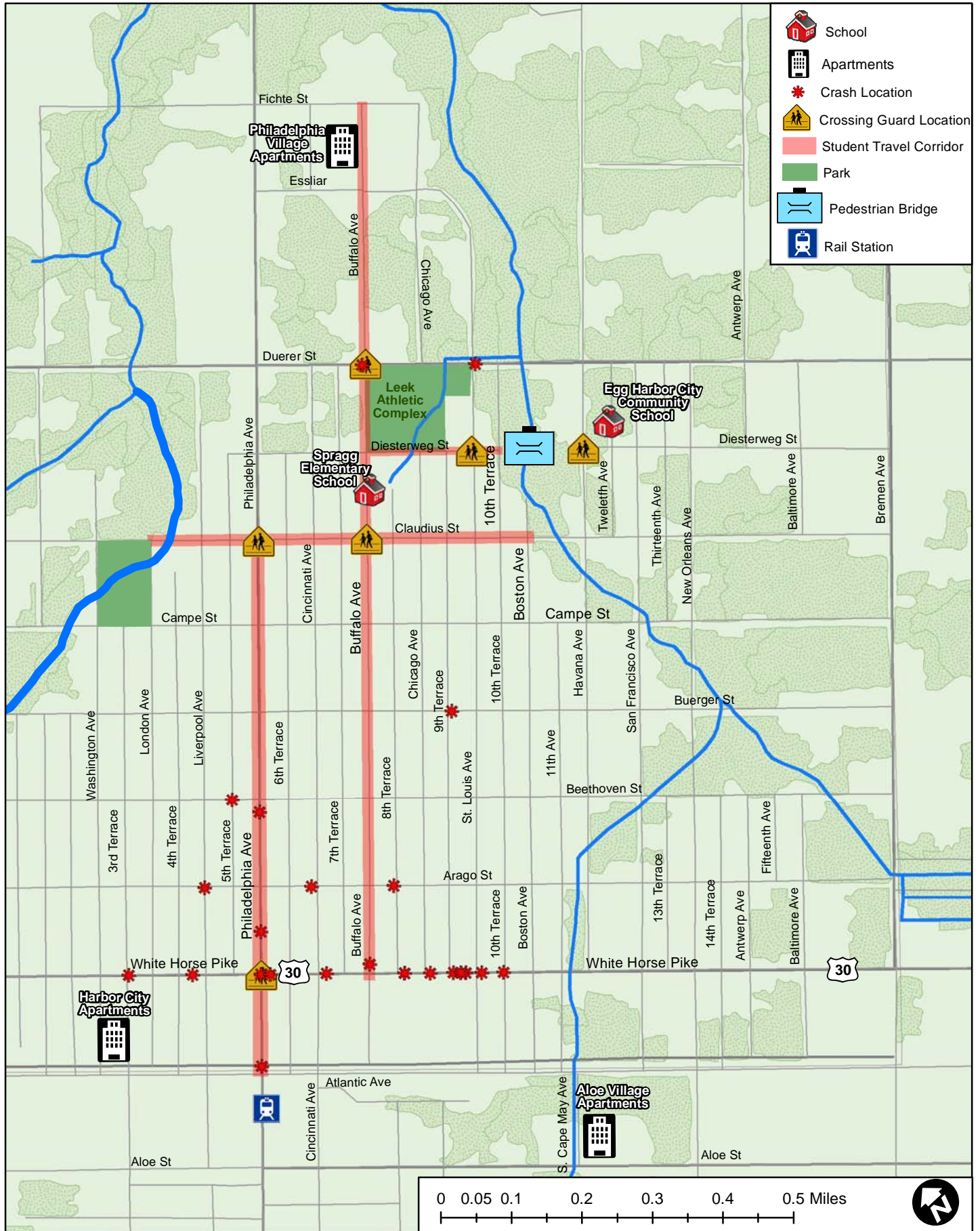
- Route 30 and Philadelphia Avenue
- Claudius Street and Philadelphia Avenue
- Claudius Street and Buffalo Avenue
- St. Louis Avenue and Diesterweg Street
- Diesterweg Street and Havana Avenue
- Duerer Street and Buffalo Avenue

Students are instructed to cross only at these guarded intersections. Each year students and parents are issued a handbook outlining school transportation policies, and the School Board requires signed permission for a student to be dismissed to walk home unescorted.



# Map 2. Egg Harbor City Crossing Guard & Crash Locations

Egg Harbor City School District Travel Plan, August 2012



## WALK/BIKE BARRIERS & OPPORTUNITIES

### Working Group

Organization	Role	Contact
Cross County Connection TMA	SRTS Program Assistance	David Calderetti, SRTS Coordinator calderetti@driveless.com
Egg Harbor City School District	Program Administration & Implementation	John Gilly, Superintendent jgilly@ehcs.k12.nj.us
Egg Harbor City Community School	Implementation	Jack Griffith, Principal jgriffith@ehcs.k12.nj.us
Egg Harbor City School District	Implementation	Gretchen Halfpenny, School Wellness ghalfpenny@ehcs.k12.nj.us
Egg Harbor City Police	Enforcement	Mike Luko, Principal School Officer (609) 965-2901
Egg Harbor City Police	Enforcement	John McColgan, Chief of Police mccolgan_j@police.eggharborcity.org
Cross County Connection TMA	SRTS Program Assistance	Graydon Newman, Land Use & Transportation Specialist newman@driveless.com
Charles L. Spragg Elementary School	Implementation	Adrienne Shulby, Principal ashulby@ehcs.k12.nj.us

The Travel Plan was developed by Cross County Connection in partnership with the SRTS Working Group members listed above. Meetings were held on 1/18/12 and 2/9/12 with participation from all members of the Working Group, as well as several teachers and school staff members. Superintendent John Gilly was the primary contact for the plan and coordinated input by law enforcement and school staff outside of meetings.

Walking audits were conducted on 2/9/12 and 5/18/12 to assess walking and biking conditions and document areas in need of improvement. School Superintendent Gilly and Police Chief John McColgan participated in the first audit, indicating areas with observed safety issues and locations where walking students were concentrated. Both audits were held in dry, warm weather during the early afternoon. Walking and biking behavior was observed at school dismissal during both audits.

### Travel Patterns

Student travel tallies were conducted by teachers at Spragg Elementary and the Community School in 2011. Tally results are shown in Table 1. Approximately half of Egg Harbor City students are driven to school at both Spragg Elementary and the Community School. Over 40% of all students travel to school by walking or biking, with the vast majority of those walking. Only 2% of elementary students

biked to school, while 5% of Community School students biked. Approximately 5% of students at each school were bussed.

<b>Table 1. School Travel Information</b>				
	<b>Charles L. Spragg Elementary</b>		<b>Egg Harbor City Community School</b>	
<b>Location</b>	601 Buffalo Avenue		730 Havana Avenue	
<b>Grades</b>	PK-3		4-8	
<b>Arrival time</b>	8:20 AM		8:20 AM	
<b>Dismissal time</b>	3:00 PM		3:00 PM	
<b>Student Population</b>	277		229	
that walk	99	35.7%	89	38.9%
that bike	6	2.2%	12	5.2%
that get driven	154	55.6%	114	49.8%
that are bussed	18	6.5%	11	4.8%

Since the elementary and middle schools are located close to one another, older students will often walk with their younger siblings for pick-up and drop-off at the elementary school on their way to and from the middle school. Until spring 2012 this walk was made on Claudius Street, and often in vehicle travel lanes due to the absence of sidewalks and right-of-way limitations of a road bridge, pictured in Figure 3. In 2011, Egg Harbor City was awarded funding through a Small Cities Community Development Block Grant for a pedestrian bridge connecting the middle school to Diesterweg Street. This bridge, expected to open in summer 2012, will greatly improve access between the schools and to recreation areas, however Diesterweg Street currently lacks sidewalks or bicycle facilities between the bridge and Spragg Elementary.

## Bicycle Facilities

There are currently no bicycle facilities in Egg Harbor City, which is likely a contributing reason for low biking rates to schools. Both schools provide bicycle parking on-site, shown in Figure 4. The Community school provides covered bicycle parking with approximately 44 spaces, while Spragg Elementary provides uncovered parking with 28 spaces.

**Figure 3. Claudius Street Bridge at Havana Avenue**





**Figure 4. Bicycle Parking at Spragg Elementary and the Community School**

## Bicycle and Pedestrian Crashes

Between 2007 and 2011, there were 21 vehicle crashes involving pedestrians and 11 vehicle crashes involving bicyclists in Egg Harbor City. Crash frequency was highest in 2007 with ten crashes, and lowest in 2011 with one crash. Between 2008 and 2010 there were six to eight crashes each year, while only one incident was reported in 2011. Crashes were most common on US 30, as shown in Map 2, accounting for 56% of all bicycle and pedestrian crashes. This roadway represents the most significant safety concern in the city because of its high traffic and observed crash volumes. The safest crossing of US 30 is located at Philadelphia Avenue where it is signalized with pedestrian actuated signal heads and crossing guards posted during school travel times. Locations where more than one crash was reported include:

- US 30 and Philadelphia Avenue (5 crashes)
- US 30 and Chicago Avenue (4 crashes)
- US 30 and Buffalo Avenue (4 crashes)
- US 30 and St Louis Avenue (2 crashes)
- Arago Street and Cincinnati Avenue (2 crashes)

Of the 32 bicycle and pedestrian crashes reported in the last five years, six occurred on streets that might be travelled by schoolchildren between the hours of 7:30 AM-8:30 AM and 3:00PM-4:30PM. 19 of the total 32 crashes occurred on US 30 outside of a signalized intersection, underscoring the importance of routing children to the signalized Philadelphia Avenue crossing.

## Travel Safety Concerns

Several safety concerns were identified by school staff, law enforcement and through walking audits:

**Busy/high-speed Road Crossings** – Crossing US 30 is a significant safety concern for students living on its southwest side. Roughly 75 students live in apartment complexes located in this area. School officials prefer students to travel south on Atlantic Avenue and cross Route 30 at the signalized Philadelphia Avenue intersection, pictured below in Figure 5, rather than at other unsignalized crossing locations.

In addition to US 30, Duerer Street is a safety concern because of its high travel speed (45 MPH posted speed limit), proximity to the schools and lack of sidewalks or shoulders. Duerer Street is not

**Figure 5. Philadelphia Avenue and US 30 Intersection Facing West**



signalized in the city and its only stop control is at its intersection with Philadelphia Avenue. Duerer Street is crossed at the uncontrolled Buffalo Avenue intersection by students living at the Philadelphia Apartments. Due to safety concerns about crossing Duerer Street, the School District has posted crossing guards at the US 30-Philadelphia Avenue and Duerer Street-Buffalo Avenue intersections at arrival and dismissal times.

**Missing Sidewalks** – While much of the residential core of Egg Harbor City has sidewalks, there are still areas where no sidewalks are present. Some locations are missing spot sections while others are completely absent of sidewalks and encourage pedestrians to walk in the roadway. Areas of missing sidewalk on primary travel routes are noted by corridor in the Primary School Travel Corridors section below and shown in Map 3.

**Missing Curb Ramps** – Missing curb ramps at several crosswalks in the city create a safety hazard for students with mobility impairments and impede bicycle travel for younger students riding on sidewalks. Locations of missing curb ramps are noted by corridor in the Primary School Travel Corridors section below.

**Crosswalk Visibility** – Law enforcement and walking audits identified several crosswalks with low visibility for both pedestrians and drivers due to faded pavement markings. Locations of these crosswalks are noted by corridor in the Primary School Travel Corridors section below.

**No Bicycle Facilities** – Biking is a great way for children to get to school, especially for children living more than half a mile from school. Currently there are no bicycle facilities such as bicycle lanes or bike paths, in Egg Harbor City. There are also currently very few students biking to school despite the availability of bicycle parking at both schools.

Biking on sidewalks is permitted in Egg Harbor City, however sidewalks are not built for bicycle travel and biking on sidewalks often results in conflicts with pedestrians. For young children, such as Spragg Elementary students, it is appropriate and even desirable for them to ride with parental supervision on sidewalks away from vehicle traffic. For older students that have received bicycle safety instruction, it may be appropriate to ride on roadways that safely accommodate bike travel. Students at any age should always wear a properly fitting bicycle helmet.

Many residential streets in the city are already conducive to general bicycle travel due to their low volume and low traffic speeds, but lack additional amenities that would increase safety and encourage bike travel to schools.



## Primary School Travel Corridors

There are four primary school travel corridors for Egg Harbor City students walking or biking to school: Philadelphia Avenue (Atlantic Avenue to Claudius Street), Diesterweg Street (Buffalo to 10th Terrace), Buffalo Avenue (Fichte Street to US 30), and Claudius Street (London Avenue to Boston Avenue). These corridors, shown on Map 2, were identified by school district staff and law enforcement as focus areas.

### Philadelphia Avenue

Philadelphia Avenue, shown in Figure 6 is a moderate volume, low-speed county road that is the central commercial corridor and main street of the city. It is located northwest of both schools and is a major southwest-northeast travel corridor for student travel and general traffic. Because of its 25 MPH posted speed limit and good pedestrian facilities, school officials have recommended Philadelphia Avenue as a travel route, especially for the roughly 75 students living south of US 30. For the purposes of student travel, Philadelphia Avenue is a recommended travel corridor between Atlantic Avenue and Claudius Street, where students may access Spragg Elementary and the Community from Claudius Street via Buffalo Avenue.

#### Transportation Concerns:

- The US 30 intersection is a high crash location despite it being the safest crossing point of that roadway, with signalization, pedestrian-actuated signal heads and marked crosswalks. Crossing guards are currently posted at this intersection.
- There have been a number of crashes involving bicyclists on Philadelphia Avenue, both at the US 30 intersection and elsewhere. The High Point to Cape May Bicycle Tour, designated by the New Jersey Department of Transportation, runs the length of Philadelphia Avenue.

**Figure 6. Philadelphia Avenue North of Arago Street**



## Claudius Street

Claudius Street is a main corridor used by students trying to get to Spragg Elementary and the Community School. The street runs perpendicular to Philadelphia Avenue from Ernie Day Rotary/Peace Pilgrim Park, continuing to the elementary school at Buffalo Street and on to Boston Avenue before intersecting with Havana Avenue. For the purposes of student travel, walking and biking on Claudius Street is recommended between London Avenue and Boston Avenue. Community School students may access the school by walking to the pedestrian bridge via Buffalo or St Louis Avenues.

### Transportation Concerns:

- School officials expressed concern about vehicle speeding on Claudius Street despite its 25 MPH posted speed limit.
- The crosswalk of Claudius Street and St Louis Avenue has limited visibility due to large trees lining St Louis Avenue. Though crossing guards are currently posted at this intersection, crosswalk striping is faded on the southern crossing of St Louis and both crossings of Claudius Street.
- There are no sidewalks between Boston and Havana Avenues. The newly constructed pedestrian bridge should route children away from this area, however children may still use this section. Additional efforts such as a temporary school staff or law enforcement presence may be needed to route children away from this area when the bridge opens.
- Sidewalks are missing on the north side of Claudius Street between 5th and 6th Terraces, pictured in Figure 7.
- Crosswalk markings are faded or nonexistent at many intersections including: Cincinnati Avenue, 7th Terrace, Buffalo Avenue, Liverpool Avenue, 5th Terrace and 6th Terrace.

**Figure 7. Intersection of Claudius Street and Philadelphia Avenue**



## Diesterweg Street

Diesterweg Street runs from Liverpool Ave in the northwest to 10th Terrace where it connects to the pedestrian bridge leading to the Community School. Diesterweg Street is the primary connection between the middle and elementary schools as well as the recreational fields. The street also connects to Philadelphia and Buffalo Avenues, providing a direct route to the Community School from Philadelphia Avenue with the construction of the pedestrian bridge. For the purposes of student travel, walking and biking on Diesterweg Street is recommended between the elementary school and the pedestrian bridge. Beginning in the 2012-13 school year, a crossing guard will be posted at Diesterweg Street and St Louis Avenue

### Transportation Concerns:

- There are currently no sidewalks or marked crosswalks between Buffalo Avenue at the elementary school and the pedestrian bridge, as shown in Figure 8.
- There are several missing curb ramps needed if or when sidewalks are constructed: all Chicago Avenue crossings, all 9th Terrace crossings, southwest corner of St Louis Avenue intersection.

**Figure 8. Diesterweg Street facing Spragg Elementary**





## Buffalo Avenue

Buffalo Avenue is a one-way street running southbound, parallel to Philadelphia Avenue and four blocks to the east. It connects the Philadelphia Village Apartments in the northeast and Atlantic Avenue in the southwest. The road intersects Duerer and Diesterweg Streets, as well as US 30. Spragg Elementary is located on Buffalo Avenue with additional playground and recreation facilities directly across the street. Roughly 100 students travel to and from the Philadelphia Village Apartments on Buffalo Avenue daily and have no other route choices until Duerer Street is crossed. A crossing guard is currently posted at this intersection during morning and afternoon travel times. For the purposes of student travel, walking and biking on Buffalo Avenue is recommended between Fichte Street and US 30, though not crossing US 30. Students crossing US 30 should do so at the Philadelphia Avenue intersection.

### Transportation Concerns:

- Duerer Street must be crossed by children travelling from the Philadelphia Village Apartments. The crossing is striped but is not stop controlled for Duerer Street through traffic. While a crossing guard is currently posted, the crossing is dangerous at any other time a crossing guard is not present.
- Crosswalk striping is faded at the well-traveled intersection of Claudius Street and Buffalo Avenue, pictured in Figure 9.
- There is no crosswalk striping at Buerger Street, Beethoven Street, Arago Street, US 30 and Atlantic Avenue intersections. Each of these intersecting streets is not stop controlled for through traffic.
- There are no curb ramps on the south side of the Buerger Street intersection.

**Figure 9. Buffalo Avenue at Claudius Street**



**Other Safety/Connectivity Concerns:**

Havana Avenue - There is currently no sidewalk access to Egg Harbor Community School from Havana Avenue. Students living east and south of the Community School often use Havana to get to school because it is a convenient and direct route. While the pedestrian bridge will draw student traffic travelling west and north, students walking or biking south are likely to continue to use Havana Avenue and must walk in the roadway.

Missing Sidewalks – There are several streets with observed schoolchildren traffic that have significant gaps in sidewalk coverage. Though these streets are not primary travel corridors, the safety of children using them would be improved by the installation of sidewalks.

## GOALS AND ACTIONS

### Goals

- To encourage more students to walk and bike to and from school.
- To improve the health of schoolchildren through increased physical activity.
- To make it safer for children to walk and bike to and from school.
- To establish healthy lifestyle habits among schoolchildren.
- To reduce traffic congestion around schools at arrival and dismissal times.
- To reduce the negative environmental impacts of automobile trips to schools.

### Actions

The following are strategies to achieve the goals listed above by addressing the five E's: Education, Encouragement, Enforcement, Engineering and Evaluation.

#### I. Education

Education efforts instruct children and parents on safe walking and biking behavior, and raise awareness of the benefits of walking and biking to school.

Education Actions	Responsibility	Time frame
Creation and distribution of educational materials to students and chaperones	School/Cross County Connection TMA/Voorhees Transportation Center	Ongoing
In-class education on the health and environmental benefits of walking and biking	School/Cross County Connection TMA	2012-13 School Year, Annual
In-class instruction on safe walking and biking behavior	School/Cross County Connection TMA	Annual

The Community School has previously coordinated bicycle rodeos where bike helmets were raffled off, a local bike shop provided bike safety checks and Stockton College Police Department taught riding skills. These events were sponsored by the Egg Harbor City Community School Wellness Team. Future bike rodeos will include participation from Cross County Connection TMA and have a similar scope of riding skills and safety checks.

Cross County Connection and the Alan M. Voorhees Transportation Center will make safety education materials available to the school district. Cross County Connection will also provide in-class education and pedestrian safety instruction as needed. Parents should be included in education and outreach



activities to encourage their child's walking and biking and participation in walking and biking programs. This might include addressing walking and biking in parent-teacher meetings, parent-specific take home materials and coordination with parent organizations.

## II. Encouragement

Encouragement actions promote walking and biking to school through programs such as walking school buses and other programs that generate excitement around walking and biking. These programs are essential to building the momentum necessary to significantly change school travel habits.

Encouragement Actions	Responsibility	Time frame
Walking School Bus (WSB) Pilot Program	Principal Adrienne Schulby, Spragg Elementary/Cross County Connection TMA	Fall 2012
Satellite walk to school event	Principal Jack Griffith, Community School	Quarterly
Bicycle safety contest	EHC Community School	Annual
Participate in International Walk to School Day	School District	Annual in October
Participate in National Bike to School Day	School District	Annual in May

Spragg Elementary is creating a Walking School Bus Pilot Program that will be led by Principal Adrienne Shulby. Ms. Shulby will first be soliciting parent volunteers in Fall 2012 to lead walking school buses from Philadelphia Village Apartments and residences located southwest of US 30 to the school. Cross County Connection will provide training to volunteers on how to lead a walking school bus.

The Community School will begin quarterly satellite walking events in which students will be asked to meet at the northwestern end of the newly constructed pedestrian bridge. Students will be led by a school staff member to the middle school while being taught safe pedestrian behavior.

Students of the Community School will participate in a Bicycle Safety Contest. Grades 4, 5 and 6 will create posters, 7th grade students will participate in a brochure contest and 8th grade students will put together short videos.

Egg Harbor City will participate district-wide in National Bike to School Day in May. Both the elementary and middle schools participated in the national event in 2012. The district will also begin participating in International Walk to School Day in October.

### III. Enforcement

Enforcement of unlawful behavior around schools, on primary school travel corridors and throughout the city is important to ensuring a safe walking and biking environment for children. The Egg Harbor City Police Department (EHCPD) currently works closely with the school district to help ensure schoolchildren travel safety.

Enforcement Actions	Responsibility	Time frame
Speed enforcement	EHCPD	Ongoing
Stop enforcement for pedestrian crosswalks	EHCPD	Ongoing

Claudius Street should be targeted for enforcement due to concerns about speeding on this corridor. In addition to existing efforts, EHCPD could consider participation in New Jersey's Pedestrian Decoy Safety Program<sup>4</sup>. This program has been a successful enforcement tool in many New Jersey communities to ensure that vehicles yield to pedestrians at crosswalks and obey New Jersey's "Stop and Stay Stopped" law (NJ 39:4-36).

### IV. Engineering

Engineering recommendations in this Travel Plan, shown in Map 3 focus on low-cost safety improvements in primary school travel corridors that can be implemented in a short time frame. Egg Harbor City has already made pedestrian safety and streetscape enhancements to Philadelphia Avenue that required significant capital costs, but there are many additional locations in need of improvement that may be addressed without high-cost "brick and mortar" projects.

Recommendations:

#### Bicycle Accommodations on Primary School Travel Corridors

Shared lane pavement markings, or "sharrows," designate a roadway as a shared travel environment for bicycles and automobiles. These markings, seen in Figure 10, alert automobile drivers to expect and share the road with cyclists, designate a roadway as a preferable bicycle route and guide

**Figure 10. Sharrow Pavement Marking**



<sup>4</sup> "Cops in Crosswalks": Pedestrian Decoy Enforcement in New Jersey" (2010), Pedestrian and Bicycle Information Center, Accessed on 5/21/12, <http://www.walkinginfo.org/library/details.cfm?id=4649>.

# Map 3. Egg Harbor City Recommended Engineering Improvements

Egg Harbor City School District Travel Plan, August 2012



Data Source: NJDEP, Atlantic County



cyclists on where to ride in the lane. “Share the Road” (W16-1P) signage may be used in combination with sharrows. Guidance on shared lane marking installation is found in Section 9C.07 of the Manual on Uniform Traffic Control Devices (MUTCD).

Recommend installation of sharrow pavement markings and “Share the Road” signs on:

- Philadelphia Avenue (Atlantic Avenue to Diesterweg Street)
- Buffalo Avenue (US 30 to Fichte Street)
- Claudius Street (London Avenue to Boston Avenue)
- Diesterweg Street (Chicago Avenue to 10th Terrace)

### Crosswalk Markings

Several crosswalks located on the primary school travel corridors are faded or unmarked. High visibility marked crosswalks are important in locations with significant pedestrian traffic because it both alerts cars to the presence of a crosswalk and designates proper crossing locations to pedestrians.

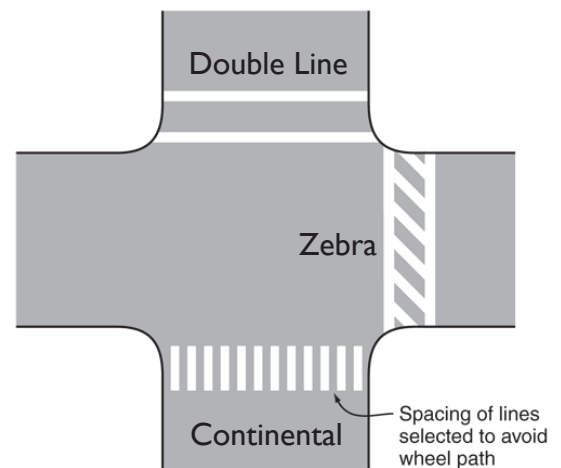
Recommend installing appropriate crosswalk markings at:

- Buffalo Avenue and US 30 (Buffalo crossing only)
- Buffalo Avenue and Arago Street
- Buffalo Avenue and Beethoven Street
- Buffalo Avenue and Buerger Street
- Diesterweg Street and St Louis Avenue
- Diesterweg Street and 9th Terrace
- Diesterweg Street and Chicago Avenue
- Claudius Street and London Avenue
- Claudius Street and Liverpool Avenue
- Claudius Street and 5th Terrace

Recommend repainting appropriate crosswalk markings at:

- Buffalo Avenue and Claudius Street
- Claudius Street and Cincinnati Avenue
- Claudius Street and 7th Terrace

**Figure 11. Crosswalk Treatments**



Source: FHWA MUTCD

Consider installation of higher visibility zebra or continental crosswalk markings, shown in Figure 11 instead of the existing double line markings to delineate heavily-used crosswalks on primary travel corridors. These higher visibility crossings have been shown to reduce vehicle-pedestrian conflicts<sup>5</sup>.

5 Federal Highway Administration, “Crosswalk Marking Field Visibility Study” (2010), Accessed on 5/20/12, <http://www.fhwa.dot.gov/publications/research/safety/pedbike/10067/10067.pdf>.

### Stop Controls for Primary School Travel Corridors

Currently the majority of intersections located on primary school travel corridors are two-way stop controlled. Intersections of this type prioritize vehicular traffic flow over pedestrian movement at crosswalks. Four-way stop controls at these intersections would help ensure safer pedestrian and bicycle movement on these corridors and provide a safer travel environment for children. Each of the primary school travel corridors are low-volume residential roads. Additional stop controls on these corridors will likely have minimal impact on vehicle circulation. An example where installation of four-way stop control is recommended is the intersection of Diesterweg Street and St Louis, pictured in Figure 12, where pedestrian movement is expected to be significant due to walking traffic from the pedestrian bridge.

**Figure 12. Diesterweg Street Facing St Louis Avenue Intersection**



This plan recommends consideration of installing all-way stop controls at all primary school travel corridor intersections, except those on Philadelphia Avenue, not currently signalized.

### Additional Wayfinding Signage

Wayfinding signage and markings provide direction to students and parents and mark roads as preferred travel routes. Wayfinding could include paint markings designating preferred corridors by color or markers, such as the one pictured in Figure 13, that designate safe travel routes. These markings and signs also increase visibility of walking routes among the community and encourage more children to walk or bike to school.

This plan recommends consideration of additional wayfinding markings or signage to be placed on primary school travel corridors.

**Figure 13. SRTS Route Marker**



Source: Decatur Active Living



### Install Missing Sidewalks

While the majority of primary school travel corridors have continuous sidewalk coverage on at least one side of the street, there are several locations with gaps in an otherwise continuous sidewalk network.

Recommend installing sidewalks on:

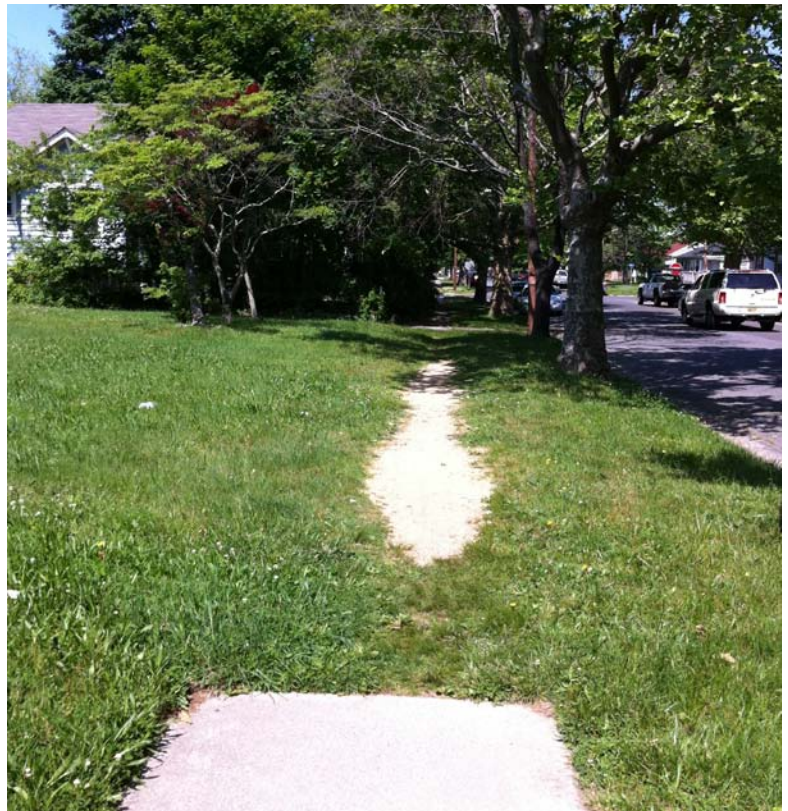
- West side of Buffalo Avenue between Campe Street and Buerger Street, pictured in Figure 14
- West side of Buffalo Avenue between Buerger Street and Beethoven Street
- Diesterweg Street between Buffalo Avenue and 10th Terrace
- North side of Claudius Street between Philadelphia Avenue and 5th Terrace

In addition to the above locations, installation of sidewalks on Havana Avenue between Diesterweg Street and Campe Street, shown in Figure 15, is recommended to accommodate students living south and east of the Community School. There is very little sidewalk coverage currently installed on Havana Avenue and no sidewalk in the recommended segment. Installation of sidewalks in this segment would provide a safe walking connection to Campe Street, which has good existing sidewalk coverage.

### Speed Limit Reduction

Duerer Street is located one block northeast of Spragg Elementary and adjacent to the Community School. The current posted speed limit for this road is 45 MPH. The road is crossed daily at Buffalo Avenue, pictured in Figure 16,

**Figure 14. Missing Sidewalk on Buffalo Avenue Near Campe Street**



**Figure 15. Havana Avenue at Claudius Street**





by many of the approximately 100 students living in the Philadelphia Village Apartments. Additionally, children living in that apartment complex access the Lee Memorial Sports Complex at this location. Crossing guards are currently posted at this uncontrolled intersection during morning arrival and afternoon dismissal times. Despite these postings, the road still poses a potential safety hazard due to its proximity to schools and recreation areas, high vehicle travel speeds and lack of adjacent sidewalks.

This plan recommends consideration of a reduction in the posted speed limit in the area around the schools, accompanied with additional speed enforcement measures, to improve road safety. This speed limit reduction could be done citywide or as part of a school speed zone. Duerer Street is maintained by Atlantic County, which would be responsible for this change.

**Figure 16. Buffalo Avenue at Duerer Street Intersection Facing Southwest**



## V. Evaluation

Evaluation Actions	Responsibility	Time frame
Student Travel Tally	School District	Summer/ Fall 2012
Parent Survey	School District/Cross County Connection TMA/Voorhees Transportation Center	Fall 2012

The Egg Harbor City School District will conduct student tallies and/or parent surveys to measure the number of children walking and bicycling. Student tallies are held in-class by school staff to determine how children got to class that day. Tallies should be held at regular intervals to determine the impact of SRTS activities in student travel choices. Tallies should also be compared yearly to measure annual success.

Parent surveys may be sent home with children or distributed to parents electronically to determine

parent attitudes and concerns about children walking or biking to school. Survey results may be submitted to the Voorhees Transportation Center for compilation and reporting. Cross County Connection TMA will assist schools in assessing results and coordinating follow-up activities if desired.

Additional information on evaluation methods is available at the New Jersey Safe Routes to School website: <http://www.saferoutesnj.org/resources/stp/measuring-progress/>

## CONCLUSION

The Egg Harbor City School District is committed to increasing the number of children that walk and bike to school through safety improvements and programs that educate and encourage biking and walking. The School District currently addresses child walking safety by providing crossing guards at busy crossings, and has proactively enabled safe pedestrian access to the Community School through the newly constructed pedestrian bridge. The District also works closely with the Egg Harbor City Police Department to increase walking safety for schoolchildren through enforcement and community policing. This Travel Plan was commissioned to address the School District's interest in walking and biking programs, and its continued concerns about existing and potential safety issues due to high-speed roads, crosswalks, and walking and biking infrastructure gaps throughout the city.

The Plan outlines several education and encouragement programs that the School District is either actively pursuing or has expressed interest, including a walking school bus pilot program, bike rodeo and participation in walk/bike to school month activities. Infrastructure improvements such as crosswalk restriping/installation, bikeways and sidewalk gap coverage were recommended on the priority travel corridors of Philadelphia Avenue, Buffalo Avenue, Claudius Street and Diesterweg Street. Implementing these improvements will make the walking and biking environment safer, better connected and more attractive for schoolchildren and the community. Creating a safe and attractive environment is key to increasing the number of children walking to school.

Implementation of this Plan and the sustained success of any effort to increase walking and biking to school will require continued partnership among local entities. Infrastructure improvements must be employed alongside hands-on education and encouragement programs to maintain momentum towards achieving the goal of reducing the more than 50% of children in the city that are driven to school. The School District and Egg Harbor City have demonstrated through past successes and current efforts that they are committed to both creating a community that fosters active and healthy children, and providing a safe environment for walking and biking.