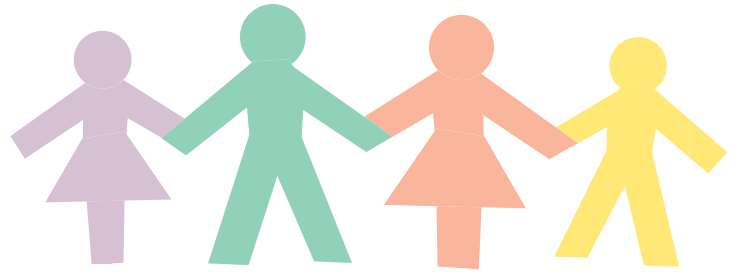


# Osage Elementary School



## School Travel Plan



June, 2014



**CROSS  
COUNTY  
CONNECTION**

TRANSPORTATION MANAGEMENT ASSOCIATION



**NEW JERSEY**

**Safe Routes to School**



Sponsored by the New Jersey Department of Transportation with funding from the Federal Highway Administration.

# Osage Elementary School Travel Plan

**Prepared by:**

**Cross County Connection  
Transportation Management Association**

**June 2014**

Cross County Connection Transportation Management Association was formally incorporated in 1989 through 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.

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## CHAPTER 1: INTRODUCTION

Voorhees Township is located in Camden County, New Jersey, approximately 20 miles east of Philadelphia, Pennsylvania. The Township is bordered by the municipalities of Berlin Township, Cherry Hill, Gibbsboro, Lindenwold, Somerdale and Evesham Township. The Port Authority Transit Corporation (PATCO) commuter rail line runs through Voorhees Township, traveling east to west from Lindenwold, New Jersey to Philadelphia, Pennsylvania; the Ashland station is located within the Township limits. The Woodcrest and Lindenwold stations are easily accessible to a number of residents. The Township also has easy access to Route I-295, a major north to south Interstate Highway and State Route 73, as well as several major County Routes.

Osage Elementary is one of four public elementary schools in Voorhees Township and is located in the northwest quadrant of the municipality. The staff of Osage Elementary School and members of the governing body, and school district recognize the correlation between active transportation and the health of its student population. Over the past few years, the school has become increasingly active in providing pedestrian and bicycle safety programs for its students. To that end, the school district and Township passed a Resolution of Support in favor of pursuing a formal Safe Routes to School (SRTS) program in the spring of 2014. In an effort to ensure the sustainability of the district's SRTS program, increase the number of children that walk or bike to school, create safe walking and biking environments, and reduce traffic congestion at arrival and dismissal times, the Osage Elementary School has chosen to develop a Safe Routes to School Travel Plan.

### Goals

The purpose of this School Travel Plan is to provide a summary of existing walking and bicycling conditions, identify possible infrastructure improvements, and recommend educational and encouragement activities which will facilitate safe pedestrian and bicycling movement to and from Osage Elementary School. This Travel Plan incorporates the 5 E's of SRTS: Evaluation, Engineering, Education, Encouragement and Enforcement. These five categories provide the framework for the recommendations of the plan and help to identify actions that may encourage more students to safely walk and bike to school. The plan was created through guidance from the faculty of Osage Elementary School, the Voorhees School District and Voorhees Township; and includes the following goals:

- To encourage more students to walk and bike to and from school.
- To make it safer for children to walk and bike to and from school.
- To improve the health of schoolchildren through increased physical activity.
- To establish healthy lifestyle habits among schoolchildren that will continue into the future.
- To reduce the negative environmental impact of automobile trips to schools—especially the effects of vehicles idling in close proximity to children.

## School Description

Osage Elementary is located at 112 Somerdale Road in Voorhees Township approximately one quarter of a mile east of Burnt Mill Road (County Route 670) and one mile west of Haddonfield Berlin Road (County Route 561), as shown in Map 1. The school serves students in grades K-5 and, as of the 2013-2014 school year, has a total student population of 674 students. The Voorhees Town Center, a Planned Unit Development, consists of a regional shopping mall, Main Street Boulevard with retail and service uses and multifamily residential area, and is located directly across the street from Osage Elementary School. Other trip generators, including the Camden County regional library and ballparks, are located nearby.

The majority of students that attend Osage Elementary School are drawn from adjacent single family residential neighborhoods of Ridge View and Ashland Terrace and from apartment complexes within the Voorhees Town Center. Students residing in Ridge View, Ashland Terrace and multifamily housing located at the intersection of Somerdale and Echelon roads are considered walkers. The multifamily housing developments are Abitare, Three Pond and Heritage Grove Apartments.

Osage Elementary School's sending area is intersected by five county routes: Somerdale Road, Burnt Mill Road, Haddonfield Berlin Road, Evesham Road, and White Horse Road. Echelon Road travels through the Voorhees Town Center and connects White Horse Road to Somerdale Road. Speeding and a lack of pedestrian and bicycle facilities are concerns of school staff and faculty on all of these roadways; only Somerdale Road has a bike lane.

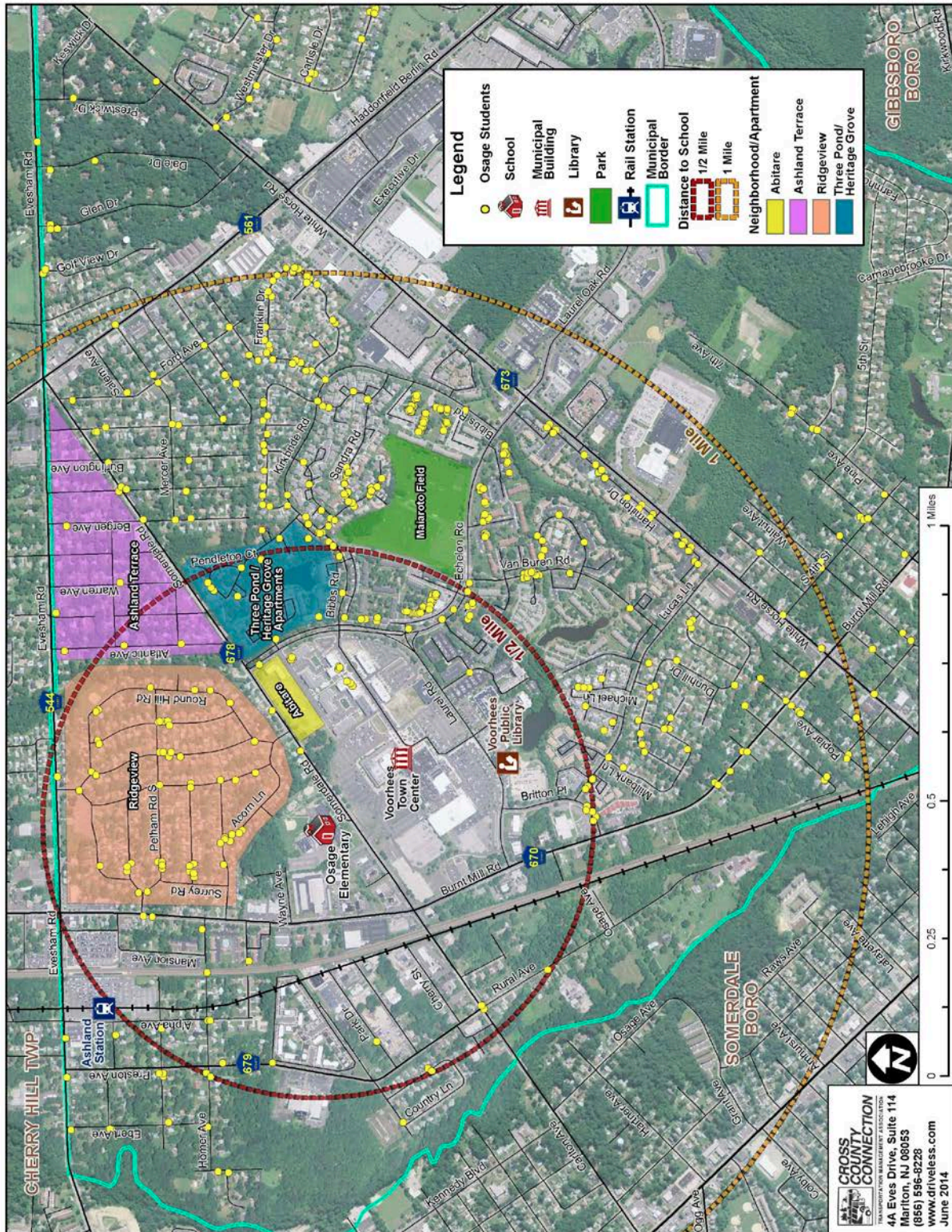
Infrastructure improvements around Osage Elementary were recently addressed in the Voorhees East-West Bikeway Connector planning study. This study, funded by a Transportation and Community Development Initiative (TCDI) grant from the Delaware Valley Regional Planning Commission (DVRPC), examined the creation of a potential bikeway to connect the eastern and western sections of the Township. The proposed bikeway would connect the existing bike lane along Centennial Boulevard to the existing bike lane on Somerdale Road via new bike facilities along Laurel Oak and Echelon Roads. This study's final report will be completed June 2014. Approximately 1,467, or 5.2%, of the residents in Voorhees Township are living in poverty. Children under 18 comprise 3.9% of all residents living in poverty.<sup>1</sup> However, approximately 134, or 19.9%, of all students from Osage Elementary School receive free or reduced lunch. Studies show that there is a direct correlation between childhood obesity and poverty rates<sup>2</sup>, which makes walking and biking to school in the town important as both an equitable and healthy transportation option. The health and well-being of all students is important to Osage Elementary School Administrators, therefore the district hopes to combat obesity rates through the administration of their SRTS program.

<sup>1</sup> U.S. Census Bureau, American Community Survey 2009-2011, accessed on 6/3/2014, [http://factfinder2.census.gov/rest/dnldController/deliver?\\_ts=419865679811](http://factfinder2.census.gov/rest/dnldController/deliver?_ts=419865679811)

<sup>2</sup> 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 1/28/2014, <http://www.ajcn.org/content/79/1/6.full>.



Map 1. Study Area





**Working Group****Table 1: Osage Elementary School SRTS Working Group**

<b>Organization</b>	<b>Role</b>	<b>Contact</b>
Cross County Connection TMA	SRTS Program Assistance	David Calderetti, SRTS Coordinator Calderetti@driveless.com
Cross County Connection TMA	SRTS Program Assistance	Mathew Bodnar, Transportation Specialist; Bodnar@driveless.com
Osage Elementary School	SRTS Champion	Robert Cranmer, Principal Cranmer@voorhees.k12.nj.us
Osage Elementary School	SRTS Co-Champion	Mary Tadley, Assistant Principal Tadley@voorhees.k12.nj.us
Voorhees Township School District	Program Administration & Implementation	Raymond J. Brosel Jr., Superintendent BroselR@voorhees.k12.nj.us
Voorhees Township School District	Program Administration & Implementation	Dr. Frank T. DeBerardinis, Assistant Superintendent Business Deberarf@voorhees.k12.nj.us
Voorhees Township School District	Program Administration & Implementation	Diane Turner, Transportation Coordinator Turnerd@voorhees.k12.nj.us
Voorhees Township Police	Enforcement	Lt. Dennis Ober, Division of Community Affairs Dober@vtpd.com
Voorhees Township Police	Enforcement	Anthony Rusterucci, Traffic Officer Ruterucci@vtpd.com
Voorhees Township	Township Administration	Joseph B. Hale, Code Enforcement Jhale@voorheesnj.com

This Travel Plan was developed by Cross County Connection in partnership with the SRTS Working Group members listed above. Meetings were held on 5/7/2014 and 5/30/2014. Principal and SRTS Champion Robert Cranmer was the primary contact for the plan and coordinated input from school staff.

A walking audit was held on 5/30/2014 to assess walking and bicycling conditions and document areas in need of improvement. The study area encompassed a mile radius around Osage Elementary, which included the Voorhees Town Center and nearby residential areas. Robert Cranmer, Osage Elementary School Principal, participated in the audit. The audit was held in dry weather during afternoon hours with a temperature of approximately 70 degrees.



## CHAPTER 2: EXISTING CONDITIONS

### Policies and Practices

At the beginning of each school year, Osage Elementary School students and their parents are issued a handbook outlining school transportation policies. The handbook is available online by visiting the Voorhees Township School District website.

According to Board Policy, students that live over a mile from Osage Elementary School are provided bus service to and from the school's campus. All kindergartners are eligible for bus transportation. Students that live under a mile are considered walkers unless they reside along roadways that have been deemed too hazardous for students to travel on because of high traffic volume or a lack of existing pedestrian or bicycle facilities. These roadways include White Horse Road, Somerdale Road, Gibbsboro Road, Burnt Mill Road, Echelon Road, and Haddonfield Berlin Road. Therefore, only students residing in the neighborhoods of Ridge View, Ashland Terrace, Abitare, Three Pond and Heritage Grove are considered walkers.

The school district provides crossing guards at the following intersections, shown on Map 2, page 8.

- Somerdale Road and Green Ridge Road
- Somerdale Road and Echelon Road

All students in grades 1-5 are dismissed from school at 3:25 p.m. on a regular school day or at 1:40 p.m. on an early dismissal day. Students are designated as bus riders, walkers/bikers, CER students (students that attend the after school program), carline students (students that get picked up by their parents/guardians), or escort dismissal students (students that are led home by a chaperone). Parents/guardians selecting to pick up their kindergarten students must do so through the supervised carline. Students attending p.m. kindergarten can also attend CER. Announcements are made at the end of the day to alert teachers to begin dismissal. Carline students and escort dismissal students are dismissed to the carline room. The homeroom teacher then walks the bus students to the gym; walkers to the exit door outside the cafeteria; and CER students to the cafeteria.

### Bus Riders

- Students who ride the bus are dismissed from the gym
- Students enter the gym and sit quietly in their designated bus line
- As buses arrive, students are called to exit the gym and enter their assigned buses in an orderly manner
- Students are not permitted to ride a bus other than the one they are assigned by the district transportation supervisor
- Students are supervised in the gym as well as outside while they are boarding their assigned buses

### Walkers/Bikers

- Students who are designated as walkers are dismissed from the exit door outside the all-purpose room, the Watson Center, to the play area outside the building
  - There is a pedestrian walkway students can utilize to get to the neighborhood of Ridgeview, as shown in Figure 1.
- Students are supervised in the hallway prior to dismissal
- Supervision is provided at the exit door to ensure students leave in a safe, orderly manner, and that visitors do not enter the building
- A bike rack is located on the east side of the building, by the Watson Center exit



Figure 1: Pedestrian walkway from Acorn Lane to the back of Osage Elementary School

### Carline

- Parent/guardian or escort arrival for carline begins at 3:20 p.m.
- Parents/guardian form a line in front of the building and wait for students to be escorted to their car from the carline classroom
- Once in the carline, parents/guardians need to stay in the carline, as it is extremely dangerous to pass a car waiting in line
- Parents/guardians should not bypass the carline and park their car to pick up their child from the carline classroom
- Students are supervised both inside the carline classroom and outside as they walk to their car

### CER

- Students who attend the after school program are escorted to the cafeteria by their teacher at the end of the school day.

### Escort Dismissal

- Parents requesting escort supervision of students in grades K-5 must complete the Request for Supervision at Dismissal Form
- Students requiring escort dismissal will wait in the carline room under staff supervision until the carline students are dismissed
- Approved escorts (parent/guardian or designated escort) must pick the student up in the carline room, be prepared to show identification, and must sign the dismissal log
- If a child is not picked up on time by the designated escort, the child will be placed in the CER program at the parent/guardian's expense

## Travel Mode

Student travel tallies were conducted by teachers at Osage Elementary School in the spring of 2014 over a week's time. Students are expected to arrive at 9:05am and are dismissed at 3:25pm. Travel mode results are shown in Table 2.

**Table 2: Student Population: Travel Mode**

Commute Mode	Students	Percent of Students
Bused	538	79.8%
Walkers	50	7.4%
Bicyclists	1	<1%
Dropped Off	85	12.6%
<b>TOTAL</b>	<b>674</b>	<b>100%</b>

Out of 674 students, 110 students are considered walkers and 564 students are provided bus service. The results of the student travel tally show that a majority of students who should be walking or biking to school are actually arriving by motor vehicle. Also, a small majority of students are not utilizing the bus services that are provided for them. These factors result in vehicle congestion at arrival and dismissal times.

## Bicycle Facilities

There are two existing bicycle facilities within one-mile of the Osage Elementary School. A bikeway is located directly outside of the school on Somerdale Road. This facility originates as a bicycle lane at the intersection of Haddonfield-Berlin Road and Somerdale Road and continues for 1.17 miles along Somerdale Road where it transitions into a bicycle route outside of Osage Elementary School. The Somerdale Road bike route continues for another 0.34 miles and ends just before the intersection of Somerdale Road and Burnt Mill Road. The other bikeway in the area is located on Lucas Lane. This bicycle lane spans the entire length of the roadway (0.51 miles) from White Horse Road to Briton Place. However, students living in the vicinity of this bike lane are provided bus service. While the Somerdale Road bikeway is located in the student walker zone, the Lucas Lane bikeway is not located in the walker zone. However, it links several apartment complexes south of the Voorhees Town Center.

## Bicycle and Pedestrian Crashes

Between 2009 and 2013, there were two vehicle crashes involving bicyclists within the Osage Elementary School walker zone during peak student travel times of 7am-9am and 2pm-5pm. Both of the crashes occurred on Somerdale Road. One of which happened at the intersection of Somerdale Road and Echelon Road, while the other occurred on Somerdale Road between Osage Elementary School and Burnt Mill Road.



Map 2. Study Area Crossing Guard and Crash Locations





## Travel Safety Concerns

Travel safety concerns were identified through walking and bicycling audits, as well as meetings with municipal representatives and school staff, who relayed parent feedback. The study area includes primary travel corridors and secondary travel corridors that include both walker and non-walker zones. While students that live within a mile radius of Osage Elementary School are considered walkers, children that would have to cross streets that are deemed hazardous are not permitted to walk to school. However, to develop recommendations to improve pedestrian safety and circulation in the entire study area, Cross County Connection examined travel corridors in both non-walker and walker zones. Primary travel corridors included Somerdale Road, from Burnt Mill Road to Haddonfield Berlin Road, Evesham Road from Burn Mill Road to Haddonfield Berlin Road, and Burnt Mill Road, from Somerdale Road to Evesham Road.

Secondary travel corridors included feeder streets in walker zones within single-family residential neighborhoods adjacent to Osage Elementary School and those within Abitare, Three Pond and Heritage Grove Apartments. Non-walker zone travel corridors included feeder streets in the Voorhees Town Center.

General safety concerns include:

Speeding and Traffic Volume – School officials identified vehicle speeding as a safety concern along Echelon Road, Somerdale Road and Burnt Mill Road. Additionally, traffic volumes along these roadways are a key factor in limiting the walker zone. The posted speed limit is 25 MPH along Somerdale Road from Ridge Place to an eighth of a mile before the intersection of Somerdale Road and Burnt Mill Road. The posted speed limit along Burnt Mill Road from Somerdale Road to Pelham Place is 25 MPH. The posted speed limit along Echelon Road from White Horse Road to Somerdale Road is 30 MPH.

Missing Sidewalks – While much of the residential areas near Osage Elementary School have sidewalks, there are still areas where no sidewalks are present. Some locations are missing sections while others are completely absent of sidewalks requiring pedestrians to walk in the roadway.

Crosswalks/Crosswalk Visibility – Walking audits identified several areas where crosswalks are absent or have low visibility for drivers due to fading.

Bicycle Facilities – Biking is a great way for children to get to school, especially for children living more than a half mile from school. As stated earlier, there are bicycle facilities along Somerdale Road and Lucas Lane. However these bikeways do not span throughout the study area. There are also few students biking to school despite the availability of bicycle parking.

## Primary School Travel Corridors

### Somerdale Road

Somerdale Road serves as a main corridor for students traveling from neighborhoods adjacent to Osage Elementary School. Students coming from Abitare, Three Pond and Heritage Grove Apartments must cross Somerdale Road at Echelon Road where crossing guards and pedestrian facilities are present.

#### Transportation Concerns:

- There is a lack of sidewalk connectivity along the south and north sides of Somerdale Road. On the north side, sidewalks are missing from the entrance of Osage Elementary School to Burnt Mill Road. On the south side, sidewalks are missing from Echelon Road to Burn Mill Road.
- Speeding was observed during the walking audit.
- At dismissal time, parents and guardians will line up along Somerdale road for up to a quarter mile to pick up students. Vehicles are queuing in the travel lane as there is no designated area for waiting vehicles, as shown in Figure 2.
- The existing crosswalk crossing Somerdale Road at Echelon Road, on the east side is faded, as shown in Figure 3. Also, ADA compliant curb ramps are missing at this location. There are no other crosswalks at this intersection. However, there are pedestrian beacons and a crossing guard is posted to help cross students from Abitare, Three Pond and Heritage Grove Apartments.



Figure 2: Vehicles queuing in travel lane



Figure 3: Faded Crosswalk at Somerdale Road and Echelon Road

- At the intersection of Somerdale Road and Green Ridge Road, the existing crosswalk is faded, as shown in Figure 4.
- During the audit, students were observed crossing Somerdale Road, midblock, at dismissal to get to Abitare Apartments. There currently is no midblock signalized crosswalk.
- The current pedestrian treatments at the intersection of Somerdale Road and Burnt Mill Road are not conducive for walking. Crosswalks with ADA compliant curb ramps are missing, as shown in Figure 5.
- There are currently no crosswalks east of Atlantic Avenue, along the north side of Somerdale Road to Haddonfield Berlin Road.



Figure 4: Crosswalk at the intersection of Green Ridge Road and Somerdale Road



Figure 5: Intersections of Somerdale Road and Burnt Mill Road

### Burnt Mill Road

Students residing along the east side of Burnt Mill Road are allowed to walk to school. Students on the west side of Burnt Mill Road are not permitted to do so. Those residing along the east side of Burnt Mill Road usually get to Osage Elementary School by cutting through the neighborhood of Ridge View.

#### Transportation Concerns:

- Along the east side of Burnt Mill Road, there is a lack of continuous sidewalk north of Somerdale Road, as shown in Figure 6.
- Speeding was observed during the audit.
- Lack of crosswalks to cross Burnt Mill Road from Somerdale Road to Evesham Road. However, students are not allowed to cross this roadway.



Figure 6: Missing Sidewalk on Burnt Mill Road

### Evesham Road

Students residing along the south side of Evesham Road are allowed to walk to school. Students on the north side of Evesham Road are not permitted to do so. Those residing along the south side of Evesham Road usually get to Osage Elementary School by cutting through the neighborhoods of Ashland Terrace and Ridge View.

**Transportation Concerns:**

- There is a lack of continuous sidewalk along south side of Evesham Road. However, there are areas where sidewalk does exist.
- There are currently no crosswalks east of Burnt Mill Road to Somerdale Road, along the south side of Evesham Road.

**Secondary School Travel Corridors (walker zone)**

Secondary travel corridors include feeder streets in walker zones within single family residential neighborhoods adjacent to Osage Elementary School, Ridge View and Ashland Terrace, and Abitare, Three Pond and Heritage Grove Apartment Complexes, which are located on the south side of Somerdale Road at Echelon Road.

**Ridge View and Ashland Terrace**

Students living in Ashland Terrace can utilize a pedestrian bridge located at Atlantic Avenue and Lennox Avenue to get to Round Hill Road, as shown in Figures 7 and 8. Students from both neighborhoods can use a pedestrian path which exists in Ridge View at Acorn Lane. This pedestrian path leads to the back of Osage Elementary School. By following these paths, students residing in both developments will avoid traveling west along Somerdale Road to get to school. Both pedestrian pathways can be seen on Map 2.



Figure 7: Entrance to pedestrian path from Atlantic Avenue



Figure 8: Pedestrian path from Atlantic Avenue to Round Hill Road





Figure 9: North on Atlantic Avenue



Figure 10: East on Lennox Avenue

### Transportation Concerns

- Sidewalks exist in Ridge View, however there is a lack of continuous sidewalks throughout Ashland Terrace. An example is shown in Figures 9 and 10. Sidewalks would facilitate student travel to the pedestrian pathways.
- There are no crosswalks or wayfinding signage throughout both communities to guide students to school.

### Abitare, Three Pond and Heritage Grove Apartments

While Three Pond and Heritage Grove Apartments are conducive to bicycle and pedestrian travel, students residing in Abitare Apartments face some challenges. To utilize the available crosswalk and crossing guard services at Somerdale Road and Echelon Road, students have to cross Echelon Road. As noted earlier, students were observed crossing Somerdale Road mid-block and cutting through parking lots at the Voorhees Town Center to get to Abitare at dismissal.

### Transportation Concerns:

- There is no west to east crosswalk on Echelon Road at Somerdale Road to lead children to the existing north to south crosswalk to cross Somerdale Road, where a crossing guard is stationed.
- As mentioned earlier, there is no signalized mid-block crossing on Somerdale Road.

### **Secondary School Travel Corridors (non-walker zone)**

#### Voorhees Town Center

Audited secondary school travel corridors that lie within the non-walker zone included Echelon Road, from White Horse Road to Kirkbride Road. Echelon Road spans the Voorhees Town Center from White Horse Road to Somerdale Road. There are numerous multifamily residential communities throughout the area that are adjacent to either side of Echelon Road.

If the concerns listed below are addressed, it may be possible for Osage Elementary School to expand their walker zone. Also, it would make it safer for students to travel to trip generators

such as the library, located on Laurel Oak Road, and sport facilities located one block north of Echelon Road and White Horse Road.

**Transportation Concerns:**

- Although there is a continuous pedestrian network on the east side of Echelon Road, there are no sidewalks on the west side of Echelon Road, except for a small section by the mall and from Kirkbride Road to Somerdale Road. Worn foot paths, as shown in Figure 11, can be found along the west side of Echelon Road.
- A pedestrian underpass exists at Van Buren Road and Echelon Road, as shown in Figure 12. However, since there is no north to south pedestrian network on the west side of Echelon Road, it is not conducive for school aged children to use. School officials noted that there are concerns with homeless people sleeping in the underpass.
- During the audit, speeding was observed.
- There is one bikeway south of the Voorhees Town Center, which is located on Lucas Lane. It does not connect to Echelon Road or any of its feeder streets.
- A majority of the roadways throughout the Voorhees Town Center are missing proper pedestrian facilities that would link multifamily residential apartments.



**Figure 11: Worn foot path along the west side of Echelon Road**



**Figure 12: Pedestrian underpass at Echelon Road and Van Buren Road**

**CHAPTER 3: ACTIONS: 5 E's**

The following are the actions and recommendations suggested to achieve the goals listed in the Introduction by addressing the 5 E's of Safe Routes to School: Education, Encouragement, Enforcement, Engineering, and Evaluation.

**Education**

Education efforts are an important component in developing a sustainable Safe Routes to School Program and to relieve pedestrian and bicycle travel issues. These actions can help change community perceptions about how children should travel to and from school safely. They will also ensure that children receive proper instruction on walking and bicycling while raising community awareness of the benefits of walking and biking. Table 3 details the recommended Education Actions.

**Table 3: Education Actions**

<b>Education Actions</b>	<b>Responsibility</b>	<b>Time Frame</b>
Creation and distribution of educational materials to students, parents/guardians and community members	Osage Elementary School/Cross County Connection TMA /NJSRTS Program	Annually
In-class education on safe walking and bicycling practices, along with their health and environmental benefits	Osage Elementary School/Cross County Connection TMA	Annually
In-class education on railroad safety	NJ TRANSIT	Annually
Inclusion of SRTS elements in Teacher and Student Handbooks	Voorhees Township School District	Annually
Participate in New Jersey's SRTS Webinar Program	Osage Elementary School	Ongoing
Social Media Account	Osage Elementary School	Ongoing
Adopt-A-Cop	Voorhees Township Police	Annually

Cross County Connection and the Alan M. Voorhees Transportation Center will provide safety education and outreach materials for distribution to students, parents and school staff. These materials may be circulated at parent-teacher meetings, school walking events, in-class, or included with municipal information. Pedestrian and bicycling safety education should also be addressed at parent-teacher meetings. Inclusion of parents in educational programming is a good way to reinforce safety education at home.

The school district should take advantage of Cross County Connection's 1<sup>st</sup>-4<sup>th</sup> Grade Pedestrian Program on an annual basis. Through active participation, students will learn about the benefits of walking, ways to avoid potential hazards while walking, how to properly understand and obey pedestrian signals, cross roadways safely, and understand traffic flow. New Jersey Core Curriculum Standards Cumulative Progress Indicators are covered in this program. Many schools in southern New Jersey use the Pedestrian Program as a building point for their SRTS programs. After the pedestrian lesson is administered, it is followed by an encouragement activity, such as a walk to school day. This method builds the excitement of students by preparing them to participate as safe and knowledgeable pedestrians.

Due to the close proximity of the PATCO Speedline, it would be beneficial to the health and safety of students for Osage Elementary School to take advantage of NJ TRANSITS Rail Safety in-class education program. By participating, students will learn how to recognize rail signage and cross railways. Students will also receive informational giveaways. For more information, contact Barbara Lazaro at (856) 614-7010 or blazzaro@njtransit.com.

Social media accounts, such as Facebook and Twitter can be created to solicit input from the community, as well as to disseminate information and request volunteers for encouragement activities. An email account can also be created to gather data.

The Voorhees Police Department has conducted an Adopt-A-Cop program since 2000. In each of Voorhees Townships' elementary schools, third grade students get "adopted" by an officer. Each officer visits their school on a monthly basis and discusses various safety topics and shows movies starring "McGruff" the crime dog. Bicycle and pedestrian safety lessons are included as topics throughout the school year. This is an informal, voluntary initiative for schools and the police department to foster trust, encourage mutual respect and build healthy relationships.

## **Encouragement**

Encouragement actions promote walking and biking to school through programs such as walking school buses, satellite walking events, a Golden Sneaker Award, and other activities that generate excitement about walking and biking. These programs are essential to building the momentum necessary to significantly change school travel habits.



**Table 4: Encouragement Actions**

<b>Encouragement Actions</b>	<b>Responsibility</b>	<b>Time Frame</b>
Walking School Bus (WSB) Pilot Program	School Champion/Cross County Connection TMA	Fall 2014
Satellite Drop Off Program/Walking School Bus	Voorhees Township School District /Cross County Connection TMA	Ongoing
Bicycle Rodeo	Osage Elementary School /Voorhees Police Dept./Cross County Connection TMA	2014-2015 School Year
Participation in International Walk to School Day	Osage Elementary School	Annually in October
Participation in International Bike to School Day	Osage Elementary School	Annually in May
Golden Sneaker Award Pilot	Osage Elementary School	2014-2015 School Year, Monthly
HEADSMART	Voorhees Police	Annually

A Walking School Bus (WSB) is a group of children walking to school along a fixed route with one or more adults. It is suggested that Osage Elementary look into developing a pilot program next school year. By doing so, younger students will be given the opportunity to learn about safe pedestrian practices, while familiarizing themselves with their neighborhoods. This would work well for students living in the neighborhoods of Ridge View and Ashland Terrace.

Osage Elementary School's SRTS Team should explore the opportunity to organize a Satellite Drop-off Program if a WSB pilot is unable to be coordinated. Much like a Walking School Bus, students are asked to meet school faculty at a designated location where the group then walks to the school. It is suggested that these events be coordinated at various times throughout the year to ensure sustainability and keep momentum going through future years.

Bicycle rodeos are another strategy used to teach a large group of schoolchildren safe bicycling practices, such as how to check tire pressure, brakes and bike chains, fit a helmet, signal for turns, and come to quick stops. Cross County Connection can assist in the coordination of a bicycle rodeo on school grounds.

To further promote bicycling and walking, Osage Elementary school should participate in International Walk to School Day and organize International Bike to School Day events, which are held in the months of October and May, respectively. School events may be registered online by visiting [www.walkbiketoschool.org](http://www.walkbiketoschool.org). International Walk to School Day can act as the official kick off to SRTS Programs, annually.

A Golden Sneaker Award Program is an incentivized contest that can be run in various ways. Some schools tally each student that walks or bikes to school daily, and at the end of each month the homeroom with the most walking students will earn the “Golden Sneaker.” A Golden Sneaker Award, like the one shown in Figure 13, can be created by spray painting an old running shoe gold and mounting it on top of a trophy stand. Incentive programs are a good way to keep the momentum going with SRTS programs.



Figure 13: Golden Sneaker Award

The Voorhees Police Department has conducted the HEADSMART program since 2002. Voorhees Police Officers on patrol stop and talk to children who are caught acting “HEADSMART” by wearing their helmets while bicycling, skateboarding, or rollerblading. They are then given a reward for wearing their helmet. The HEADSMART program is presented each year to the four Voorhees Elementary Schools, during a bike safety assembly, given by Voorhees Police Officers.

### Enforcement

Enforcement of safe and lawful travel behavior around schools, on all travel corridors and throughout the town is important to ensuring a safe walking and biking environment for children.

Table 5: Enforcement Actions

Enforcement Actions	Responsibility	Time Frame
Speed Enforcement	Voorhees Township Police	Ongoing
Stop for pedestrians in crosswalks enforcement	Voorhees Township Police	Ongoing

Somerdale Road should be targeted for enforcement due to concerns about speeding. In addition to existing efforts, participation in New Jersey’s Pedestrian Decoy Safety Program<sup>3</sup> should be considered. This program has been a successful enforcement tool in many New Jersey communities to ensure that vehicles stop for pedestrians in crosswalks and obey New Jersey’s “Stop and Stay Stopped” law (NJ 39:4-36). Mobile speed displays should also be considered for use to alert motorists of speeding infractions.

### Engineering

Engineering recommendations in this Travel Plan are discussed in Chapter 4 and shown on map 3. These recommendations focus on safety improvements in primary school travel corridors that can be implemented in a short timeframe. These recommendations are general in nature

<sup>3</sup> “Cops in Crosswalks: Pedestrian Decoy Enforcement in New Jersey”, Pedestrian and Bicycle Information Center, Accessed on 3/25/2014, <http://www.pedbikeinfo.org/data/library/details.cfm?id=4649>

and should be examined in more detail. Any improvement would be subject to American Association of State Highway and Transportation Officials (AASHTO) and Manual on Uniform Traffic Control Devices (MUTCD) regulations and guidelines.

## Evaluation

Determining participation in walking and biking programs, and parent concerns is an important part of a SRTS program. Evaluating these factors allows school staff to determine the success of their SRTS activities and how they might best prioritize and modify their efforts to encourage more children to walk and bike to school.

**Table 6: Evaluation Actions**

Evaluation Action	Responsibility	Time Frame
Student Travel Tally	Osage Elementary School	2014-2015 School Year; Quarterly
Parent Survey	Osage Elementary School /Cross County Connection TMA / Voorhees Transportation Center	2014-2015 School Year; Annually

School staff should 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 arrived at school 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. 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/>

## CHAPTER 4: RECOMMENDATIONS

Based on the findings of this Travel Plan and discussions with the Working Group, the following improvements should be considered to accommodate and encourage safe bicycling and walking at Osage Elementary School. These recommendations are shown on Map 3, page 23.

### Bicycle Accommodations

Bicycle accommodations such as bike lanes or shared lane pavement markings (sharrows) designate a roadway as a shared travel environment for bicycles and automobiles. Sharrow markings, seen in Figure 14, alert motorists to expect and share the road with cyclists and also show bicyclists where to ride. “Share the Road” signage to warn drivers that bicyclists will be using the road, can be utilized in combination with sharrows. Guidance on shared lane markings and signage can be found in Section 9C.07 of the Manual on Uniform Traffic Control Devices (MUTCD).

Based upon guidelines set forth by the National Association of City Transportation Officials (NACTO) and the American Association of State Highway and Transportation Officials (AASHTO), it is recommended that a Professional Engineer be consulted about providing bicycle accommodations on the following roadways:

- Van Buren Road (Luca Lane to Echelon Road)
- Kirkbride Road
- Echelon Road (White Horse Road to Somerdale Road)



Figure 14: Sharrow

### Crosswalk Markings

Currently, there are some crosswalks missing on primary school travel corridors. High visibility marked crosswalks are important in locations with significant pedestrian traffic because it both alerts motorists to the presence of a crosswalk and designates proper crossing locations to pedestrians.

It is recommended that an engineer be consulted regarding the installation of appropriate crosswalk markings at:

- The intersection of Somerdale Road and Echelon Road
- The intersection of Somerdale Road and Green Ridge Road
- The western entrance to the back of Osage Elementary School and Somerdale Road
- The north side of Somerdale Road to Haddonfield Berlin Road, east of Atlantic Avenue (multiple intersections)
- The south side of Evesham Road, east of Burnt Mill Road to Somerdale Road (multiple intersections)



It is also recommended that the Township consider the repainting of appropriate crosswalk markings at:

- The north to east crossing on the east side of the intersection at Somerdale Road and Echelon Road
- Somerdale Road and Green Ridge Road
- Intersection of Burnt Mill Road and Somerdale Road

Installation of higher visibility zebra, ladder, or continental crosswalk markings, shown in Figure 15, should be considered instead of the existing double line marking to delineate heavily-used crosswalks on primary travel corridors. These higher visibility crossings have been shown to reduce vehicle-pedestrian conflicts.<sup>4</sup>

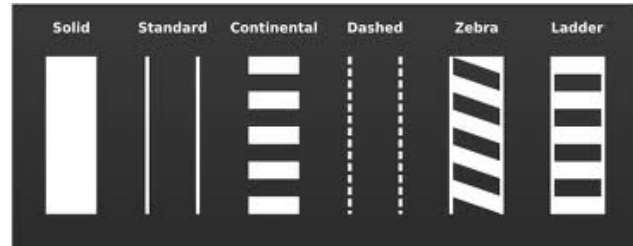


Figure 15: Crosswalk Treatments

### Missing Curb Ramps

There are a number of non-ADA compliant curb ramps at intersections and crosswalks in the study area. This creates a safety hazard for students with mobility impairments and impedes bicycle travel for younger students that ride on sidewalks. The Americans with Disabilities Act (ADA) requires state and local governments to follow specific standards at pedestrian crossings that dictate the width, slope and placement of curb ramps. ADA requirements also specify that curb ramps must be equipped with detectable warning surfaces that provide detectable warning to visually impaired pedestrians. The ADA rules and requirements vary depending on whether the roadway was constructed “Pre-ADA” – 1992 or earlier – or, “Post-ADA” – 1993 to present.<sup>4</sup> Cross County Connection recommends consulting with an Engineer or other qualified professional familiar with ADA requirements when exploring options to improve pedestrian safety in the study area.

### Traffic Control

Speeding along Somerdale Road and Echelon Road was a concern mentioned by school district faculty. During the audit, students were observed crossing Somerdale Road, in front of Osage Elementary School, at dismissal. Pedestrian warning beacons with appropriate crosswalk markings installed along Somerdale Road would slow vehicle traffic and alert motorists to the presence of pedestrians.

Recommended installation of pedestrian beacon:

- Somerdale Road in front of Osage Elementary

<sup>4</sup> For more information on the Specific Requirements for local governments under the Americans with Disabilities Act please visit *ADA Best Practices Tool Kit for State and Local Governments* at <http://www.ada.gov/pccatoolkit/toolkitmain.htm>.

## 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 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 throughout the neighborhoods of Ridge View and Ashland Terrace.

## Missing Sidewalks

While the majority of primary school travel corridors have continuous sidewalk coverage, there are several locations with gaps in the network. Some areas in secondary corridors, both the walker and non-walker zones, are also missing sidewalks.

Consider completing the sidewalk network on the following roadways:

- The south and north side of Somerdale Road
- The east side of Burnt Mill Road
- The south side of Evesham Road
- Throughout Ashland Terrace
- West side of Echelon Road

Installation of sidewalks is also recommended throughout the neighborhoods south of the Voorhees Town Center. There is very little sidewalk coverage currently throughout this area.



Map 3: Study Area Recommended Improvements





## Project Funding

Implementation of engineering improvements can be expensive. Fortunately, there are funding programs at the state and federal level dedicated to assist with the implementation of projects that would improve the safety of Osage Elementary School students walking and biking to school. These funding programs are competitive, have deadlines and the application process requires time to complete. In addition, the programs listed below receive far more funding requests than can be obligated. Cross County Connection is available to provide assistance in determining appropriate funding sources and preparing grant applications.

The funding programs listed below are provided as a general guide, and are not an exhaustive list of available funding sources. For more information on a specific program, please contact the granting agency or refer to the grant program guidelines found on the program websites.

### Safe Routes to School (SRTS) Infrastructure Program

Federal funding is available for SRTS projects that improve the safety of children walking or biking to school. The program is administered through the New Jersey Department of Transportation (NJDOT). Eligible projects may include the planning, design, construction or installation of sidewalks, crosswalks, signals, traffic-calming and bicycle facilities within two miles of an elementary or middle school (K-8). Local and regional governments, school districts and individual schools are eligible to be project sponsors and receive direct funding.

### Transportation Alternatives Program (TAP)

TAP is a federal funding program administered through NJDOT. The program is designed to foster more livable communities and promote alternative modes of transportation such as biking and walking. Eligible activities include bikeway construction, acquisition of right-of-way for bikeways and many other projects. Activities funded by TAP were previously funded by the Transportation Enhancements (TE) Program contained in previous federal transportation bills. A key addition to the TAP program in the current federal transportation bill (MAP-21) is the funding eligibility for projects dedicated to the construction, planning and design of infrastructure projects that provide “safe routes for non-drivers” which includes children, seniors and disabled persons. NJDOT is providing the 20% match required under the new MAP-21 legislation. Eligible project sponsors for TAP funds include local and regional governments, transit agencies, school districts and individual schools.

### Municipal Aid Program

Municipal Aid is a state-funded program administered by NJDOT for roadway and bridge improvements, including bicycle and pedestrian projects. Each county is appropriated funds for their constituent municipalities based on a formula. Municipalities must submit applications, detailing a potential project, to their local NJDOT District Office. Projects awarded funds in 2013 included construction of bicycle lanes and pedestrian safety improvements.



School districts and individual schools are not eligible to apply for these funds directly, but should encourage their municipal government to apply for these funds and direct them towards improving the bicycle and pedestrian safety around their schools.

For more information regarding these three funding programs contact:

**New Jersey Department of Transportation (NJDOT)**

Website: <http://www.state.nj.us/transportation/business/localaid/>

District Manager, NJDOT

1 Executive Campus

Route 70 West, 3<sup>rd</sup> Floor

Cherry Hill, NJ 08002

Phone: 856-486-6618

Fax: 856-486-6771

**Conclusion**

Osage Elementary School is committed to increasing the number of children who walk and bike to school through safety improvements and programs that educate and encourage biking and walking. The municipality and school district currently address child walking safety by providing crossing guards at busy crossings. This Travel Plan was undertaken to address the school district's interest in improving walking and biking programs, and its continued concerns about existing and potential safety issues due to speeding, road crossings, and walking and biking infrastructure gaps in the community it serves.

Implementation of this plan and the sustained success of any effort to increase walking and biking to school will require continued partnership among local and regional organizations. Infrastructure improvements must be employed alongside hands-on education and encouragement programs to maintain momentum towards achieving the goals set forth by the SRTS Team. Osage Elementary School and the municipality have demonstrated through current and previous efforts that they are committed to creating a community that fosters active and healthy children, as well as providing a safe environment for walking and biking.