

May 2015



City of Vineland Safe Routes to School Travel Plan Veterans Memorial Intermediate School



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Introduction

The City of Vineland is the largest city by size in the State of New Jersey and is located in Cumberland County. Veterans Memorial Intermediate School is one of the four public intermediate schools within the City of Vineland. The staff of Memorial Intermediate School and members of the local government recognize the correlation between active transportation and the health of the student population. In an effort to increase the number of children that walk or bike to school, the City of Vineland has chosen to develop a school Travel Plan to create safe walking and biking environments and to reduce traffic congestion at arrival and dismissal times.

This school Travel Plan incorporates the “Five E’s” of Safe Routes to School (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 Memorial Intermediate, Vineland Police Department, and the City of Vineland. The City of Vineland added the Safe Routes to School to the District Policy in June 2014.

School Description

Veterans Memorial Intermediate School (Map 1) is located at 424 S. Main Road in Vineland approximately a half mile from Landis Avenue. Landis Avenue serves as one of the two commercial corridors in Vineland. Veterans Memorial is a large public school built on the edge of center city with approximately 600 students in grades 6th-8th. In 2007, the New Jersey Schools Development Authority (SDA) upgraded and renovated Veterans Memorial to offer 21st century educational opportunities. The renovation played a part in alleviating some of the overcrowding in the district as well. The SDA enhanced and added classrooms. In addition, they built a music room, a new cafeteria and kitchen, a library/media center, and added a nurse’s station with work done to the exterior of the school as well. The student teacher ratio at Memorial School is 8 to 1 and the percentage of children with disabilities is about 20% of the student body. Veterans Memorial is home to the Vineland School District’s new applied math and science program. The program boasts 70 students from all across the district, based on their NJASK scores. Students had to score at least a 290 on the math portion and a 225 on the language arts, 300 being a perfect score.

Vineland is a diverse multicultural, urban community with approximately 60,854 city residents. The Caucasian population accounts for 49.2% of the population, Hispanic 34.9%, African American 12.2%, and Asian 1.7%. Of the 600 students who attend Veterans Memorial, 51% are Hispanic, 24% are Caucasian, and 21% are African American.

There are six parks within a two-mile radius of Veterans Memorial School. Table 1 lists the name, location, and amenities of each park.

Name	Location	Amenities
John C. Gittone Park	East Oak Road	Softball fields, lighted tennis courts, basketball courts, horseshoe courts, and a tot-lot.
Joseph E. Romano Sports Complex	1911 E. Maple Avenue	Soccer fields, a baseball field, a walking track, a football field, and an all-purpose field.
Albert Giampietro Memorial Park	3231 E. Landis Avenue	Tot-lot, picnic area, and lake.
Roberto Clemente Park	Seventh & Humbert Street	Softball field, tennis courts, basketball courts, tot-lot, and a handball court.
Normandie Lane	West Chestnut & South Third Street	A lighted midget football field and practice areas, a lighted Babe Ruth baseball field, tennis courts, basketball courts, and a tot-lot.
Howard Pagliughi Park	2245 E. Magnolia Road	Tennis courts, basketball courts, softball fields, horseshoe courts, volleyball courts, an all-purpose field, and a tot-lot.

Figure 1. Landis Ave., Main Street Vineland



There are many major street corridors in Vineland, with Landis Avenue being the main East to West street corridor. The City of Vineland has recently completed some streetscape improvements to Landis Avenue such as resurfacing areas of sidewalks, street trees, bike bollards, building facades, new street lighting, and overall curb appeal. Landis Avenue has been proposed to be repaved from Myrtle Street to East Boulevard in the near future.

Due to Vineland’s low economic status, Vineland School District is considered an Abbott school district because of the amount of poor urban children. More than 13% of Vineland residents are living in poverty

and the unemployment rate is 4% higher in Vineland than it is in the entire state. According to the New Jersey Department of Education, 94.4% of the students attending Veterans Memorial are eligible for free or reduced lunch. Recent studies have shown that lower income children have higher obesity rates, which makes active modes of transportation even more important to the health and well-being of school-age children in Vineland. 40% of children in Vineland are overweight or obese compared to the national average of 21%. According to Active Living Research, “people who live in neighborhoods with sidewalks on most streets are 47% more likely to be active at least 30 minutes a day.”

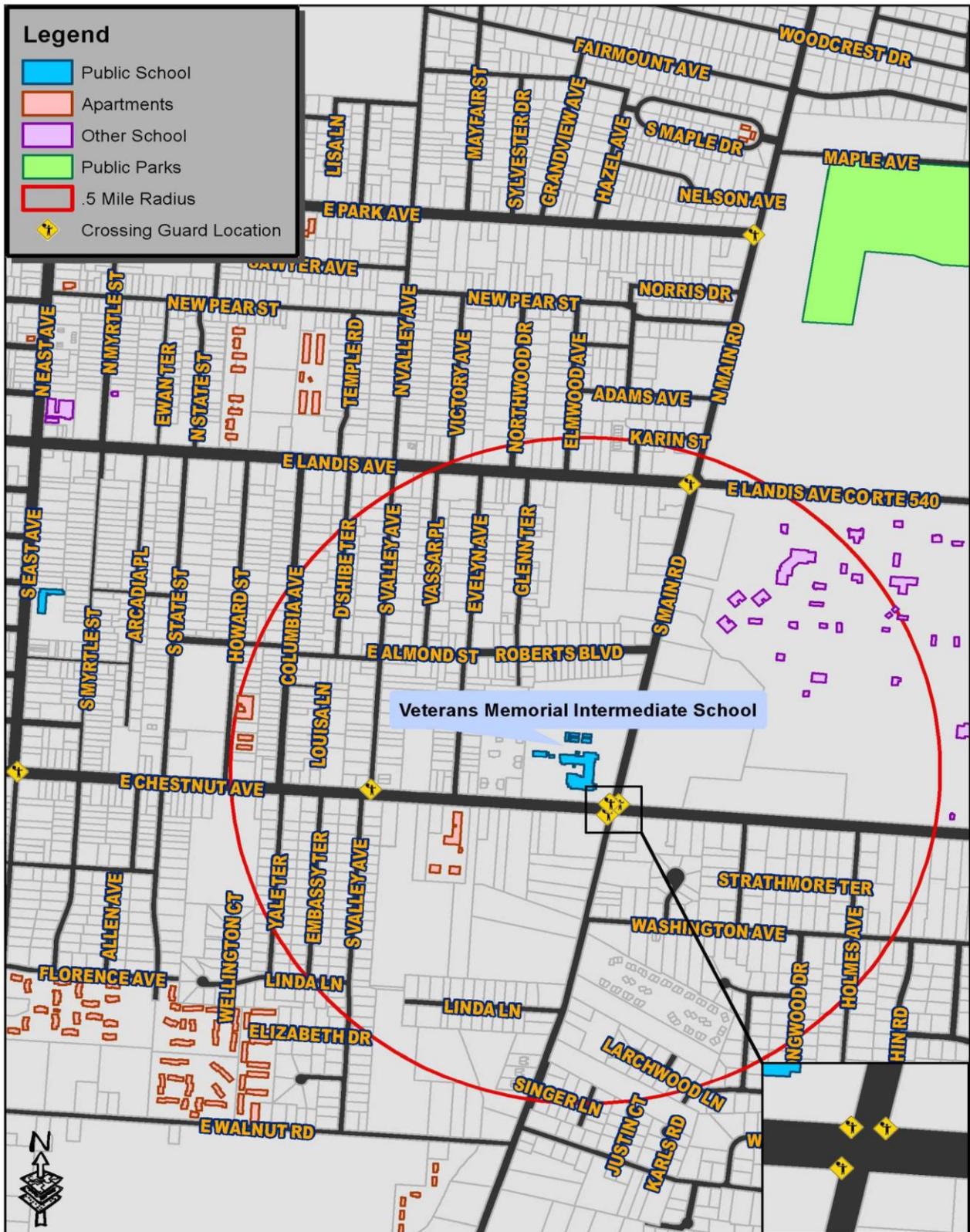
Existing Policies and Practices

Due to its size, Vineland School District is not considered a walking district. Although, students living less than a mile and a half from an intermediate school are not provided transportation they are permitted to walk or bike to school and are required to wear a helmet. The Vineland Police Department provides crossing guards at the following intersections, shown in Map 1:

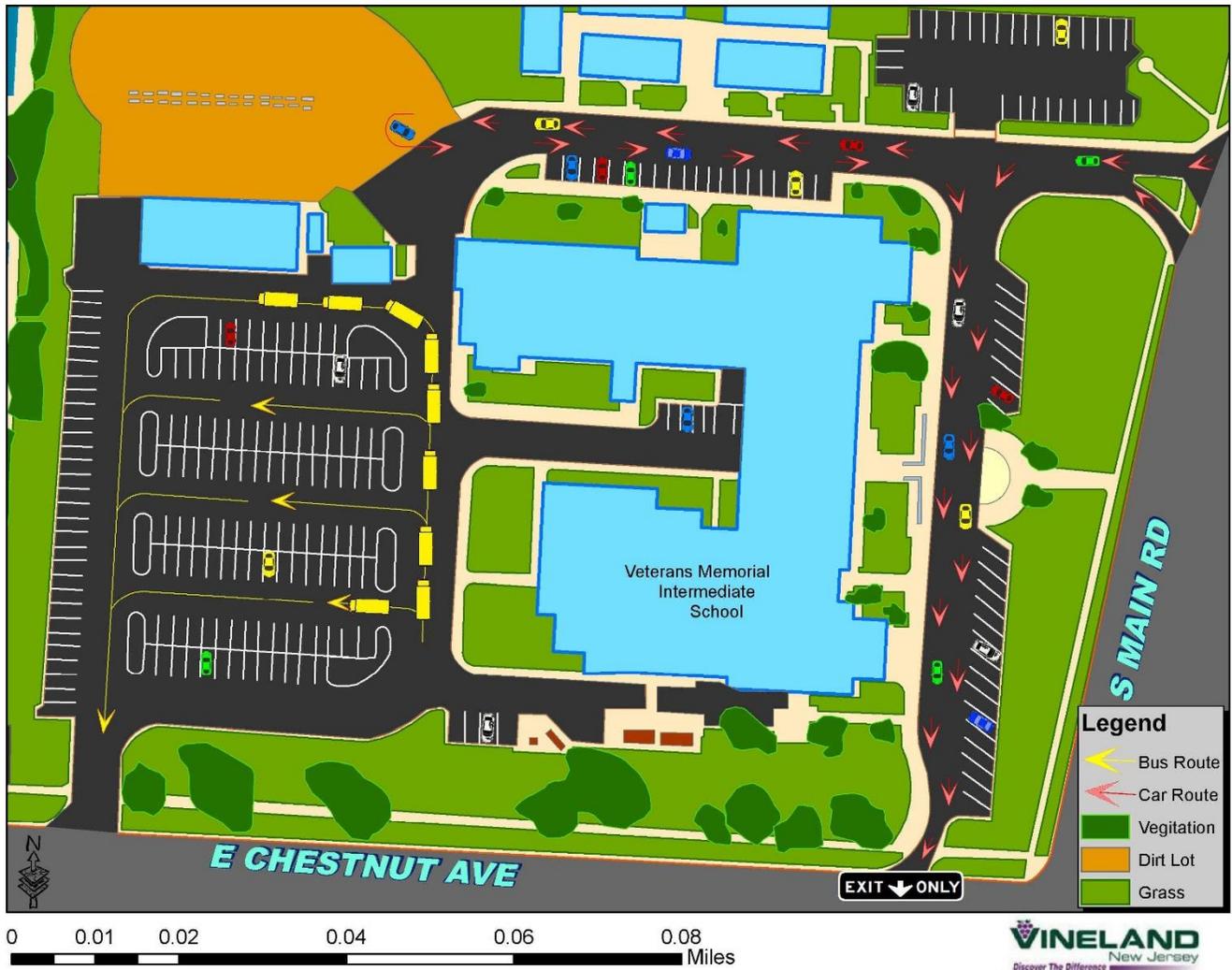
- Main and Chestnut (Three officers)
- Valley and Chestnut
- East and Chestnut
- Main and Landis
- Main and Park

During student arrival and dismissal times, teachers are assigned various monitoring posts on school grounds to monitor pedestrian activity. Car riders, bus riders, and walkers and bikers are dismissed at three separate times in order to help the flow of traffic. At 2:55 PM car riders are dismissed followed by bus riders at 3:00 PM, and walkers and bikers at 3:05 PM. A transportation route (Map 2) for cars and busses was created to help control traffic. However, because the dismissal times are so close together much of the traffic congestion remains when the walkers are dismissed. In the morning, there is not a specific arrival time for the different travelers, which increases safety concerns.

Map 1. Veterans Memorial Intermediate School Travel Plan Area



Map 2. Veterans Memorial Intermediate School Transportation Routes



Walk/Bike Barriers & Opportunities

Working Groups and Partnerships

Table 2. Working Groups and Partnerships		
Organization	Role/Responsibility	Contact
YMCA Project Director	SRTS Program Assistance	David Calderetti, Project Director Email: dcalderetti@ccaymca.org
Vineland School District	Program Administration & Implementation	John Frangipani, Assistant Superintendent Email: jfrangipani@vineland.org
Veterans Memorial Intermediate School	Implementation	Joseph Camardo, Principal Email: jcomardo@vineland.org
Veterans Memorial Intermediate School	Implementation	Heather Dolente, PE Teacher Email: hdolente@vineland.org
City of Vineland Police Department	Safety Education and Enforcement	Timothy Codispoti Phone: 856-696-1212 ext. 4199
City of Vineland	Engineering Project Implementation	Ruben Bermudez, Mayor Email: rbermudez@vinelandcity.org
City of Vineland	Engineering Project Implementation	David J. Maillet, Principal Engineer Email: dmaillet@vinelandcity.org
City of Vineland	Implementation	Emma Lopez, Health Educator Email: elopez@vinelandcity.org
The Brain Injury Alliance	Safety Education	Sue Quick, Email: squick@bianj.org
Cross County Connection	SRST Program Assistance	Sean Schweitzer Email: schweitzer@driveless.com
City of Vineland	GIS	Emmanuel John Email: ejohn@vinelandcity.org

This plan was developed by the City of Vineland Health Department in partnership with the principal engineer and Cross County Connection Transportation Management Association. The Vineland Health Department met with the Assistant Superintendent on November 19, 2014 to discuss Safe Routes to School programs for Vineland Public Schools. With Administrative support, the Vineland Health Department reached out to school principals, including Joseph Camardo, principal of Veterans Memorial Intermediate School to collect student and school information.

Travel Patterns

A Student Travel Tally Survey was conducted the first week of February 2015. Tally results as reported by the school are shown in Table 2. The school-wide Student Travel Tally Survey revealed that most students are not bussed to school. The same amount of students that take the bus classify themselves as car riders. Approximately 16% of the 568 students surveyed indicated that they walk or bike to school. Only 28% of students that are not provided bus services walk/bike to school.

Table 3. School Travel Information, Veterans Memorial Intermediate School

Location	424 S. Main Road	
Grades	6-8	
Arrival Time	8:00 – 8:25 AM	
Dismissal Time	2:55 – 3:05 PM	
Student Population/Student Participants	600 / 568	
that are bussed	237	42%
that are not bussed to school	331	58%
that walk/bike	93	16%
that use other transportation	238	42%

There are 22 apartment complexes within a 2-mile radius of the school, many from which students walk to school daily. School staff developed a transportation route (Map 2) as a calming measure on the school property. However, there is a heavy volume of vehicles and pedestrians converging on the site at the same time causing concern.

Pedestrian Travel Survey

Two surveys of pedestrian travel were performed on Thursday, April 30, 2015; one in the hour before school and one in the hour after school. The morning count was performed from 7:30 AM to 8:30 AM. The school day starts at 8:25 AM. The afternoon count was performed from 2:50 PM to 3:50 PM. The school day ends at 2:55 PM. The goal of the survey was to determine both the general volume and direction of student pedestrians to and from school. In total, there were 12 people stationed at intersections near the school which, during an initial investigation, were expected to generate the most foot traffic. Map 3 displays the locations of the 12 observers.

Both surveys, however, did not discriminate between student and non-student traffic. All people involved in the survey indicated that the vast majority of pedestrians did appear to be students. The sheets used to tally the traffic included spaces to count both pedestrians and bicyclists, as well as space for noting instances of jaywalking, biking against traffic, and bikers disregarding traffic signals.

Map 3. Pedestrian Travel Survey Observer Locations

Survey Locations for Memorial



AM/PM Pedestrian Survey Results

Both the AM and PM surveys revealed that the majority of bicycle and pedestrian travel was on Chestnut Avenue from East Avenue to Main Road, with Main Road from Landis Avenue to Chestnut Avenue making up the vast majority of remaining pedestrians. In both the AM and PM surveys, Chestnut Avenue volumes in the dominant direction were between 75% and 82% greater than on Main Road. The volumes were also consistent with the results of the Student Travel Survey, though they were slightly less.

As described, participants were asked to note instances of jaywalking, biking against traffic, and bicyclists not obeying traffic signals (including stop signs). There were 23 jaywalking incidents in the morning and 18 in the afternoon. There was also a total of 6 incidents where bicyclists were operating against traffic. The majority of jaywalking was observed on Chestnut Avenue, a 4 lane highway.

Another noteworthy observation was students who were released from the school as walkers were being picked up near the school by people in vehicles. This was observed at the intersections of Chestnut/Evelyn, Chestnut/State, and Main/Roberts.

Walking Audit

A walking audit was conducted on May 20, 2015 (Figure 2) by the principal engineer for the City of Vineland, Vineland Health Department, CCAYMCA Project Director, and the Safe Routes to School Coordinator for Cross County Connection to evaluate walking and biking conditions, as well as to identify areas in need of infrastructure improvement. The audit was held in warm weather during the morning and into the early afternoon. During the walking audit, jaywalking was observed multiple times (Figure 3).

On the school site, audit members encountered a security guard who provided information on the drop-off and pick-up procedures. He explained how parents stack prior to pick-up along the northerly side of the building and into the dirt parking lot located north of the large parking field. The audit members agreed that some additional access improvements could be made including construction of handicapped accessible sidewalk ramps, additional sidewalk from Main Road, and improvement of the dirt parking lot.

Along the streets, the deficiencies generally included deficient handicapped accessible sidewalk ramps, missing or damaged sidewalk, soil and vegetative intrusion over the sidewalk which restricts the width, and lack of paved shoulders on Chestnut Avenue.

It should be noted that during the audit, a casual observational count of pedestrians and bicyclists was performed by the engineer. 21 pedestrians were observed, of which 7 jaywalked. 7 bicyclists were observed, primarily on Chestnut Avenue.

Figure 2. Walking Audit Pictured – Principal Engineer, CCAYMCA Project Director, Vineland Department of Health Education



Figure 3. Chestnut Ave. – 2 Jaywalkers



Bicycle Facilities

There are two bikeways in center city Vineland. One is located on Wood Street and runs the length of the entire street, extending from East Avenue to West Avenue. The other is located on Elmer Street (figure 4) and also runs the length of the entire street, extending from West Avenue to East Avenue. However, both of these bike lanes are outside of Memorial’s School Zone.

Figure 4. Elmer St. - Bike lane



Bicycle parking is currently available at Veterans Memorial School. There are four racks that are available behind the school. Each rack is designed to hold ten bicycles. Figure 5 displays a bike rack behind the school that should be relocated due to bicycles covering too much of the sidewalk. It is recommended that it be pushed back or placed in a different location.

Figure 5. Bicycle parking behind school



Traffic Crash Report

Crash data from the last five years was reviewed for accident rates, types, and severity for the areas surrounding the school, where the majority of pedestrian traffic was observed in the Traffic Survey detailed above. The accidents were from the following areas:

Table 4. Traffic Crash Report Analysis

Street Name	From	To
East Avenue	Washington Avenue	Cherry Street
Myrtle Street	Washington Avenue	Cherry Street
Allen Avenue	Washington Avenue	Chestnut Avenue
State Street	Washington Avenue	Cherry Street
Howard Street	Chestnut Avenue	Cherry Street
Yale Avenue	Linda Lane	Chestnut Avenue
Columbia Avenue	Chestnut Avenue	Louisa Lane
Embassy Terrace	Linda Lane	Chestnut Avenue
Valley Avenue	Linda Lane	Almond Street
Evelyn Avenue	Chestnut Avenue	Almond Street
Landis Avenue	1,000 feet West of Main Road	1,000 feet East of Main Road
Roberts Boulevard	Main Road	Glenn Terrace
Main Road	Chestnut	Karin Street
Chestnut Avenue	Main Road	East Avenue

A review of crash reports for the previous five years reveals a total of 442 crashes, of which 11 involved pedestrians and 7 involved bicycles. Chestnut Avenue and Main Road have the highest accident rates, along with a combined total of 5 pedestrian crashes and 4 bicycle crashes.

Within the study area, Main Road and Chestnut Avenue should both be considered “Minor Arterial” roadways. Roads of this type carry a large volume of traffic, generally beyond municipal borders, and connect to collector streets and local roads. Landis Avenue, Valley Avenue, and East Avenue would be considered “Major Collector” roadways. Roads of this type carry traffic from minor collectors and local streets to the arterial roadways. The remaining streets are local streets.

Figure 6. Main Rd. and Chestnut Ave.
intersection

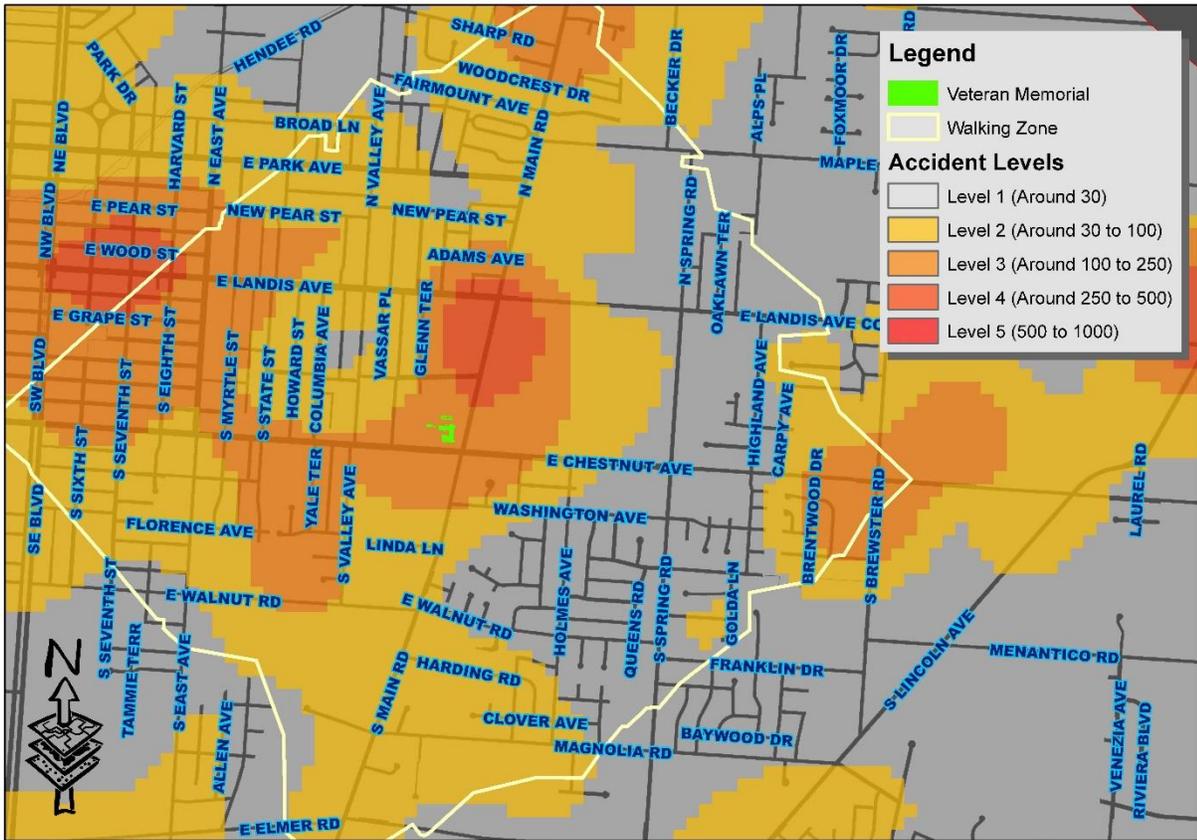
The predominant crash types on Chestnut Avenue and Main Road are “Same Direction – Rear End” (105) and “Right – Angle” crashes (97) also making up a large portion. Rear end crashes are common on roadways with traffic signals. Right angle crashes are common on wide roadways, especially roads without center two-way left turn lanes and dedicated left turn lanes at intersections. Map 4 displays the crash data analysis.

Of the 9 crashes that occurred on Main Road at Chestnut Avenue, 8 were caused by pedestrians or bicyclists. Pedestrians were generally crossing midblock when the crashes occurred. The 3 bicycle caused crashes occurred at a crossed midblock, cross on red, or when they were not paying attention to traffic.



Map 4. Crash Data Analysis

Crash Analysis For Veterans Memorial



Travel Safety Concerns

Travel safety concerns were identified through walking audits and meetings with school staff, who relayed parent feedback they received. Three major safety concerns were identified:

High Traffic Volume – The area around Veterans Memorial has a high traffic volume. There is a shopping plaza directly across the street in front of the school, a bank and CVS Pharmacy across the street on Chestnut Avenue, and medical offices behind the school. There are more of these large businesses within a 2 mile radius that bring a large amount of traffic in the area of Veterans Memorial. During the walking audit, it was observed that another large business (a dollar store) is being built on the south side of Chestnut Avenue, across from the back portion of Veterans Memorial Intermediate School. This will attract many students and be a potential safety hazard with students jaywalking to reach the store.

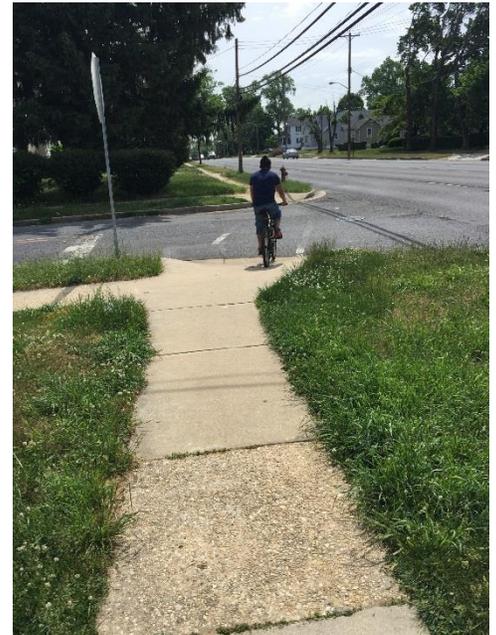
Parking Lot Usage – Map 2 displays the parking lot usage. Cars enter the parking lot on Main Road and exit on Chestnut Avenue. As more cars enter the property, they begin to turn around in the dirt lot in the back and park along the building. Security guards are stationed along the side of the building to help direct traffic. A security guard noted that many parents try to take shortcuts to pick up their student faster, endangering other students and for obstructing a clear path walkers and bikers to get to school. During

the traffic survey, it was noted that parents are picking students up on smaller side streets, west of the school due to a large amount of traffic within the parking lot. As previously stated, the same amount of students that take the bus are car riders, creating unnecessary traffic in front of the school and on the roads.

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 is not a bikeway connection, such as a bicycle lane or bike path, to Veterans Memorial School.

Figure 7. Chestnut Ave. - Biking on Sidewalk

Biking on sidewalks is permitted in the city, however sidewalks are not built for bicycle travel and biking on sidewalks often results in conflicts with pedestrians. Figure 7 displays a bicyclist on Chestnut Avenue seen during the walking audit. For children under the age of 10, 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.



Some 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 travel corridors for Veterans Memorial Intermediate School students who choose to walk or bike to school: Main Road (Landis Avenue to Chestnut Avenue), Chestnut Avenue (East Avenue to Main Road), Valley Avenue (Chestnut Avenue to Landis Avenue), and Landis (East Avenue to Main Road). These corridors were identified by city officials as areas where children currently walk and as focus areas for safety efforts. Sidewalks are present and continuous on most portions of the identified corridors.

Main Road (CR 555)

Main Road runs from north to south parallel to Valley Avenue through the City of Vineland. Main Road is both commercial and residential. It should be noted that Main Road is a county owned road. Veterans Memorial Intermediate School is located on South Main Road. The speed limit on Main Road is 40 mph during non-school hours and 25 mph during school, making it a high speed area. However, many drivers fail to obey traffic laws and do not drive 25 mph when students are present. Since Main Road is a county road, vehicle congestion raises concerns as well.

Students coming from Main Road, south of the school, must cross Chestnut Avenue in order to get to school. Three crossing guards are posted at Main Road and Chestnut Avenue during the arrival and dismissal times.

Transportation Concerns:

- Traffic congestion and queuing at arrival and dismissal times creates a potential safety hazard for pedestrians crossing Main Road and Chestnut Avenue. Figure 5 shows the intersection of Main and Chestnut.
- There are no bicycle accommodations on Main Road.
- There are multiple locations on Main Road north and south of the school within the primary corridors that do not have sidewalks. Note the “warn foot” path in Figure 9.
- There are crosswalks that need to be repainted and some that need to be put in place.

Figure 9. West side of Main Rd. -
Vegetation Overgrowth



Figure 8. East side of Main Rd. "Foot" path



Figure 11. West Main Rd. - Misleading Sidewalk



Figure 10. Main Rd. and Landis Ave. Intersection



Chestnut Avenue

Chestnut Avenue is a local, high-volume, multiple lane roadway extending from Mill Road to Tuckahoe Road. Chestnut Avenue is mostly commercial with some housing. Chestnut Avenue serves as a direct connection to Veterans Memorial Intermediate School. According to the city engineer, Chestnut Avenue has the highest rate of pedestrian crashes. Due to this fact, the city is working on a road diet to help reduce vehicular crashes involving pedestrians. The proposed changes will target traffic flow, cause fewer conflicts involving passing vehicles, make it easier for vehicles to make left turns, decrease the amount of lanes that pedestrians have to cross, and improve bicycle safety. There are multiple intersections on Chestnut Avenue that have crosswalks that need to be repainted. The north side of Chestnut Avenue has a sidewalk but the south side does not. Veterans Memorial Intermediate School lies on the north side of Chestnut Avenue.

Transportation Concerns:

- There are no bicycle accommodations on Chestnut Avenue.
- Traffic congestion and queuing at arrival and dismissal times creates a potential safety hazard for pedestrians crossing Chestnut Avenue.
- Crosswalks along Chestnut Avenue need to be restriped.
- Deficient, or missing handicap accessible sidewalk ramps.
- Portions of sidewalk on Chestnut Avenue are unsafe.

Figure 12. Chestnut Ave. Vegetation Overgrowth



Figure 13. Chestnut Ave. & State St. Non- ADA compliant sidewalk ramps and faded crosswalk



Figure 14. Chestnut Ave. - "Foot Path"



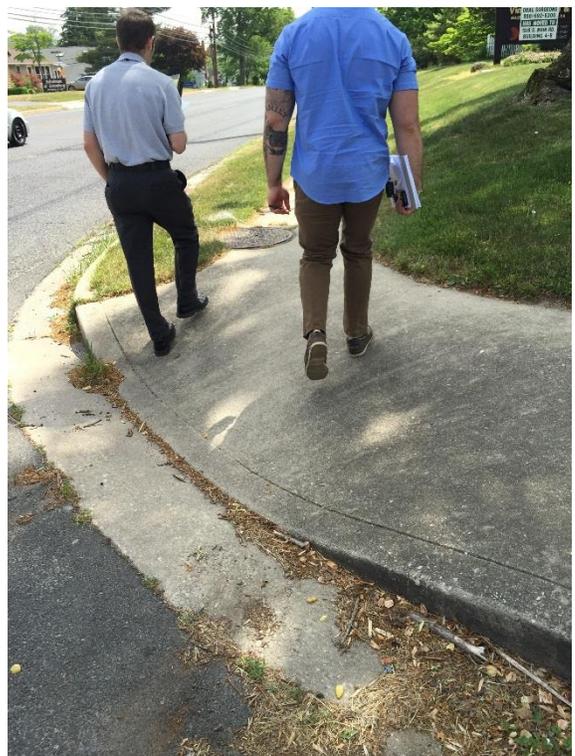
Figure 15. Chestnut Ave. - Uneven Sidewalk



Figure 16. Chestnut Ave. - "Foot Path"



Figure 17. Chestnut Ave. - Steep Grade



Valley Avenue

Valley Avenue is a local, moderate-volume, residential street extending from Wheat Road to Walnut Road. The City of Vineland is currently putting in all new sidewalk along Valley Avenue from Park Avenue to Landis Avenue. Last year, the city put in all new sidewalk on Valley Avenue between Landis Avenue and Chestnut Avenue. Valley Avenue, between Chestnut and Walnut Road, does not have continuous sidewalk. There are many portions without it. It is a main corridor to the Vineland Public Library, which is located on Landis Avenue. The corner of Valley Avenue and Landis Avenue is host to one of the many bus stops in center city Vineland, accounting for Valley Avenue's abundance of pedestrian traffic.

Transportation Concerns:

- Street Crossings along Valley Avenue are unmarked.
- There are no bicycle accommodations on Valley Avenue.
- There are missing portions of sidewalk on Valley Avenue.
- Crossing at Valley Avenue and Elizabeth Avenue is non-conducive to individuals with physical Handicap needs and bicycles.

Figure 19. Valley Ave. & Linda Lane - Broken Curb and no ramp or crosswalk



Figure 18. Valley Ave. - Between Chestnut Ave. and Walnut Ave. -Missing Sidewalk



Landis Avenue

Landis Avenue was constructed in 1861, making it the oldest road in Vineland. Landis Avenue is a local, high-volume, east to west commercial street, and is also the main corridor. It is referred to as Route 56. Route 56 begins at Route 77 in Bridgeton, Cumberland County and ends at Route 40 in Richland, Atlantic County. As stated earlier, the city has recently completed

some streetscape improvements such as resurfacing of areas of sidewalk, street trees, bike bollards, building facades, new street lighting, and overall curb appeal. It is proposed to be repaved from Myrtle Street to East Boulevard. Landis Avenue runs straight through downtown Vineland and has everything from parks, businesses, churches, to a theater. It is also home to one of the four Vineland

Figure 20. Downtown Vineland – Landis Ave.



intermediate schools, Landis Intermediate School. Because Landis Avenue is home to so many various establishments, vehicle congestion is common. All of downtown Vineland has sidewalks, therefore many people use that as a mode of transportation. Many students must walk a portion of Landis Avenue in order to get to Veterans Memorial Intermediate School.

Transportation Concerns:

- There is no crosswalk at the intersection of Landis Avenue and Valley Avenue. Crossing Landis Avenue is non-conducive to individuals with special physical needs and bicycles because there is no sidewalk ramp leading across Landis Avenue (Figure 22).
- Traffic congestion and queuing at arrival and dismissal times creates a potential safety hazard for pedestrians crossing Landis Avenue
- There are no bicycle accommodations on Landis Avenue.
- Many crosswalks along Landis Avenue need to be restriped.

Figure 21. Valley Ave. & Landis Ave. - No crosswalk or ramp to cross Landis Ave.



Other Safety/Connectivity Concerns:

Columbia Avenue

Columbia Avenue is a residential side street that serves as a direct route to the Vineland Public Library. Columbia Avenue extends from Chestnut Avenue to Landis Avenue. Figure 23 shows the intersection of Columbia and Landis Avenue. The sidewalk leads an individual across the street with no crosswalk and no sidewalk ramp to meet the individual across the street.

Transportation Concerns:

- There is no crosswalk at the Columbia Avenue and Landis Avenue intersection. Crossing Landis Avenue is non-conducive to individuals with special physical needs and bicycles because there is no sidewalk ramp on the North side of Landis (Figure 23).
- There are missing portions and uneven portions of sidewalk on Columbia Avenue (Figure 24).
- There are no bicycle accommodations on Columbia Avenue.
- There is vegetation overgrowth obstructing portions of sidewalk (Figure 27).

Figure 22. Columbia Ave. and Landis Ave.



Figure 23. Columbia Ave. (East side) - Uneven sidewalk



Figure 24. Columbia Ave. (East side) – Non-continuous sidewalk



Figure 26. Columbia Ave. - Missing Sidewalk ramp and sidewalk



Figure 25. Columbia Ave. - Vegetation Overgrowth



Additional Concerns

Veterans Memorial Intermediate School’s Zone has multiple streets students walk/bike that are not primary travel corridors and should be improved for the safety of children. The walking zone from Memorial is quite large as can be seen in Map 3. Primary travel corridors are of great concern but the side streets in which the majority of students live possess a greater concern. Multiple streets lack bicycle accommodation, crosswalks, sidewalks, unrepaired sidewalks, and intersections that are non-conductive to individuals with special physical needs. Figure 29, displays the intersection of Evelyn Avenue and Roberts Boulevard. There is no crosswalk present and Roberts Boulevard does not have a sidewalk. Figure 28 displays Evelyn Avenue. There is no sidewalk. Notice the “Handicap Child Area” sign. An individual with special needs will not be able travel down the road safely without a sidewalk. Across the street from that sign in Figure 31, there is a sidewalk, which is in no condition to accommodate an individual with physical special needs. Multiple figures display missing crosswalks, sidewalks, and ramps.

Figure 27. Evelyn Ave. – No Sidewalk



Figure 28. Evelyn Ave. & Roberts Blvd. – No Crosswalk, missing sidewalk



Figure 29. Evelyn Ave. & Roberts Blvd. – No Crosswalk, missing sidewalk, no ramp



Figure 30. Evelyn Ave. – Unsafe sidewalk



Figure 32. Embassy Terrace & Linda Ave. – No Crosswalk, missing sidewalk, no ramp

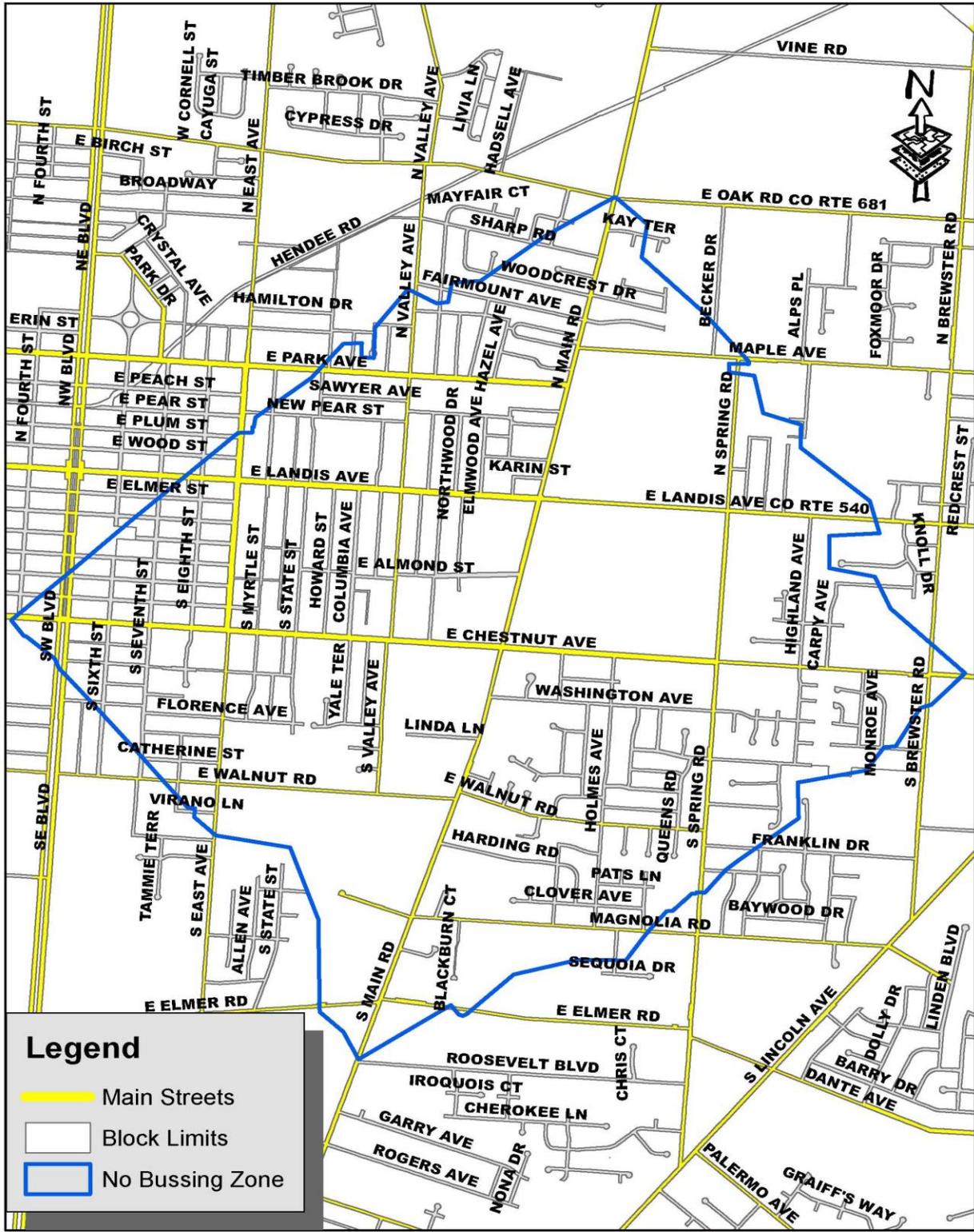


Figure 31. Main Rd. & Washington Ave. – No Crosswalk, missing sidewalk, no ramp



Map 5. Veterans Memorial Intermediate School No Bussing Zone

Veterans Memorial Intermediate School Walking Zone



0 0.275 0.55 1.1 Miles



Goals and Action

Goals

- Encourage more students to walk and bike to and from school.
- Improve the health of schoolchildren through increased physical activity.
- Make it safer for children to walk and bike to and from school.
- Establish healthy lifestyle habits among schoolchildren.
- Reduce traffic congestion around schools at arrival and dismissal times.
- Reduce the negative environmental impacts of automobile trips to schools.
- Ease staff workload during drop-off and pick-up times.
- Reduce driver indecision.

Action

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 are an important component of developing a sustainable Safe Routes to School Program. These actions can help change community expectations about how children should travel to and from school, and ensure that children receive proper instruction on walking and biking safely.

Table 5. Education Efforts		
Education Actions	Responsibility	Time Frame
Bicycle and Pedestrian Safety Presentation	Safe Kids - NJ-Cooper University Health Care / Memorial Intermediate	Spring 2015
In-class education on the health and environmental benefits of walking and biking	Memorial Intermediate/ Cross County Connection TMA	Fall 2015
In-class education on safe walking and biking behavior	Memorial Intermediate/ Cross County Connection TMA	Fall 2015
Participate in Vineland City’s Bike Rodeo	SRTS/Vineland Police Department/Safe Kids NJ-Cooper University Health Care	Annual

Veterans Memorial Intermediate School has not pursued education efforts in the past on street safety. During field audits, bicyclists were observed riding against traffic, on sidewalks and without helmets. This plan recommends that bicycle safety and riding instruction be performed to reduce unsafe riding behavior in the City of Vineland. The Brain Injury Alliance will administer in-class pedestrian and bicycling safety instruction at Veterans Memorial Intermediate School as requested. Bicycle and pedestrian education efforts would highlight designated crossing locations of Main Road, Chestnut Avenue, Landis Avenue, and Valley Avenue. Safe Kids New Jersey gave away over 50 helmets to children in need at the Bike Rodeo held on May 16th.

Cross County Connection TMA will make safety education and outreach materials available for the distribution to students, parents, and school staff. These materials may be circulated at parent teacher meetings, school walking events, and in-class or included with municipal notices.

II. Encouragement

Encouragement actions promote walking and biking to school through programs such as the Fitness Club, the Bike Rodeo, and other strategies that generate excitement around walking and biking. These programs are essential to building the momentum necessary to significantly change school travel habits and create a sustained, successful SRTS program.

Table 6. Encouragement Actions		
Encouragement Actions	Responsibility	Time Frame
The Fitness Club	Physical Education Teacher - Heather Dolente; Veterans Memorial Intermediate School	Academic School Year; Annual
Bike to School Day/Walk to School Day	Veterans Memorial Intermediate School	Annual
Participate in Vineland City's Bike Rodeo	SRTS/Vineland Police Department/Safe Kids NJ-Cooper University Health Care/Vineland Health Department	Annual

Veterans Memorial Intermediate School has a fitness program that is done on school property after school hours, known as the Fitness Club. The Fitness Club meets once a week until Christmas. After the Christmas break, they will begin meeting twice a week. The club does a variety of activities focusing on cardiovascular endurance and muscular strength training such as T25 and running outside or inside, weather permitting. T25 is a popular 25 minute exercise video created by Shaun T., the creator of Insanity, another popular exercise video. They frequent the weight room which consists of mostly free weights along with a few machines and resistant bands. The number of students who attend depends on the time of year and what other clubs are meeting, but averages 10-20 students. The students that attend are those who truly want to improve their fitness; some are athletic but many are not. According to Ms. Dolente, Veterans Memorial School's physical education teacher, they all work very hard for the entire hour they are together. They are all friendly and encouraging and she has never had an issue where a student has felt uncomfortable or been made to feel unwelcome. She encourages all of the students to walk or bike to school. However, she noted that there are parents that would rather pick their child up or have their child take the bus home.

Students of all schools within the City of Vineland were encouraged to participate in Walk to School Day on October 8th, 2014 and Bike to School Day on May 6, 2015. Students were also encouraged to participate in the City's Bike Rodeo that was held on May 16th, 2015. The Vineland Police Department, the Vineland Health Department, Safe Kids New Jersey, and the C.C.A.Y.M.C.A. provided bicycle safety inspections, bicycle safety talks, an obstacle safety course, and a helmet check. Safe Kids New Jersey gave away over 50 helmets to children who were in need of one.

III. Enforcement

Enforcement of safe and lawful travel 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 Vineland Police department is currently working with the school district to help ensure schoolchildren travel safely.

Enforcement Actions	Responsibility	Time Frame
Speed enforcement	Vineland Police Department	Ongoing
Stop enforcement for pedestrian crosswalks	Vineland Police Department	Ongoing

Main Road, Chestnut Avenue, Landis Avenue, and Valley Avenue should be targeted for enforcement due to concerns about speeding along these corridors. In addition to existing efforts, participation in New Jersey’s Pedestrian Decoy Safety Program should be considered. This program has been a successful enforcement tool in many New Jersey communities to ensure that vehicles stop for pedestrians at crosswalks and obey New Jersey’s “Stop and Stay Stopped” law (NJ 39:4-36).

IV. Engineering

Engineering recommendations based on the findings of the observations and data analysis revealed that there are opportunities to enhance pedestrian and bicyclist safety in the area surrounding Veterans Memorial Intermediate School. It is recommended that physical improvements be addressed in higher vehicular and pedestrian areas first, as well as areas that provide direct access to public entities.

On school grounds:

- A sidewalk is recommended south of the Main Road driveway, towards the school, with a crosswalk connecting to the sidewalk in front of the school building.
- Additional handicap accessible ramps are recommended on the back side of the building.
- The dirt parking lot, north of the large parking field in the southwest corner of the site, is used as a queuing area by parents waiting to pick up students. This area should be paved.
- A review of the dismissal procedure is recommended given that some of the students are being picked up by vehicles off-site, inferring that parents are frustrated by long queues and wait times. Potential options include staggering dismissal times by grade or creating a secondary location for car rider dismissals.

In the Right-Of-Way:

- Replacing deficient, or missing, handicap accessible sidewalk ramps with ADA - compliant ones.
- Repairing damaged sidewalk and building new sidewalk where none exists.
- Trimming trees which obstruct the sidewalk.
- Clearing sidewalks of soil and vegetation which restrict useable width.

- Creation of delineated shoulder areas on Chestnut Avenue. Coupled with other concerns of the City Engineer, the full recommendation is the institution of a road diet for Chestnut Avenue. The road diet would include reconfiguring the road to have one travel lane in each direction, one two-way left turn lane, designated left turn lanes at intersections, and a paved shoulder that should be designated for bicycle use.

The North Jersey Transportation Planning Authority (NJTPA) has initiated a program called StreetSmart, which seeks to change driver and pedestrian behavior through education and enforcement on a community-wide basis. The South Jersey Transportation Planning Organization (SJTPO) is a sister agency to NJTPA, which services Southern New Jersey and would be a valuable partner in developing a similar initiative in Vineland.

Additional Recommendations:

Bicycle Accommodations

This plan recommends the installation of bicycle facilities on the travel corridors listed above in each phase. Shared lane pavement markings, or “sharrows,” designate a roadway as a shared travel environment for bicycles and automobiles. These markings alert automobile drivers to expect and share the road with cyclists, designate a roadway as a preferable bicycle route and guide cyclists on where to ride in the lane. “Share the Road” signage, shown in Figure 34, is recommended to 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).

Figure 33. Shared Road Designation



Crosswalk Markings and Improvements

Several crosswalks located on primary school travel corridors are unmarked and un-striped. 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. Much of the signage within the project limits is faded or otherwise not in conformance with the Manual on Uniform Traffic Control Devices (MUTCD). Re-striping the stop bars and cross walks further reinforces good behavior by drivers and protects the pedestrian population. Replacing these signs allow motorists to make better decisions which have a direct impact on the safety of pedestrians and bicyclists in the area. Installing appropriate crosswalk markings are listed above in each phase.

Figure 34. In-Street Crossing Signage



Mobile in-street pedestrian crossing signage should be considered for placement at heavily used crossing locations during arrival and dismissal times. Signage shown in Figure 34 may be mounted on a portable base to allow for easy placement and removal. This mobile signage should be monitored and placed at crossing locations approximately 45 minutes before school starts, and removed approximately 30 minutes after school dismissal. Signage should be placed in the roadway centerline adjacent to the crosswalk.

Figure 35. Handicap Accessible Sidewalk Ramp



Handicapped Accessible Sidewalk Ramp

There are intersections within the project limits that do not have handicap accessible sidewalk ramps and many that do have them are not in accordance with the Federal ADA standards. Therefore, sidewalk ramps will be redesigned to better conform to those standards. Each ramp will be individually designed, ensuring conformance with the Public Right-Of-Way Accessibility Guidelines (PROWAG). This should further encourage pedestrian use of the sidewalks by students, especially those with special needs. Figure 35 displays a handicap accessible sidewalk ramp. Handicap accessible sidewalk ramps will be installed at the locations listed above in each phase.

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 36, 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 wayfinding markings or signage to be placed on primary school travel corridors.

Figure 36. SRTS Route Marker



Additionally, please note that this project connects to the following projects which have pedestrian and/or bicycle safety elements:

Upcoming

Landis Avenue Resurfacing (Myrtle St to East Boulevard) – Fall 2015

Landis Avenue traffic signals replacement (6 between Myrtle St. to East Boulevard) – Winter 2015

Construction of a traffic signal at Main and Elmer Road – Summer 2015

V. Evaluation

Determining participation in walking and biking programs, how many children walk and bike to school, and parent concerns is an important part of the 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 8. Evaluation Actions		
Evaluation Actions	Responsibility	Time Frame
Student Travel Tally	Vineland Health Department/ Veterans Memorial School	February 2015
Parent Survey	Vineland Health Department/ Veterans Memorial School	Spring 2016

Veterans Memorial Intermediate School conducted a survey to measure the number of students walking and biking to school. Student Travel Tallies should be held at regular intervals to determine the impact of SRTS activities in student 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 Vineland Health Department 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

Veterans Memorial Intermediate School 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 city and School District currently address child walking safety by providing crossing guards at busy crossings and have proactively pursued pedestrian safety improvements and bicycle infrastructure in the city. This School Travel Plan was commissioned to address the School’s interest in walking and biking programs, and its continued concerns about existing and potential safety issues due to high-speed roads, road crossings, and walking and biking infrastructure gaps in the city.

The School Travel Plan outlines several education and encouragement programs that the School District is either actively pursuing or has expressed interest in, including a walking school bus program, encouragement programs and events, and participation in walk/bike to school month activities. Infrastructure improvements such as crosswalk installation, signage, bikeways and shared road treatments were recommended on the priority travel corridors of Chestnut Avenue, Main Road, Valley Avenue, and Landis Avenue. Implementing these improvements will make the walking and biking environment safer, better connected, and more attractive for schoolchildren and the community.

Implementation of this Travel 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 coincide with hands-on education and encouragement programs, to maintain momentum towards achieving the goal of reducing the amount of children in the city that are currently driven to school. The Vineland School District and the City of Vineland 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.