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October 3, 2011

Ms. Maryanne Fisher
President of the Board of Education
Massapequa Public Schools
4925 Merrick Road
Massapequa, N.Y. 11758

Re: Pedestrian Safety Study
Massapequa High School
Cartwright Boulevard, Massapequa

Dear Ms. Fisher:

In accordance with our agreement of September 15, 2011, this office has completed a Pedestrian Safety Study along a pedestrian arrival route to and from Massapequa High School. This study focuses on Cartwright Boulevard from the high school to north of Sunrise Highway, NYS Route 27.

This pedestrian safety study was performed to determine if a population of approximately 90 students that reside north of Sunrise Highway should be bused to school based on safety concerns present along this route. This study was performed within the guidelines set forth in the New York State Department of Transportation Regulations of the Commissioner Part 191, Child Safety Zones. A copy of this Part is attached to this letter.

The guidelines set forth in Part 191 essentially lead to a route being scored based on features or lack of features that have an affect on pedestrian safety along the route. If a certain score is achieved (higher scores mean more potential safety issues) the route is considered to connect the school to a hazardous zone. If a zone is considered a hazardous zone, the school district may create a child safety zone and provide busing for students in that zone that would not be bused otherwise.

Background and Route Conditions

Massapequa High School is located on the north side of Merrick Road just east of Cartwright Boulevard. The campus has indirect access to Cartwright Boulevard via several east/west roadways that dead-end at or enter the school property along its western boundary. Cartwright Boulevard traverses in a northeasterly direction and crosses Sunrise Highway at-grade at a signalized, conventional intersection. As such, Cartwright Boulevard serves students who walk to school and reside in the area north of Sunrise Highway. The walking route from the school building to north of Sunrise Highway is approximately 8/10 of a mile.

Cartwright Boulevard is a local Town of Oyster Bay roadway that extends from Merrick Road northeasterly past Sunrise Highway. Cartwright Boulevard is a two lane roadway consisting of one travel lane in each direction and the posted speed limit is 30 miles per hour. There are numerous two-way and all-way stop controlled intersections between Merrick Road and Sunrise Highway. Cartwright Boulevard is signalized at its intersection with both Merrick Road and Sunrise Highway, the only signalized locations along the study route.

On the east side of Cartwright Boulevard there exist continuous sidewalks from Merrick Road to Sunrise Highway. The west side has sidewalks as well; however, there is a gap of several hundred feet total in two locations. Therefore, there is a continuous sidewalk route from the school to north of Sunrise Highway. Sidewalk ramps are provided and side street stop bar markings are set back sufficiently to allow a clear walking path across side streets.

Sunrise Highway (Route 27) is a major New York State arterial facility at the north end of the route. Sunrise Highway here is a six lane arterial consisting of three lanes in each direction with additional turning lanes at Cartwright Boulevard. The posted speed limit near Cartwright Boulevard is 45 miles per hour in the eastbound direction. In the westbound direction, the posted speed limit is 55 miles per hour and drops to 50 just west of Cartwright Boulevard.

Child Safety Zone Evaluation

To determine the potential for the establishment of a child safety zone the conditions existing on the route to school in question were compared to the criteria outlined in the regulation. The regulation identifies three basic types of hazards which are described as follows:

- Highways without sidewalks or adequate shoulders,
- Highway intersections, and
- Highway – railroad grade crossings.

Although the Long Island Railroad crosses Cartwright Boulevard just north of Sunrise Highway, the crossing is grade-separated and represents no hazard to pedestrians. Therefore, the hazards which potentially present on the route include:

- Highways without sidewalk or adequate shoulders, and
- Highway intersections.

The guidelines identify factors for each hazard that is found to be present. The factors are assigned a point value and summed to determine if a hazardous zone exists.

It is noted that the guidelines present a point value (situation points) which, if met, is considered a hazard. The point value necessary differs by the grade level of the students using the route.

Higher grades must score higher points to be considered a hazard. In the case of the High School, the two greatest scoring hazards must add to 27 points to qualify.

Highways Without Sidewalk or Adequate Shoulders

The criteria in the regulation assigns situation points for routes, or portions of routes, which have no sidewalk and also have shoulders less than five feet wide. Routes with sidewalks qualify for zero points. As Cartwright Boulevard has continuous sidewalks on its east side, the route does not score any points under this section of the criteria.

Highway Intersections

The route being examined contains a total of 16 intersections. However, the scoring system allows for the summation of only the top two greatest hazards. Locations that qualify for points include:

- Unsignalized intersections without all-way stop control (2 points per 1 lane)
- Traffic signal with pedestrian devices (1 point per lane, up to 4 lanes considered)
- Student crosses a highway intersection with a speed limit of over 40 mph

Other highway intersection criteria do not apply. It should be noted that the scoring criteria with respect to sidewalks refers to "sidewalk or shoulder \geq five feet wide". Most of the sidewalks along Cartwright Boulevard are four feet wide with the exception of the intersection at Cartwright Boulevard at Sunrise Highway, where sidewalks are five feet wide. In the text of the regulation on Page 5, this is clarified to state, "sidewalk (any width) or a shoulder \geq five feet wide". The narrower sidewalks at four feet do not, therefore, affect the scoring criteria. The criteria at intersection gives points for crossing roadways with speed limits greater than 40 mph. Only Sunrise Highway has a speed limit greater than 40 miles per hour. All other streets have a speed limit of 30 miles per hour.

The intersection of Sunrise Highway at Cartwright Boulevard is controlled by a traffic signal with pedestrian signals. The pedestrian signals have countdown timers and the pedestrian crosswalk across Sunrise Highway is laid out using "staggered piano key markings" which are currently State standard. Sunrise Highway, the major roadway being crossed, has three lanes in each direction with left turn lanes, a median and right turn lanes. The speed limit through the intersection is 45 miles per hour eastbound and 55 miles per hour westbound reducing to 50 miles per hour west of the intersection.

The Sunrise Highway intersection is scored one point per lane for up to four lanes due to the presence of pedestrian devices receiving four points for the pedestrian devices. The students will be required to cross a roadway with high traffic volumes. The volume of traffic on Sunrise Highway is in excess of 500 vehicles per hour. The intersection receives five points for volume

assuming a strict criteria that students crossing the roadway are walking in the roadway. Under the speed criteria the student crosses three eastbound lanes with a speed limit of 55 miles per hour and three westbound lanes with a speed limit of 45 miles per hour. Students may also cross Cartwright Boulevard which has a 30 mile per hour speed limit so no points would be attributed to those crossings. Taking the most hazardous of the four approaches yields four points for the crossing of the westbound lanes. The point total for the Sunrise Highway intersection is 13 points.

Intersections with four-way stop control do not qualify for any points under the intersection control criteria. Each unsignalized intersection with two-way stop control qualifies for four points (two points per lane with two lanes). There are several such intersections but only the top one counts toward the score, as the Sunrise Highway intersection qualifies for more points than the unsignalized intersection.

As noted previously, none of the stop controlled intersections would receive points under the speed control criteria as speed limits are 30 miles per hour. The volume of traffic on Cartwright Boulevard, Front Street and possibly Church Street is estimated to be moderate so this would give the intersections with these roadways an additional three points under the volume criteria. The additional three points are added to the four points received at two way stop controlled intersections for a total of seven points at the second most hazardous intersection.

Hazard	Situation Points
Unsignalized Intersection, w/o All-Way Stop	7
Sunrise Highway Intersection	13
Total	20

Therefore, following the guidelines the route receives a total score of twenty situation points. To qualify for the establishment of a Child Safety Zone for a High School, the route must score at least 27 situation points. A score of 15 points at a single location would also qualify but that criteria is also not met.

The route evaluated, therefore, does not qualify for the establishment of a Child Safety Zone.

Other Comments

A field inspection of the school route along Cartwright Boulevard was made. The intersection of Sunrise Highway at Cartwright Boulevard is augmented with pedestrian signals which have "countdown timers" and the pedestrian crosswalks utilize the latest staggered bar pavement markings to enhance visibility. The intersection traffic signal appears to be in full conformance with the latest version of the Federal Manual of Traffic Control Devices. It appears that the school area signing on Cartwright Boulevard is not up to current standards. A review of current

Ms. Maryanne Fisher
October 3, 2011
Page 5 of 6

guidelines and regulations should result in enhanced school area signs in the vicinity of the school.

Summary and Recommendations

The analysis performed in this study indicates that under the guidelines contained in the regulation the route evaluated does not present a sufficient hazard to declare a Child Safety Zone for walking students in the area served by the route.

That being noted, there are steps that could be taken to improve the area near the school for pedestrians that are low cost and easily implemented. The application of School Area signs are specified in the Federal Manual on Uniform Traffic Control Devices and State regulation. The criteria for use of these signs, and the types of signs used, are periodically updated. It appears that the school area signing on Cartwright Boulevard is not up to current standards. A review of current guidelines and regulations would result in enhanced school area signs in the vicinity of the school. The district should contact the Town of Oyster Bay Traffic Department to inquire about updating the signing in the area.

If you have any questions or require additional information, please do not hesitate to contact this office.

Sincerely,



RONALD HILL, P.E.
Principal

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Attachment

ATTACHMENT



Pupil Transportation

New York State Department of Transportation Regulations of the Commissioner Part 191 Child Safety Zones

Section

191.1 Purpose

191.2 Definitions

191.3 Types of safety hazards students may encounter while walking to and from school

191.4 Point determination

191.5 Illustrative examples of various hazards

191.6 Petition for the designation of a child safety zone

191.7 Application for determining a child safety zone

191.8 Analysis sheet for determining a child safety zone

§ 191.1 Purpose.

Historical Note

The Child Safety Transportation Act of 1992 (Chapters 69 and 403 of the Laws of 1992) allows school districts to transport students for distances less than the statutory transportation distance requirements. These guidelines have been developed in consultation with the State Education Department, the Department of Motor Vehicles and the Division of State Police in order to identify conditions under which walking to and from school may endanger the safety of children. Using these guidelines, school districts can authorize the establishment of a child safety zone.

There are three basic types of safety hazards students may encounter while walking to school:

Highways without sidewalks or adequate shoulders,

Highway intersections, and

Highway-railroad grade crossings

The guidelines identify factors for each of these types of hazards. These factors, each with assigned point values, are added together to determine if a hazardous zone exists. If the total points equal or exceed the values as set forth in section 191.4 of this Part, then the school district may choose to create a child safety zone.

Historical Note

Sec. filed Feb. 2, 1993 eff. Feb. 17, 1993.

§ 191.2 Definitions.

Historical Note

The following words and phrases used in this Part are defined as follows:

(a) Curb. A vertical or sloping member along the edge of a roadway clearly defining the pavement edge.

(b) Highway. The entire width between the boundary lines of every way publicly maintained when

any part thereof is open to the use of the public for purposes of vehicular travel. For the purposes of this Part, the word highway is a generic term for parkway, road, street, avenue, drive, boulevard, lane, etc.

(c) Intersection. The area embraced when two or more highways join one another. Where a highway includes two roadways 30 feet or more apart, then every crossing of each roadway of such divided highway by an intersecting highway shall be regarded as a separate intersection. In the event such intersecting highway also includes two roadways 30 feet or more apart, then every crossing of two roadways of such highways shall be regarded as a separate intersection. There is no differentiation between intersections involving major highways and intersections involving minor highways. Each intersection is evaluated on its own merits by calculating the hazard points from the appropriate chart in section 191.4 of this Part.

(d) Narrow bridge or underpass. A bridge or underpass which, because of significant reduction in pavement widths on or under the structure, requires students to walk on the roadway due to the absence of shoulders or sidewalks. In addition, for a location to be considered as a narrow bridge or underpass, at least one of the following roadway widths shall exist:

- (1) two way traffic with a width of less than 18 feet;
- (2) two way traffic with a width greater than or equal to 18 feet, but less than the width of the approach roadway;
- (3) one way bridge with a width of less than or equal to 10 feet; or
- (4) one way bridge with a roadway width less than the width of the approach roadway.

(e) No control. Neither stop signs nor traffic signals are in place that would require vehicles to stop on the roadway which the children are crossing. Yield signs are not considered as stop controls for the purpose of these guidelines.

(f) Number of lanes crossed. The total number of lanes on the roadway being crossed, including through lanes and turning lanes.

(g) Number of tracks. The number of railroad tracks at a railroad crossing. Tracks must be within 100 feet of each other to be considered as part of the same crossing. Crossings with an adult school crossing guard is considered in the same vein as crossing a street with an adult crossing guard. Therefore, no hazard is deemed to exist.

(h) Number of trains. The sum of all freight and passenger trains using a railroad crossing during a one hour interval in the morning and a one hour interval in the afternoon. The one hour intervals should occur during the normal hours students can be expected to walk to and from school. The number of passenger trains using the crossing during the affected hours can usually be obtained from the railroad companies. However, determining the number of freight trains may require a manual count because their schedule is subject to a degree of randomness. Since the number of freight trains using a crossing may vary from day to day, an average count based on five weekdays of observations during the morning and afternoon crossing periods must be made. Switching movements using a crossing can also be considered, but the number used should be an average count based on five weekdays of observations during the morning and afternoon crossing periods.

(i) Pedestrian devices. The presence of traffic control equipment such as pedestrian signal indications and/or pedestrian push buttons for the purpose of controlling pedestrian traffic. Pedestrian indications are traffic signal indications which consist of the illuminated words "WALK" and "DONT WALK". A traffic signal equipped with pedestrian indications may or may not have push buttons to operate the pedestrian signal. The other type of pedestrian device is simply a pedestrian push button attached to a pole or post. When used without pedestrian signal indications, the activated push button provides for additional time so that a pedestrian can cross the street safely. It should be noted that all traffic will not necessarily come to a halt when the indications are displayed. While some traffic signals are equipped with pedestrian indications that provide an exclusive walk phase and no turns on red, others have pedestrian indications which allow traffic and pedestrians to move concurrently. Therefore, it is important to recognize the type of pedestrian indications because they do not all operate in the same manner.

(a) Highways without sidewalks or adequate shoulders. With this type of hazard, a student must be walking either on a narrow shoulder or in the roadway. If a usable sidewalk exists, then the student is expected to use it unless the sidewalk is closed to the public by order of the local municipality. The length of the highway section without sidewalks where children walk on the roadway or on a shoulder within five feet of the roadway is to be measured by any normally accepted method (i.e., use a measuring wheel, measuring tape or scale the distance from a map). For children to be covered by a child safety zone, they must walk the complete length of the section under analysis. When evaluating a subdivision or neighborhood, the district may use the closest residence to the school for which all students in the neighborhood must pass as the point to begin calculations. If this residence qualifies, all other residences in the neighborhood will also qualify. In order to determine a point value for this type of hazard, the following information must be known:

- (1) facility which the student walks on (i.e., sidewalk, shoulder greater than five feet wide, shoulder less than five feet wide, or roadway);
- (2) 15 minute volume count on the affected roadway during the normal period when students walk to and from school; and
- (3) speed limit on the affected roadway. Determine the type of facility, the volume of traffic, and the speed limit using the definitions for "Curb", "Narrow bridge or underpass", "Roadway", "Shoulder", "Sidewalk", "Speed limit", and "Volume of traffic". Distances should be rounded to the nearest foot. On a roadway without a shoulder for a distance of 397 feet, one point is awarded for the first 300 feet and a second point is awarded for feet 301 through 600.

(b) Highway intersections. With this type of hazard, the student must be crossing a roadway at an intersection or a marked midblock pedestrian crossing. Two roadways may need to be crossed at an intersection. When this occurs, only the most critical roadway (highest points) should be used. The roadways which the student must cross can either be public or private. In the case of a private road, such as an entrance to a shopping center or an industrial plant, the 15-minute volume must be representative of a 15-minute period when the student walks to or from school. Crossing a roadway is not considered a hazard due to the presence of any of the following controls which provide pedestrian protection:

- (1) all way stop signs;
- (2) adult crossing guard; and
- (3) pedestrian bridge or underpass within 500 feet of the crossing which can be utilized instead of crossing the road. Each intersection is considered a separate, distinct hazard. Along a given route, a student may cross four to five intersections. The intersection with the highest point value should be used in the analysis to determine if a CSZ exists because a hazardous intersection must be crossed. If a combination of hazards is to be examined, then the two intersections which have the highest individual point totals may be used. Consequently, the number of qualifying points is higher for multiple hazards than it is for a single hazard. Determine the type of control, the number of lanes of traffic on the roadway being crossed, the volume of traffic, and the speed limit using the definitions for "No control", "Number of lanes crossed", "Speed limit", "Stop sign control", "Traffic control signals" and "Volume of traffic".

(c) Highway-railroad grade crossings. With this type of hazard, the following information must be known:

- (1) number of tracks in use; and
- (2) number of trains using the tracks during the morning and afternoon crossing periods. Determine the number of tracks and trains using the definitions for "Number of tracks" and "Number of trains".

Historical Note

Sec. filed Feb. 2, 1993 eff. Feb. 17, 1993.

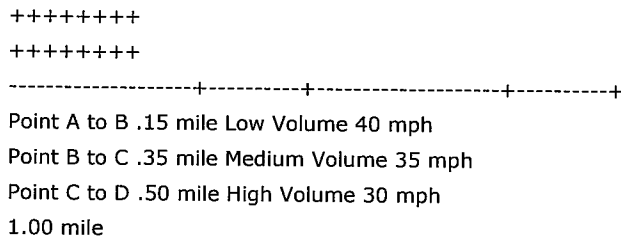
§ 191.4 Point determination.

Historical Note

An analysis should be completed for the highway sections containing the types of hazards the student encounters. A route to school can involve walking along one or more highways. As a result, it is not always obvious when a new highway segment should be evaluated, especially when conditions may change along that highway. A new highway segment exists whenever the facility type on which a student must walk changes. There are four different types of facilities:

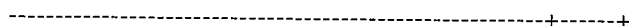
- (a) sidewalk (any width) or a shoulder \geq five feet wide;
- (b) shoulder $<$ five feet wide;
- (c) roadway with no shoulder; and
- (d) roadway with a narrow bridge or overpass.

In some cases, a highway or several highways with the same type of walking facility, may undergo several changes regarding its volume and/or speed limit. To simplify matters, the average volume and/or speed limit that occurs in the segment should be used. For example, over a one mile stretch, the following situation occurs for a series of contiguous highways without adequate shoulders (i.e., shoulder $<$ five feet wide):



The average speed is 35 mph $[(40 + 35 + 30) / 3]$ and would be used in calculating the point totals. Since the average speed is only required to be determined to the nearest five mph interval, it can be easily calculated as simply a straight, unweighted average of all the speeds. The route used between home and school must avoid hazardous locations when a more reasonable route is available. In addition, the analysis is to be based on conditions that will remain basically unchanged throughout the school year. Section 3635-b(2) specifies that transportation will be provided "on the basis that their most direct walking route to school will traverse a hazardous zone". However, before a CSZ can be established, alternative solutions must be investigated. Sometimes, a hazard can be mitigated by changing the route which the student walks to one that is slightly shorter or longer. Such a route could be deemed more "reasonable" because it avoids the alleged hazards found on the more direct walking route. For routes where a single hazard exists, determine the type of hazard, the number of points produced by the hazard and the highest grade level that would qualify for bus transportation as indicated in the accompanying chart. For routes where several hazards exists, there are two options which can be followed. First, determine the type of hazards that exist and calculate the number of points produced by each hazard. Compare the point totals for each hazard and use the point value of the greatest hazard to determine the highest grade level that would qualify for bus transportation as indicated in the accompanying chart. If an area fails to qualify for a specific grade level, then a combination of hazards should be examined. Determine the types of hazards, the sum of points produced by the two greatest hazards and the highest grade level that would qualify for bus transportation as indicated in the accompanying chart. It should be noted that the two hazards identified may be of the same type or of different types. A school route will be determined to be a hazardous zone for children in certain grades if it produces at least the points indicated in the accompanying chart.

TABLE 1 - NUMBER OF QUALIFYING POINTS REQUIRED



Total number of points required to qualify a student for POINTS
transportation

- A. Grades K - 8 with 1 HAZARD 12
- B. Grades K - 8 with 2 Greatest HAZARDS 21
- C. Grades 9 - 12 with 1 HAZARD 15
- D. Grades 9 - 12 with 2 Greatest HAZARDS 27

TABLE 2 - HIGHWAYS WITHOUT SIDEWALKS OR ADEQUATE SHOULDERS

SITUATION POINTS

1. Student walks on a sidewalk, shoulder or roadway with a given length:

- A. Sidewalk or shoulder \geq 5 feet wide: 0
- B. Shoulder $<$ 5 feet wide: *
* 1 point for every 500 ft or fraction thereof; examples:
1 to 500 ft = 1 point, 501 to 1000 ft = 2 points
- C. Roadway with no shoulder: **
** 1 point for every 300 ft or fraction thereof; examples:
1 to 300 ft = 1 point, 301 to 600 ft = 2 points
- D. Roadway with a narrow bridge or overpass: ***
*** 1 point for every 25 ft or fraction thereof; examples:
1 to 25 ft = 1 point, 26 to 50 ft = 2 points

2. Student walks on roadway or shoulder $<$ 5 ft wide with 15 minute traffic volumes of:

- A. Low (L) - less than 50 vehicles 1
- B. Medium (M) - 50 to 100 vehicles 3
- C. High (H) - more than 100 vehicles 5

3. Student walks on roadway or shoulder $<$ 5 ft wide with a speed limit \geq 40 MPH:

- A. 40 MPH 1
- B. 45 MPH 2
- C. 50 MPH 3
- D. 55 MPH 4

TABLE 3 - HIGHWAY INTERSECTIONS

SITUATION POINTS

4. Student crosses a highway intersection with the following degree of traffic control:

- A. All way stop signs, an adult crossing guard, or a 0 pedestrian bridge/underpass within 500 feet of the

crossing

B. Traffic signal with pedestrian devices 1 per lane (*)

C. Stop signs, or a traffic signal without 2 per lane pedestrian devices (*)

D. No traffic control measures 3 per lane (*)

5. Student walks on roadway or shoulder < 5 ft wide with 15 minute traffic volumes of:

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A. Low (L) - less than 50 vehicles 1

B. Medium (M) - 50 to 100 vehicles 3

C. High (H) - more than 100 vehicles 5

6. Student crosses a highway intersection with a speed limit of:

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A. less than 40 MPH 0

B. 40 MPH 1

C. 45 MPH 2

D. 50 MPH 3

E. 55 MPH 4

(*)-Up to 4 lanes may be considered

(*)-Up to 4 lanes may be considered

(*)-Up to 4 lanes may be considered

TABLE 4 - HIGHWAY - RAILROAD GRADE CROSSINGS

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SITUATION POINTS

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7. Student crosses an active railroad crossing during the normal school crossing period:

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A. 1 or 2 tracks and 0 trains 0

1 train 5

2 trains 9

3 or more trains 13

B. 3 or more tracks and 0 trains 0

1 train 7

2 trains 11

3 or more trains 15

Historical Note

Sec. filed Feb. 2, 1993 eff. Feb. 17, 1993.

§ 191.5 Illustrative examples of various hazards.

Historical Note

(a) Highways without sidewalks or adequate shoulders. A 4th grade child going to an elementary school must walk four feet from the roadway on a shoulder along a two lane road for a distance of 1/2 mile. If the road is posted at 50 mph, with a 15 minute vehicular traffic count of 120, the situation would produce the following points:

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HAZARD TYPE - HIGHWAYS WITHOUT SIDEWALKS OR ADEQUATE SHOULDERS

1. Shoulder < five feet wide, 1/2 mile 6 points
2. 120 vehicles per 15 minutes 5
3. 50 mph 3

HAZARD TYPE - HIGHWAY INTERSECTIONS

4. Does not cross highway 0
5. N/A 0
6. N/A 0

HAZARD TYPE - HIGHWAY - RAILROAD GRADE CROSSINGS

7. Does not cross railroad tracks 0
- 14 points

Result: CSZ established for grades K - 8

No CSZ established for grades 9 - 12

To establish a CSZ, 12 points are required for a 4th grade student and 15 points for students in grades 9 - 12. The situation meets the criteria for establishing a CSZ for students in grades K - 8 since 14 points were calculated. However, a CSZ is not justified for students in grades 9 - 12.

(b) Highways without sidewalks or adequate shoulders. A family has a 3rd grade child and an 9th grade child going to schools at the same location. They must walk 1050 feet on a two lane roadway posted at 40 mph with no shoulder or sidewalk. Recent traffic counts indicate that 600 vehicles per hour use the roadway during the morning walk to school. Each child would have the following points:

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HAZARD TYPE - HIGHWAYS W/O SIDEWALKS OR ADEQUATE SHOULDERS

1. No Shoulder, 1050 feet 4 points
2. 600 vph (150 veh per 15 minutes) 5
3. 40 mph 1

HAZARD TYPE - HIGHWAY INTERSECTIONS

4. Does not cross highway 0
5. N/A 0
6. N/A 0

HAZARD TYPE - HIGHWAY - RAILROAD GRADE CROSSINGS

7. Does not cross railroad tracks 0
- 10 points

Result: No CSZ established for grades K - 8

No CSZ established for grades 9 - 12

To establish a CSZ, 12 points are required for a 3rd grade student and 15 points for students in grades 9 - 12. The situation does not meet the criteria for establishing a CSZ for students in grades K - 8 since 10 points were calculated. Also, a CSZ is not justified for students in grades 9 - 12.

(c) Highway intersections. An 8th grade child walking to a middle school on a sidewalk must cross Central Avenue, a four lane highway with a posted speed limit of 45 mph. Traffic is not required to stop on Central Avenue, only on the intersecting side streets. A 15 minute vehicular traffic count generated 200 vehicles on Central Avenue. The child would have the following points:

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HAZARD TYPE - HIGHWAYS W/O SIDEWALKS OR ADEQUATE SHOULDERS

- 1. Sidewalk 0 points
- 2. N/A 0
- 3. N/A 0

HAZARD TYPE - HIGHWAY INTERSECTIONS

- 4. Cross 4 lane roadway w/o traffic control 12
- 5. 200 vehicles per 15 minutes 5
- 6. 45 mph traffic on Central Avenue 2

HAZARD TYPE - HIGHWAY - RAILROAD GRADE CROSSINGS

- 7. Does not cross railroad tracks 0
- 19 points

Result: CSZ established for grades K - 8

CSZ established for grades 9 - 12

To establish a CSZ, 12 points are required for an 8th grade student and 15 points for students in grades 9 - 12. The situation meets the criteria for establishing a CSZ for students in grades K - 8 since 14 points were calculated. A CSZ is also justified for students in grades 9 - 12.

(d) Highway-railroad crossings. A 5th grade child walking to school on a sidewalk must cross two adjacent railroad tracks. If this location has two trains crossing daily during the one hour period children are going to school and one train crossing daily during the one hour period children are returning from school, there would be a total of three trains, and the situation would produce the following points:

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HAZARD TYPE - HIGHWAYS W/O SIDEWALKS OR ADEQUATE SHOULDERS

- 1. Sidewalk 0 points
- 2. N/A 0
- 3. N/A 0

HAZARD TYPE - HIGHWAY INTERSECTIONS

- 4. Does not cross highway 0
- 5. N/A 0
- 6. N/A 0

HAZARD TYPE - HIGHWAY - RAILROAD GRADE CROSSINGS

7. Cross 2 tracks, 3 trains 13
13 points

Result: CSZ established for grades K - 8
No CSZ established for grades 9 - 12

To establish a CSZ, 12 points are required for an 8th grade student and 15 points for students in grades 9 - 12. The situation meets the criteria for establishing a CSZ for students in grades K - 8 since 13 points were calculated. However, a CSZ is not justified for students in grades 9 - 12.

(e) Combination of two greatest hazards. A sophomore student going to a high school must walk four feet from the roadway on a shoulder along a two lane road for a distance of 1/2mile. The road is posted at 35 mph, with a 15 minute vehicular traffic count of 240. The student must also cross Main Street, a three lane highway with a posted speed limit of 45 mph. Traffic is controlled by a traffic signal with pedestrian indications. A 15 minute vehicular traffic count generated 200 vehicles on Main Street. The situation would produce the following points:

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HAZARD TYPE - HIGHWAYS W/O SIDEWALKS OR ADEQUATE SHOULDERS

- 1. Shoulder < 5 feet wide, 1/2 mile 6 points
 - 2. 240 veh per 15 minutes on two lane road 5
 - 3. 35 mph on two lane roadway 0
- 11 points

HAZARD TYPE - HIGHWAY INTERSECTIONS

- 4. Cross Main Street, 3 lanes, traffic signal with 3 pedestrian indications
 - 5. 200 veh per 15 minutes on Main Street 5
 - 6. 45 mph on Main street 2
- 10 points

HAZARD TYPE - HIGHWAY - RAILROAD GRADE CROSSINGS

- 7. Does not cross railroad tracks 0
- 0 points

Sum of Two Greatest Hazards 21 points

Result: CSZ established for grades K - 8
No CSZ established for grades 9 - 12

To establish a CSZ, 12 points are required for an 8th grade student and 15 points for students in grades 9 - 12. The situation does not meet the criteria for establishing a CSZ based on a single hazard for students in grades K - 8 or grades 9 - 12. However, when the two greatest hazards are combined, the criteria is met for grades K - 8 since 21 points were calculated. However, a CSZ is not justified for students in grades 9 - 12.

(f) Combination of two greatest hazards. A sophomore student going to a high school must walk four feet from the roadway on a shoulder along a two lane road for a distance of .8 mile (4224 feet). The road is posted at 35 mph, with a 15 minute vehicular traffic count of 240. The student must also cross Main Street, a three lane highway with a posted speed limit of 45 mph. Traffic is controlled by

a traffic signal without pedestrian indications. A 15 minute vehicular traffic count generated 200 vehicles on Main Street. In addition, the student must cross a highway-railroad grade crossing with one track. This location has one train crossing daily during the one hour period children are going to school and one train crossing daily during the one hour period children are returning from school. Therefore, there would be a total of two trains, and the situation would produce the following points:

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HAZARD TYPE - HIGHWAYS W/O SIDEWALKS OR ADEQUATE SHOULDERS

- 1. Shoulder < 5 feet wide, .8 mile 9 points
 - 2. 240 veh per 15 minutes on two lane road 5
 - 3. 35 mph on two lane roadway 0
- 14 points

HAZARD TYPE - HIGHWAY INTERSECTIONS

- 4. Cross Main Street, 3 lanes, traffic signal without 6 pedestrian indications
 - 5. 200 veh per 15 minutes on Main Street 5
 - 6. 45 mph on Main street 2
- 13 points

Result: CSZ established for grades K - 8 based on 1 hazard

CSZ established for grades 9 - 12 based on 2 hazards

To establish a CSZ, 12 points are required for students in grades 8 - 12 and 15 points for students in grades 9 - 12. The situation does meet the criteria for establishing a CSZ based on a single hazard for students in grades K - 8 as there are two individual hazards with 13 and 14 points respectively. However, the criteria is not met for students in grades 9 - 12. If the two greatest hazards are combined, the criteria is met for both grades K - 8 and 9 - 12 since 27 points were calculated.

Historical Note

Sec. filed Feb. 2, 1993 eff. Feb. 17, 1993.

§ 191.6 Petition for the designation of a child safety zone.

Historical Note

We the undersigned, request that the Board of Education of the _____ School District review a request for designating _____ between _____ and _____ as a Child Safety Zone.

After receipt of the petition, the Board of Education or Board of Trustees of the affected school district may directly, or by appointment of an advisory committee, make an investigation to determine if such a zone should be established in the district. The investigation shall be made pursuant to the regulations set forth in this Part.

Name Address

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____
- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____
- 16. _____
- 17. _____
- 18. _____
- 19. _____
- 20. _____
- 21. _____
- 22. _____
- 23. _____
- 24. _____
- 25. _____

Page _____ of _____.

Historical Note

Sec. filed Feb. 2, 1993 eff. Feb. 17, 1993.

§ 191.7 Application for determining a child safety zone.

Historical Note

Pursuant to section 3635-b of the Education Law, a petition shall be submitted in order to request that the Board of Education investigate the need to establish a Child Safety Zone for the purpose of transporting students to and from school.

The petition shall contain a minimum of 25 qualified voters of the school district or five percent of the number of voters who voted in the previous annual election of the members of the Board of Education, whichever is greater.

For requests that designates an area/neighborhood, please submit the application as a package for the entire neighborhood or area to be affected. The package shall contain the petition and application for each family requesting transportation.

Name of Parent/Guardian _____

Mailing Address _____

City _____ ZIP Code _____ Telephone # _____

Name of the Student(s) _____

Name of School to Which Qualifying _____

Student(s) is Walking _____

Address of School _____

City _____ ZIP Code _____

On a separate 8 1/2 inch by 11 inch sheet of paper, please provide a map or sketch showing the school route. As a minimum, this map should include the residence where the student(s) reside, location of the school that the student(s) attend, and the route the student(s) travel to and from school. Please indicate all street names and route numbers along the route.

Historical Note

Sec. filed Feb. 2, 1993 eff. Feb. 17, 1993.

§ 191.8 Analysis sheet for determining a child safety zone.

Date: _____ Completed by: _____

Name of School to Which Qualifying

Student(s) is Walking: _____

Address of the School: _____

City: _____ State: _____ NY ZIP Code _____

POINT DETERMINATION

HAZARD TYPE - Highways Without Sidewalks or Inadequate Shoulders

1. Location on highway (check one): _____ Points

on shoulder \geq five feet wide or sidewalk

on shoulder \leq five feet wide without a sidewalk

on roadway with no shoulder

on roadway at a narrow bridge or overpass

2. 15 minute vehicular count on roadway being walked by _____ Points

the students: _____ vehicles

3. Speed limit on roadway being walked: _____ mph _____ Points

X. Total Points (Line 1 + Line 2 + Line 3) _____ Points

HAZARD TYPE - Highway Intersections

4. Traffic control on roadway being crossed _____ Points

(check one):

Number of lanes of traffic: _____ lanes

no control

stop sign or traffic signal w/o ped walk lights

traffic signal with ped walk lights

all way stop signs, adult crossing guard, or

pedestrian overpass/underpass

5. 15 minute vehicular count on roadway being crossed by _____ Points

the students: _____ vehicles

6. Speed limit on roadway being crossed: _____ mph _____ Points

Y. Total Points (Line 4 + Line 5 + Line 6) _____ Points

HAZARD TYPE - Highway-Railroad Grade Crossings

7. a) Number of tracks crossed: _____ Points

b) Number of trains daily during school crossing periods: _____

Z. Total Points (Line 7) _____ Points

FINDINGS

FINDINGS

Single Hazard: (Line X, Y, or Z) _____ Points

_____ Exist for children through grade _____.

_____ Does not exist for any school children.

Combination of Hazards: (Line X, Y, or Z) _____ Points

(Sum of Two Greatest Hazards)

_____ Exist for children through grade _____.

_____ Does not exist for any school children.

I hereby certify that the results of the analysis are accurate and reflect traffic conditions as of this date for the location under study.

Signature of School Superintendent Date