



**COLORADO**

Department of Transportation

# SCHOOL ZONE TRAFFIC SAFETY EVALUATION





**Traffic Engineering Division  
2014  
Revised July 2021**

**IN COOPERATION WITH:**

**AAA COLORADO  
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT  
COLORADO DEPARTMENT OF EDUCATION  
DENVER OSTEOPATHIC FOUNDATION  
DRIVE SMART  
PTA COLORADO**

Updated March 2014 and Revised July 2021 by the  
**COLORADO DEPARTMENT OF TRANSPORTATION (CDOT)  
TRAFFIC SAFETY AND ENGINEERING SERVICES BRANCH  
2829 West Howard Place, 4<sup>th</sup> Floor  
Denver, CO 80204**

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# **INTRODUCTION**

## **PURPOSE**

Your responses to the following Checklist will assist the Colorado Department of Transportation Regional and Headquarters Traffic Engineering staff to determine traffic control measures necessary to provide safe movement of school age pedestrians within the school zone. These questions deal with a broad range of issues that relate to the overall traffic safety situation at your school.

One of the most pressing and controversial problems that parents, transportation engineers, law enforcement agencies and school administrators are faced with concerns the safety of children on their way to and from school. This topic always produces great concern for parents and administrators due to the potentially severe consequences of a vehicle/child pedestrian accident. The primary question facing these agencies and individuals is how the school transportation safety issue can be best handled with maximum safety effectiveness.

School zone safety is a function of many different factors. School zones are evaluated on a case-by-case basis because each school environment is unique. As this checklist is completed it will become obvious that many items are involved in school zone safety.

## **SAFETY FACTORS**

There are a number of factors affecting the overall transportation safety situation for a school. These factors include physical setting, school population characteristics, transportation, education, and law enforcement. Each of these items can have a dramatic affect on the safety of a child on his or her way to school and the manner in which that municipality/county and the school district should handle a particular school's situation.

Following receipt of this checklist the Colorado Department of Transportation will, if necessary, evaluate expressed issues and concerns through a Traffic Engineering Study. The determination of whether a reduction in speed limit is warranted for the school will be based upon the degree of exposure of school age pedestrians to traffic and the nature of that traffic. Other factors include but are not limited to the age of the school children who must cross the highway and the frequency and number of children exposed to traffic. The presence of a school along or near a state highway or city street does not always expose children to traffic.

Furthermore, a speed reduction within the school zone to simply accommodate vehicles exiting from or entering the school is not appropriate.

## **MISCONCEPTIONS**

Past thinking was that once a child had reached the school grounds he or she was safe and did not need to worry about vehicular traffic. Many of today's school grounds are not safe havens for young pedestrians. Confusion created by a complicated combination of driveways and sidewalks has become common in the typical layout for school grounds of today.

Arrival and departure practices at some schools consist of parents dropping off or picking up students at the same time school buses are attempting to use the same driveways. The situation can be further complicated by school age pedestrians and young bicycle riders attempting to navigate through this setting using those same driveways. This type of layout requires young children to maneuver through a maze of parked and moving cars while at the same time watch for buses that may also be moving.

Although CDOT takes into account the entire school area when conducting a school study, CDOT's responsibility is solely for the school zone on the State Highway.

# **SCHOOL ZONE SAFETY EVALUATION**

## **GETTING STARTED WITH THE CHECKLIST**

In all likelihood, more than one person will need to be contacted to assist with providing answers to the questions on the Checklist. School administrators, local government officials and law enforcement agency representatives with responsibility for the school area in question should be asked to provide answers related to their disciplines. Do not attempt to provide answers to sections of the Checklist that fall within the purview of another. It is the responsibility of the governmental representative signing this document to assure that there are no inaccurate or misleading responses provided in this Checklist.

Certain terminology used in the Checklist may not be familiar to the persons preparing the response. An attached glossary of terms is provided to assist and provide a basis for understanding and response.

## **SAFETY ASSESSMENT TOOL**

This Checklist can be helpful as an indicator of the overall safety condition within the school area and can be used by any concerned individual or group to do a community school safety assessment on their own. Normally, there are many ways to improve the school safety scene. The Checklist is set up to help focus on safety deficiencies.

Keep in mind that speed limit reductions for school areas, if warranted, are based upon the exposure of school age pedestrians to traffic and the age of those children as well as the nature of the traffic (e.g. traffic volume, flow and composition; roadway width; pedestrian crosswalks; etc.). The speed limit within the school zone will be determined by a Traffic Engineering Study.

## **SAFETY CATEGORIES**

School safety zones are complex, therefore the Checklist is divided into five categories:

- (1) School Population Characteristics,
- (2) Transportation Issues,
- (3) Physical Setting,
- (4) Education Issues, and
- (5) Law Enforcement

The five areas may overlap and be reliant upon other aspects contained in another section. The School Population Characteristics section asks for basic information about the students, staff, parents and others connected with the school. How students are transported to and from school is addressed in the section on Transportation Issues. The Physical Setting section asks questions which will define the physical characteristics of a school zone. Most questions in this area are measurable and self-explanatory. Education issues relates to how students receive safety information. Finally, the Law Enforcement portion identifies the current role and exposure of police in and around the school grounds. After the completion of all five sections, you should have a better understanding of your individual school's safety needs.

## **CHECKLIST CONTACT INFORMATION INSTRUCTIONS**

The Checklist Contact Information portion of the Checklist must be completed and accompany your Checklist when it is submitted. It provides the opportunity to explain any additional circumstances specific to the school in question. Furthermore, it documents the authenticity of the Checklist and provides the authorized municipality officials' signatures.

Please present the completed Checklist with the Contact form to your municipality official authorized to request a Traffic Engineering Study for processing, approval, signature and mailing. Do not send these documents directly to the Colorado Department of Transportation. Before the documents can be processed by CDOT, the Contact portion of the form must be signed by the appropriate municipality official(s) authorized to request an official Traffic Engineering Study. It is their responsibility to then forward the documents on to the Colorado Department of Transportation Region Traffic Engineer.

Checklist documents received by the Colorado Department of Transportation lacking the official governmental signatures will be returned to the appropriate municipality for approval and processing.

# **SCHOOL ZONE SAFETY CHECKLIST**

## **SCHOOL POPULATION CHARACTERISTICS**

1. Type of School:     Elementary     Junior/Middle School     High School
  
2. Please provide the school schedule and calendar web addresses. If these are not available online, please attach copies of your school calendar and schedule.  
  
\_\_\_\_\_
  
3. What are your school hours of operation? \_\_\_\_\_
  
4. Do you have any before/after school extra-curricular activities scheduled outside of the normal school hours of operation?     Yes     No  
    If so, what time(s)?
  
5. How many students are currently enrolled in the school?
  
6. Closed campus\*?     Yes     No
  
7. Does the school have an "on-site management or cooperative decision making team\*\*"?     Yes     No

## **TRANSPORTATION ISSUES**

8. Is there a "walking and/or biking school route map/plan\*\*"?     Yes     No
  
9. Is the "school route map/plan\*\*" up-to-date?     Yes     No  
    NOTE: An up-to-date route plan must be submitted to CDOT (see page 9 and 10) prior to scheduling a School Safety Evaluation Survey.
  
10. Does the school have a policy on how students can/must be transported?     Yes     No
  
11. The number of children that normally walk or bike to school:
  
12. What portion of those walking/biking to school must cross the State Highway in question?
  
13. Is large truck traffic limited on the State Highway in question?     Yes     No
  
14. Is large truck traffic limited on adjacent streets?     Yes     No

## **PHYSICAL SETTING**

15. Is the school located in a residential area?     Yes     No
  
16. Does the school area currently have school related signing and pavement markings?     Yes     No

**PHYSICAL SETTING, Continued**

17. Do you feel the school area signing and pavement markings are in good condition?  Yes  No
18. Do pedestrian crosswalks currently exist?  Yes  No
19. Are there sidewalks along the designated route(s) to the school?  Yes  No
20. Is there a designated child drop-off\* area separate from the school bus drop-off\* area?  Yes  No
21. Is there a traffic control plan for school buses and parents' vehicles?  Yes  No
22. Parking Situation:
- a.) Is diagonal parking\* prohibited near the school?  Yes  No
  - b.) Is diagonal parking\* prohibited on school grounds?  Yes  No
  - c.) Do you feel it is difficult to see pedestrians in the crosswalk?  Yes  No
23. Does the municipality/county have a traffic engineer?  Yes  No  
NOTE: If you answered yes to question 21, go to question 23.

24. If the municipality/county does not have a traffic engineer, who is the person responsible for traffic engineering decisions?  
 Chief of Police  Sheriff  Other \_\_\_\_\_

\_\_\_\_\_  
Name and Title

25. Are students directed to designated crossing locations by secured fencing\*?  Yes  No
26. Is the school playground protected with secured fencing\*?  Yes  No
27. Is the campus completely contained on one side of the highway with no need for students to cross the highway during the school day?  Yes  No
28. Are there multiple schools on the same grounds?  Yes  No  
NOTE: If you answered yes to this question, all Principals must approve the request for a Traffic Engineering Study.

**EDUCATION ISSUES**

29. Does the school have an adult crossing guard\* program?  Yes  No
30. Is there a training program for crossing guards\*?  Yes  No
31. Is there a student safety patrol\*?  
If so, what grades? \_\_\_\_\_  
Number of participating students? \_\_\_\_\_
32. Who administers the crossing guard\* program?  
 School  PTA  Municipality  County  Other: \_\_\_\_\_



**EDUCATION ISSUES, Continued**

33. Does the school have a safety education program that:
- Addresses pedestrian behavior?  Yes  No
  - Addresses bicycle safety?  Yes  No
  - Addresses seat belt usage?  Yes  No
34. Is there a training program for crossing guards\*?  Yes  No
35. Is there a student safety patrol\*?  Yes  No
- If so, what grades? \_\_\_\_\_
  - Number of participating students? \_\_\_\_\_

**LAW ENFORCEMENT**

36. What is the posted speed limit on the State Highway in question? \_\_\_\_\_
37. Is there good compliance with existing speed limits?  Yes  No
38. What law enforcement agency is responsible for this school zone? (e.g. State Patrol, Sheriff's office, local law enforcement, etc.)?  
\_\_\_\_\_
39. How often does the responsible law enforcement agency patrol the area during the school day? Give average number of patrols per day. \_\_\_\_\_

\* Indicates a term that is defined in the Glossary on Page 11

**CHECKLIST CONTACT INFORMATION**

(Please type or print all information except signature)

---

**SCHOOL DISTRICT NAME AND NUMBER**

---

**NAME OF SCHOOL (#1)**

---

**NAME OF SCHOOL (#2)\*\***

---

**PHYSICAL ADDRESS**

---

**PHYSICAL ADDRESS\*\***

---

**WEBSITE ADDRESS**

---

**WEBSITE ADDRESS\*\***

---

**PHONE NUMBER**

---

**PHONE NUMBER\*\***

---

**EMAIL**

---

**EMAIL\*\***

---

**PRINCIPAL'S NAME**

---

**PRINCIPAL'S NAME\*\***

---

**(School Authority) SIGNATURE**

---

**(School Authority) SIGNATURE\*\***

**NAME OF PERSON PREPARING THE CHECKLIST**

---

**ORGANIZATION NAME (IF APPLICABLE)**

---

**PHONE NUMBER**

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**EMAIL**

\*\*If there are Multiple Schools on the same Grounds.

## **CHECKLIST CONTACT INFORMATION (Cont'd):**

(Please type or print all information except signature)

**NAME AND TITLE OF MUNICIPALITY OR COUNTY OFFICIAL OR ADMINISTRATOR REQUESTING THE OFFICIAL TRAFFIC ENGINEERING STUDY:**

_____ <b>NAME</b>	_____ <b>SIGNATURE</b>
----------------------	---------------------------

\_\_\_\_\_  
**ORGANIZATION NAME**

\_\_\_\_\_  
**PHONE NUMBER**

\_\_\_\_\_  
**EMAIL**

\_\_\_\_\_  
**WEBSITE ADDRESS**

**NAME AND TITLE OF MUNICIPALITY OR COUNTY TRAFFIC ENGINEER OR PERSON RESPONSIBLE FOR TRAFFIC ENGINEERING DECISIONS (NOTE: IF SAME AS REQUESTING OFFICIAL, WRITE "REQUESTING OFFICIAL" ON "NAME" LINE.)**

_____ <b>NAME</b>	_____ <b>SIGNATURE</b>
----------------------	---------------------------

\_\_\_\_\_  
**ORGANIZATION NAME**

\_\_\_\_\_  
**PHONE NUMBER**

\_\_\_\_\_  
**EMAIL**

\_\_\_\_\_  
**WEBSITE ADDRESS**

**COMMENTS:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

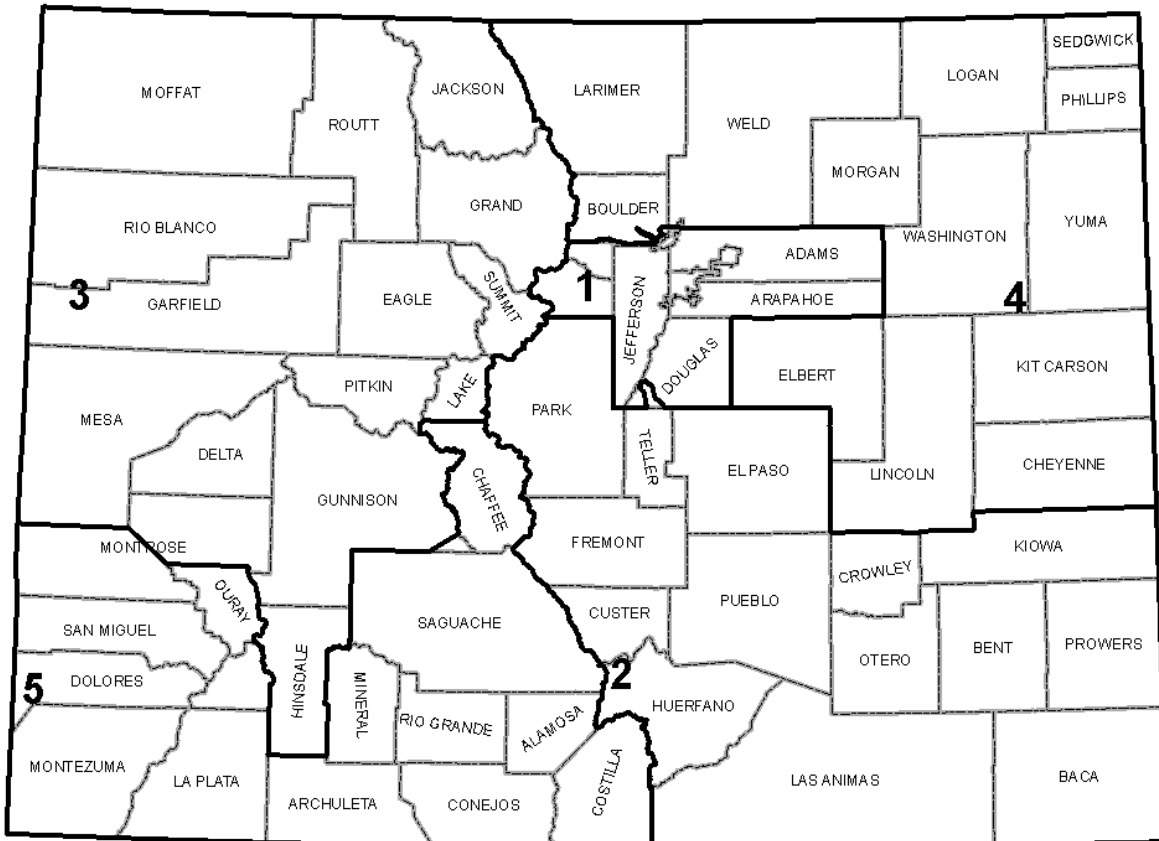
(Please attach additional sheets if necessary)

## CDOT REGIONAL TRAFFIC ENGINEERS

Once the Checklist has been completed and approved by the municipality or county, it should be sent to the Colorado Department of Transportation, Regional Traffic Engineer for your area.

<b>COLORADO DEPARTMENT OF TRANSPORTATION REGIONS</b>		
<b>REGION</b>	<b>ADDRESS</b>	<b>PHONE</b>
1	2829 West Howard Place Denver, CO 80204	(303) 757-9511
2	5615 Wills Blvd Pueblo, CO 81008	(719) 546-5750
3	222 South Sixth Street, Room 100 Grand Junction, CO 81501-2769	(970) 683-6271
4	10601 West 10 <sup>th</sup> Street Greeley, CO 80634	(970) 350-2211
5	3803 North Main Avenue, Suite 100 Durango, CO 81301	(970) 385-8360

The CDOT Regional Map (below) can be helpful in determining which CDOT Engineering Region contact is appropriate for you. The municipality or county representative should direct the Checklist mailing to the Traffic Engineering Office within the appropriate Region.



## **COMMITTEE PARTICIPANTS AND EDUCATIONAL RESOURCES**

AAA Colorado, Inc.  
Driver Education/Traffic Safety  
4100 East Arkansas Ave  
Denver, CO 80222  
(303) 753-8800

Denver Osteopathic Foundation  
3801 East Florida Avenue #635  
Denver, CO 80210  
(303) 996-1140; Fax: (303) 996-1142

Brain Injury Alliance of Colorado  
1385 S Colorado Blvd, Suite 606, Bldg A  
Denver, CO 80222  
(303) 355-9969; Fax: (303) 355-9968

Drive Smart Evergreen – Conifer  
2962 Evergreen Parkway, #201  
Evergreen, CO 80437-9683  
(303) 674-9683

Children's Hospital Colorado  
13123 East 16<sup>th</sup> Avenue  
Aurora, CO 80045  
(720) 777-1234

Federal Highway Administration  
Safety and Traffic Operations  
12300 West Dakota Avenue, Suite 180  
Lakewood, CO 80228  
(720) 963-3000; Fax: (720) 963-3001

Colorado Department of Education  
School Transportation  
201 East Colfax Avenue  
Denver, CO 80203-1704  
(303) 866-6856; Fax: (303) 866-6186

Mesa County Health Department  
Health Education  
510 29 ½ Road  
Grand Junction, CO 81504  
(970) 248-6900; Fax: (970) 246-6971

Colorado Department of Public Health and  
Environment  
Injury, Suicide and Violence Prevention  
4300 Cherry Creek Drive South  
Denver, CO 80246  
(303) 692-2609; Fax: (303) 691-7901

National Highway Transportation Safety  
Administration  
12300 West Dakota Avenue, Suite 140  
Lakewood, CO 80228  
(720) 963-3100; Fax: (720) 963-3124

Colorado Department of Transportation  
Safety and Traffic Engineering Branch  
4201 E Arkansas Avenue  
Denver, CO 80222  
(303) 757-9654; Fax: (303) 757-9219

State Farm Insurance  
1555 Promontory Circle  
Greeley, CO 80634-0002  
(970) 395-5000

Colorado Parent Teacher Association  
7859 West 38<sup>th</sup> Avenue  
Wheat Ridge, CO 80033  
(303) 420-7820; Fax: (303) 420-7703

## **GLOSSARY**

**Authorized speed limit:** speed limit that is legally established and authorized by the Colorado Department of Transportation for that portion of state highway in question. It is the responsibility of CDOT to make sure that the legally authorized speed limit agrees with the posted limit.

**Closed campus:** school policy that prohibits students from leaving school grounds during the day for lunch breaks or when they do not have classes; e.g. can they visit a convenience store across the street during breaks or lunch thus increasing their exposure to traffic.

**Crossing guard:** any person eighteen years of age or older who instructs, directs, and controls the members of the student body in crossing the streets and highways at or near the school. Controls traffic when authorized.

**Diagonal parking:** a parking layout where vehicles are parked at an angle on the street. Traditional diagonal street parking has been responsible for 30% of all accidents within small communities. There are two primary causes that contribute to this statistic. Motorists backing out of a diagonal parking spot have extremely poor visibility; in some cases they may also be required to back out across the cross-walk as in the case of the parking stall nearest the cross-walk. There is limited “free space” available to vehicles. “Free space” is the separation distance between parked vehicles and the moving ones and is usually much less than with other parking designs. The potential benefits of reverse diagonal parking, or diagonal parking in which drivers back into position upstream, is currently being evaluated.

**Drop-off and pick-up zone:** area for vehicles and school buses to drop off and pickup students. Ideally, vehicles and school buses should not be stopping in the street to load or unload students. There should be good sight distance, minimizing the risk of children “darting out” from between vehicles and diagonal parking should be discouraged.

**On-site management or decision making team:** a group typically comprised of faculty, parents, and community members who evaluate and make recommendations on the operation of individual school sites.

**Safety program:** classes or discussions that teach students safety practices relating to pedestrian behavior, such as the proper way to cross streets, use sidewalks, load and unload buses, avoid darting out from between parked cars, etc. This program also includes classes or discussions that teach students safe practices regarding bicycles and seat belts.

**School route map/plan:** diagram of the area surrounding the school marked to show the main routes students must use to walk or bike to school. See section 7A in the Manual on Traffic Control Devices. Consult with your local traffic engineer or chief of police.

**School safety patrol:** any students trained and delegated to control other students as they safely cross roadways.

**Secured fencing:** fencing designed to prevent children from easily passing through or around it. An excellent example would be 8 to 12 foot high chain link type fence.

**Year round school:** the standard nine month instructional period is distributed throughout the year with regularly scheduled breaks or vacations interspersed.

## **COLORADO REVISED STATUTES AND REFERENCES**

The following Colorado Revised Statutes (C.R.S.) are some of the Colorado laws that apply to school zones. For full-text of these C.R.S. descriptions go to:

<http://www.lexisnexis.com/hottopics/Colorado/>

42-4-104	Adoption of traffic control manual
42-4-105	Local traffic control devices
42-4-110	Provisions uniform throughout the state
42-4-110.5	Automated vehicle identification systems
42-4-111	Powers of Local Authorities
42-4-615	School zones - increase in penalties for moving traffic violations
42-4-1102	Altering of speed limits
42-4-1701	Traffic offenses and infractions classified
43-2-135	Division of authority over streets
43-1-1601	Safe routes to school program
13-21-115.6	Immunity from civil liability for school crossing guards and sponsors

### **Manual on Uniform Traffic Control Devices (MUTCD)**

MUTCD 2009 Edition. Published by the U.S. Department of Transportation Federal Highway Administration; Part 7 – Traffic Controls for School Areas.