

# CDOT Speed Study References, Maps & Contacts

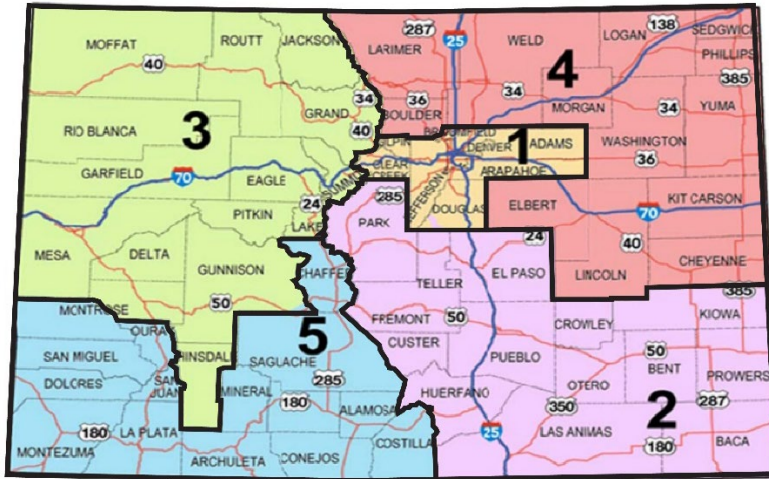
Colorado Department of Transportation  
Traffic Safety and Engineering Services Branch  
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## Study Reference Information

The CDOT Regional Map (below) can help you determine 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.



### CDOT Regional Traffic Engineers

Once the municipality or county has completed and signed the checklist, it should be sent to the Colorado Department of Transportation, Regional Traffic Program Engineer, and Region Traffic Resident Engineer(s) for your area.

Colorado Department of Transportation Region Traffic Offices					
Region	Address	Name	Title	Phone	Email
1	2829 West Howard Place, 2nd Floor, Denver, CO 80204	Alazar Tesfaye	Traffic Program Engineer	303-512-4040	<a href="mailto:Alazar.Tesfaye@state.co.us">Alazar.Tesfaye@state.co.us</a>
		Jocelyn Higashide	Traffic Resident Engineer	303-512-4331	<a href="mailto:Jocelyn.higashide@state.co.us">Jocelyn.higashide@state.co.us</a>
		Alvin Stamp	Traffic Resident Engineer	303-512-4025	<a href="mailto:Alvin.stamp@state.co.us">Alvin.stamp@state.co.us</a>
2	5615 Wills Blvd, Pueblo, Co 81008	Jason Nelson	Traffic Program Engineer	719-546-5411	<a href="mailto:jason.nelson@state.co.us">jason.nelson@state.co.us</a>
		Pepper Whittlef	Traffic Program Manager	719-546-5734	<a href="mailto:pepper.whittlef@state.co.us">pepper.whittlef@state.co.us</a>
		Matt Jagow	Traffic Resident Engineer	719-546-5751	<a href="mailto:matthew.jagow@state.co.us">matthew.jagow@state.co.us</a>
3	222 South Sixth Street, Grand Junction, CO 81501	Zane Znamenacek	Traffic Program Engineer	970-683-6275	<a href="mailto:zane.znamenacek@state.co.us">zane.znamenacek@state.co.us</a>
		Andi Staley	Traffic Resident Engineer	970-683-6278	<a href="mailto:andi.staley@state.co.us">andi.staley@state.co.us</a>
4	10601 Tenth St, Greeley, CO 80634, United States	Katrina Kloberdanz	Traffic Program Engineer	970-350-2211	<a href="mailto:katrina.kloberdanz@state.co.us">katrina.kloberdanz@state.co.us</a>
		Jonathan Woodworth	Traffic Resident Engineer	970-350-2166	<a href="mailto:jonathan.woodworth@state.co.us">jonathan.woodworth@state.co.us</a>
5	3803 N Main Ave., Suite 100, Durango, CO 81301	Jennifer Allison	Traffic Program Engineer	970-880-0549	<a href="mailto:jennifer.allison@state.co.us">jennifer.allison@state.co.us</a>
		David Peyton	Traffic Resident Engineer	970-385-8948	<a href="mailto:david.peyton@state.co.us">david.peyton@state.co.us</a>

## Educational Resources

1. [AASHTO Highway Design Guide](#)
2. [Clear Zones and Shoulders](#)
3. [AASHTO Roadside Design Guide](#)
4. [Safe System Approach](#)
5. [CDOT Pedestrian Crossing Installation Guide](#)
6. [Manual Of Uniform Traffic Control Devices](#)
7. [CDOT: Establishing Realistic Speed Limits](#)
8. [Colorado 2017 Speed Management Action Plan](#)

## Glossary

- 50<sup>th</sup> Percentile Speed - the Speed at or below which 50 percent of vehicles travel.
- 66th Percentile Speed - the Speed at or below which 66 percent of vehicles travel.
- 85th Percentile Speed - the Speed at or below which 85 percent of vehicles travel.
- Design Speed - the selected Speed used to determine the various geometric design features of the roadway.
- Engineering Approach - A two-step process where a base speed limit is set according to the 85th percentile speed, the design speed for the road, or other conditions.
- Expert System Approach - Speed limits are suggested by a computer program that uses knowledge and inference procedures that simulate the judgment and behavior of speed limit experts. The speed limits are reviewed by an engineer to ensure the speed limit recommendation is valid and correct.
- Mean Speed - the summation of the measured speeds of vehicles at a specific location divided by the number of vehicles measured.
- Operating Speed - the speeds at which vehicles are observed operating during free flow conditions. Free flow conditions mean that vehicles are unimpeded by other vehicles or traffic control devices such as traffic signals.
- Posted Speed - the maximum lawful Speed for a particular location as displayed on a regulatory sign.
- Safe System Approach - The safe systems approach emphasizes that some degree of roadway user error will always occur and that such errors should not result in a fatality or serious injury.
- Speed Distribution - the arrangement of speed values showing their observed frequency of occurrence.
- Speed Limit - the maximum lawful vehicle speed for a specific location.
- Speed Zone - the speed limit established on the basis of an engineering study for a particular section of road for which a statutory speed limit is not appropriate.
- Statutory Speed - the numerical speed limits established by state law that apply to various classes or categories of roads in the absence of posted speed limits.

## Colorado Revised Statutes and References

### **42-4-104. Adoption of traffic control manual.**

The department of transportation shall adopt a manual and specifications for a uniform system of traffic control devices consistent with the provisions of this article for use upon highways within this state. Such uniform system shall correlate with and insofar as possible conform to the system set forth in the most recent edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" and other related standards issued or endorsed by the federal highway administrator.

### **42-4-105. Local traffic control devices.**

Local authorities in their respective jurisdictions shall place and maintain such traffic control devices upon highways under their jurisdiction as they may deem necessary to indicate and to carry out the provisions of this article or local traffic ordinances or to regulate, warn, or guide traffic, subject in the case of state highway to the provisions of sections 42-4-110 and 43-2-135 (1)(g), C.R.S. All such traffic control devices shall conform to the state manual and specifications for statewide uniformity as provided in section 42-4-104.

### **42-4-110. Provisions uniform throughout the state.**

(1) The provisions of this article shall be applicable and uniform throughout this state and in all political subdivisions and municipalities therein. Cities and counties and incorporated cities and towns shall regulate and enforce all traffic and parking restrictions on streets which are state highways as provided in section 43-2-135 (1)(g), C.R.S., and all local authorities may enact and enforce traffic regulations on other roads and streets within their respective jurisdictions. All such regulations shall be subject to the following conditions and limitations:

(e) Pursuant to section 43-2-135 (1)(g), C.R.S., no regulation of a local authority shall apply to or become effective for any streets which are state highways, including any part of the national system of interstate and defense highways, until such regulation has been presented to and approved in writing by the department of transportation; except that such regulations shall become effective on such streets sixty days after receipt for review by the department of transportation if not disapproved in writing by said department during that sixty-day period.

### **42-4-111. Powers of Local Authorities.**

(1) The provisions of this article shall not be deemed to prevent local authorities, with respect to streets and highways under their jurisdiction and within the reasonable exercise of the police power, except those streets and highways which are parts of the state highway system which are subject to the provisions of section 43-2-135 (1)(g), C.R.S., from:

(s) Regulating the movement of traffic at school crossings by official traffic control devices or by duly authorized school crossing guards, consistent with the provisions of this article;

## Colorado Revised Statutes And References (Cont'd)

### 43-2-135. Division of authority over streets.

(1) The jurisdiction, control, and duty of the state, cities, cities and counties, and incorporated towns with respect to streets which are a part of the state highway system is as follows:

(g) Cities, cities and counties, and incorporated towns shall regulate and enforce all traffic and parking restrictions on streets and highways but all regulations adopted after December 31, 1979, shall be approved in writing by the department of transportation before becoming effective on such streets;

### 42-4-615. School zones - increase in penalties for moving traffic violations.

(1) Any person who commits a moving traffic violation in a school zone is subject to the increased penalties and surcharges imposed by section 42-4-1701 (4) (d).

(2) For the purposes of this section, "school zone" means an area that is designated as a school zone and has appropriate signs posted indicating that the penalties and surcharges will be doubled. The state or local government having jurisdiction over the placement of traffic signs and traffic control devices in the school zone area shall designate when the area will be deemed to be a school zone for the purposes of this section. In making such designation, the state or local government shall consider when increased penalties are necessary to protect the safety of school children.

(3) This section does not apply if the penalty and surcharge for a violation has been doubled pursuant to section 42-4-614 because such violation also occurred within a highway maintenance, repair, or construction zone

### 42-4-1102. Altering of speed limits.

(1) (a) Whenever the department of transportation determines upon the basis of a traffic investigation or survey or upon the basis of appropriate design standards and projected traffic volumes in the case of newly constructed highways or segments thereof that any speed specified or established as authorized under sections 42-4-1101 to 42-4-1104 is greater or less than is reasonable or safe under the road and traffic conditions at any intersection or other place or upon any part of a state highway under its jurisdiction, said department shall determine and declare a reasonable and safe speed limit thereat which shall be effective when appropriate signs giving notice thereof are erected at such intersection or other place or upon the approaches thereto; except that no speed limit in excess of seventy-five miles per hour shall be authorized by said department.

(2) Whenever county or municipal authorities within their respective jurisdictions determine upon the basis of a traffic investigation or survey, or upon the basis of appropriate design standards and projected traffic volumes in the case of newly constructed highways or segments thereof, that any speed specified or established as authorized under sections 42-4-1101 to 42-4-1104 is greater or less than is reasonable or safe under the road and traffic conditions at any intersection or other place or upon any part of a street or highway in its jurisdiction, said local authority shall determine and declare a reasonable and safe speed limit thereat which shall be effective when appropriate signs giving notice thereof are erected at such intersection or other place or upon the approaches thereto. No such local authority shall have the power to alter the basic rules set forth in section 42-4-1101 (1) or in any event to authorize by resolution or ordinance a speed in excess of seventy-five miles per hour.

## Colorado Revised Statutes And References (Cont'd)

(3) Local municipal authorities within their respective jurisdictions shall determine upon the basis of a traffic investigation or survey the proper Speed for all arterial streets and shall declare a reasonable and safe speed limit thereon which may be greater or less than the Speed specified under section 42-4-1101 (2) (b) or (2) (c). Such speed limit shall not exceed seventy-five miles per hour and shall become effective when appropriate signs are erected giving notice thereof. For purposes of this subsection (3), an "arterial street" means any United States or state-numbered route, controlled-access highway, or other major radial or circumferential street or highway designated by local authorities within their respective jurisdictions as part of a major arterial system of streets or highways.

(4) No alteration of speed limits on state highways within cities, cities and counties, and incorporated towns is effective until it has been approved in writing by the department of transportation. Upon the request of any incorporated city or town, the department of transportation shall conduct any traffic investigation or survey that is deemed to be warranted for determination of a safe and reasonable speed limit on any street or portion thereof that is a state highway. In conducting such a traffic investigation, the department may receive and consider traffic and engineering data provided by the city or county engineer of any requesting local government that will be impacted by a proposed alteration of speed limits. Any speed limit so determined by the department becomes effective when declared by the local authority and made known by official signs conforming to the state traffic control manual.

(5) Whenever the department of transportation or local authorities, within their respective jurisdictions, determine upon the basis of a traffic investigation or survey that a reduced speed limit is warranted in a school or construction area or other place during certain hours or periods of the day when special or temporary hazards exist, the department or the concerned local authority may erect or display official signs of a type prescribed in the state traffic control manual giving notice of the appropriate speed limit for such conditions and stating the time or period the regulation is effective. When such signs are erected or displayed, the lawful speed limit at the particular time and place shall be that which is then indicated upon such signs; except that no such speed limit shall be less than twenty miles per hour on a state highway or other arterial street as defined in subsection (3) of this section nor less than fifteen miles per hour on any other road or street, nor shall any such reduced speed limit be made applicable at times when the special conditions for which it is imposed cease to exist. Such reduced speed limits on streets which are state highways shall be subject to the written approval of the department of transportation before becoming effective.

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

MUTCD 2009 Edition with Revisions 1,2, and 3. Published by the U.S. Department of Transportation Federal Highway Administration; Part 7 - Traffic Controls for School Areas.