### Colorado Transportation Facts





Colorado Department of Transportation

### **Transportation Facts**



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## Vision and Mission Statements

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### **CDOT** Vision

To enhance the quality of life and the environment of the citizens of Colorado by creating an integrated transportation system that focuses on moving people and goods by offering convenient linkages among modal choices.

### **CDOT** Mission

To provide the best multi-modal transportation system for Colorado that most effectively moves people, goods, and information. Late 1800s The majority of Colorado's roads were privately built by stage or mining companies or built as toll roads by individuals.

1909 A three-member Highway Commission was formed to approve highway work and allocate funds.

**1913** The state Legislature created the Internal Improvement Fund solely for highway purposes. Revenue from highway user fees was allocated to the state and counties at a 50/50 ratio.

1916 The Federal Road Act was passed and funds were allocated to the states based on specific criteria.

1917 The State Highway Fund was created and a department was formed to approve highway construction projects. The department consisted of a five-member Highway Commission, executive director, and staff.

**1921** The State Highway Department was created, as well as a seven-member advisory Commission.

1952 A new eight-member, policy-making Highway Commission was established.

1971 An amendment to the Colorado Constitution permitted the Governor to appoint all Highway Department directors.

**1983** The Colorado State Patrol was removed from the Highway Department and placed within the newly created Department of Public Safety.

1987 The General Assembly increased the number of highway commissioners to 11.

1991 The Department of Highways became the Colorado Department of Transportation (CDOT).

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History

The state's transportation system is managed by CDOT under the direction of the state Transportation Commission. The Commission, statutorily authorized, is composed of 11 commissioners who represent specific districts. Each commissioner is appointed by the Governor, confirmed by the Senate and serves a four-year term. To provide continuity on the Commission, the expiration dates of the terms are staggered.

### District 1 Joe Blake,

Vice Chairman **District 3** 

Gregory McKnight

**District 2** Joseph Jehn Chairman

**District 4** JoAnn Groff

**District 6** 

**District 8** 

**District 5** Charles Archibeque

District 7 Doug Aden

District 9 Dan Stuart District 10 George Tempel

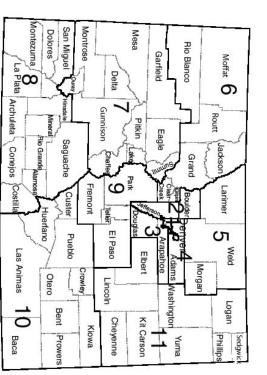
Steve Parker

William Haight

District 11 Donald Morrison **Secretary** Jennifer Webster

Commission Office (303) 757-9207





# Transportation Commission Districts

### **Colorado Tolling Enterprise**

Last year, the Colorado General Assembly passed legislation creating the Colorado Tolling Enterprise (CTE), a government-owned, nonprofit business operating within, and as a division of CDOT, with the Transportation Commission serving as the Tolling Enterprise Board. The purpose is to finance, construct, operate, regulate and maintain a system of toll highways in Colorado.

The CTE has the authority to conduct all aspects of building and operating toll highways, including setting and adjusting tolls, issuing revenue bonds, overseeing maintenance and entering into public/ private partnerships. The enterprise may toll new or additonal highway capacity.

### **CTE Board Members**

Doug Aden, Chairman Don Morrison, Vice Chairman Joe Blake Joseph Jehn Gregory McKnight JoAnn Groff Charles Archibeque William Haight Steve Parker Dan Stuart George Tempel Jennifer Webster, Secretary Margaret (Peggy) Catlin, Acting Director

Board/Commission Office (303) 757-9207



### **Colorado Aeronautical Board**

The seven-member Colorado Aeronautical Board was created by statute in 1988 and works closely with the 78 public-use airports in Colorado to maintain, develop, and improve the state's aviation system.

CDOT-Aeronautics Division, created in 1991, supports Colorado's general avaiation community through fuel tax entitlement refunds, a discretionary aviation grant program, and long-range system planning in partnership with Colorado's general avaition airports. The Colorado Aeronautical Board provides direction and oversight to CDOT Aeronautics.

**Aeronautical Board Members** 

Harold Patton, Chair Eastern Plains Governments

Corinne Nystrom, Vice Chair Airport Management

Joe Keck, Secretary Western Slope Governments

Harold Felderman Eastern Plains Governments

Larry Romrell Aviation Interest-at-Large

Patrick Wiesner Pilot Organizations

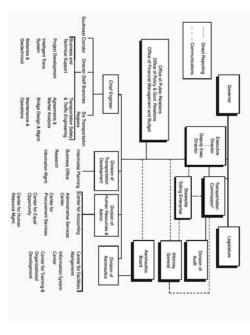
Bob Anderson Western Slope Governments

Aeronautics Division (303) 261-4418

Colorado Aeronautical Board

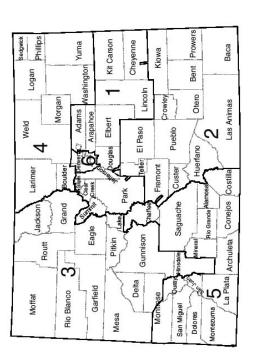


## Department Organization



\*Pursuant to C.R.S 43-4-803 (1), the 11-member Transportation Commission also serves as the Statewide Tolling Enterprise Board

# Transportation Management Regions



Contact information: See page 10, Regional Transportation Directors

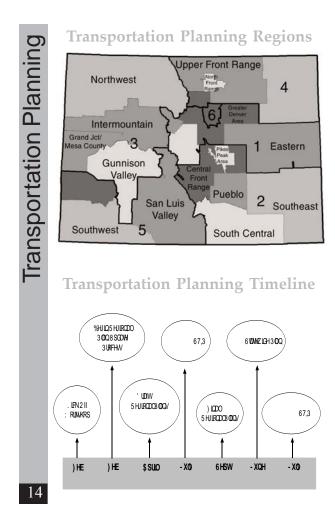
Each CDOT construction project is selected from the Statewide Transportation Plan based on its ability to solve or improve a particular problem in the transportation system such as congestion, safety or surface/bridge deterioration. Projects are selected and prioritized by local officials in coordination with CDOT through the Project Prioritization and Programming Process.

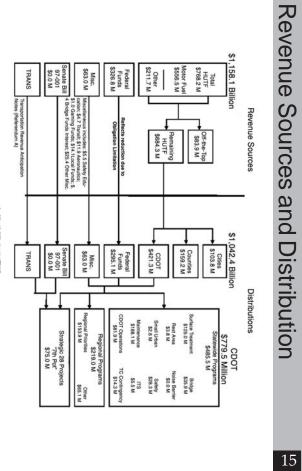
### **Project Planning and Building Steps**

- 1. Determine appropriate Transportation Planning Region (TPR) and Regional Planning Commission (RPC) representative (see page 14.)
- 2. Propose project to RPC representative.
- Participate in planning and programming activities held by RPC and CDOT.
- Through planning meetings, regional values, vision, goals, and strategies are determined; inventory of existing transportation system is conducted, establishing regional needs.
- Research is conducted on socioeconomic and environmental factors to maintain the quality of the environment and find good land use. An analysis of the current and future travel demands is conducted.
- 6. The RPC representative takes projects to the TPR where alternatives are introduced and analyzed. A preferred plan is chosen and projects are selected and prioritized for the regional plan and inclusion in the statewide plan.
- CDOT and all TPRs meet to prioritize plans to fall within CDOT regional budgets and into the Statewide Transportation Improvement Program or STIP (a fiscally-constrained, six-year plan.)
- 8. The final plan is reviewed to ensure state and federal regulations are being met; federal environmental clearance required.
- 9. Project is designed.
- Project advertised for contractors, contractor selected, and project begins construction.

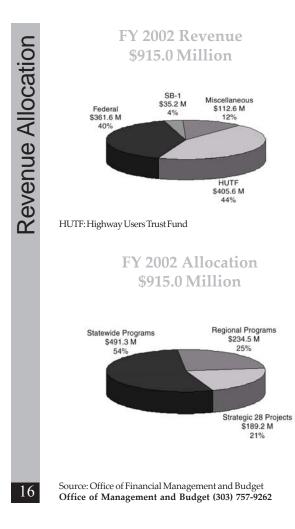
Division of Transportation Development: (303) 757-9525

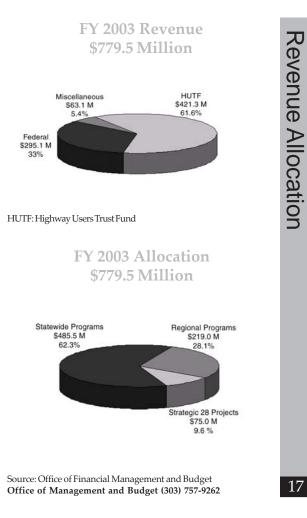
Transportation Planning











Fuel Tax

### **Colorado's Fuel Tax History**

	Fuel Tax	<b>Diesel Tax</b>
1969	.07	.07
1981	.09	.09
1983	.12	.13
1986	.18	.205
1989	.20	.18
1991	.22	.18
1992	.22	.205

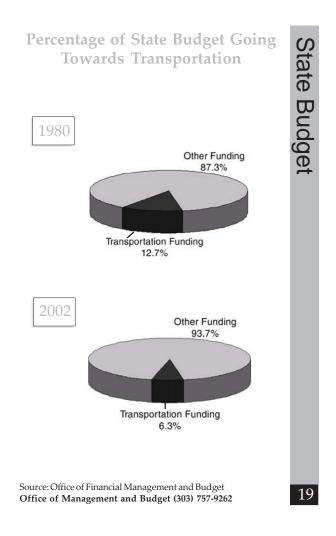
### **State Motor Fuel Tax Rates for**

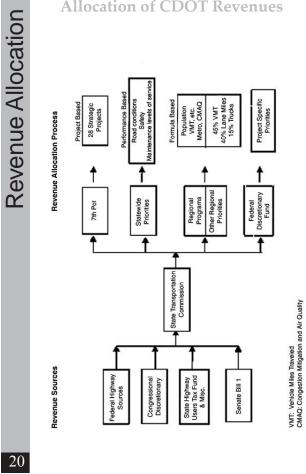
Colorado and Surrounding States\*

	Fuel Tax	<b>Diesel Tax</b>
Colorado	.22	.205
Kansas	.21	.23
Nebraska	.245	.245
New Mexico	.185	.195
Utah	.245	.245
Wyoming	.14	.14
National Average (Weighted)	.1908	.1987
(vveignieu)		

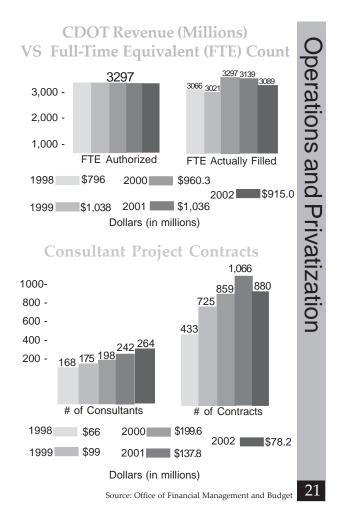
\* Coloradoís transportation system is funded primarily by fuel tax. Some states also receive sales and serverance tax revenue for transportation.

Source: FHWA, Highway Statistics, 2001





### **Allocation of CDOT Revenues**



Strategic Transportation Projects

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In 1996, the Transportation Commission adopted this program identifying 28 high-priority projects for accelerated construction, establishing a minimum annual level of funding. In 1999, Colorado voters passed Referendum A, allowing CDOT to issue Transportation Revenue Anticipation Notes (TRANs bonds) to speed up completion of the Strategic Transportation Projects. This program is funded by several sources of revenue in addition to bonding.

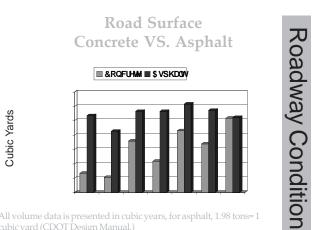
### Already/Nearly Completed or Fully

### Funded

I-25/US 50/SH 47 Interchange I-25, Owl Canyon Road to Wyoming C-470 Extension US 34, I-25 to US 85 Santa Fe Corridor I-76/120th Avenue I-70/I-25 Mousetrap US 285- Goddard Ranch Court to Foxton Road SH 82- Basalt to Aspen I-225 and Parker Road (State Highway 83) I-70 East-Tower Road to Kansas I-25, SH 7 to SH 66 US 287-Broomfield to Loveland T-REX- Transportation Expansion Project I-25/I-225

### Projects with Remaining Work

I-25- Through Colorado Springs US 287- Campo to Hugo I-25/US 36/I-270 US 160- Wolf Creek Pass US 160- SH 3 to the Florida River US 550- New Mexico State Line to Durango US 40- Berthoud Pass and in Winter Park US 50- Grand Junction to Delta Powers Boulevard-Colorado Springs I-70 West, Denver to Eagle County I-25 North, Denver to Fort Collins I-25, Denver to Colorado Springs East and West Corridors undergoing necessary environmental clearance to identify future projects.



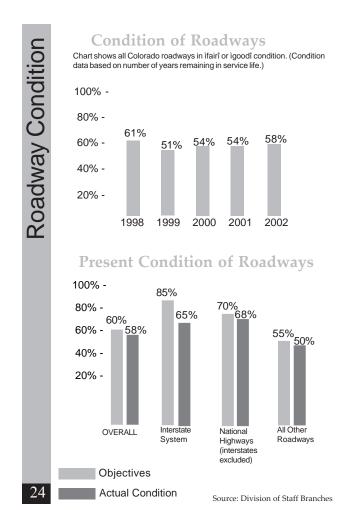
All volume data is presented in cubic years, for asphalt, 1.98 tons= 1 cubic yard (CDOT Design Manual.)

Source: Division of Staff Branches

### Bridge Conditions (State-Owned Bridges Only)

Functional Classification	Total Bridges	Rehabilitation Needed	Replacement Needed
Principal Arterial (Interstate,	1,945	251	44
Expressways, & Freeways)			
Other Principal Arterial	322	56	17
Minor Arterial	817	68	40
Collector	405	53	12
Local	209	24	5
Total	3,698	452	118

Source: Division of Staff Branches 23



### Colorado's Interstate System

Coloradoís interstate system has 953 designated miles.

• Nearly 50% of the current interstate system was built before 1965.

• Nearly 75% of the current interstate system was built before 1970. With a 20-year design life, much of it now requires extensive repairs.

Source: Division of Transportation Development

### Typical Costs to Build/ Maintain Highways (Per Mile)

New 4-Lane Interstate (including interchanges) Rural/Light Urban \$8,000,000 to \$12,000,000 Reconstruct 4-Lane Interstate (based on center lane miles) Moderate Urban (widen) \$9,000,000 to \$15,000,000\* Per Interchange \$10,000,000 to \$30,000,000\* Rural (non widening) \$6,000,000 to \$10,000,000\* Resurface 4-Lane Interstate (based on lane miles) Rural \$250,000 to \$350,000\* Urban \$500,000 to \$700,000\* Resurface 2-Lane State Highway (based on lane miles) Rural \$120,000 to \$180,000\*

Costs include engineering, bridge, roadway, auxiliary lane, interchange, and indirect costs. The costs do not include preliminary engineering or right-of-way, which can vary significantly depending on location and guardrail and bridge variables.

\* Primary variables are soil conditions and terrain

Source: Division of Staff Branches

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**Roadway Statistics** 

Colorado	's Public R	loads	2002)
	adway Center Line Miles	Numbe Bridg	
State County City Other*	9,135 54,833 13,492 8,392	3,70 3,25 1,37 204	0
Total	85,852	8,52	7
High	way Miles	and	n Development
High	way Miles e Miles of stem 9,1:	and Travel	Change* 09%
High Vehicle State Highway Sys Center-line miles	way Miles e Miles of stem 9,1 22,	and Travel	Change*
High Vehicle State Highway Sys Center-line miles Lane-miles	way Miles e Miles of stem 9,1 22, led 25.8 asure roadway mile easure the total dis dicator of CDOTis miles traveled on state highways ac e interstate system mileage, yet 40% em.	<b>35</b> <b>814</b> <b>35</b> <b>814</b> <b>3 billion</b> es without a stance of al actual main all Colorad ecounts for a accounts 6 of all VM	Change* 09% 02% 3.93% accounting for I roadway ntenance o roads were more than for 10% of I takes place

### Colorado Population

Colorado Total Population= 4,301,261 Growth Rate = 30.6% over last 10 years; ranked third behind Nevada and Arizona

Source: FHWA, Highway Statistics, 2001

Registered Vehicles in Colorado 2001		
Automobiles Buses Trucks Motorcycles	2,367,565 5,875 2,275,380 194,856	
Total	4,843,676	

Number	Number of Licensed Drivers in Colorado 2001		
Male Female <b>Total</b>	1,706,950 1,580,972 <b>3,287,922</b>	51.92% 48.08%	

Source: FHWA, Highway Statistics, 2001 27

**Other Statistics** 

The maintenance program is split into two major categories. Regular maintenance covers items such as blading, revegetation, rockfall mitigation and much more. Snow and ice control involves plowing, sanding, and avalanche control. During the 2002 fiscal year, members of the Maintenance Program staff tended more than 26,000 lane miles by:

• Repairing and maintaining more than 9.1 million square yards of roadway surface

• Utilizing 364,600 tons of asphalt and 3.2 million gallons of liquid asphalt in asphalt preservation activities

Striping more than 37,000 miles of roadway and creating 993,000 square feet of pavement markings using 1.95 million pounds of glass beads, 293,000 gallons of paint and 182,000 pounds of thermoplastics

 Snowplowing, sanding, and/or deicing 4.55 million miles of highway

• Applying 296,400 tons of salt/sand and 9.5 million gallons of liquid deicer to the highways

Repairing and installing 375,000 feet of snow fence

• Disposing of 140,000 cubic yards of trash off the rightof-way with help of 20,000 Adopt-A-Highway volunteers

• Replacing and repairing 99,466 signs and sign posts

• Replacing, installing, and repairing over 16.5 million linear feet of fencing along CDOT right-of-way

• Providing more than 45,000 hours of traffic surveillance along the I-70 corridor, which provided quick response to the 467 emergencies that occurred



### Alcohol/Seat Belts/Young Drivers

CDOT administers the state's federally-funded traffic safety program. The goal of the program is to reduce traffic deaths on Colorado highways by addressing impaired driving, lack of seat belt and child car seat use and improving safety among young drivers, ages 16 to 20.

• In 2001, 741 people died on Colorado highways. Alcohol was involved in 267 (36%) of the deaths.

• Drivers and passengers accounted for 565 deaths and 354 of the victims were not buckled up. If everyone had buckled up, at least half of the victims should have lived. The 565 deaths include 38 child passengers from birth through age 15. Of the children who died, 26 (68%) were riding unrestrained. In 2002, the adult seat belt use rate in Colorado was 73.2%. For children under age four, car seat use was 79.6% and seat belt use for children ages four through 15 was 59.7%.

• Younger, less experienced drivers are more likely to be involved in a traffic crash than older drivers. Colorado's Graduated Driver Licensing Law (GDL) took effect in 1999 and requires young drivers to gain more experience behind the wheel before they are licensed. Preliminary data demonstrate the early results of the law's impact. In 1998, 33 people died in crashes involving 16-year-old drivers, compared to 18 such deaths in 2000. The rate of fatal crash involvement per 100,000 16-year-olds dropped from 46 in 1998 to 28 in 2000.

Source: Safety and Traffic Engineering Branch

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Transportation Safe

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## Transportation Safety

### **Economic Impacts**

Traffic safety is a top priority for CDOT and its many partners in law enforcement, health care and community organizations across Colorado. Traffic deaths and injuries cost our nation and state in huge economic losses as well as in the pain and suffering of victims. According to the latest study of the economic impact of traffic crashes, Americans pay \$230.6 billion each year, or \$820 per person, to cover the cost of injuries and deaths on our highways. Based on statistics in 2000, the report puts the cost of a traffic fatality at \$977,000 and the costs for a critically injured crash survivor at \$1.1 million.

Who pays the bills for traffic crashes? Crash victims pay for about 26 percent of the cost. Through insurance premiums, taxes and travel delays, the public pays for nearly 75 percent of the cost. In 2000, that amounted to \$170 billion. Traffic crash costs include lost workplace and household productivity, property damage, medical care and travel delays.

By continuing to increase seat belt use and reduce impaired driving on our highways, Colorado can save lives, prevent the pain and suffering of victims and protect critical financial resources.

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Source: The Economic Impact of Motor Vehicle Crashes, U.S. Department of Transportation's National Highway Traffic Safety Administration

### **Traffic Fatalities**

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## State Highway Fatalities

Fatalities per 100 million VMT*	Occupant Fatalities (both drivers and passengers)	Percentage of Alcohol-Related Fatalities	Alcohol-Related Fatalities	TOTAL TRAFFIC FATALITIES	
1.62	499	30.6	186	612	1997
1.63	497	32.3	203	628	1998
1.54	491	30.8	193	626	1999
1.63	513	30.7	209	681	2000
1.71	574	36.3	267	741	2001

Source: Fatality Analysis Reporting System and Safety and Traffic Engineering Branch

\*Vehicle miles traveled

### Scenic and Historic Byways

Scenic and Historic Byways are nominated by local partnership groups designated by the Colorado Scenic and Historic Byways Commission for their exceptional scenic, historic, cultural, recreational, and natural features. Currently, Colorado has 24 Scenic and Historic Byways, with the most recent one designated in August 2002. The new byway follows a loop from Golden, then to Evergreen and Morrison, back to Golden. For more information on this program call **303-757-9786** for a brochure or visit http://www.coloradobyways.org/Main.cfm.

### Adopt-A-Highway

Other CDOT

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This program brings together individuals, families, and groups such as service clubs, churches, scout groups, and employee associations, in order to clean up litter along our highways. To support the program, CDOT provides litter bags, safety vests, and an informational video, and will haul the litter bags away. To get involved, contact your area coordinator: Alamosa- (719) 589-3616 Aurora- (303) 365-7086 Craig- (970) 824-5104 Denver- (303) 757-9514 Durango- (970) 385-8360 Eagle- (970) 328-6385 Glenwood Springs- (970) 947-9361 Grand Junction-(970) 248-7361 Greeley- (970) 353-1232 Montrose- (970) 249-5285 Pueblo- (719) 546-5426

CDOT provides 24-hour "real-time" traveler information including road and weather conditions, chain laws, highway closures, and construction/maintenance schedules and accident detours.

### **CDOT Road Condition Numbers**

**In Denver Metro or Outside Colorado** (303) 639-1111

**Outside Denver but within Colorado** (877) 315-7623 (toll-free)

### **Internet Road Condition Report**

www.cotrip.org or www.dot.state.co.us

**Other DOT Road Condition Numbers** 

Kansas Nebraska New Mexico Utah Wyoming (800) 585-7623 (402) 471-4533 (800) 432-4269 (800) 492-2400 or (801) 964-6000 (307) 772-0824

## Traveler Information

### **Chain Regulations**

Chain Laws

Colorado chain laws apply to every state highway, federal highway and interstate throughout the state.

A vehicle is considered commercial if it is used in commerce to transport passengers or property if the motor vehicle:

• Has a gross combination weight rating of 26,001 lbs. or more, inclusive of a towed unit with a gross vehicle rating of more than 10,000 lbs.; or

• Has a gross vehicle weight rating of 26,001 or more pounds; or

• Is designed to transport 16 or more passengers, including the driver.

### Levels of Chain Law:

**Level 1** All single-axle combination commercial vehicles must chain-up

Level 2 All commercial vehicles are required to chain-up

I-70 Chain-up Stations (MM=mile marker)

Eastbound I-70: MM 180 (East Vail) MM 182.6 (East Vail) MM 183.8 (shoulder only, East Vail) MM 186.2 (East Vail) MM 203 (Frisco scenic overlook) MM 210.8 (three miles below Eisenhower Tunnel) Westbound I-70:

MM 228 (Georgetown) MM 221 (Bakerville) MM 218.5 (Herman Gulch interchange) MM 195 (Copper Mountain Overlook)



### **General Permit Information**

**Based on State Statute** 

### Legal Width: 8' 6"

Legal Height: 13'; vehicles with a height of 14' 6" shall be operated only on highways designated by CDOT

### Legal Length:

■ 45′ maximum – single unit – measured from extreme front bumper to extreme rear bumper

70' maximum – tractor/trailer(s) combination,

not to exceed four total units

Truck Size and Weight Limits No overall length limit for a tractor/trailer combination with a single trailer length of 57' 4" or less • No overall length limit for a combination of units with trailers 28' 6" or less in length ("Western Doubles") • 75' maximum (Saddlemounts) not exceed four total

units

• 75' maximum Specialized equipment used in combination for transporting automobiles or boats

### Legal Axle Weights:

- Single axle 20,000 lbs.
- Tandem axles 36,000 lbs.; 40,000 lbs. non-interstate

Tridem axles - 54,000 lbs.

Legal Weight Limits (Total weight must be distributed so that no axle grouping exceeds the maximum gross weight per legal axle weight limits):

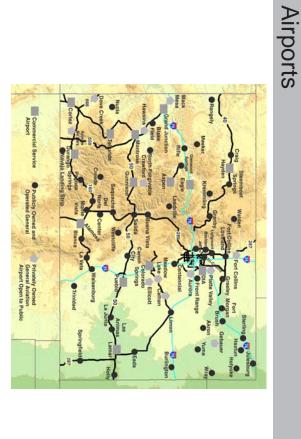
Two axle/Single unit – 36,000 lbs.

Three or more axles/Single unit - 54,000 lbs.

Three or more axles/Combination units – 80,000 lbs. Interstate highways; 85,000 lbs. Colorado non-interstate highways

Oversize/Overweight Permit Office (303) 757-9539

Colorado Rest Areas	Route SH 13 US 34 US 34 US 40 US 50 US 50 SH 139 US 160 US 160 US 287 US 287 I-25 I-25 I-25 I-25 I-25 I-25 I-25 I-25	Location Rifle* Junction 144 & US 34 Yuma East Hayden Hadley (E. of La Junta) Holly Rangely Cortez (6 mi East) Shaw Creek Virginia Dale Hugo El Moro Cuerno Verde- Colorado City* Pueblo (Southbound) Pueblo (Northbound) Larkspur (Northbound)
	I-25 I-70	Poudre Rest Area (Northbound) Fruita Welcome Center*
	I-70	West Glenwood Springs
	I-70	No Name, Glenwood Canyon
	I-70	Grizzly Creek, Glenwood Canyon
	I-70	Hanging Lake, Glenwood Canyon
	I-70	Bair Ranch, Glenwood Canyon
	I-70	Edwards
	I-70	Vail Pass Rest Area
	I-70	Georgetown Overlook Pull-Out
	I-70	Genessee Buffalo Herd Pull-Out
	I-70	Bennett
	I-70	Deer Trail
	I-70	Arriba
	I-70 I-76	Burlington*
	I-76 I-76	Julesburg* Sterling*
	I-76	Wiggins
36		mation available





S	Road Conditions	(303) 639-1111
	In-State Toll Free	(877) 315-7623
<b>W</b>	Websites	www.cotrip.org
Ę		www.dot.state.co.us
	CDOT Public Relations Office	(303) 757-9228
	Traffic Operations Center	(303) 512-5826
2	(24-hours/day)	
σ	RTD Schedules/Routes	(303) 299-6000
Ũ	Colorado State Patrol	(303) 239-4500
	Motor Carrier Enforcement	(000) 210 1010
	Hazard Material Routes	(303) 239-4546
Frequently Called Numbers	Colorado Motor Vehicle Divis	
	Driver Licenses	(303) 205-5613
Ħ	Vehicle Registration	(303) 205-5607
	Vehicle Titles	(303) 205-5608
μ	Ports of Entry	(303) 205-5691
ц Ц	Emissions Program	(303) 205-5603
ω ω	E-470 Highway Authority	(303) 537-3470
<u>۳</u>	Northwest Parkway	(303) 466-0567
ш	Public Utilities Commission	(303) 894-2000
	US DOT/FHWA	(303) 969-6730
	Motor Carriers Association	(303) 433-3375
	Permits (Oversize/Overweigh	,
	Local	(303) 757-9539
	Statewide Toll-Free	(800) 350-3765
	Risk Management	(303) 866-3848
	State Map Requests	(303) 757-9207
	Bicycle Information	(303) 757-9982
	Colorado Tourism Board T-REX Information	(800) 265-6723
	Website	(303) 786-8739
20	Website	www.trexproject.com
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Inquiries about this fact book may be directed to the Public Relations Office Colorado Department of Transportation 4201 E. Arkansas Ave., Rm 277 Denver, CO 80222 www.dot.state.co.us 303-757-9228

