

COLORADO

BICYCLING MANUAL

A GUIDE FOR USING ROADS AND TRAILS



Colorado Department of Transportation
Bicycle / Pedestrian Program



*This edition of the
Colorado
Bicycling Manual
is dedicated
to
Jerry Nagel
in appreciation
of his many years
of service and
commitment
to the bicycling
community
in Colorado.*

Thank You Jerry!



TABLE OF CONTENTS

INTRODUCTION	1
RULES OF THE ROAD	2
Summary of Colorado Bicycle Law	2
Road Hazards	11
Roundabouts	13
Riding on Sidewalks and in Crosswalks	13
Right-of-Way	14
Activating Traffic Signals	14
Bicycles and Traffic Violations	15
Tips for Motor Vehicle Drivers	15
Tips for Bicycling and Walking Near Large Trucks and Buses	17
RULES FOR SHARED-USE PATHS	19
RIDING FOR DIFFERENT REASONS	22
Bicycle Commuting	22
Effective Bicycling Skills	27
Route Selection	31
The Employer Guide to an Employee Commuting Program	33
Bicycle Touring	38
Bicycle Racing	39
Mountain Biking	40
EQUIPMENT AND ACCESSORIES	41
Identification and Medical Information	41
Helmet	41
Bicycle	43
How Safe is Your Bicycle?	43
Flat Prevention	44
Does Your Bicycle Fit You?	45
Optional Accessories	46
Climate and Clothing	48
A GUIDE TO BICYCLE PARKING	54
THEFT PREVENTION	59
CRASH INFORMATION	60
CHILDREN	64
What Parents Should Know	64
When Should a Child Start Riding a Bicycle?	65
When Should a Child Begin to Ride in the Street?	66
Transporting Children	67
EVERYONE IS A PEDESTRIAN	68
Crossing Advice for Pedestrians	68
The Signs of Safety are Everywhere!	69
Select a Safe Path Through Work Zones	71
GLOSSARY OF TERMS	73
COLORADO STATUTES REFERENCING BICYCLING	74
RESOURCE DIRECTORY	77






INTRODUCTION

This compendium of bicycling information has been prepared by the Colorado Department of Transportation (CDOT) Bicycle/Pedestrian Program. It is designed to encourage the use of bicycles for transportation by providing information about bicycling in Colorado to make it an easy, safe, and satisfying experience. All levels of government in Colorado are participating in engineering, enforcement, education, and encouragement efforts to make bicycling a practical transportation choice, and the Colorado Department of Transportation continues to encourage the development of facilities and programs to accommodate safe and efficient travel options.






Bicycling is a very energy efficient form of transportation and includes many benefits such as improved health, less stress, and reductions in air pollution, traffic congestion, and energy consumption. In addition, bicycles are affordable and inexpensive to maintain, and driving a bicycle is a lot more fun than sitting in traffic on a congested roadway.

The State of Colorado recognizes the benefits of using bicycles as an alternative form of transportation and highly recommends their use for commuting, errands, and recreation. Many trips normally taken by car can be pleasantly and efficiently done by bicycle. Bicycle transportation is particularly efficient for short trips of ten miles or less and can be combined with other alternative modes for longer trips.

Using a bicycle for one ten-mile trip results in the following savings:

-  .5 gallons of gasoline
-  \$.75 saved on gasoline costing \$1.50 per gallon
-  .328 pounds of carbon monoxide are not produced
-  .044 pounds of nitrous oxides are not produced
-  .039 pounds of hydrocarbons are not produced

While these numbers may seem small when broken down into one ten-mile trip, they are significant when viewed statewide. For instance, Colorado's population is approximately four million, and if one quarter of our population (one million people) replaced just one ten-mile motor vehicle trip per year with one bicycle trip, it would result in the following savings:

-  500,000 gallons of gasoline
-  \$750,000 would be saved on gasoline costing \$1.50 per gallon
-  328,000 pounds of carbon monoxide would not be produced
-  43,000 pounds of nitrous oxides would not be produced
-  39,000 pounds of hydrocarbons would not be produced

NOTE: The calculations above are based on the following figures from the Colorado Department of Health:

- An average commuting vehicle gets 20 miles per gallon of gasoline
- An average commuting vehicle carbon monoxide emission rate is 14.9 grams per mile
- An average commuting vehicle nitrous oxide emission rate is 1.98 grams per mile
- An average commuting vehicle hydrocarbon emission rate is 1.79 grams per mile

Every person's transportation choice counts! We all need to be conscious of and courteous to other individuals when sharing our roadways. Remember, streets and trails are for everyone and sharing is more than good manners!