

SILVERTON BICYCLE MASTER PLAN



SILVERTON Bicycle Master Plan

ADMINISTRATIVE ADVISORY COMMITTEE

Members:

Gretchen Hardie
Laura Wanker
Otto Heider
Leigh Springer
Ted Conrad
Rich Barstad
Geoffrey James

Chairman Citizen-At-Large
Citizen-At-Large
Citizen-At-Large
Planning Commission
Former City Council
Director of Public Works, Silverton
FALCON Architecture & Planning

AUGUST 1993

prepared by
FALCON Architecture & Planning
2540 NINETEENTH S.E., BUILDING #7, SALEM, OR 97302-1501
TELEPHONE: (503) 362-9424

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I. INTRODUCTION

A. PURPOSE

The Silverton Bicycle Master Plan is designed to be an easily referenced document used to address the specific needs of bicyclists, to promote bicycling in the Silverton area, and to outline the tasks and responsibilities of involved agencies.

The Transportation Goal of the City of Silverton Comprehensive Plan is as follows:
Provide and encourage a safe, convenient, aesthetic and economical transportation system.

This Goal is identical to that contained in the Oregon Statewide Planning Goals 1990.

B. ORGANIZATION

This plan is organized into six sections, plus appendixes that provide additional reference material. The document provides sufficient detail for all responsible parties to carry out their tasks.

Sections I and II contain introductory and background material about bicycling and its role in Silverton. Section III states the Plan's goals and objectives. The remaining sections describe the program to accomplish the objectives, with Section IV on overall implementation. A glossary of relevant terms and acronyms is contained in Appendix A. The remaining appendixes are referenced in the text as needed.

C. REFERENCED DOCUMENTS

1. City of Silverton Comprehensive Plan, Silverton, Oregon.
2. Marion County, Comprehensive Plan; Marion County, Oregon.
3. City of Silverton 3 Year Strategic Plan, January, 1992
4. City of Silverton Community Survey, 1991
5. Vision 2000 Infrastructure Committee Report, 1992
6. Guide for Development of New Bicycle Facilities; American Association of State Highway and Transportation Officials, Washington, D.C.; 1981.
7. Guidelines for Administration of Bicycle Racing on Oregon Roads; Bikeway Program Office, Roadway Section, Highway Division, Oregon Department of Transportation; Salem, Oregon; August 1990.
8. Manual on Uniform Traffic Control Devices Standards; Federal Highway Administration, Washington, D.C.
9. Oregon Motor Vehicles Code.
10. Oregon Revised Statute 366.514, "Oregon Bicycle Bill."
11. State of Oregon Bicycle Master Plan; Bikeway Program Office, Roadway Section, Highway Division, Oregon Department of Transportation; Salem, Oregon; May 1988.

II BACKGROUND

A. BICYCLING AS TRANSPORTATION

Since the Comprehensive Plan was adopted, the City of Silverton has undergone growth that is placing an increased load upon its mostly automobile-dominated transportation system. As have many cities, Silverton is turning to the bicycle as a well-proven and cost-effective alternative form of transportation.

The bicycle's simple technology offers much to a growing population faced with evermore expensive energy needs. To many residents it provides economical and fast transportation for short-range trips as exist in the Silverton urban area. To the community its value is multiplied manyfold by its clean, low-impact nature. Quiet, small, non-polluting, and gentle to roadways, the bicycle moves people efficiently with minimum insult to our resources and senses. Well-designed bikeways, both on and off-road, that link residential, school, shopping and business areas can contribute significantly to the community's livability and vitality.

Utilitarian cyclists, with limited time and a specific destination in mind, generally want the shortest and most direct route to their destination. Efficient ways typically traverse high-traffic zones. Children going to school, adults commuting to work, and people running short errands are examples of popular utilitarian cycling trips. Convenient secure parking is highly desirable for the utilitarian cyclist.

B. BICYCLING AS RECREATION

Bicycling is a popular activity with both City residents and tourists, young and old. Its growing popularity is in large part due to an increasing public enthusiasm for clean, healthy family activities and for athletic fitness. On most weekends, roads have a moderate stream of cyclists. On any day, especially during the spring and summer racing season, athletes are out on long and fast-paced training rides. The needs of recreational cyclists can be quite different from the utilitarian cyclists. Often, the recreational cyclist prefers a looping route with a scenic or recreational destination and light traffic.

Current cycling activities in Silverton:

Silver City Cyclists bike club:

- Twice weekly evening rides from approximately April through October
- Extended weekend rides from approximately April through October
- Family rides twice a month through October

Silverton School District:

- Bike Rodeo at Eugene Field School in May
- Bike Rodeo at Robert Frost Elementary in May
- Summer Fun bike ride for grades 4 - 8 in July
- Possible bicycle interest group at Mark Twain School in 4th. quarter

Other:

- USCF Silver Falls Classic Road Race, last week in June
- USCF Silverton Criterium last week in June
- Silverton Citizen's Criterium last week in June
- Pioneer Century event comes through town on the first Saturday in June

C. SILVERTON

LOCATION

Silverton, a city of 6,050 residents, is located about 42 miles south of Portland and 15 miles north-east of Salem, Oregon's Capital. Silverton is the gateway to Silver Falls State Park, the largest State Park in Oregon, located 14 miles south-east of Silverton on Highway 214. The park offers ten waterfalls, miles of hiking, biking, and horse trails as well as picnicking and camping facilities.

AGRICULTURE & INDUSTRY

Agriculture around Silverton is primarily grass seed production and Christmas tree farming. The valley floor area around Silverton produces numerous agricultural products such as truck crops, fruits, nuts, grass seed and small grains.

Cooley's Gardens, located just two miles west on Highway 213, is the largest producer of Bearded Iris in the world. Cooley's has been growing iris since 1928.

Silverton's largest manufacturing employers are Redman Homes (manufactured homes) and Blazer Industries (pre-fab structures).

HISTORY OF SILVERTON

Like many of the towns of the Willamette Valley, the history of Silverton is a story interspersed with tales of wagon trains, Indian battles, hardships with weather and fire, and failed and successful businesses. But threading throughout the pioneer story is a common theme of a hearty and enterprising people seeking to carve out of new territory a new and better life. The most important trait the City of Silverton inherits from its founding fathers is the pursuit of a quality of life for the people of Silverton.

Before the white explorers first traversed the Silverton area in 1812, Silverton was the sole domain of the Santiam Indians. The Santiams were primarily a hunting and gathering people, living in pit houses during the winter, "out-of-doors" during the summer, and trading and living peacefully with other Indian nations, including the Molallas and Klamaths. From 1812 to the 1830's, the only white persons in the area were those on fur trapping expeditions.

As the United States expanded westward, more and more settlers pushed toward the lush Willamette Valley. In the Spring of 1843, those who were to be Silverton's first white settlers, left Independence, Missouri in a wagon train bound for Oregon City. Soon such pioneers as Daniel Waldo (Waldo Hills), the Howells (Howell Prairie), and others were settling in the area, cultivating the land, planting wheat, fruit trees, and various other crops. Agriculture soon came to dominate the local economy.

The California Gold Rush of 1849 proved to be a gold mine for the agriculturally dominated economy of the Silverton area, as local farmers found a rich market for their products in the California gold fields.

Milford was the earliest center of population and industry in the area, and in 1854, apparently dissatisfied with its location, the townspeople moved the town 2 miles downstream, renaming it Silverton. The primary industries were farming, a flour mill, and various retail firms. In 1865 a post office was established; and also that year, the "Silverton Fire", the largest known in Oregon history, burned about one million acres in the hills beyond the town. The town grew very slowly, and was not officially incorporated until 1891.

In the 1880's, a railroad in the Willamette Valley, running through Silverton, was built. The railroad spurred the local lumber industry by providing an efficient way to get the logs out to the rapidly growing West. This quickly transformed Silverton from a small town to a city of several thousand people. A flour mill and several lumber mills operated in the area, with the latter cutting the forests around Silverton to obtain their logs. By 1923, Silverton was the largest lumber producing city in the Willamette Valley.

The boom period was soon to end as the depression hit, driving the flour mill out of business; and the lumber companies eventually had to close because of a lack of logs. During the 1940's Silverton's population declined, and many of the locals wondered about its future. However, the town survived, the hills were reforested, agriculture and small retail operations once again became dominant in the economy, and the enterprising people of Silverton settled into the good life that a scenic and friendly small city offers.

III GOALS AND OBJECTIVES

The goals and objectives of the Silverton Master Bicycle Plan are:

GOAL: Provide and maintain a safe, convenient and pleasing city-wide bicycle system that is integrated with other transportation systems.

- Objective 1:** Develop a bicycle facility plan that meets the needs of bicyclists in all city areas and within the urban growth boundary.
- Objective 2:** Balance the plan with a variety of facilities to meet the needs of different bicyclists.
- Objective 3:** Provide bicycle access connecting with County and State bikeways.
- Objective 4:** Develop a routing system and including a map for the public, that describes the opportunities for bicycling in Silverton.
- Objective 5:** Provide uniform bicycle route signs, markings and design standards that meet state and national standards.
- Objective 6:** Establish priorities for facility construction and maintenance based on need and resource availability.
- Objective 7:** Continually seek opportunities to further extend the Bikeway System through abandoned rights-of-way or through private developments.

GOAL: Encourage and support bicycle safety, education and enforcement programs.

- Objective 8:** Encourage and support education and safety programs for all ages to improve bicycle skills, encourage helmet safety, observance of traffic laws and overall safety.
- Objective 9:** Analyze and monitor bicycle accident data to identify safety problem areas. Safety programs shall be aimed at motorists & bicyclists.

GOAL: Develop a comprehensive system of through ways, bicycle parking, secondary connecting ways, and recreational ways.

- Objective 10:** Develop improved through bikeways as striped bike lanes that are components of the statewide bikeway system.
- Objective 11:** Develop bicycle parking facilities.
- Objective 12:** Develop a system of secondary connecting bikeways as shared roadway or shoulder bikeways.
- Objective 13:** Develop a system of recreational and mountain-bike ways connecting parks, and following Silver Creek and abandoned railroad rights-of-way, initially unpaved, and eventually paved bike paths.

IV MASTER PLAN

A. MASTER PLAN MAPS

The two Bicycle Master Plan Maps are on the two following pages.

- The first map is a fold-out which covers the entire Silverton area and shows the proposed Bikeway Routes by a coded dotted line type that indicates whether it is a Shoulder or a Bike Lane, a Shared Roadway type or a separate Bicycle Path.
- The second map is the INSET or enlarged map of just the downtown or central business district.

B. POLICIES

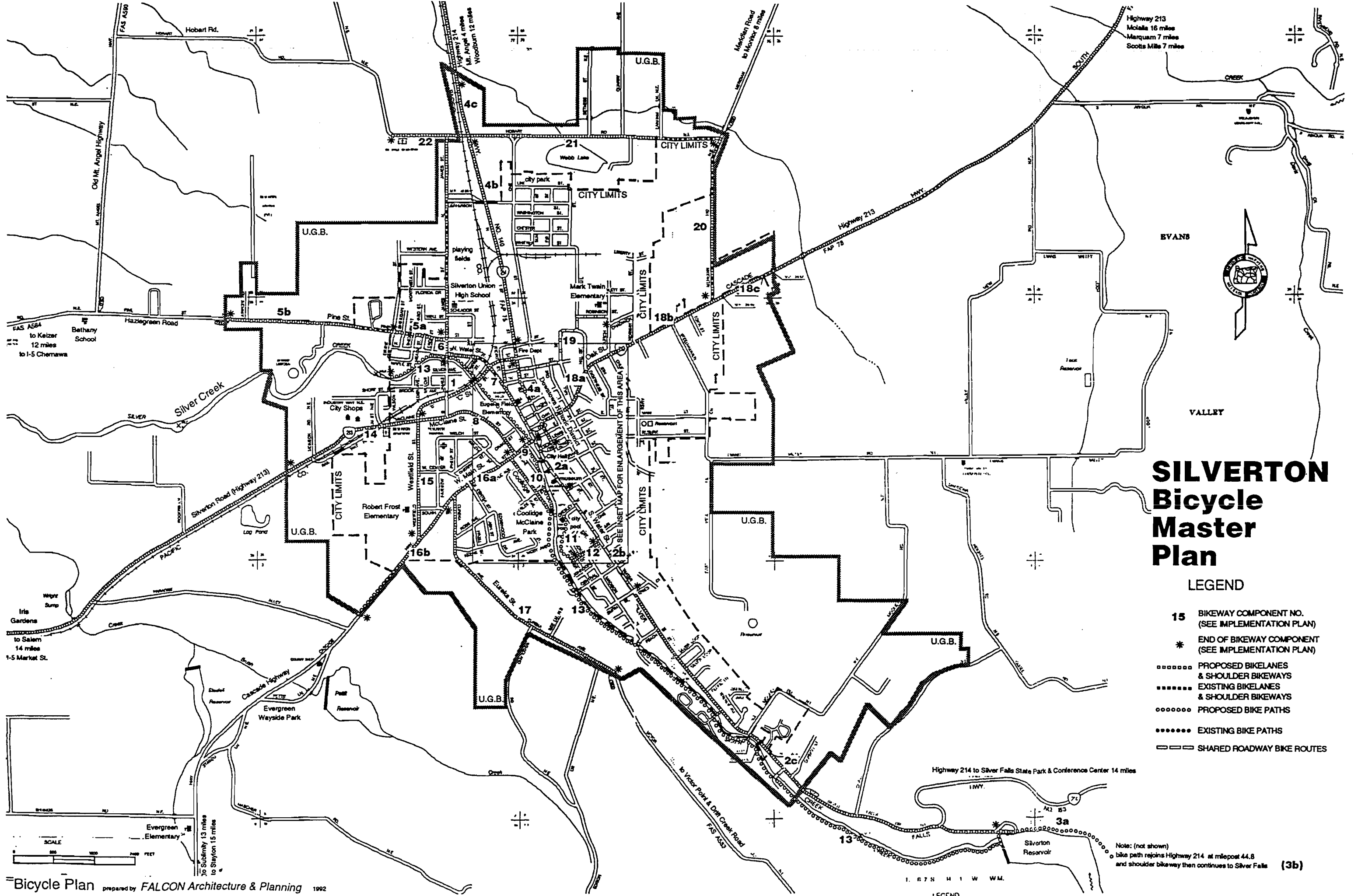
The following policies form the basis of the Master Plan:

- Bicycle facilities should satisfy the recreational and utilitarian needs of the citizens of Silverton.
- In designating specific bikeways, potential use, safety, and the cost of bikeway construction shall be primary considerations.
- Where conditions warrant, emphasis shall be placed on designation of on-road bikeways, due to safety reasons and the cost of construction and maintenance of separate bike paths.
- Every effort shall be made to secure resources for the adequate maintenance of existing bikeways and in order to keep pace with the development of new bikeways.

The emphasis of the Bicycle Master Plan is to develop an overall network of bikeways to connect urban areas, recreation areas, education centers, and retail and employment centers. The following subsections define the facility types, detail the bikeway system and its construction, and define proper parking facilities.

ORS 366.514: Use of Highway Fund for Bikeways

This legislation requires a city or county to expend reasonable amounts, of the funds they receive from the State Highway Fund, to provide footpaths and bicycle trails. Bikeways shall be provided whenever a road or street is constructed, reconstructed or relocated. These funds may also be used to maintain the bikeways along streets and in parks and recreational areas. The minimum amount expended on bikeways and pedestrian ways in each fiscal year shall never be less than 1% of the amount received from the highway fund. Alternatively a city or county may apply the funds to a reserve for up to 10 years for future bikeway projects. A copy of the legislation is included in Appendix D, pg. 43.



SILVERTON Bicycle Master Plan






LEGEND

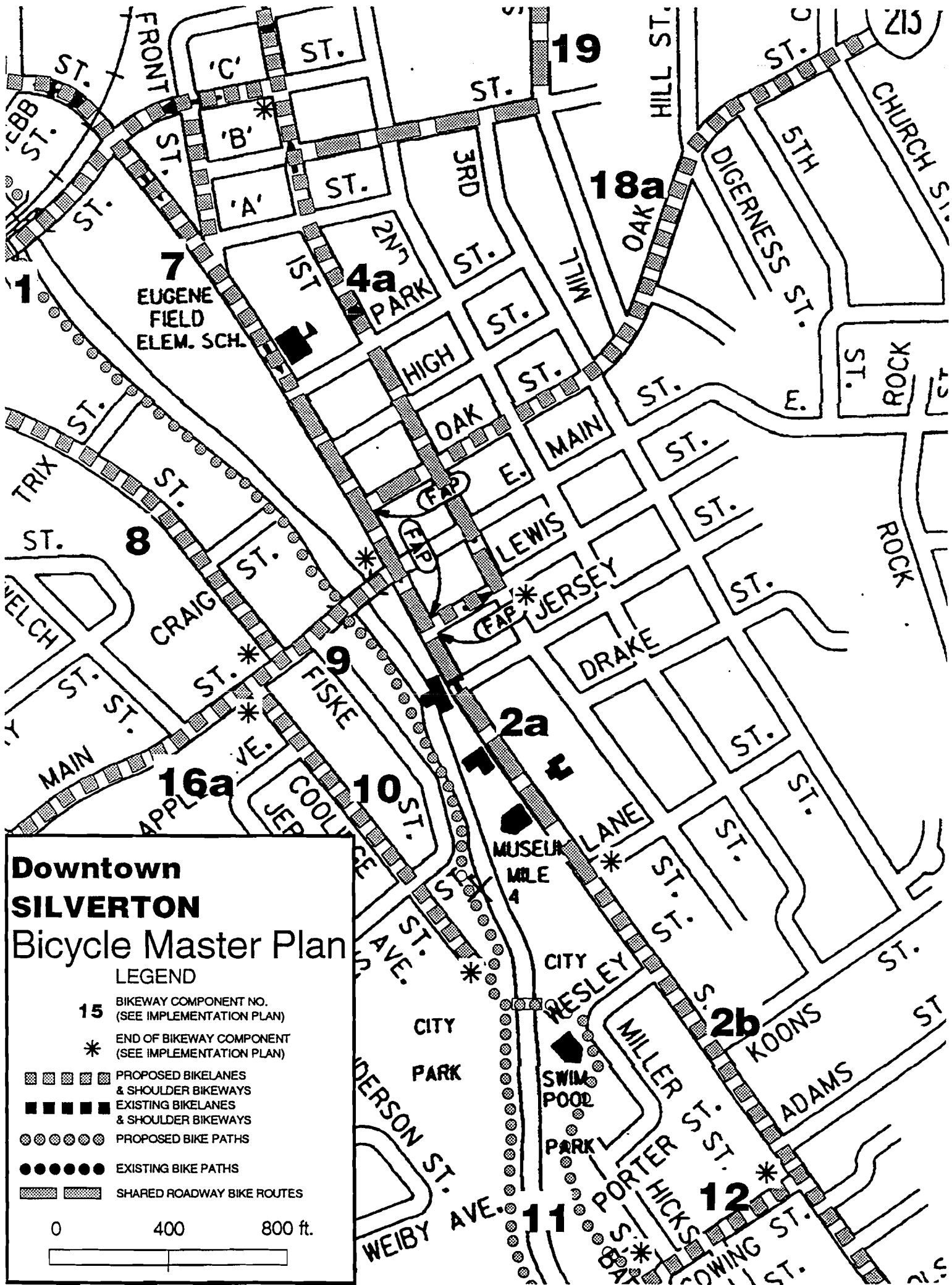
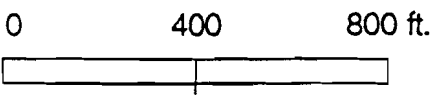
- 15** BIKEWAY COMPONENT NO.
(SEE IMPLEMENTATION PLAN)
- *** END OF BIKEWAY COMPONENT
(SEE IMPLEMENTATION PLAN)
- PROPOSED BIKELANES
& SHOULDER BIKEWAYS
- EXISTING BIKELANES
& SHOULDER BIKEWAYS
- PROPOSED BIKE PATHS
- EXISTING BIKE PATHS
- ==== SHARED ROADWAY BIKE ROUTES

Note: (not shown)
bike path rejoins Highway 214 at milepost 44.8
and shoulder bikeway then continues to Silver Falls **(3b)**

Downtown SILVERTON Bicycle Master Plan

LEGEND

- 15** BIKEWAY COMPONENT NO. (SEE IMPLEMENTATION PLAN)
- *** END OF BIKEWAY COMPONENT (SEE IMPLEMENTATION PLAN)
-  PROPOSED BIKELANES & SHOULDER BIKEWAYS
-  EXISTING BIKELANES & SHOULDER BIKEWAYS
-  PROPOSED BIKE PATHS
-  EXISTING BIKE PATHS
-  SHARED ROADWAY BIKE ROUTES



C. CLASSIFICATIONS

Bicycle facilities include bikeways, both paved and unpaved, and parking. The following subsections define the types of facilities and their place within the city's bicycle system.

1. PAVED BIKEWAYS

Bicycles are legally classified as vehicles which may be ridden on most public roadways in Oregon. Because of this, bikeways should be designed to allow bicyclists to emulate drivers. There are four basic types of paved bicycle facilities which accommodate bicycle travel in Silverton.

- **Shared Roadway** - On a shared roadway facility, bicyclists share the normal vehicle lanes with motorists. Shared roadway facilities are common on city residential street systems and on narrow rural roads.
- **Shoulder Bikeway** - Smooth, paved, rural roadway shoulders provide a good area where bicyclists can ride with few conflicts with faster moving motor vehicle traffic. The majority of bicycle travel on the state highway system is accommodated on shoulder bikeways.
- **Bike Lane** - Where bicycle travel is substantial and where adequate width is available, a portion of the roadway may be designated for use by bicyclists. Bike lanes are most common in urban areas. Bike lanes should always be well marked and signed to call attention to their use by bicyclists.
- **Bike Path** - A bike path is a bikeway that is physically separated from motorized traffic by an open space or barrier. Bike paths may be within the roadway right-of-way or within an independent right-of-way. Bike paths are normally two-way facilities. Bike paths should be used to serve corridors not served by other bikeways and where there are few crossing roadways.

2. UNPAVED BIKEWAYS

Unpaved roads and paths, which are relatively smooth and hardpacked, have often been used by cyclists where paved ways were not available. Where their incorporation into the bikeway system is appropriate, they may be classified as shared, unpaved roadways or unpaved bike paths. With the advent of mountain-bikes, even rough unpaved ways have become popular bikeways, creating a new classification. It is important to note, however, that the inclusion of these un-paved mountain bikeways must not supersede paved bikeways but rather supplement a paved bikeway system.

- **MOUNTAIN-BIKE ROUTES** - This bicycle facility category is designed to accommodate mountain-bike travel on unpaved roads and trails. Most often the only improvement needed to existing facilities is signing, although some trails may need improvements to the alignment and clearing before the route is safe for high-volume use.

3. PARKING

Parking facilities are critical to the successful use of bicycles. It is not enough to develop and maintain a bikeway system. People cannot be expected to use their bicycles for transportation without parking facilities.

D. PAVED BIKEWAYS

1. ON-ROAD ROUTE SELECTION

The most prominent element of each city's bicycle system is its paved, on-road bikeways. Emphasis has been placed on these ways by cities for several reasons:

- The existing system of city streets generally provides the most efficient and safest route for bicycle commuters traveling to and from home, work, school and shopping.
- A portion of the State gas tax revenues are available only for bicycle lanes or paths constructed within public road rights-of-way.
- Maintenance is easier for public agencies as part of their normal road maintenance.
- It takes more effort, time and money to obtain rights-of-way and to build separate bicycle paths outside public road rights-of-way.

Consequently, almost all ways are paved, on-road facilities.

The objective is to provide ways for both recreational and utilitarian riders. The following twelve un-prioritized factors are considered in route selection:

- a. Origin and destination value for bicycles
- b. Existing bicycle usage and need
- c. Population concentrations
- d. Safety
- e. Existing roadway width
- f. Potential or planned roadway width (right-of-way)
- g. Topography (grade)
- h. Pavement quality
- i. Volume and nature or type of traffic
- j. Other agency plans (state, cities)
- k. Scenic value
- l. Concept for future development

Efforts were made to coordinate the ways with known existing and proposed state and city ways. Also, the integrity and usefulness of the system mandates that future developments are designed with bicycling in mind:

- New developments shall accommodate and tie into the bicycle system and shall provide their residents and employees with appropriate bicycle facilities in accordance with State Law, OAR 660-12-045 (3(A)).

- New construction of arterials and collectors that lie substantially within the Urban Growth Boundary (UGB) shall include bike lanes. Existing arterials and collectors shall be upgraded as soon as is practical.
- Outside the UGB, arterials and collectors may use shoulder bikeways or shared roadways as designated in the Plan. These routes shall be upgraded to bike lanes when highway reconstruction occurs.

2. OFF-ROAD ROUTE SELECTION

The rapidly growing interest in bicycles for recreation and fitness as well as commuting has encouraged a look at off-road bike paths as a supplement to our on-road bike ways. The bike paths would cater more to the recreational and fitness riders, although well-placed paths could also serve commuting traffic. Off-road bike paths would also offer an automobile-free route for inexperienced and younger cyclists. The opportunity exists in Silverton to utilize off-road, separate bike paths in some circumstances.

- Major utility easements
- Short connector ways between adjoining subdivisions, and between subdivisions and adjoining schools and parks
- Abandoned roadways
- Additional bicycle paths along Silver Creek through city owned lands, acquired land, or donated land
- Bicycle paths within new developments inside and near the UGB

Developers shall be strongly encouraged to design paths that connect to the bikeway system and that provide a direct route for commuters. In some cases, it may be appropriate to relax a requirement, such as for a sidewalk on one side of a residential street, in favor of a comparable bike path in the development. This should only be done when there is no reasonable alternative, and pedestrian sidewalks should normally exist or be provided in addition to the bikeway in residential areas and streets with pedestrian traffic. The use of a separated bike path shall not change the on-road bikeway requirement for arterials and collectors.

3. BIKEWAY CONSTRUCTION GUIDELINES

Standards for construction of different types of bike facilities are based upon the most recent Guide for Development of New Bicycle Facilities published by the American Association of State Highway and Transportation Officials (AASHTO).

4. PROPOSED BIKEWAYS

The above criteria were utilized to select the proposed bikeways shown on the map in Section IV, pg. 9.

E. UNPAVED BIKEWAYS

1. OPPORTUNITIES

Mountain-bikes, which can easily traverse unpaved trails and poor roads, open up many possibilities in inexpensive bicycle ways that require little more than a right-of-way and appropriate signs.

While the focus on mountain biking has been from a recreational viewpoint, these vehicles are frequently used to transport people on errands or commuting trips. Trails and greenways within urban areas are prime corridors for mountain bikes, offering the desirable separation from unpleasant motorized traffic without the traditional expense of paved bike paths.

2. ROUTE SELECTION

The City of Silverton shall support mountain-bike ways and incorporate them into its transportation system where appropriate. Particular attention shall be given to obtaining and keeping right-of-way for uninterrupted ways linking areas within the city. Natural corridors such as rivers, creeks and abandoned roadway and rail lines shall receive special attention. Proposed developments may be required to provide such rights-of-way as part of their transportation scheme in order to maintain the integrity and continuity of the city-wide system.

F. PARKING

Bicycle parking facilities are an essential element in an overall effort to promote bicycling. People are discouraged from bicycling, especially for utilitarian trips, unless adequate parking is available. Bicycle parking facilities should be provided as specified in Table 1, p.15. Given the high cost of land and paving, bicycle parking is a real bargain, since as many as 14 bicycles can be stored in an area required by one automobile. Adequate parking shall be included whenever new building or development occurs. OAR 660-12-045 (3(A)).

PRIMARY CONSIDERATIONS

The primary considerations are as follows:

- Bicycle parking shall be convenient and easy to find. Where necessary, a sign should be used to direct users to the parking facility.
- Each bicycle parking space shall be at least 2 feet by 6 feet with a vertical clearance of 6 feet.
- An access aisle of at least 5 feet wide shall be provided in each bicycle parking facility.
- Parking facilities shall offer security in the form of either a lockable enclosure in which the bicycle can be stored or a stationary object, i.e., a "rack," upon which the bicycle can be locked. Structures that require a user-supplied lock shall accommodate both cables and a U-shaped lock and shall permit the frame and both wheels to be secured (removing the front wheel may be necessary.) Note: businesses may provide long-term, employee parking by allowing access to a secure room within a building, although additional short-term customer parking may also be required.
- The rack shall support the bicycle in a stable position without damage.
- Long-term parking should be sheltered so that bicycles are not exposed to the sun, rain and snow.

The Public Works Director may make specific recommendations for the appropriate facility to match a particular parking need. There are many acceptable designs in use throughout the State, some of which are ideal for our climate and user needs.

1. PARKING FACILITY GUIDELINES

The wide variety of bicycle parking devices fall into two basic categories of user need: commuter (or long term) and convenience (or short term). The minimum needs for each differ in their placement and protection, as shown in Table 1.

Table 1. Bicycle Parking Categories

Placement	Protection	Comments
<i>Commuter (Long-Term) Parking</i>		
<ul style="list-style-type: none"> • Employment areas • Schools and colleges • Multifamily dwellings 	<ul style="list-style-type: none"> • Security ranks over convenience, although bicycle parking should be at least as conveniently located as automobile parking. • Bicycle parking should not conflict with motorized uses in a dangerous or congested manner. 	
<i>Convenience (Short-Term) Parking</i>		
<ul style="list-style-type: none"> • Shopping centers • Health care offices • Libraries and Museums • Public service government agencies • Recreation and entertainment areas 	<ul style="list-style-type: none"> • Device that allows the frame and both wheels to be secured by the bicyclist's own lock, e.g. cable lock. • Parking location free of unnecessary conflicts with motor vehicles and pedestrians. • Well-lit location that is as closely situated to the most easily monitored access to an entry in order to reduce theft. 	<ul style="list-style-type: none"> • Weather-protected bicycle parking is not always necessary or cost effective for the short-term user. • Note that these locations are also a place of employment and should have some long-term parking.

2. PLACEMENT STANDARDS

Bicycle parking shall be provided for in all types of new development, per Table 1, p. 15, per OAR 660-12-045 (3(A)), and for changes in use, and for expansions and other remodeling that increase the required level of automobile parking. Existing developments while not required to provide bicycle parking retroactively, shall be strongly encouraged to do so. The following standards are applicable and should be considered for future implementation:

- A minimum of two spaces at all developments in order to facilitate bicycle use. These spaces, if conveniently placed for the user, may be located in a common area shared by other developments.
- Above the minimum of two spaces, one bicycle parking space for every 20 automobile spaces required except at schools and parks, where the ratio is one for every 10 automobile spaces, and at multi-family residences, where one covered space should be provided for each addressable multi-family unit. When calculating, round up to the nearest whole number.
- Where bicycle parking use is expected to be greater than the above guidelines, additional parking to meet the need may be required.

G. OTHER FACILITIES

Consider for future implementation the following:

1. MASS TRANSIT

When expanded bus or other transit systems are developed, they should be designed with the bicycle in mind. None of the mass-transit facilities should impede bicycling. Indeed, not only should adequate commuter parking be provided, but the bus or other transit system should be able to transport bicycles so that passengers have a fast way to cross town and have their bicycles available at the other end. Such provisions would greatly enhance the bicycle's contribution to the overall transportation system.

2. EMPLOYER-PROVIDED COMMUTER FACILITIES

An active interest by employers will contribute substantially to increased bicycle use. Beyond the required off-street parking described in Section E, changing rooms and showers at the workplace will make a bicycle commute much more attractive to employees. Therefore, showers and changing rooms shall be encouraged to be provided in new construction of commercial and public buildings of 10,000 square feet or larger and with at least 25 employees.

H. MAINTENANCE

I. ROUTE MAINTENANCE

The objective of bicycle route maintenance is to keep the route functional and as near to the constructed standard as practical. A dirty or rough surface, except for off-road or mountain-bike ways, can make for an unsafe condition and will force cyclists into the roadway where they must compete with automobiles. To keep their usefulness, bikeways must be frequently inspected and maintained.

a. Surface Sweeping

Bikeways and highway shoulders, as well as the edges of shared roadways, tend to collect debris which limits their use by cyclists. Pavement surfaces shall be swept clean periodically, providing that operational budgets permit, and as soon as practical after major winter storms to remove grit and gravel, with extra attention given to curbed roadways which tend to trap debris. Priority shall be given to ways with the highest bicycle traffic.

b. Surface Pavement Maintenance

Bikeways shall be resurfaced when the parent road is resurfaced. The roadway shall be resurfaced, as a minimum, to the same width as the existing pavement and, where possible, shall be widened to comply with the bikeway standards. All utility access points, manhole covers, and drainage grates shall be raised to match the new surface within 0.75 inch. All edges shall be feathered to provide a smooth transition from the lane to other surfaces. All driveway approaches shall be paved back to the edge of the road right-of-way to prevent gravel from being carried onto the bikeway.

The preferred chip seal size is 3/8 inch to #10 or smaller for roads with bike lanes and shoulder bikeways. When the parent road is chip sealed, the bicycle lane shall be sealed the entire width.

c. Signing and Striping

Bicycle lanes shall be paint striped periodically to maintain visibility with an 8-inch stripe (4 inches on shared roadways and shoulder bikeways) conforming to State of Oregon standards (refer to the State of Oregon Bicycle Master Plan).

Damaged or missing signs on bikeways shall be replaced to State of Oregon standards as soon as practical.

d. Clearing

Trees and shrubs shall be cut back so that no vegetation protrudes into the bicycle lane below a height of ten feet. Consideration shall be given to maintaining and improving sight distance on horizontal and vertical curves to keep the bicyclists and pedestrians visible to the motorists.

2. *PARKING MAINTENANCE*

Parking facility maintenance is the responsibility of the provider of the parking. Adequate maintenance includes:

- Keeping the racks in good working order and securely fastened to their mounting surface
- Removing debris and trimming adjacent trees and shrubs
- Checking area for proper drainage and snow removal
- Replacing burned-out lights and repairing damaged fixtures

3. *HAZARD REPORTING*

The public may report bicycle facility hazards, such as potholes, broken glass, etc. to the appropriate agency, i.e. to the Public Works Department during normal office hours, and to the Dispatch Center after office hours. The phone numbers for reporting bikeway problems, such as glass, pot holes, etc., should be communicated to bicyclists through appropriate publications or other printed material.

V. EDUCATION PLAN

A. POLICIES

The City of Silverton shall, within its means, assist all appropriate agencies in the establishment and continuation of ongoing bicycle safety and education programs.

B. LAWS AND REGULATIONS

The City of Silverton is governed by the Oregon Revised Statutes in the regulation of bicycles and their use. No specific regulations have been adopted.

The most important aspect of the Oregon Revised Statutes is that bicycles are considered vehicles under the Oregon Motor Vehicles Code (MVC). Therefore, bicyclists have the same rights and responsibilities as drivers of motor vehicles. They are subject to the same penalties and they must obey the same rules of the road and have no special privileges. Bicyclists can and should act like drivers of motor vehicles. The Oregon Motor Vehicle Code is a necessary component of bicycle safety and education.

The MVC can be used as a tool for education, problem solving and funding. The enforcement of the code with bicyclists will be stressed with local enforcement agencies in order to better educate the public in proper operating procedures. The frequency of code violations or accidents can be an indication of a problem area.

Therefore, it is important to establish a working relationship with a key individual in each of the enforcement agencies and for the three law enforcement agencies to stress the enforcement of the MVC.

C. BACKGROUND

The mis-use of bicycle facilities contributes to cyclists accidents. Some cyclists have never been taught how to ride a bicycle skillfully and persist in dangerous cycling behavior. Cyclists must be reminded to operate their bicycles similar to motor vehicles and, if necessary, to practice the skills needed to do so. Children need to be taught bicycle safety early.

Any public awareness or education program can be improved. It will take a concerted, coordinated effort to develop a comprehensive educational program for bicycling in Silverton. A major aspect of an educational program is to show the motorist the needs of the bicyclist and the bicyclist the needs of the motorist.

The educational effort needs to be visible. Bicycle safety is a serious matter. A strong public awareness effort with media support is needed to show bicyclists the proper procedures. A joint effort among the Community groups, schools, bicycle clubs and affected agencies shall be encouraged. Helmet safety will be strongly promoted and emphasized in all training.

D. PLAN DEVELOPMENT

The educational program shall address the needs of both bicyclists and non-bicyclists. All age groups need to know the rules of the road and how to ride safely. Non-bicyclists, particularly motorists, need to know that bicyclists have the same legal rights and responsibilities as a motor vehicle.

In the majority of injury-producing bicycle accidents involving children, the accident happens because the child either did not know or failed to observe basic traffic laws pertaining to cyclists. Experience in other cities has shown that up to half of the injuries to children from bicycle accidents can be prevented with a 10-15 hour bicycle and traffic safety course. The existing educational program in the city includes bike rodeos and in-class safety presentations by teachers, civic groups and presentations by law enforcement officials to school children. This should be continued, and bicycle traffic laws and safety shall be emphasized. At all times, helmet safety will be promoted and emphasized.

Public awareness of the Bicycle Master Plan itself is important. Bicyclists should know what this plan includes and the approach to implement it. Residents and visitors alike should have access to a plan summary describing existing and proposed ways along with any problems and hazards known to exist. The summary should be short, concise and include a map, in hand-out form, that is usable by the public.

VI. Implementation

A. IMPLEMENTATION PLAN

The Implementation Plan is summarized on the next two pages. The Plan is in tabular form and is prioritized into Priority #1, #2, and #3 Projects. Each Route Component is given a component number and the route components shown on the maps are also labelled by number. The street name, the start and finish points, the bikeway type, the length, and the estimated cost of each section are all listed in the table.

B. RESPONSIBILITIES

The agencies of the City and the State - as well as the public have responsibilities for implementing this plan. Table 2, pg. 23 lists these primary agencies, and the following subsections discuss their specific responsibilities. The City of Silverton has responsibility for implementation of the Bicycle Master Plan.

TABLE 1

SILVERTON Bikeway Implementation Plan: Priorities #1 and #2

ROUTE (see map)	ROUTE SECTION COMPONENT	TYPE	LENGTH (in miles)	LENGTH (in feet)	EST. COST	
PRIORITY #1 (implementation: 1 to 5 years)						
PROJECTS						
1.	*C' Street	McClaine to First Street	BL	0.49	2,600	5,200
2a.	South Water Street	W. Main Street to Lane Street	SR	0.23	1,200	2,400
2b.	South Water Street	Lane Street to Smith Street	SB	0.47	2,500	75,000
2c.	Silver Creek Falls Highway 214	Smith St to Silverton Reservoir	SB	1.99	10,500	312,000
3	Silver Creek Bike Path	Silverton Reservoir to Milepost 44.8 on Highway 214	BP	5.0	26,400	844,800
4a.	North First Street	Lewis Street, north to 'D' Street	BL	0.42	2,200	4,400
4b.	North First Street	'D' Street, north to Urban Growth Boundary	SB	1.17	6,200	186,000
5a.	Pine Street	James Street to Grant Street	BL	0.23	1,200	2,400
5b.	Pine Street	Grant Street to Urban Growth boundary	SB	0.72	3,800	114,000
6.	James Street	Pine Street to North Water St.	BL	0.06	300	600
7.	North Water Street	James Avenue to Main Street	BL	0.57	3,000	6,000
8.	McClaine Street	*C' Street to West Main Street	BL	0.47	2,500	5,000
9.	West Main Street	McClaine St. to Water Street	BL	0.10	500	1,000
10.	Coolidge Street	West Main Street to Coolidge McClaine Park	BL	0.28	1,500	3,000
11.	Coolidge McClaine Park	Park entrance through Olde Mill Park, across Silver Creek via bike paths to Cowing Street	BP	0.25	1,300	41,600
12.	Cowing Street	Barger St. to South Water Street	BL	0.15	800	1,600
PRIORITY #2 (implementation: 5 to 10 years)						
PROJECTS						
13a	Silver Falls Highway 214	Milepost 44.8 to Silver Falls State Park	SB	7.0	36,960	1,108,800
13b	Silver Creek Greenway Bike Path	West city limits to the Silverton Reservoir	BP	3.60	19,000	608,000
14.	McClaine Street	*C' Street west to the Urban Growth Boundary	SB	0.57	3,000	90,000
Totals for Priorities 1 & 2:			TOTAL	23.77	125,460	3,411,800

BIKEWAY TYPES:

BL = 4' STRIPED BIKELANE (\$2 per lin. ft.) This assumes adequate width exists, and cost applies to striping & signs.
 SB = 4' STRIPED SHOULDER BIKEWAY (\$30 per lin. ft.) This assumes widening & constn of shoulder, striping both sides.
 BP = 10' BIKE PATH (\$32 per lin. ft.) This includes base rock & asphalt paving, and an allowance for signs.
 SR = SHARED ROADWAY (\$2 per lin. ft.) No improvements are required, and bikeway signing is optional.
 NC rights-of-way acquisition costs are included in the above.

TABLE 1

SILVERTON

Bikeway Implementation Plan: Priority #3 Projects

ROUTE (see map)	ROUTE SECTION COMPONENT	TYPE	LENGTH (in miles)	LENGTH (in feet)	EST. COST (\$)	
PRIORITY #3 PROJECTS (implementation: 10 to 20 years)						
15	Westfield Street	McClaine St. to Cascade Highway	SB	0.45	2,400	72,000
16a.	West Main Street	McClaine Street to Eureka St.	SB	0.30	1,600	48,000
16b.	Cascade Highway	Eureka St. to Urban Growth Bndry	SB	0.57	3,000	90,000
17.	Eureka Street	West Main St. to UGB	SB	1.14	6,000	180,000
18a.	Oak Street	S. Water St. to Hill Street	SB	0.38	2,000	60,000
18b.	Oak Street	Hill Street to Meridian Road	SB	0.85	3,100	93,000
19.	B Street	1st. Street to Mark Twain Elem.	SR	0.61	3,200	6,400
20.	Meridian Road	Cascade Highway #213 to UGB	SB	0.64	3,400	102,000
21.	Hobart Road	Meridian Road to Highway #214	SB	1.02	5,400	162,000
22.	Hobart Road	Highway #214 to St. Paul Cemtry.	SB	0.30	500	15,000
Total for Priority 3 Projects:				6.26	30,600	828,400
Totals for Priorities 1 & 2				23.77	125,460	3,411,900
Total for All Projects:			TOTAL	30.03	156,060	4,240,300

Street Inventory

The following table (overleaf) is the Street Inventory of existing streets where bikeways are proposed. The inventory shows the existing pavement width, paving surface material, and the right-of-way width. Data is from Dept. of Public Works Street Inventory.

BIKEWAY TYPES:

BL = 4' STRIPED BIKELANE (\$2 per lin. ft.) This assumes adequate width exists, and cost applies to striping & signs.
 SB = 4' STRIPED SHOULDER BIKEWAY (\$30 per lin. ft.) This assumes widening & constn of shoulder, striping both sides.
 BP = 10' BIKE PATH (\$32 per lin. ft.) This includes base rock & asphalt paving, and an allowance for signs.
 SR = SHARED ROADWAY (\$2 per lin. ft.) No improvements are required, and bikeway signing is optional.
 NO rights-of-way acquisition costs are included in the above.

TABLE 1-A

SILVERTON

Street Inventory (Table of Existing Roadways)

ROUTE <small>(see map)</small>	ROUTE SECTION COMPONENT	CLASS	WIDTH	MATERIAL	R/W WIDTH
1.	'C" Street McClaine to First St.	L	25'-40'	AC	60'
2a	South Water St. W.Main St. to Lane St.	A	40'	AC	60'
2b.	South Water St. Lane St. to Smith St.	A	30'-40'	AC	50'-60'
2c.	Silver Creek Falls Highway 214 Smith St. to Silverton Res.	A	30'	AC	50'-60'
4a.	North First St. Lewis St. north to "D" St.	A	42'-44'	AC	50'-60'
4b.	North First St. "D" St., North to U.G.B.	A	42'-44'	AC	50'-60'
5a.	Pine St. James St. to Grant St.	COL	30'	AC	60'
5b.	Pine St. Grant St. to U.G.B.	COL	30'	AC	60'
6.	James St. Pine St. to N. Water St.	COL	24'	AC	60'
7.	N. Water St. James Ave. to Main St.	A	40'	AC	60'
8.	McClaine St. "C" St. to West Main St.	COL	30'	AC	50'-60'
9.	West Main St. McClaine St. to Water St.	COL	30'	AC	60'
10.	Coolidge St. West Main St. to Coolidge/McClain Park	L	26'	AC	50'
12.	Cowing St. Barger St. to South Water St.	L	16'	CONC	50'
14.	McClaine St. "C" St. west to UGB	COL	30'	AC	50'-60'
15.	Westfield St. McClaine St. to Cascade Hwy.	A	28'	AC	60'
16a.	West Main St. McClaine St. to Eureka Ave.	COL	30'	AC	60'
16b.	Cascade Hwy. Eureka Ave. to UGB	A	30'-32'	AC	60'
17.	Eureka Ave. West Main St to UGB	COL	22'	AC	60'
18a.	Oak St. N. Water St. to Hill St.	A	40'	AC	60'
18b.	Oak St. Hill St. to Meridian Rd.	A	32'	AC	60'
19.	"B" St. N. First St. to Mark Twain Elementary School	L	34'	AC	60'
21.	Hobart Road Meridian Road to Hwy 214	A	23'	AC	50'
22.	Meridian Road Hwy. 213 to UGB	A	28'	AC	50'
23.	Hobart Road Hwy. 214 to St.Paul Cemtry.	A	23'	AC	50'

ABBREVIATIONS & FORM COLUMN DESCRIPTIONS:

CLASS: A=ARTERIAL, COL=COLLECTOR, CBD=CENTRAL BUSINESS DISTRICT, L=LOCAL
MATERIAL: AC=ASPHALTIC CONCRETE, CON=CONCRETE
ROUTE: STREET NAME & BIKEWAY COMPONENT NUMBER
WIDTH: APPROXIMATE EXISTING PAVEMENT WIDTH
MATERIAL: SURFACE MATERIAL
R/W WIDTH: RIGHT-OF-WAY WIDTH

RESPONSIBLE AGENCIES

The following agencies from the City, County and State, as well as the public have responsibilities for implementing this plan. Table 2 lists the primary agencies, and the following sub-sections discuss their specific responsibilities.

Table 2. Responsible Agencies

Agency	Address	Phone No.
<i>City</i>		
City of Silverton CITY HALL	306 South Water Street Silverton, OR 97381	(503) 873-5321
City of Silverton Department of Public Works	306 South Water Street Silverton, OR 97381	(503) 873-8679
Silverton Police Department	400 South Water Street Silverton, OR 97381	(503) 873-5326
<i>County</i>		
Marion County Public Works Department	220 High Street Salem, OR 97301	(503) 588-5036
Marion County Sheriffs Department	Court House Salem, OR 97301	(503) 588-5044
<i>State</i>		
Oregon State Bicycle Advisory Committee	Bikeway Program Manager Oregon Department of Transportation Room 200, Transportation Building Salem, OR 97310	(503) 378-3432
Oregon Department of Transportatio	Transportation Building Salem, OR 97310	(503)378-6570
Oregon Bicycle Safety Education Program	Oregon Traffic Safety Commission 400 State Library Building Salem, OR 97310	1-800-922-2022
Oregon State Police	Oregon State Police, Dist. II 4762 Portland Rd. NE Salem, OR 97305	(503)378-2110

NOTE:

Several miles of City of Silverton streets are under the jurisdiction of Marion County, in addition to county roads within the Urban Growth Boundary area.

1. City

a. *Silverton*

Developing and maintaining the long-range bicycle facility planning is important and is ongoing. A cooperative effort can be made in planning and construction of a bikeway that ultimately connects Silverton to Silver Falls State Park. ORS 366.514 requires all Oregon cities to provide bicycle trails wherever a highway, road or street is being constructed, reconstructed or relocated.

2. County

a. *Marion County*

Because many miles of City streets are under the jurisdiction of Marion County, as well as the county roads within the Urban Growth Boundary, close cooperation will be maintained between the City of Silverton Public Works Department and the Marion County Department of Public Works in the implementation of the Silverton Master Bicycle Plan.

3. State

a. *Oregon Department of Transportation*

OREGON BICYCLE BILL: ORS 366.514

The Oregon Department of Transportation, Highway Division, is responsible for maintenance on State-designed bikeways. It must also comply with and implement ORS 366.514, commonly known as the "Oregon Bicycle Bill." Within the Highway Division is the Bicycle Program Office headed by the Bikeway Program Manager. This is where policies and programs are formulated and where they are implemented.

STATEWIDE PLANNING GOAL 12

The State of Oregon has the responsibility to provide for the transportation needs of all residents, not just the motoring public. That responsibility is solidly cast in Statewide Planning Goal 12 (Transportation), which says, in part, "A transportation plan shall (1) consider all modes of transportation including mass transit, air, water, pipelines, rail, highway, bicycle and pedestrian;" and shall also "avoid principal reliance upon any one mode of transportation; conserve energy; meet the needs of the transportation disadvantaged; and conform with local and regional comprehensive plans..."

TRANSPORTATION PLANNING RULE 660-12

Goal 12 is implemented by the Transportation Planning Rule (OAR 660-12-000 through 660-12-070) which includes the Purpose, Definitions, Transportation System Plan Elements and Preparation, Compliance With Goals, Determination of Transportation Needs, Evaluation of Alternatives, Financing Program, Implementation, Project Development, Timing of Updates, Amendments, and Rural Lands and Exceptions. Statutory Authority is by ORS 197 generally, and 197.040 and ORS 183.

The Transportation Rule is designed to result in "better planning for alternative modes of transportation". Reducing reliance on the automobile is emphasized in the Rule, and cities and counties are required to plan for other modes of transportation including pedestrian and bicycle ways.

Rule 660-12-020 requires that the Transportation System Plan include "a bicycle and pedestrian plan for a network of bicycle and pedestrian ways throughout the planning area. The network and list of facility improvements shall be consistent with the requirements of ORS 366.514".

Under 660-12-045 (1) (a) (A), the Implementation requirements, the operation, maintenance and repair requirements for bicycle facilities are covered.

660-12-045 (3) (a) & (b) requires "bicycle parking facilities as part of new multi-family residential developments of four units or more, and in new retail, office and institutional developments". "Safe and convenient bicycle access" is also required "within and from new subdivisions, planned developments, shopping centers and industrial parks to nearby residential areas, transit stops, and neighborhood activity centers, such as schools, parks and shopping". The above includes bikeways along arterials and major collectors and, where appropriate, allows separate bikeways to minimize travel distance between these areas and the developments listed above.

In section 660-12-045 (3) (c) "safe, convenient and adequate" is described as it applies to bicycle facilities and improvements which:

- (A) "Are reasonably free from hazards, particularly types or levels of automobile traffic which would interfere with or discourage pedestrian or cycle travel for short trips".
- (B) "Provide a direct route of travel between destinations such as between a transit stop and a store; and,
- (C) "Meet travel needs of cyclists and pedestrians considering destination and length of trip".

Section 660-12-045 (6) requires that the bicycle plan "identify improvements to facilitate bicycle trips to meet local travel needs in developed areas". "Appropriate improvements should provide for more direct, convenient and safer bicycle travel within and between residential areas and neighborhood activity centers (i.e. schools, shopping, transit stops)".

b. State Bicycle Advisory Committee

The State Bicycle Advisory Committee assists the Highway Division in regulating bicycle traffic and establishing bikeways, and it acts as liaison between the public and the Highway Division. ORS 366.514 requires all Oregon cities and counties to provide bicycle trails wherever a highway, road or street is being constructed, reconstructed or relocated. Therefore, communication with the State Bicycle Advisory Committee is important. The Oregon Bikeway Program Manager serves as staff to the State Bicycle Advisory Committee and is available to local jurisdictions dealing with bicycle issues.

c. Oregon Bicycle Safety Education Program

This program was instituted within the Oregon Department of Traffic Safety in order to specifically develop and promote bicycle education programs on bicycle safety for use throughout the state. It offers classes, fairs, handouts, videos and general advice.

4. Law Enforcement Agencies

The Silverton Police Department, the Marion County Sheriffs Department, and the Oregon State Police are responsible for enforcement of the Motor Vehicle Code on designated bikeways. Frequent contact between the Bicycle Advisory Committee and the appropriate enforcement agency can emphasize the need for enforcement, promote understanding, and identify problem areas.

5. Public

Public interest is important to the success of any program. The public must be made aware of the existing system and its needs. The inclusion of various bicycling interests in on-going planning and development strategies is an essential element in the overall effectiveness of the Bicycle Master Plan.

C. RESOURCES

The major funding resource is the 1% of the State Highway Fund for Bicycle/Footpaths. The total of State Bicycle/Footpath Funds that the City of Silverton has received for fiscal years 1983-92 totals \$14,106. Other sources include State Highway Division Local Assistance, Federal Aid Highway Funds, City General Funds and donations. The last four are possibilities but have not played a major role in past funding. These funding sources are described below.

1. State Highway Fund

In 1971 the Oregon Legislature enacted an important funding source for local governments by passing ORS 366.514. The law requires that bikeways or footpaths be developed as part of highway projects, except where the establishment of such facilities would be contrary to public safety, disproportionate in cost to the need or probable use, where there is a sparsity of population, other available ways exist, or other factors indicate an absence of any need or probable use. The law mandates that no less than 1% of the State Highway Fund each year will be spent by the cities, counties and the state for bikeways and footpaths. Recognizing that 1% in any given year may be too low to be useful, cities and counties can accumulate this money in a special reserve fund for up to ten years.

Table 3, p.28 shows the minimum required bikeway expenditure from funds received in Silverton (based on 1% of the total amount received from the State Highway Fund).

The City of Silverton plans to establish a special Bikeway Fund. This fund will be administered by the Public Works Department. A budget is presented and approved by the City Council each year, which provides for maintenance activities and the accumulation of monies for capital improvements.

Bicycle Fund monies can only be spent on bikeway construction projects within a publicly owned road or highway right-of-way. The following are eligible expenditures, according to the State of Oregon Bicycle Master Plan:

- Administrative costs
- Expenses incurred by the Bicycle Advisory Committee
- Preliminary engineering costs of bikeways
- Construction costs for bikeway/footpath facilities within the highway or road right-of-way
- Auxiliary facilities such as signs, curb cuts, ramps and parking
- Development of bicycle route maps and brochures
- Planning assistance to Councils of Governments (COG's)

The bulk of the expenditures in Silverton have been used for the maintenance of existing facilities and pedestrian sidewalks. Current funds received from the State Highway Division are adequate for the maintenance of existing bikeways, education, minor capital improvements and a small carry-over. Outside of the right-of-way, no funds are currently available for any type of development. The City of Silverton may however spend as much as it deems necessary on bikeways, over the required minimum.

Table 3. Apportionment of 1 % Bicycle Fund: Silverton

Fiscal Year	receipts	totals
1983	780.00	
1984	799.00	
1985	915.00	
1986	997.00	
1987	1,176.00	
1988	1,336.00	
1989	1,696.00	
1990	1,927.00	
1991	2,214.00	
1992	2,266.00	
TOTAL		14,106.00

Source: ODOT Bikeway Program Office: Minimum One Percent Bikeway/Footpath Amounts
Fiscal Years 1983 through 1992

2. STATE HIGHWAY DIVISION LOCAL ASSISTANCE

The Oregon Department of Transportation Highway Division provides limited funding for "Local Assistance" bikeway projects. The funds for this assistance program are also derived from the State Bicycle Fund. They are referred to as "category four" monies and, again, can only be expended on publicly-owned road rights-of-way. Application must be made annually. The State Bicycle Advisory Committee reviews and rates each project and subsequently makes recommendations to the Highway Division.

The City's accumulated share of the Highway Fund can be used as match for these state-awarded projects.

3. FEDERAL ISTE A PROGRAM

The Federal Highway Administration encourages the construction of bicycle and pedestrian facilities as part of the Intermodal Surface Transportation Efficiency Act of 1991. The ISTE A Program number is #PL102-240. Federal aid money is available for bicycle facilities as part of a highway construction project at the same financial match as the highway work.

4. CITY GENERAL FUND & DONATIONS

City funding of bikeway development projects may be limited. The completion of the bikeway system will have to be a phased development, using primarily 1% Bicycle Fund monies, donations, special grants, general funds and any special levies decided on by the voter. Private funds may not be available, however certain portions of right-of-way for bicycle paths may be donated.

5. ALLOCATION OF RESOURCES

Available funding sources shall be evaluated for budgeting purposes. Programs shall be prioritized annually by the Budget Committee and funds allocated for:

- Maintenance
- Capital improvements of current bikeways
- Carry-over to accrue for major projects
- Education

Each of the activities requires staff coordination and planning assistance.

Specific project priorities for bicycle facility improvements are listed below. The priorities were determined from current needs and available resources. In many cases, limited resources or common sense reduced an ideal separate path or a widened, striped lane to a signed route.

a. Major Capital Improvements

Major capital improvements can be done with the carry-over of the 1% Bicycle Fund revenues or other moneys that may become available through grants, donations, levies, etc. The City of Silverton Public Works Department maintains a list of projects that are prioritized for completion when moneys become available. It is very important to recognize that most bikeway improvements are constructed as part of normal roadway improvements.

Other projects have been identified which, although not feasible now due to budget constraints, shall remain as part of the overall plan and shall be implemented as funding permits. An example of a future bicycle project is the Silver Creek Bikeway. This route would provide a delightful recreational and scenic bikeway system connecting Silverton to Silver Creek Falls State Park via a new right-of-way along Silver Creek. Certain portions of this route are already city-owned, some right-of-way may be donated by the land-owners, and some may have to be purchased.

b. Short-Term Minor Improvements

Short-term minor improvements that will benefit bicyclists can be accomplished with 1% Bikeway Fund revenues each year. A list of these projects is maintained by the City of Silverton Public Works Department.

D. UPDATES

The Plan shall be reviewed annually by the Bicycle Advisory Committee. The Committee will make recommendations to the City Council on any changes or modifications in the Plan at its annual review. If changes are to be made in the plan, the City Council will hold a hearing and receive public comment. Once the changes are agreed to by the City Council, the Plan will be amended to include the changes.

A major update of the Plan shall be undertaken every five years by the committee. The next major update will occur late in 1997. Changes recommended by the public and the Bicycle Advisory Committee will be forwarded to the Planning Commission, prior to being forwarded to the City Council for a public hearing and for consideration. It will then be the responsibility of the *City Manager* to see that the Plan is implemented by the Public Works Department staff of the various local governments.

APPENDIX A.

GLOSSARY

AASHTO	American Association of State Highway and Transportation Officials. Their publication, Guide for Development of New Bicycle Facilities, provides the basic facility construction guidelines and specifications for this plan.
ADT	Average daily trips, a measure of traffic volume
BADT	Bicycle average daily trips measured during the months of April through October
Arterial	A through road that connects major traffic generators. Arterials are designated by the Comprehensive Plans (Amended) of the city.
Bicycle	In the strictest sense, a bicycle is a human-powered land vehicle with two tandem wheels, a steering handle, a saddle seat, and pedals by which it is propelled. In legal terms, the definition is expanded to include other velocipedes: (1) designed to operate on the ground on wheels, (2) propelled solely by human power, upon which any person or persons may ride, and (3) with every wheel more than 14 inches in diameter or two tandem wheels either of which is more than 14 inches in diameter. This takes in the broader range of bicycle-type vehicles (recumbents, tricycles, etc.) while excluding such vehicles as pushcarts.
Bicycle facilities	A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities, all bikeways, and shared roadways not specifically designated for bicycle use
Bike Lane	A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists
Bike Lane Stripe	An 8-inch wide line separating a bike lane from a motor vehicle travel lane
Bike Path	A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way
Bikeway	Any road, path, or other way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are shared with other transportation mode
Chip Seal	An asphalt emulsion surface treatment consisting of an application of asphalt emulsion followed by a layer of clean crushed 1/4 in. to #10 aggregate.
Collector	A branch road that feeds into an arterial from the local roads between arterials. Collectors are designed by the Comprehensive Plans of the City
Commuter Parking	Long-term parking, such as work or school, where the bicycle must be left unattended for 3 or more hours.

Convenience Parking	Short-term parking, such as at a store or park, where the bicycle is left for a brief time
Fog Line	A 4-inch white stripe delineating the edge of the roadway and separating it from the shoulder
Grade (percent)	The rise (+) or fall (-) of roadway measured in feet per 100 feet of length expressed as a percentage
Grade Separation	Vertical isolation of travelways through the use of a structure so that traffic crosses without interference
Land Development	Any change in land use subject to the requirements of the Codes (subdivision/partition) or requiring site plan review, zone change, or plan amendment by the City of Silverton
MVC	Motor Vehicle Code which contains the rules of the road that cyclists must follow
Mountain-Bike	A bicycle generally characterized by rugged construction, wide tires, extra bottom bracket clearance, low gears, and stable handling attributes that enhance its rideability on rough and steep terrain
Mountain-Bike Route	A rough or unpaved bikeway upon which an average cyclist using a normal bike would have difficulty
MUTCD	Manual on Uniform Traffic Control Devices approved by the Federal Highway Administration as a national standard for placement and selection of all traffic control devices on or adjacent to all highways open to public travel
ORS	Oregon Revised Statute. ORS 366.514, the "Oregon Bicycle Bill," is the law describing funding and development of bikeways. It was originally House Bill 1700
Recreational Cyclist	An individual who uses a bicycle for the trip enjoyment itself. The ultimate destination is of secondary importance.
Right-of-way	A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes
Roadway	The portion of the highway for vehicle use
Shoulder	A portion of a highway contiguous to the roadway that is primarily for use by pedestrians, bicyclists and emergency use of stopped vehicles
Traffic Volume	The number of vehicles that pass a given point for a given amount of time, usually expressed as Average Daily Trips (ADT)
UGB	Urban Growth Boundary which defines the area, near an incorporated city, that is deemed suitable and necessary for future urban uses

Utilitarian Cyclist

An individual who uses a bicycle primarily to reach a particular destination

Vehicle

Any device in, upon or by which any person or property is or may be transported or drawn upon a public highway. A vehicle may be self-propelled or powered by any means

APPENDIX **B.**

BICYCLE ADVISORY COMMITTEE

NAME

This committee to be established by the City of Silverton shall be called the Silverton Bicycle Advisory Committee.

PURPOSE

The purpose of the Committee is to advise the City Council of Silverton in the development and maintenance of a city-wide bicycle plan to perform the following:

- a. To assist in the development of a city-wide bicycle plan that will encourage and facilitate the use of bicycles as a means of transportation and recreation in Silverton
- b. To provide city-wide coordination of bicycle planning within the overall transportation plan framework
- c. To obtain and provide public input into the continuing, on-going bicycle planning process
- d. To assist in establishing program priorities for implementation of the maintenance of the city-wide Bicycle Master Plan
- e. To promote safety and education in bicycling

MEMBERSHIP

a. The Committee shall be composed as follows: Six (6) members, and shall include the Public Works Director; one (1) Planning Commission member; one (1) City Council member; two (2) representatives of the local bicycle club; and one (1) Member-At-Large. All members shall serve without compensation and shall be appointed by the City Council. The Mayor of Silverton shall recommend the committee members to the City Council for appointment.

b. Any vacancy occurring in a position on the Committee shall be filled by appointment of the City Council for the remainder of the unexpired term.

c. The duration of Committee member's terms on the Committee shall be staggered, i.e. 1 year, 2 year, and 3 year terms.

MEETINGS, RULES AND PROCEDURE

- a. The officers shall consist of a chairperson, vice-chairperson, and secretary.
 - b. The regular time, place and notice of meetings shall be fixed by the Bicycle Committee. Special meetings may be called by the chair or by action of the Committee.
 - c. Any clerical and staff assistance shall be provided by the City of Silverton as needed.
-

APPENDIX C.

BIKEWAY DESIGN AND CONSTRUCTION SPECIFICATIONS

General

This appendix covers the basic design standards and the striping and signing requirements for bikeways in Silverton.

Except as modified or supplemented herein, the provisions of the applicable sections of the current edition of the State of Oregon Bicycle Master Plan and the current AASHTO Guide for Development of New Bicycle Facilities shall apply as the Silverton Standards and Specifications.

BIKE PATH

1. CRITERIA FOR APPLICATION

Paved bike paths can serve a valuable role in the transportation scheme. Removed from motorized traffic, they are safe and nearly pollution-free and thus likely to receive greater use as a more pleasant riding experience. When routed on independent rights-of-way, such as canal corridors, the paths can provide direct, alternate ways for commuters. When linked with paths from adjacent developments and with the city-wide system, they make it possible for cyclists to travel completely across urban areas on an off-road route.

Due to higher construction and maintenance costs, as well as problems with right-of-way, paved bike paths are sometimes impractical. Nevertheless, where aesthetic, recreation, and safety concerns are primary, such as in large privately-funded developments, near schools, and within parks, bike paths may be the bikeway of choice. Whenever a direct route can be established and financial and right-of-way obstacles can be overcome, bike paths may be considered for commuter ways.

2. WIDTH AND CLEARANCE

One-way bike path design shall be discouraged. The standard bike path width shall be 10ft of pavement, with 12ft more desirable for paths having multiple users. Vertical clearance shall be at least 10ft. Any change from this standard should be recommended by the Silverton Bicycle Advisory Committee.

3. HORIZONTAL ALIGNMENT AND SUPERELEVATION

Pathway horizontal curves shall be based on AASHTO design standards for a geometric design based on speed. Bike paths shall have at least a 35ft curve radius. Meandering paths with sharp turns should be avoided.

Superelevation may vary from a minimum 2% to a maximum 5% (beyond which maneuvering difficulties by slow bicycles and adult tricyclists might be expected.) Table 4 gives design radii at various design speeds and superelevations.

Table 4: Bike Path Radii

Design Speed, mph	Friction Factor	Horizontal Radius, feet				
		Superelevation				
		0%	2%	3%	4%	5%
20	0.27	99	92	89	86	83
25	0.25	167	154	149	144	139
30	0.22	273	250	240	231	222
35	0.19	430	389	371	355	340
40	0.17	627	561	533	508	485

4. SIGHT DISTANCE

Because bicycle speed is dependent upon grade, the sight distance will vary according to the path's grade. The following relationship defines stopping sight distance based on a total perception and brake reaction times of 2.5 seconds, and a coefficient of friction of 0.25 to account for wet pavement conditions.

$$S = 3.67V + \frac{V^2}{30(f - G)}$$

Where: S = stopping sight distance, ft
V = bicycle speed, mph
f = coefficient of friction = 0.25
G = descending grade, ft/ft

On a typical bike path, a design speed of 20 mph is appropriate, given the following sight distances:

Sight Distances

Grade	Stopping Sight Distance, feet
2	131
5	140
8	152

5. INTERSECTIONS

Poor intersection design can contribute greatly to bicycle safety problems. Because bicycle paths are essentially narrow roadways (without motor vehicles), intersections with other paths and roadways should follow standard design principles. Particular attention should be given to smooth bicycle-automobile interaction, so that each vehicle operator is presented with clear options that allow predictable behavior. Intersections that require cyclists to become pedestrians are not acceptable.

Where possible, a separated grade crossing should be provided at arterials and collector streets. An on-grade crossing may be constructed at local streets provided that adequate sight distances can be assured, pavement markings are provided on the roadway, bicycle stop signs (Sign Type R1-1) are located on the bike path, and appropriate advance warning signs are located on the roadway. Street identification should also be provided via signs or pavement markings.

Bike lanes on one side of the street only will require warning signs at intersections for motorists or some other means of warning motorists to expect bicyclists on the wrong side of the street. Bicycle rider-operated traffic signal lights, similar to pedestrian crossings, should be provided to allow safe bicycle crossings.

6. PAVEMENT STRUCTURE

Asphaltic concrete bike paths should have a section of not less than 2 in. of asphaltic concrete on a 4-in. aggregate or stabilized base. Full-depth asphalt should be not less than 4 in. placed in two lifts. Base material should be placed against the edge of the asphalt so no more than a 2-in. drop-off remains.

7. RESTRICTION OF MOTOR VEHICLE TRAFFIC

Traffic bollards having a height of not less than 40 in. should be located at the intersections with roadways to restrict motor vehicle use. Such a bollard should be a lockable, removable post to permit access for maintenance vehicles. The post should have permanent reflectorization elements for night-time visibility.

8. *MULTIUSE*

The widths of bicycle paths should be increased as appropriate to provide for multiple use as indicated in Subsection 2 on page 36.

9. *RIGHT-OF-WAY*

Right-of-way shall be a minimum of 15 ft wide.
Increased right-of-way will be required where:

- other utilities are to occupy the right-of-way
- as necessary to maintain natural features or vegetation as an amenity to the design, in steep terrain areas as necessary for design or safety, or
- as necessary to enhance user safety or security

10. *LANDSCAPING*

Landscaping shall not infringe into the bike path clearance or interfere with design sight distance. Trees should not be placed close to bike paths (and vice versa) due to possible root intrusion; where this location is unavoidable, root barriers adjacent to the edge of the pavement are recommended.

SHARED ROADWAY

CRITERIA FOR APPLICATION

Shared roadways shall be considered acceptable on:

- all streets, other than new construction of arterials and collectors, having less than 20 bicycles per day,
- new rural construction other than local and primary access, and
- as interim facilities on existing arterials and collectors provided the shared travel lane is not less than 14 ft wide.

Where the shared travel lane is less than 14 ft wide and bicycle trips exceed 20 bicycles per day, bike signs with a "RIDER ON ROADWAY" (Sign Type 11-1) shall be installed. Rural bike ways are common on shared roadways .

SHOULDER BIKEWAY

1. CRITERIA FOR APPLICATION

Shoulder bikeways may be used on uncurbed street sections. A shoulder bikeway shall be provided on all new construction of uncurbed arterials and collectors. Shoulder bikeways should be provided on any uncurbed street having 20 to 50 bicycle trips per day.

2. WIDTH AND CLEARANCE

Except when mandated otherwise by a Federal Agency or Oregon State Department having jurisdiction over the bikeway, the width shall be measured from the center of the bike lane stripe to the edge of pavement, face of guardrail or face of curb, whichever is the lesser. Shoulder bikeways shall not be less than the following width:

- uncurbed roadways, 20-50 bike trips per day: 4-ft width.
- existing curbed roadways, travel lane not greater than 11-ft: 4-ft width
- curbed roadways, 20-50 bike trips per day, posted or basic speed rule less than 40 mph: 5-ft width

3. PAVEMENT STRUCTURE

The pavement structural section shall be the same as the parent roadway.

4. STRUCTURES

Where an existing structure is not wide enough to accommodate a shoulder bikeway, temporarily discontinue the shoulder bikeway across the structure. Appropriate warning signs shall be installed.

BIKE LANE

1. CRITERIA FOR APPLICATION

Bike lanes shall be provided on all new construction of urban collectors and arterials and on rural ways designed as bicycle ways where bicycle ridership exceeds 50 bicycle per day.

2. WIDTH AND CLEARANCE

Except when mandated otherwise by a Federal Agency or an Oregon State Department having jurisdiction over the bikeway, the width shall be measured from the center of the bike lane stripe to the edge of the pavement, face of guardrail or face of curb, whichever is the lesser. Bike lanes shall not be less than the following width, however a 6 ft width is the standard.:

- posted or basic-rule speed in excess of or equal to 40 mph 6-ft width
- posted or basic-rule speed less than 40 mph 5-ft width
- existing roadway, travel lane not greater than 11 ft 4-ft width
- rural minor arterial or collector without curbs 4-ft width

3. INTERSECTIONS

Bike lane striping shall be temporarily discontinued sufficiently in advance of major intersections to permit vehicles to merge for turning movements.

4. SIGNING AND MARKING

Combination "NO PARKING - BIKE LANE" (Sign Type R7-9) may be used in lieu of "BIKE LANE" (Sign Type R3-17) sign in urban areas where on-street parking is prohibited. The "BEGIN" and "END" supplemental plaques may be deleted, as they are often meaningless or confusing.

Major bike ways may be assigned numbers which can be displayed along with destination signs, such as "Bike Route 9," and ".....River Park 2 mi."

5. PAVEMENT STRUCTURE

The pavement structural section shall be the same as the parent roadway.

6. STRUCTURES

Where an existing structure is not wide enough to accommodate a shoulder bikeway, appropriate advanced warning signs shall be installed.

Where possible, structures such as water valves, sewer manholes and drainage structures should be located outside of the bike lane.

7. DRAINAGE

Drainage grates shall be "Bike Proof" (ORS 810.150).

MOUNTAIN-BIKE TRAILS

1. CRITERIA FOR APPLICATION

Mountain-bike trails are primarily recreational, although in some cases they may provide an interim transportation facility. Mountain-bike riding is intended to be as natural an experience as possible and any improvements beyond those absolutely required for safety may deter from this experience. Opportunities may exist for combining these trails with roadways that are otherwise closed to vehicle traffic.

2. WIDTH AND CLEARANCE

Most mountain-bike trails make use of unpaved roads and hiking trails in their existing, semiprimitive state. Where new mountain-bike trail building takes place, the tread width should generally be 2 ft minimum with 6 ft clearing width centered over the trail, and overhead clearance should be at least 7 ft with 10 ft desirable.

3. INTERSECTIONS

Mountain-bike trails generally require little signing beyond identification. Where trails intersect roadways, consideration should be given to providing bicycle stop signs (Sign Type R1-1).

4. PROVISION FOR POLICE PATROLS

SHORT TERM

Eventually these bike paths may be paved for the use of conventional bicycles. At that time the width should permit police patrol cars to drive the full length of the paths.

LONG TERM

Access points should be provided at frequent intervals (minimum of one-eighth mile, preferably more frequently) in order to allow police patrol vehicles to observe the bike path in both directions.

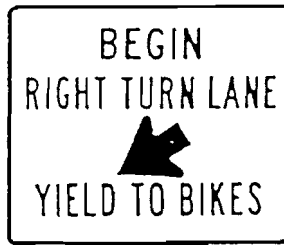


Bike lane sign and pavement markings

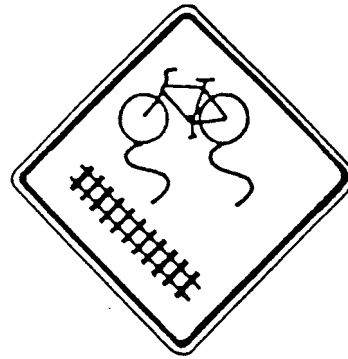
TYPICAL BIKEWAY SIGNS



D11-1
24" x 18"



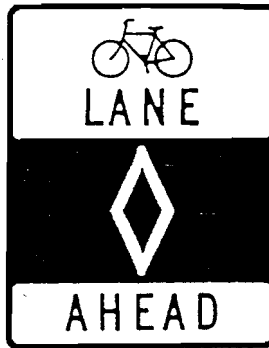
R4-4
36" x 30"



OBW 8-20



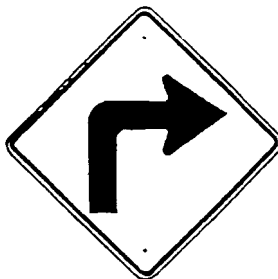
W11-1
30" x 30"



R3-16
24" x 30"



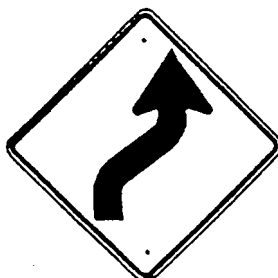
R3-17
24" x 30"



W1-1
18" x 18"



W1-2
18" x 18"



W1-4
18" x 18"

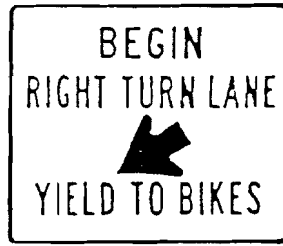


W1-5
18" x 18"

TYPICAL BIKEWAY SIGNS



D11-1
24" x 18"



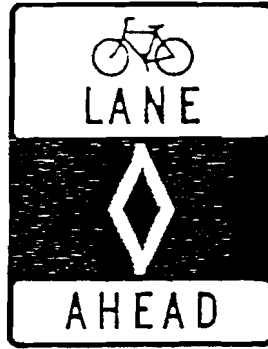
R4-4
36" x 30"



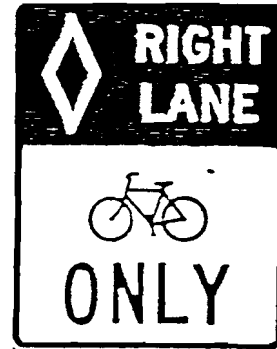
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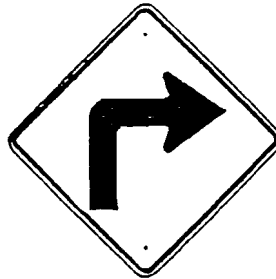
W11-1
30" x 30"



R3-16
24" x 30"



R3-17
24" x 30"



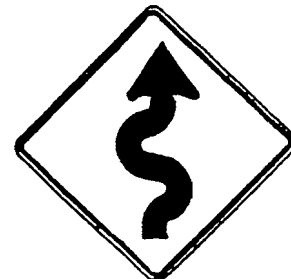
W1-1
18" x 18"



W1-2
18" x 18"

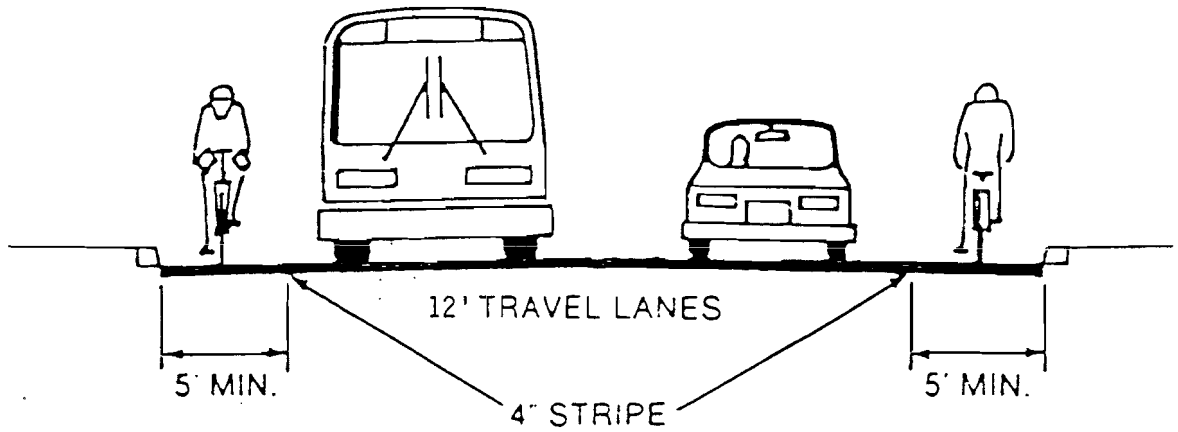
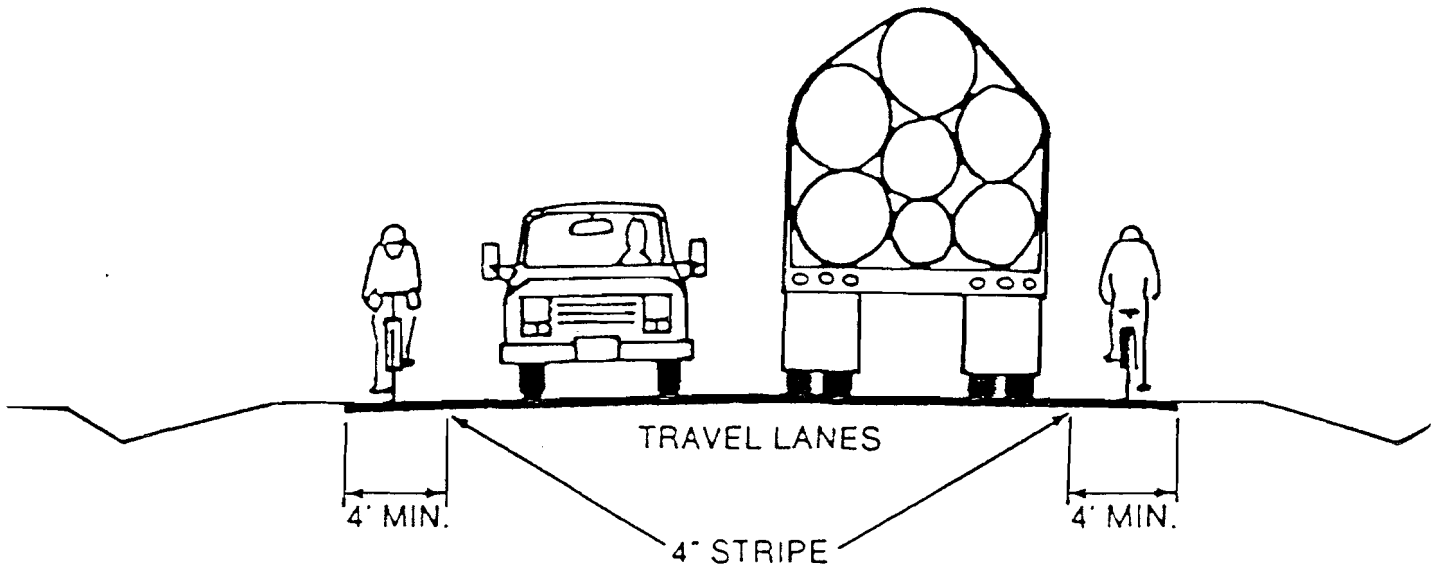


W1-4
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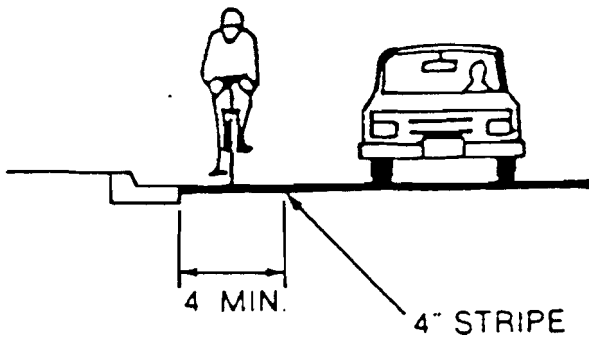


W1-5
18" x 18"

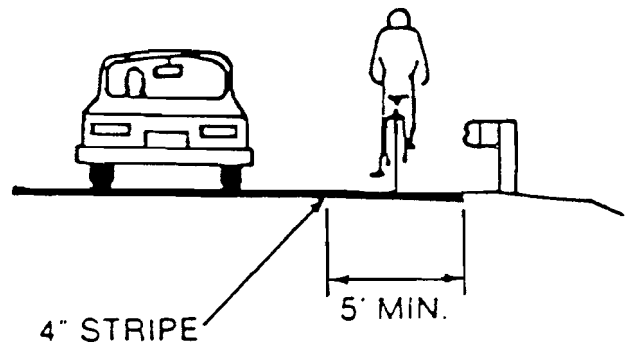
MINIMUM WIDTHS FOR SHOULDER BIKEWAYS:



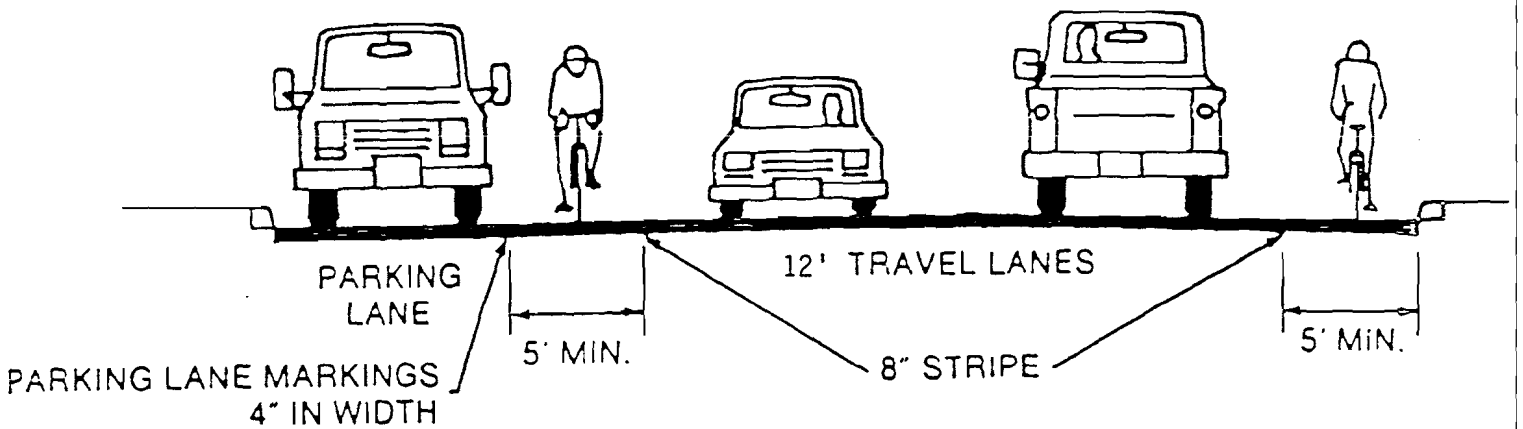
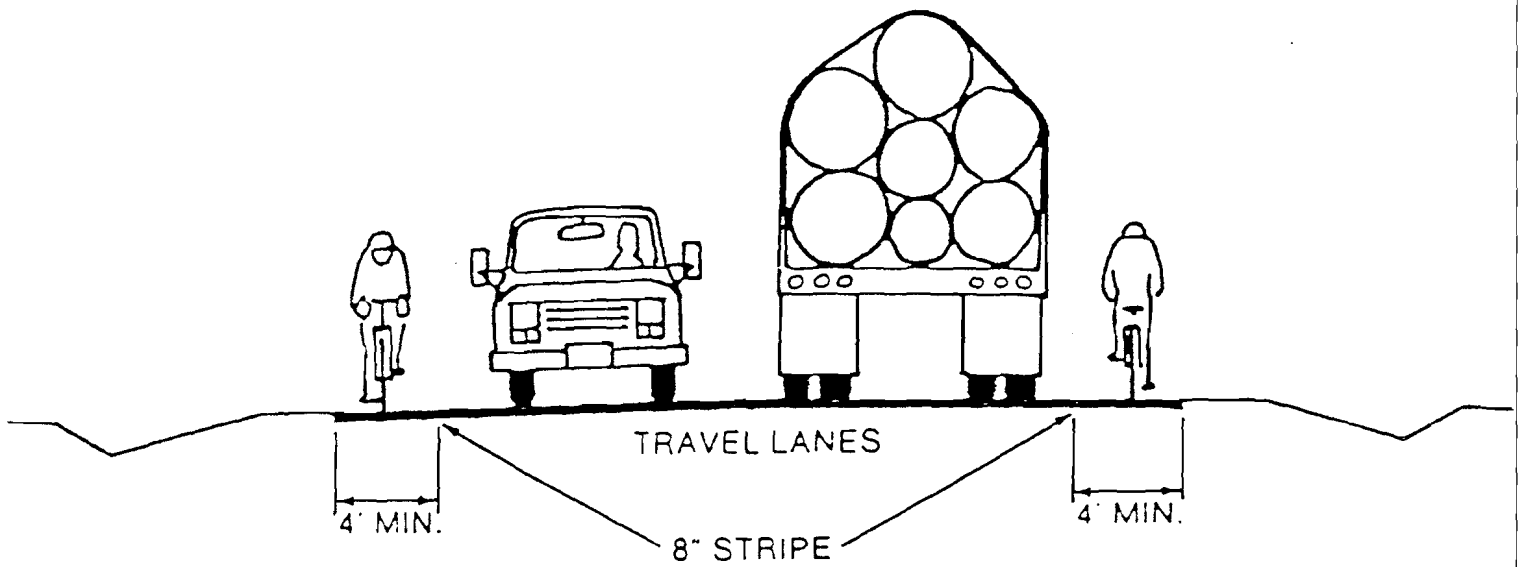
STANDARD TYPE "A"
MONOLITHIC CURB



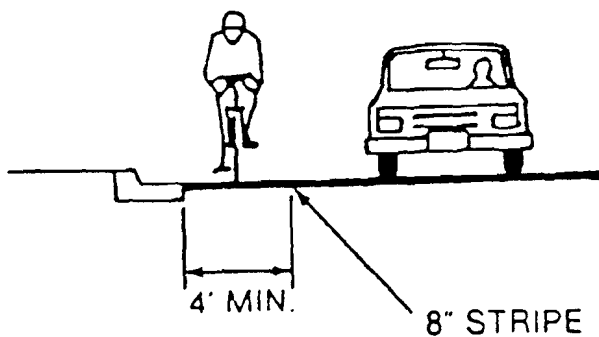
GUARD RAIL, FENCES
OR PHYSICAL BARRIERS



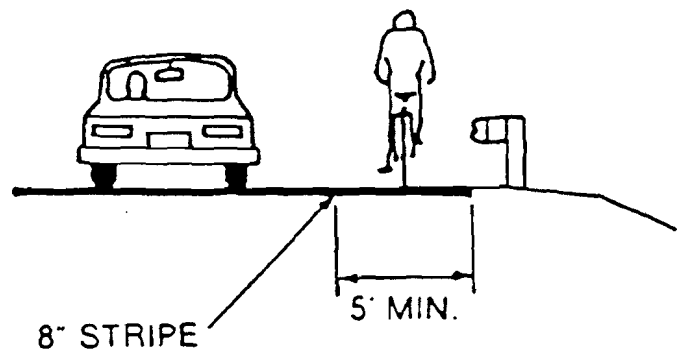
MINIMUM WIDTHS FOR BIKE LANES



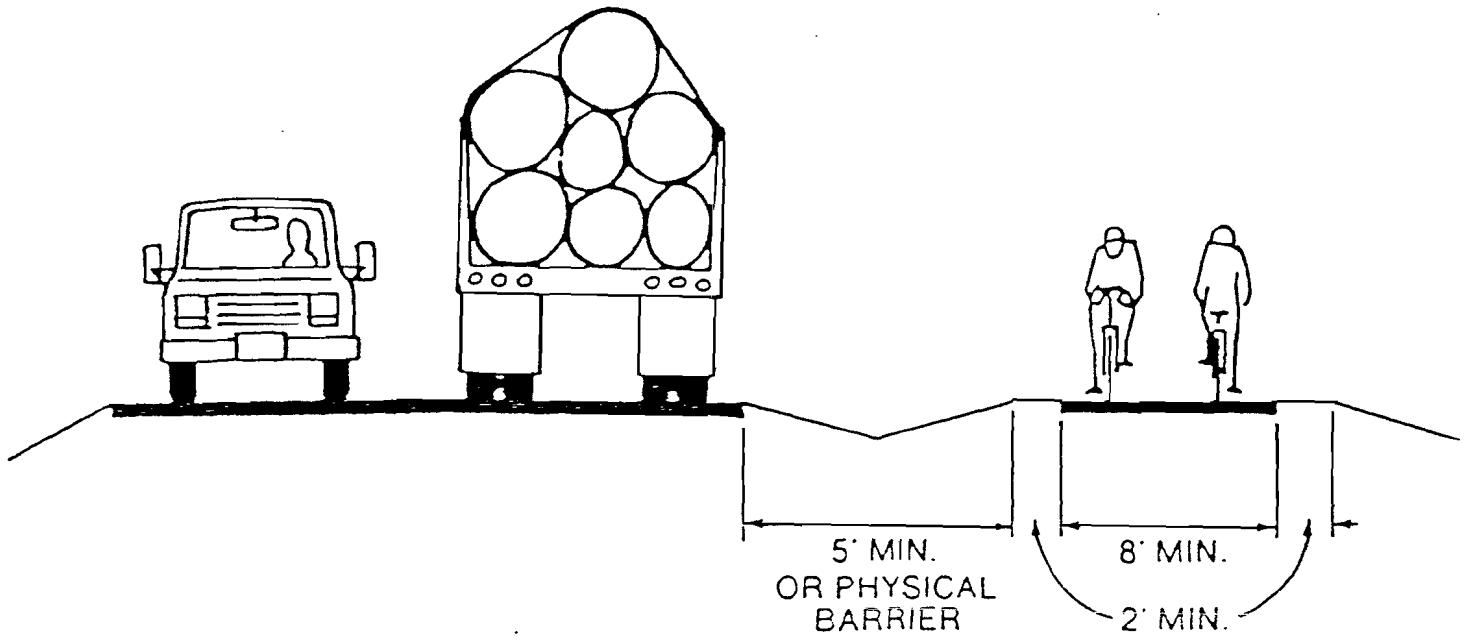
STANDARD TYPE "A"
MONOLITHIC CURB



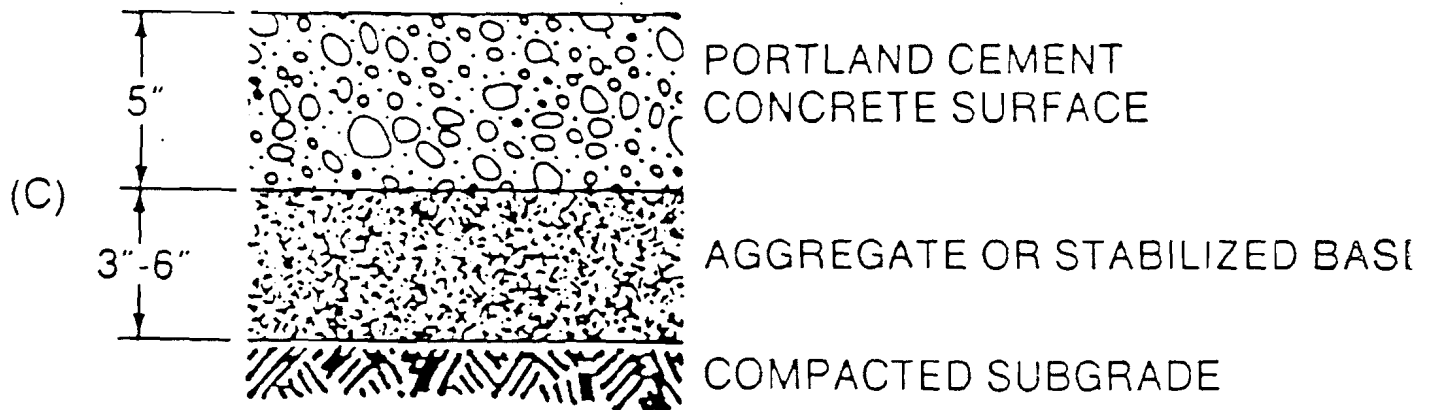
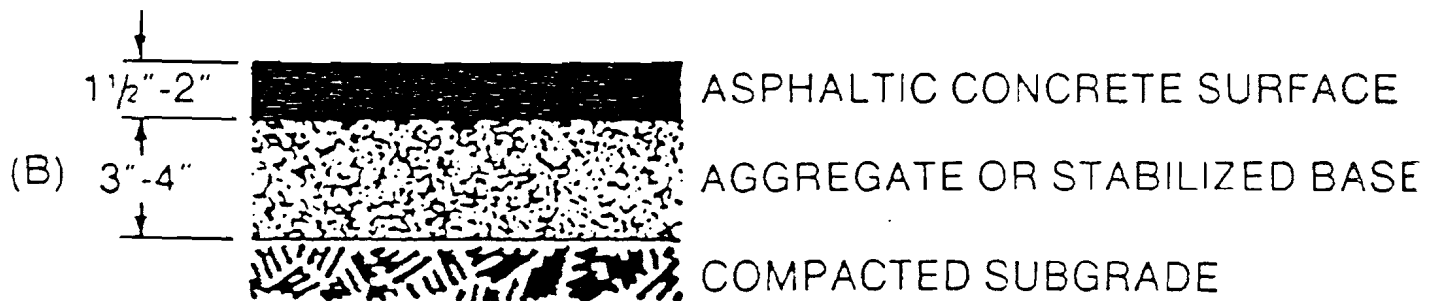
GUARD RAIL, FENCES
OR PHYSICAL BARRIERS



MINIMUM BIKE PATH REQUIREMENTS



TYPICAL PAVEMENT DESIGNS



APPENDIX D.

Copy of Statute

OREGON STATUTES PERTAINING TO BICYCLES

366.112 Bicycle lane and path advisory committee; members, terms, duties and powers; meetings. (1) There is created in the Highway Division of the Department of Transportation an advisory committee to be appointed by the Governor to advise the division regarding the regulation of bicycle traffic and the establishment of bicycle lanes and paths. The committee shall consist of eight members including an employee of a unit of local government employed in land use planning, a representative of a recognized environmental group, a person engaged in the business of selling or repairing bicycles, a member designated by the Oregon Recreation Trails Advisory Council, and at least one member under the age of 21 at the time of appointment. Members of the advisory committee shall be entitled to compensation and expenses as provided by ORS 292.495.

(2) The members shall be appointed to serve for terms of four years each, except the members first appointed. The terms of the first appointed members shall be fixed so that the terms of half the members shall expire in two years and half in four years, commencing July 1, 1973. Vacancies on the committee shall be filled by appointment by the Governor for the unexpired term.

(3) The committee shall meet regularly four times a year, at times and places fixed by the chairman of the committee. The committee may meet at other times upon notice by the chairman or three members of the committee. The Highway Division shall provide office space and personnel to assist the committee as requested by the chairman, within the limits of available funds. The committee shall adopt rules to govern its proceedings and may select officers it considers necessary. [1973 c.716 §1]

Note: 366.112 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 366 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

366.460 Construction of sidewalks within highway right of way. The department may construct and maintain within the right of way of any state highway or section thereof sidewalks, footpaths, bicycle paths or trails for horseback riding or to facilitate the driving of livestock. Before the construction of any of such facilities the department must find and declare that the construction thereof is necessary in the public interest and will contribute to the safety of pedestrians, the motoring public or persons using the

highway. Such facilities shall be constructed to permit reasonable ingress and egress to abutting property lawfully entitled to such rights.

366.514 Use of highway fund for footpaths and bicycle trails. (1) Out of the funds received by the department or by any county or city from the State Highway Fund reasonable amounts shall be expended as necessary to provide footpaths and bicycle trails, including curb cuts or ramps as part of the project. Footpaths and bicycle trails, including curb cuts or ramps as part of the project, shall be provided wherever a highway, road or street is being constructed, reconstructed or relocated. Funds received from the State Highway Fund may also be expended to maintain footpaths and trails and to provide footpaths and trails along other highways, roads and streets and in parks and recreation areas.

(2) Footpaths and trails are not required to be established under subsection (1) of this section:

(a) Where the establishment of such paths and trails would be contrary to public safety;

(b) If the cost of establishing such paths and trails would be excessively disproportionate to the need or probable use; or

(c) Where sparsity of population, other available ways or other factors indicate an absence of any need for such paths and trails.

(3) The amount expended by the department or by a city or county as required or permitted by this section shall never in any one fiscal year be less than one percent of the total amount of the funds received from the highway fund. However:

(a) This subsection does not apply to a city in any year in which the one percent equals \$250 or less, or to a county in any year in which the one percent equals \$1500 or less.

(b) A city or county in lieu of expending the funds each year may credit the funds to a financial reserve or special fund in accordance with ORS 280.100, to be held for not more than 10 years, and to be expended for the purposes required or permitted by this section.

(c) For purposes of computing amounts expended during a fiscal year under this subsection, the department, a city or county may record the money as expended:

OREGON STATUTES PERTAINING TO BICYCLES

(A) On the date actual construction of the facility is commenced if the facility is constructed by the city, county or department itself; or

(B) On the date a contract for the construction of the facilities is entered with a private contractor or with any other governmental body.

(4) For the purposes of this chapter, the establishment of paths, trails and curb cuts or ramps and the expenditure of funds as authorized by this section are for highway, road and street purposes. The department shall, when requested, provide technical assistance and advice to cities and counties in carrying out the purpose of this section. The division shall recommend construction standards for footpaths and bicycle trails. Curb cuts or ramps shall comply with the requirements of ORS 447.310. The division shall, in the manner prescribed for marking highways under ORS 810.200, provide a uniform system of signing footpaths and bicycle trails which shall apply to paths and trails under the jurisdiction of the department and cities and counties. The department and cities and counties may restrict the use of footpaths and bicycle trails under their respective jurisdictions to pedestrians and non-motorized vehicles, except that motorized wheelchairs shall be allowed to use footpaths and bicycle trails.

(5) As used in this section, "bicycle trail" means a publicly owned and maintained lane or way designated and signed for use as a bicycle route. [1971 c.376 §2; 1979 c.825 §1; 1983 c.19 §1; 1983 c.338 §919]

366.790 Authorized use of appropriation to cities; report by cities to Legislative Assembly. (1) Money paid to cities under ORS 366.785 to 366.820 shall be used only for the purposes stated in sections 3 and 3a. Article IX of the Oregon Constitution and the statutes enacted pursuant thereto including ORS 366.514.

(2) Cities receiving moneys under ORS 366.785 to 366.820 shall report during each Legislative Assembly the expenditures of those moneys in each of the following areas:

(a) Maintenance;

(b) Public improvements as defined in ORS 279.011; and

(c) Administration. [Amended by 1961 c.653 §2; 1971 c.376 §5; 1985 c.565 §65; 1987 c.899 §4]

447.310 Standards for curbing. (1) The standard for construction of curbs on each side of any city street, county road or state highway, or any connecting street, road or highway for which curbs and sidewalks have been prescribed by the governing body of the city or county or Department of Transportation having jurisdiction thereover, shall require not less than two curb cuts or ramps per lineal block to be located on or near the crosswalks at intersections. Each curb cut or ramp shall be at least 48 inches wide, where possible, and a minimum of 36 inches wide where a 48-inch width will not fit, at a slope not to exceed one-inch rise per 12-inch run. If a 12:1 slope will not fit, an 8:1 slope is acceptable if so constructed as to allow reasonable access to the crosswalk for persons with physical disabilities.

(2) Standards set for curb cuts and ramps under subsection (1) of this section shall apply whenever a curb or sidewalk is constructed or replaced at any point in a block which gives reasonable access to a crosswalk. [1973 c.176 §1; 1975 c.468 §1]

801.026 General exemptions; exceptions.

(1) Persons, motor vehicles and equipment employed or used by a public or telecommunications utility, electric cooperative or by the United States, this state or any political subdivision of this state are exempt from the provisions of the vehicle code specified in subsection (3) of this section while on a highway and working or being used to service, construct, maintain or repair the facilities of a utility.

(2) Persons, motor vehicles and equipment employed or being used in the construction or reconstruction of a street or highway are exempt from the provisions of the vehicle code specified in subsection (3) of this section if:

(a) They are within the immediate construction project as described in the governmental agency contract, if there is a contract; and

(b) The work is being done in an area that is signed in accordance with the manual adopted under ORS 810.200.

(3) Persons, motor vehicles and equipment described in subsections (1) and (2) of this section are exempt from provisions of the vehicle code relating to rules of the road as described in ORS chapter 811, except that this subsection does not apply to major traffic offenses as defined in ORS 153.500 or to the provisions of ORS 811.145, 811.155, 811.170, and 811.175.

OREGON STATUTES PERTAINING TO BICYCLES

(4) Motor vehicles and equipment being used in the area and in the manner described in subsection (2) of this section are also exempt from the provisions of the vehicle code relating to vehicle size and weight to the extent set out in the governmental agency contract.

(5) Devices moved exclusively on stationary rail tracks are exempt from the vehicle code.

(6) Devices that are powered exclusively by human power are not subject to those provisions of the vehicle code that relate to vehicles. Notwithstanding this subsection, bicycles are generally subject to the vehicle code as provided under ORS 814.400.

(7) The exemptions in subsection (3) of this section do not apply to the persons and vehicles when traveling to or from the facilities or construction project. [1989 c.400 §2 (enacted in lieu of 801.025)]

801.150 "Bicycle." "Bicycle" means a vehicle that:

(1) Is designed to be operated on the ground on wheels;

(2) Has a seat or saddle for use of the rider;

(3) Is designed to travel with not more than three wheels in contact with the ground;

(4) Is propelled exclusively by human power; and

(5) Has every wheel more than 14 inches in diameter or two tandem wheels either of which is more than 14 inches in diameter. [1983 c.338 §22]

801.155 "Bicycle lane." "Bicycle lane" means that part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles except as otherwise specifically provided by law. [1983 c.338 §23]

801.160 "Bicycle path." "Bicycle path" means a public way, not part of a highway, that is designated by official signs or markings for use by persons riding bicycles except as otherwise specifically provided by law. [1983 c.338 §24]

801.590 "Vehicle." "Vehicle" means any device in, upon or by which any person or property is or may be transported or drawn upon a public highway and includes vehicles that are propelled or powered by any means. [1983 c.338 §109]

802.325 Traffic Safety Division bicycle safety program; contents; fees. (1) The Traffic Safety Division, in consultation with the Traffic Safety Committee shall establish a bicycle safety program that complies with this section to the extent moneys are available for such program. The program established may include the following:

(a) Bicycle safety promotion and public education.

(b) Advice and assistance for bicycle safety programs operated by government or nongovernment organizations.

(c) Classroom instruction and actual riding instruction necessary to teach safe and proper operation of bicycles.

(d) Bicycle education and information that assist police agencies in the enforcement of bicycle laws.

(e) Other education or safety programs the Traffic Safety Division determines will help promote the safe operation of bicycles, promote safe and lawful riding habits and assist in accident prevention.

(f) The Traffic Safety Division may charge a fee for services provided under the program. Any fee charged by the commission under this paragraph shall be established by rule and shall not be in an amount that will discourage persons from participating in safety programs offered by the commission under this section.

(2) The commission shall act as a liaison between government agencies and advisory committees and interested bicyclist groups.

(3) The commission may accept donations and solicit grants to enable the commission to carry out the functions of this section. [1987 c.683 §2]

810.020 Regulating use of throughway.

(1) Each road authority may prohibit or restrict the use of a throughway in its jurisdiction by any of the following:

(a) Parades.

(b) Bicycles or other nonmotorized traffic.

(c) Motorcycles or mopeds.

(2) Regulation under this section becomes effective when appropriate signs giving notice of

OREGON STATUTES PERTAINING TO BICYCLES

the regulation are erected upon a throughway and the approaches to the throughway.

(3) Penalties for violation of restrictions or prohibitions imposed under this section are provided under ORS 811.445.

(4) The commission shall act as road authority under this section in lieu of the department. [1983 c.338 §146]

810.030 Imposition of restrictions on highway use; grounds; procedure; penalties.

(1) A road authority may impose restrictions described under this section on its own highways as the road authority determines necessary to do any of the following:

(a) Protect any highway or section of highway from being unduly damaged.

(b) Protect the interest and safety of the general public.

(2) Restrictions that may be imposed under this section include any of the following:

(a) Prohibition of the operation of any or all vehicles or any class or kind of vehicle.

(b) Imposing limits on any weight or dimension of any vehicle or combination of vehicles.

(c) Imposing any other restrictions that the road authority determines necessary to achieve the purposes of this section. This paragraph does not grant authority to impose speed restrictions.

(3) Any restrictions or limitations imposed under this section must be imposed by proper order. The restrictions or limitations are effective when appropriate signs giving notice of the restrictions or limitations are erected. A sign giving notice of a restriction or limitation in an order shall be maintained in a conspicuous manner and shall be placed at each end of the highway or section of highway affected by the order and at such other places as is necessary to inform the public.

(4) Penalties are provided under ORS 818.130 for violation of restrictions imposed under this section. [1983 c.338 §147; 1985 c.16 §46]

810.090 Bicycle racing. Bicycle racing is permitted on any highway in this state upon the approval of, and under conditions imposed by, the road authority for the highway on which the race is held. [1983 c.338 §153]

810.150 Drain construction; compliance with bicycle safety requirements; guidelines. (1) Street drains, sewer drains, storm drains and other similar openings in a roadbed over which traffic must pass that are in any portion of a public way, highway, road, street, footpath or bicycle trail that is available for use by bicycle traffic shall be designed and installed, including any modification of existing drains, with grates or covers so that bicycle traffic may pass over the drains safely and without obstruction or interference.

(2) The department shall adopt construction guidelines for the design of public ways in accordance with this section. Limitations on the applicability of the guidelines are established under ORS 801.030.[1983 c.338 §159]

811.050 Failure to yield to bicycle on bicycle lane. (1) A person commits the offense of failure of a motor vehicle operator to yield to a bicycle on a bicycle lane if the person is operating a motor vehicle and the person does not yield the right of way to a person operating a bicycle or moped or motorized wheelchair upon a bicycle lane.

(2) This section does not require persons operating mopeds to yield the right of way to bicycles if the mopeds are operated on bicycle lanes in the manner permitted under ORS 811.440.

(3) The offense described in this section, failure of a motor vehicle operator to yield to a bicycle on a bicycle lane, is a Class B traffic infraction. [1983 c.338 §698; 1985 c.16 §336]

811.055 Failure to yield to bicyclist on sidewalk. (1) The driver of a motor vehicle commits the offense of failure to yield the right of way to a bicyclist on a sidewalk if the driver does not yield the right of way to any bicyclist on a sidewalk.

(2) The driver of a motor vehicle is not in violation of this section when a bicyclist is operating in violation of ORS 814.410. Nothing in this subsection relieves the driver of a motor vehicle from the duty to exercise due care.

(3) The offense described in this section, failure to yield the right of way to a bicyclist on a sidewalk, is a Class C traffic infraction. [1983 c.338 §702; 1985 c.16 §340]

811.395 Appropriate signals for stopping, turning, changing lanes and decelerating.

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This section establishes appropriate signals, for purposes of the vehicle code, for use when signals are required while stopping, turning, changing lanes or suddenly decelerating a vehicle. This section does not authorize the use of only hand and arm signals when the use of signal lights is required under ORS 811.405. Vehicle lighting equipment described in this section is vehicle lighting equipment for which standards are established under ORS 816.100 and 816.120. Appropriate signals are as follows:

(1) To indicate a left turn either of the following:

(a) Hand and arm extended horizontally from the left side of the vehicle.

(b) Activation of front and rear turn signal lights on the left side of the vehicle.

(2) To indicate a right turn either of the following:

(a) Hand and arm extended upward from the left side of the vehicle. A person who is operating a bicycle is not in violation of this paragraph if the person signals a right turn by extending the person's right hand and arm horizontally.

(b) Activation of front and rear turn signal lights on the right side of the vehicle.

(3) To indicate a stop or a decrease in speed either of the following:

(a) Hand and arm extended downward from the left side of the vehicle; or

(b) Activation of brake lights on the vehicle.

(4) Change of lane by activation of both front and rear turn signal lights on the side of the vehicle toward which the change of lane is made. [1983 c.338 §635; 1985 c.16 §314]

811.435 Operation of motor vehicle on bicycle trail; exemptions; penalty. (1) A person commits the offense of operation of a motor vehicle on a bicycle trail if the person operates a motor vehicle upon a bicycle lane or a bicycle path.

(2) Exemptions to this section are provided under ORS 811.440.

(3) This section is not applicable to mopeds. ORS 811.440 and 814.210 control the operation and use of mopeds on bicycle lanes and paths.

(4) The offense described in this section, operation of a motor vehicle on a bicycle trail, is a Class B traffic infraction. [1983 c.338 §643]

811.440 When motor vehicles may operate on bicycle lane. This section provides exemptions from the prohibitions under ORS 811.435 and 814.210 against operating motor vehicles on bicycle lanes and paths. The following vehicles are not subject to ORS 811.435 and 814.210 under the circumstances described:

(1) A person may operate a moped on a bicycle lane that is immediately adjacent to the roadway only while the moped is being exclusively powered by human power.

(2) A person may operate a motor vehicle upon a bicycle lane when:

(a) Making a turn;

(b) Entering or leaving an alley, private road or driveway; or

(c) Required in the course of official duty.

(3) An implement of husbandry may momentarily cross into a bicycle lane to permit other vehicles to overtake and pass the implement of husbandry. [1983 c.338 §645]

(4) A person may operate a motorized wheelchair on a bicycle lane or path. [1983 c.338 §645; 1991 c.417 §1]

811.490 Improper opening or leaving open of vehicle door; penalty. (1) A person commits the offense of improper opening or leaving open a vehicle door if the person does any of the following:

(a) Opens any door of a vehicle unless and until it is reasonably safe to do so and it can be done without interference with the movement of traffic, or with pedestrians and bicycles on sidewalks or shoulders.

(b) Leaves a door open on the side of a vehicle available to traffic, or to pedestrians or bicycles on sidewalks or shoulders for a period of time longer than necessary to load or unload passengers.

(2) The offense described in this section, improper opening or leaving open a vehicle door, is a Class D traffic infraction. [1983 c.338 §655; 1985 c.16 §320]

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811.525 Exemptions from requirements for use of lights. This section establishes exemptions from ORS 811.515 and 811.520. The exemptions under this section are in addition to any exemptions under ORS 801.025. The exemptions established under this section are partial or complete as described in the following:

(1) ORS 811.515 and 811.520 shall not be construed to prohibit the use of additional parts and accessories on any vehicle not inconsistent with the provisions of those sections.

(2) Except for the provisions relating to exempt-vehicle safety lighting equipment; ORS 811.515 and 811.520 do not apply to any of the following:

- (a) Road machinery.
- (b) Road rollers.
- (c) Farm tractors.

(d) Antique motor vehicles that are maintained as a collector's item and used for exhibitions, parades, club activities and similar uses, but not used primarily for the transportation of persons or property.

(3) Whenever motor and other vehicles are operated in combination during the time that lights are required, any lighting equipment, except the taillight, which by reason of its location on a vehicle of the combination would be obscured by another vehicle of the combination, need not be lighted. This subsection shall not affect the requirement that lighted clearance lights be displayed on the front of the foremost vehicle required to have clearance lights nor the requirement that all lights on the rear of the rearmost vehicle of the combination be lighted.

(4) Lighting equipment on bicycles shall be lighted as required under ORS 815.280.

(5) Parked or stopped vehicles are not required to display parking lights if the road authority for the highway provides by ordinance or resolution that no lights need be displayed upon a vehicle parked on the highway in accordance with legal parking regulations where there is sufficient light to render clearly discernible any person or object within a distance of 500 feet from the highway.

(6) Nothing under ORS 811.515 and 811.520 limits the ability to use the following

lights with any other lights during the day or at night:

- (a) Public vehicle warning lights.
- (b) Pilot vehicle warning lights.
- (c) Tow vehicle warning lights.
- (d) Police lights.

(7) Requirements for use of motorcycle and moped headlights are under ORS 814.320. [1983 c.338 §661; 1985 c.16 §324; 1985 c.71 §8]

811.550 Places where stopping, standing and parking prohibited. This section establishes places where stopping, standing and parking a vehicle are prohibited for purposes of the penalties under ORS 811.555. Except as provided under an exemption in ORS 811.560, a person is in violation of ORS 811.555 if a person parks, stops or leaves standing a vehicle in any of the following places:

(1) Upon a roadway outside a business district or residence district, whether attended or unattended, when it is practicable to stop, park or leave the vehicle standing off the roadway. Exemptions under ORS 811.560 (1) and (7) are applicable to this subsection.

(2) On a shoulder, whether attended or unattended, unless a clear and unobstructed width of the roadway opposite the standing vehicle is left for the passage of other vehicles and the standing vehicle is visible from a distance of 200 feet in each direction upon the roadway or the person, at least 200 feet in each direction upon the roadway, warns approaching motorists of the standing vehicle by use of flagpersons, flags, signs or other signals. Exemptions under ORS 811.560 (9) are applicable to this subsection.

(3) On the roadway side of a vehicle stopped or parked at the edge or curb of a highway. Exemptions under ORS 811.560 (7) are applicable to this subsection.

(4) On a sidewalk. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(5) Within an intersection. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(6) On a crosswalk. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

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(7) Between a safety zone and the adjacent curb or within 30 feet of points on the curb immediately opposite the ends of a safety zone, unless a different length is indicated by signs and markings. For purposes of this subsection the safety zone must be an area or space officially set apart within a roadway for the exclusive use of pedestrians and which is protected or is so marked or indicated by adequate signs as to be plainly visible at all times while set apart as a safety zone. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(8) Alongside or opposite a street excavation or obstruction when stopping, standing or parking would obstruct traffic. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(9) Upon a bridge or other elevated structure upon a highway. Exemptions under ORS 811.560 (4) to (8) are applicable to this subsection.

(10) Within a highway tunnel. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(11) On any railroad tracks or within seven and one-half feet of the nearest rail at a time when the parking of vehicles would conflict with railroad operations or repair of the railroad tracks. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(12) On a throughway. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(13) In the area between roadways of a divided highway, including crossovers. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(14) At any place where traffic control devices prohibit stopping. Exemptions under ORS 811.560 (4) to (7) are applicable to this subsection.

(15) In front of a public or private driveway. Exemptions under ORS 811.560 (2) and (4) to (7) are applicable to this subsection.

(16) Within 10 feet of a fire hydrant. Exemptions under ORS 811.560 (2) and (4) to (7) are applicable to this subsection.

(17) Within 20 feet of a crosswalk at an intersection. Exemptions under ORS 811.560 (2) and (4) to (7) are applicable to this subsection.

(18) Within 50 feet upon the approach to an official flashing signal, stop sign, yield sign or traffic control device located at the side of the roadway if the standing or parking of a vehicle will obstruct the view of any traffic control device located at the side of the roadway. Exemptions under ORS 811.560 (2) and (4) to (7) are applicable to this subsection.

(19) Within 15 feet of the driveway entrance to a fire station and on the side of a street opposite the entrance to a fire station, within 75 feet of the entrance. Exemptions under ORS 811.560 (2) and (4) to (7) are applicable to this subsection.

(20) At any place where traffic control devices prohibit standing. Exemptions under ORS 811.560 (2) and (4) to (7) are applicable to this subsection.

(21) Within 50 feet of the nearest rail of a railroad crossing. Exemptions under ORS 811.560 (3) to (7) are applicable to this subsection.

(22) At any place where traffic control devices prohibit parking. Exemptions under ORS 811.560 (3) to (7) are applicable to this subsection.

(23) On a bicycle lane. Exemptions under ORS 811.560 are applicable to this subsection.

(24) On a bicycle path. Exemptions under ORS 811.560 are applicable to this subsection. [1983 c.338 §669; 1985 c.334 §1]

814.210 Operation of moped on sidewalk or bicycle trail; penalty. (1) A person commits the offense of operation of a moped on a sidewalk or bicycle trail if the person operates a moped upon a sidewalk, a bicycle path or a bicycle lane.

(2) Exemptions to this section are provided under ORS 811.440

(3) The offense described in this section, operation of a moped on a sidewalk or bicycle trail, is a Class D traffic infraction. [1983 c.338 §644]

814.400 Application of vehicle laws to bicycles. (1) Every person riding a bicycle upon a public way is subject to the provisions applicable to and has the same rights and duties as the driver of another vehicle concerning operating on highways, vehicle equipment and abandoned vehicles, except:

(a) Those provisions which by their very nature can have no application.

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(b) When otherwise specifically provided under the vehicle code.

(2) Subject to the provisions of subsection (1) of this section:

a) A bicycle is a vehicle for purposes of the vehicle code; and

(b) When the term "vehicle" is used the term shall be deemed to be applicable to bicycles.

(3) The provisions of the vehicle code relating to the operation of bicycles do not relieve a bicyclist or motorist from the duty to exercise due care. [1983 c.338 §697; 1985 c.16 §335]

814.410 Unsafe operation of bicycle on sidewalk; penalty. (1) A person commits the offense of unsafe operation of a bicycle on a sidewalk if the person does any of the following:

(a) Operates the bicycle so as to suddenly leave a curb or other place of safety and move into the path of a vehicle that is so close as to constitute an immediate hazard.

(b) Operates a bicycle upon a sidewalk and does not give an audible warning before overtaking and passing a pedestrian and does not yield the right of way to all pedestrians on the sidewalk.

(c) Operates a bicycle on a sidewalk in a careless manner that endangers or would be likely to endanger any person or property.

(d) Operates the bicycle at a speed greater than an ordinary walk when approaching or entering a crosswalk, approaching or crossing a driveway or crossing a curb cut or pedestrian ramp and a motor vehicle is approaching the crosswalk, driveway, curb cut or pedestrian ramp. This paragraph does not require reduced speeds for bicycles either:

(A) At places on sidewalks or other pedestrian ways other than places where the path for pedestrians or bicycle traffic approaches or crosses that for motor vehicle traffic; or;

(B) When motor vehicles are not present.

(2) Except as otherwise specifically provided by law, a bicyclist on a sidewalk or in a crosswalk has the same rights and duties as a pedestrian on a sidewalk or in a crosswalk.

(3) The offense described in this section, unsafe operation of a bicycle on a sidewalk, is a Class D traffic infraction. [1983 c.338 §699; 1985 c.16 §337]

814.420 Failure to use bicycle lane or path; exceptions; penalty. (1) Except as provided in subsection (2) of this section, a person commits the offense of failure to use a bicycle lane or path if the person operates a bicycle on any portion of a roadway that is not a bicycle lane or bicycle path when a bicycle lane or bicycle path is adjacent to or near the roadway.

(2) A person is not required to comply with this section unless the state or local authority with jurisdiction over the roadway finds, after public hearing, that the bicycle lane or bicycle path is suitable for safe bicycle use at reasonable rates of speed.

(3) The offense described in this section, failure to use a bicycle lane or path, is a Class D traffic infraction. [1983 c.338 §700; 1985 c.16 §338]

814.430 Improper use of lanes; exceptions; penalty. (1) A person commits the offense of improper use of lanes by a bicycle if the person is operating a bicycle on a roadway at less than the normal speed of traffic using the roadway at that time and place under the existing conditions and the person does not ride as close as practicable to the right curb or edge of the roadway.

(2) A person is not in violation of the offense under this section if the person is not operating a bicycle as close as practicable to the right curb or edge of the roadway under any of the following circumstances:

(a) When overtaking and passing another bicycle or vehicle that is proceeding in the same direction.

(b) When preparing to execute a left turn.

(c) When reasonably necessary to avoid hazardous conditions including, but not limited to, fixed or moving objects, parked or moving vehicles, bicycles, pedestrians, animals, surface hazards or other conditions that make continued operation along the right curb or edge unsafe or to avoid unsafe operation in a lane on the roadway that is too narrow for a bicycle and vehicle to travel safely side by side. Nothing in this paragraph excuses the operator of a bicycle from the requirements under ORS 811.425 or from the penalties for failure to comply with those requirements.

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(d) When operating within a city as near as practicable to the left curb or edge of a roadway that is designated to allow traffic to move in only one direction along the roadway. A bicycle that is operated under this paragraph is subject to the same requirements and exceptions when operating along the left curb or edge as are applicable when a bicycle is operating along the right curb or edge of the roadway.

(e) When operating a bicycle along side not more than one other bicycle as long as the bicycles are both being operated within a single lane and in a manner that does not impede the normal and reasonable movement of traffic.

(f) When operating on a bicycle lane or bicycle path.

(3) The offense described in this section, improper use of lanes by a bicycle, is a Class D traffic infraction. [1983 c.338 §701; 1985 c.16 §339]

814.440 Failure to signal turn; exceptions; penalty. (1) A person commits the offense of failure to signal for a bicycle turn if the person does any of the following:

(a) Stops a bicycle the person is operating without giving the appropriate hand and arm signal continuously for at least 100 feet before executing the stop.

(b) Executes a turn on a bicycle the person is operating without giving the appropriate hand and arm signal for the turn for at least 100 feet before executing the turn.

(c) Executes a turn on a bicycle the person is operating after having been stopped without giving, while stopped, the appropriate hand and arm signal for the turn.

(2) A person is not in violation of the offense under this section if the person is operating a bicycle and does not give the appropriate signal continuously for a stop or turn because circumstances require that both hands be used to safely control or operate the bicycle.

(3) The appropriate hand and arm signals for indicating turns and stops under this section are those provided for other vehicles under ORS 811.395 and 811.400.

(4) The offense described under this section, failure to signal for a bicycle turn, is a Class D traffic infraction. [1983 c.338 §703; 1985 c.16 §341]

814.450 Unlawful load on a bicycle; penalty. (1) A person commits the offense of having an unlawful load on a bicycle if the person is operating a bicycle and the person carries a package, bundle or article which prevents the person from keeping at least one hand upon the handlebar and having full control at all times.

(2) The offense described in this section, unlawful load on a bicycle, is a Class D traffic infraction. [1983 c.338 §704]

814.460 Unlawful passengers on bicycle; penalty. (1) A person commits the offense of unlawful passengers on a bicycle if the person operates a bicycle and carries more persons on the bicycle than the number for which it is designed or safely equipped.

(2) The offense described in this section, unlawful passengers on a bicycle, is a Class D traffic infraction. [1983 c.338 §705]

814.470 Failure to use bicycle seat; penalty. (1) A person commits the offense of failure to use a bicycle seat if the person is operating a bicycle and the person rides other than upon or astride a permanent and regular seat attached to the bicycle.

(2) The offense described in this section, failure to use bicycle seat, is a Class D traffic infraction. [1983 c.338 §706]

814.480 Nonmotorized vehicle clinging to another vehicle; penalty. (1) A person commits the offense of nonmotorized vehicle clinging to another vehicle if the person is riding upon or operating a bicycle, coaster, roller skates, sled or toy vehicle and the person clings to another vehicle upon a roadway or attaches that which the person is riding or operating to any other vehicle upon a roadway.

(2) The offense described in this section, nonmotorized vehicle clinging to another vehicle, is a Class D traffic infraction. [1983 c.338 §707]

815.280 Violation of bicycle equipment requirements; requirements; penalty. (1) A person commits the offense of violation of bicycle equipment requirements if the person does any of the following:

(a) Operates on any highway a bicycle in violation of the requirements of this section.

(b) Is the parent or guardian of a minor child or ward and authorizes or knowingly permits the

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child or ward to operate a bicycle on any highway in violation of the requirements of this section.

(2) A bicycle is operated in violation of the requirements of this section if any of the following requirements are violated:

(a) A bicycle must be equipped with a brake that enables the operator to make the braked wheels skid on dry, level, clean pavement.

(b) A person shall not install or use any siren or whistle upon a bicycle.

(c) At the times described in the following, a bicycle or its rider must be equipped with lighting equipment that meets the described requirements:

(A) The lighting equipment must be used during limited visibility conditions.

(B) The lighting equipment must show a white light visible from a distance of at least 500 feet to the front of the bicycle.

(C) The lighting equipment must have a red reflector or lighting device or material of such size or characteristic and so mounted as to be visible from all distances up to 600 feet to the rear when directly in front of lawful lower beams of headlights on a motor vehicle.

(3) Nothing contained in this section shall be construed to prohibit the use of additional parts and accessories on any bicycle not inconsistent with this section.

(4) The offense described in this section, violation of bicycle equipment requirements, is a Class D traffic infraction. [1983 c.338 §502; 1985 c.16 §260; 1985 c.69 §5]

OREGON LEGISLATIVE ASSEMBLY—1971 REGULAR SESSION

Enrolled
House Bill 1700

Sponsored by Representatives STATHOS, THORNTON, HENDERSON,
Senator WINGARD, Representatives CROTHERS, DENSMORE,
HANNEMAN, KENNEDY, LANG, PAULUS, ROBERTS

CHAPTER.....

AN ACT

Relating to ways for public travel; creating new provisions; and amend-
ing ORS 366.515, 366.525 and 366.790.

Be It Enacted by the People of the State of Oregon:

SECTION 1. Section 2 of this Act is added to and made a part of ORS chapter 366.

SECTION 2. (1) Out of the funds received by the commission or by any county or city from the State Highway Fund reasonable amounts shall be expended as necessary for the establishment of footpaths and bicycle trails. Footpaths and bicycle trails shall be established wherever a highway, road or street is being constructed, reconstructed or relocated. Funds received from the State Highway Fund may also be expended to maintain such footpaths and trails and to establish footpaths and trails along other highways, roads and streets and in parks and recreation areas.

(2) Footpaths and trails are not required to be established under subsection (1) of this section:

(a) Where the establishment of such paths and trails would be contrary to public safety;

(b) If the cost of establishing such paths and trails would be excessively disproportionate to the need or probable use; or

(c) Where sparsity of population, other available ways or other factors indicate an absence of any need for such paths and trails.

(3) The amount expended by the commission or by a city or county as required or permitted by this section shall never in any one fiscal year be less than one percent of the total amount of the funds received from the highway fund. However:

(a) This subsection does not apply to a city in any year in which the one percent equals \$250 or less, or to a county in any year in which the one percent equals \$1,500 or less.

(b) A city or county in lieu of expending the funds each year may credit the funds to a financial reserve or special fund in accordance with ORS 280.100, to be held for not more than 10 years, and to be expended for the purposes required or permitted by this section.

(4) For the purposes of this chapter, the establishment of paths and trails and the expenditure of funds as authorized by this section are for highway, road and street purposes. The commission shall, when requested, provide technical assistance and advice to cities and counties in carrying out the purpose of this section. The division shall recommend construction standards for footpaths and bicycle trails. The division shall, in the manner prescribed for marking highways under ORS 483.040, provide a uniform

system of signing footpaths and bicycle trails which shall apply to paths and trails under the jurisdiction of the commission and cities and counties. The commission and cities and counties may restrict the use of footpaths and bicycle trails under their respective jurisdictions to pedestrians and nonmotorized vehicles.

(5) As used in this section, "bicycle trail" means a publicly owned and maintained lane or way designated and signed for use as a bicycle route.

Section 3. ORS 366.515 is amended to read:
366.515. (1) The highway fund shall be expended under the jurisdiction of the commission.

(2) Except as provided in ORS 367.236 and 366.735, the commission shall set aside from the highway fund, in the following order:

(a) An amount sufficient for the salaries and expenses of the highway department.

(b) A sufficient amount to cover the cost of operating and maintaining state highways which have been constructed or improved.

(c) Sufficient funds to meet the Federal Government appropriation and requirements of sections 6 and 8 of the Act of July 11, 1916, 39 Stat. 355, entitled "An Act to provide that the United States shall aid the states in the construction of rural post roads and for other purposes," or any federal appropriation that may be provided.

(d) The remainder shall be used for any of the purposes authorized by law.

(3) All the highway fund not otherwise specifically applied shall be expended by the commission in its discretion, except as required by section 2 of this 1971 Act, on the construction, maintenance, betterment or pavement of roads and highways within the state.

Section 4. ORS 366.525 is amended to read:

366.525. There shall be and hereby are appropriated out of the highway fund annually such sums of money as will equal 20 percent of all moneys credited to the State Highway Fund by the State Treasurer between July 1 of any year and June 30 of the following year and which have accrued from funds transferred to the highway fund by the State Treasurer under ORS 481.950, paragraph (b) of subsection (2) of ORS 484.250 and ORS 767.635. The appropriation shall be distributed among the several counties for the purposes (none) provided by law.

Section 5. ORS 366.790 is amended to read:
366.790. Money paid to cities under ORS 366.785 to 366.820 shall be used only for the purposes stated in section 3, Article IX of the Oregon Constitution and the statutes enacted pursuant thereto including section 2 of this 1971 Act.

APPENDIX E.

City Council Resolution:
Adoption of the
Silverton Bicycle Master Plan