

MASTER ROAD PLAN (MRP)

A. INTRODUCTION

The Master Road Plan strives to address Dunes City Comprehensive Plan Policy F14 and Land Subdivision Section of Dunes City Code, Section 155.081 (A)(3)(a)&(b), which call for developing such a plan. The primary focus is to evaluate, map and develop a future plan for roads within the Urban Growth Boundary (UGB). An atlas of four maps is included in this MRP (Appendix N).

B. ROAD INVENTORY

The development of the Dunes City Master Road Plan began with an assessment and evaluation of the existing road system. The Dunes City UGB contains approximately 2,145 acres, all of which are within the City limits. The UGB lies almost exclusively east of Highway 101. It includes properties surrounding Woahink Lake, Little Woahink Lake, and Siltcoos Lake (including Booth Island). Roads within the UGB include a combination of City owned and maintained facilities, Lane County facilities, and privately owned roads. Highway 101, a State facility, also runs along the western edge of the UGB.

A complete inventory of Dunes City's road system was conducted in January 2000. All public roadway segments within the UGB were driven and evaluated for surface type, pavement condition, and roadway width. The length of each road segment, right-of-way width and jurisdictional responsibility were obtained from the LCOG digital parcel base layer. A spreadsheet and database containing this information is presented in Chapter 2, Section 7. During the field inventory, onsite drainage and maintenance issues were identified and noted.

Based on this inventory, there are over 20 miles of roads within the UGB. The length of roads by jurisdictional responsibility and type is shown in the table below.

	City Roads	Lane County Roads	Private Roads
Length of Roads (feet)	55,062	44,034	10,304
Length of Roads (miles)	10.43	8.34	1.95
Roads Paved (feet)	53,248	42,959	<i>unknown</i>
Roads Unpaved (feet)	4,704	1,075	<i>unknown</i>

Dunes City also has approximately 4,704 feet of undeveloped public rights-of-way. Some of these areas will provide rights-of-way for future road connections or walking paths while other areas will probably never be utilized due to environmental constraints such as slope and wetlands.

The majority of the City's roads were evaluated as being in good condition based on the Oregon Department of Transportation's Pavement Rating System. This information and the methodology used to evaluate roads is presented in the inventory. Of the more than 20 miles of City roads, less than 1.5 road miles are in Fair condition and no roads were evaluated as being in Poor condition. The majority of condition problems are due to road surface cracking and erosion issues typically located on the inside curve of roads. Roads range in width from about 10 feet to 24 feet with the majority of roads about 12 to 15 feet wide. Road rights-of-way widths range in size from 10 feet up to 60 feet.

C. ENVIRONMENTAL CONSTRAINTS

Existing natural resource information was reviewed and compiled to assist in identifying problem areas for future road construction. Digital information available includes soils, topography, wetlands, waterways, and riparian areas.

1. Soils

Soils within the Dunes City UGB were identified using the Soil Survey of Lane County published by the USDA Natural Resource Conservation Service in 1987. Soil types found in the UGB are shown in the table below. Soil type can be a significant factor in determining the cost and feasibility of new road construction. Roads have an all-weather surface and carry automobile and light-truck traffic all year. They have a base of cut or fill soil material, and a flexible or rigid surface. Soil factors that affect the ease of excavating or grading a new road include depth to bedrock or to a cemented pan, a high water table, flooding, large stones, and slope. Soil strength and shrink-swell potential also affect traffic-supporting capacity. Within Dunes City, the primary soil limitations include slope, depth to a cemented pan, and high water table.

Soil Map No.	Soil Unit Name	Acres in UGB
7B	Bandon sandy loam, 0-7% slopes	16.5
7C	Bandon sandy loam, 7-12% slopes	11.4
7F	Bandon sandy loam, 12-50% slopes	57.4
17	Brallier muck, drained	65.1
21B	Bullards-Ferrello loams, 0-7% slopes	52.3
21C	Bullards-Ferrello loams, 7-12% slopes	135.8
21E	Bullards-Ferrello loams, 12-30% slopes	32.2
21G	Bullards-Ferrello loams, 30-60% slopes	83.6
44	Dune land	1.0
53	Heceta fine sand	42.7
74B	Lint silt loam, 0-7% slopes	399.7
74C	Lint silt loam, 7-12% slopes	279.5
74D	Lint silt loam, 12-20% slopes	325.8
74E	Lint silt loam, 20-40% slopes	61.8
111F	Preacher loam, 25-50% slopes	2.4
112G	Preacher-Bohannon-Slickrock complex, 50-75% slopes	0.1
131C	Waldport fine sand, 0-12% slopes	20.5
131G	Waldport fine sand, 30-70% slopes	6.8
132E	Waldport fine sand, 0-30% slopes	1.7
133C	Waldport-Urban Land complex, 0-12% slopes	24.9
	Water	523.8
	Total	2,145

2. Topography

Woahink Lake serves as a central feature in the topography of Dunes City. In general, the land area separating Woahink Lake from Siltcoos Lake is higher in the middle and slopes down toward the lake margins. The highest elevations are along the eastside of Woahink Lake. Topographic considerations may limit road construction in localized areas.

3. Wetlands and Riparian Areas

The presence of wetlands may influence the extent of development and road construction. A wetlands inventory and assessment was completed for Dunes City in 1996 as part of the Dunes City Local Wetlands and Riparian Area. Wetland and riparian area resources were mapped over a parcel base to aid in assessing future road locations. Wetland resources are regulated by the Division of State Lands at the State level and the Army Corps of Engineers at the Federal level.

Filling in an area in the wetlands requires approval from the Army Corp of Engineers and the Division of State Lands.

A total of 48 wetlands were identified in the project area, totaling 228 acres. Many of the wetland areas are associated with tributary streams to Woahink Lake, Little Woahink Lake, and Siltcoos Lake. Some of these areas extend outside the UGB.

The study also inventoried and assessed the presence of riparian areas. In general, riparian areas within the UGB are well defined by topography and confined to narrow, relatively steep banked ravines. Riparian areas also exist around the edge of the three lakes.

Other hydrologic features in the study area include the Siltcoos River, Woahink Creek, Gibbs Creek, and several unnamed tributaries.